

# **Rethinking Doping**

# Alex Wolf-Root

University of Colorado Boulder runnerforlife86@gmail.com

Citar este artículo como: Alex Wolf-Root (2020): Rethinking Doping, *Fair Play. Revista de Filosofía, Ética y Derecho del Deporte*, vol. 18, p. 1-42

FECHA DE RECEPCIÓN: 6 de Julio de 2019 FECHA DE ACEPTACIÓN: 9 de Septiembre de 2020

# **Rethinking Doping**

#### Alex Wolf-Root

#### Abstract

Despite the important role doping plays in the world of sport, insufficient attention has been given to understanding the concept of doping. In this paper, I argue that we should understand doping as a means of gaining a competitive advantage through the use of exogenous substances entering an athlete's body, where such means undermine the relevant sporting institution. By focusing on sport as socially constructed institution, not merely as competition, we can have a unified explanation for many of our pretheoretic beliefs while giving the tools to understand doping in the ever-changing landscape of contemporary sport and society.

#### Key words:

doping, sport, WADA.

### 1. Introduction

Much digital ink has been spilled trying to get a handle on doping-related issues. From questions around the alleged unfair advantages of doping to the alleged infringements on athletes' rights from anti-doping regulations, philosophers have spent significant time investigating issues connected to doping. However far too little has been done to directly try to define doping and the typical understanding as exemplified by the World Anti-Doping Agency (WADA) doesn't hold water. We need to try something new, and this paper is just such an attempt.

I recognize that a full discussion about the lack of sufficient understanding of the concept of doping would take a paper all its own, so for present purposes I will motivate this project with brief looks at WADA and the philosophy of sport literature.

Three quick examples should illustrate that WADA's operational definition of doping fails to capture what we want philosophically. First, caffeine fits both the performance-enhancing (4.3.1.1) and health risk (4.3.1.2) criteria for inclusion on the Prohibited List,<sup>1</sup> and despite these

<sup>&</sup>lt;sup>1</sup> World Anti-Doping Code (2019, p.30)

being sufficient for many other substances to be added, caffeine was removed from the List in 2003.<sup>2</sup> Second, marijuana is not harmful and gives no performing enhancing benefits (perhaps with some rare exceptions such as in archery), but is currently banned. Third, substance use that is necessary for general human flourishing has led to bans in frankly absurd situations; for example, 79-year-old Barbara Gicquel received a one-year ban for using "a doctor-prescribed medication, used to offset the impact of menopause on Gicquel's lungs."<sup>3</sup> Though these three examples are insufficient to show that WADA fails to capture what we want with a concept of doping, it should be enough to make us suspicious.

While there is significant philosophy of sport literature connected to doping, much of it seems to fall into two camps. The first is articles addressing performance-enhancing substances or performance enhancement, subjects related to but (arguably) distinct from doping. Examples include Carr (2008), Dixon (2008), Gardner (1989), and Loland (2018). The second is articles using the term doping on the assumption that we have an understanding of the concept in the first place. Examples include Jones (2010), Morgan (2009), and Murray (2019). Despite all being valuable contributions to the literature, it's not clear that they are all discussing the same concept of doping, or that there is one accepted understanding of what doping even means. As Verner Møller puts it "[t]he root of the difficulties that the anti-doping campaign has to wrestle with remains precisely because the concept of doping has not been sufficiently clarified."<sup>4</sup>

In this paper, I will attempt to clarify the concept of doping. I argue that we should understand the concept of doping as

a means of gaining a competitive advantage through the use of exogenous substances entering an athlete's body, where such means undermine the relevant sporting institution.

Before we dive in, it's worth noting some key consequences of this new definition.

First, doping is *prima facie* morally wrong. While some act can be both doping and all-things considered morally permissible, or potentially even obligatory in some cases, doping

<sup>&</sup>lt;sup>2</sup> Sharon (2003)

<sup>&</sup>lt;sup>3</sup> Melero (2020)

<sup>&</sup>lt;sup>4</sup> Møller (2010, p.74)

categorically is *prima facie* wrong. Just as cheating in a game is *prima facie* wrong, but might be morally right all things considered – say by cheating you win significant money that you can then use to donate to charity – doping will be *prima facie* wrong due to a constitutive feature of some act of doping being an act of undermining the sporting institution at issue.

On the face of it, this might seem to render much discussion about the morality of doping moot. However, all this does is move the question. Instead of asking, as much academic work into doping has thus far, if some act of doping is wrong (and presumably should therefore be banned), we now have to ask if some act is *prima facie* wrong to determine if that act is doping. (It's a bit more complicated than that, but that'll do for introductory purposes.)

Second, this new view tells us that doping isn't monolithic. Not only will the rightness or wrongness of some act be relative to a particular sport, but what doping even is will be relative to a particular sport. More specifically, doping isn't just relative to a sporting competition, but to a particular sporting institution. For example, what is doping relative to professional baseball need not be identical to what is doping relative to youth baseball, or what is doping relative to professional cycling in 2019 need not be doping relative to professional cycling in 1969.

Third, while my view is that doping only applies to sport, those who think that doping should apply more broadly can use much of the work here with only a minor change to my definition. Simply deleting the word "sporting" should lead to my definition applying to non-sport cases in addition to sporting ones. For example, there is discussion about whether the use of various "study drugs" are instances of "academic doping," as they give some students an unfair advantage. While I don't want to weigh in on that discussion here – beyond saying that such a view requires a depressing view of the purpose of higher education – it is worth noting that a slight modification of my definition would allow for something like this to be a candidate for this distinct doping\* concept. The reasons why "academic doping" is thought to be wrong might be the same reason why doping in sport is wrong – again, provided you hold a depressing view of the purpose of higher education – but just looking out in the world it does seem like there is a more limited concept of doping that only applies to sport, and it is that concept that we will be concerned with here.

Fourth, "mechanical doping" is not doping proper. (Things that are sometimes considered mechanical doping include hidden motors on bicycles, high-tech swimsuits, and shoes with springy carbon fiber plates in them.) Most paradigmatic cases of doping involve exogenous substances, and it is this understanding with which this paper is concerned. I admit there might be a way to give a broader definition of doping that allows for distinct sorts of doping, including mechanical doping, though my definition could not be as easily adapted to such a view. One couldn't simply get rid of the "through the use of exogenous substances" clause; without it anything from fouling mid-competition to bribing referees ahead of time could fit, and that would clearly be mistaken. While much of the reasoning in this paper might be relevant to a view on mechanical doping, I won't say more about it specifically here, despite recognizing that it is a worthy avenue of future exploration.

The rest of this paper will be organized as follows. Section 2 will discuss the distinction between sport as competition and sport as social institution. Section 3 will discuss how a sporting institution can be undermined. Section 4 will look at two examples of changes in doping views over time. Section 5 will discuss my proposed definition more directly. And Section 6 will look at a handful of interesting conceptual and practical key worries of this new definition.

It's now time to talk about the biggest missing ingredient in discussions of doping: sporting institutions.

# 2. Sport as institution

We can think of sport in (at least) two ways. Sport can be a *competition*, or sport can be some sort of broader *institution*. Much has been said about the nature of sport, and while I can't get too far into the weeds here, we should be able to acknowledge this important dual nature of sport. Once we do, it'll be clearer why I think that doping should be understood relative to a sporting *institution* rather than merely a sporting *competition*. It is the former that carries the social importance.

Much of the discussion of the nature of sport involves its relationship to that of games. Some think that for something to be a sport is just for it to be an athletic game, while others think that only some sports are games. We needn't get into that here. What matters for present purposes is that much discussion of sport involves treating it as some particular form of competition; it is some event that takes place in some discrete space and some discrete time. This is an important understanding but it's not the only way to understand sport. And when it comes to how we talk about values in sport, we're often not just talking about competitions.

Folks promote sport because it (allegedly) improves character through not only competition but also consistent, hard training. Sport is said to be good in part because it brings people together as a community. Collegiate sport is often sold as a way to bring attention to an academic institution, or criticized because it takes up too much time (and they don't mean that competitions are too long!). Even a cursory look at how we talk about sport should be enough to make clear that sport is generally understood as not only a competition, but also as a broader social institution.

Some philosophers of sport have adopted Alasdair MacIntyre's use of the terms "institution" and "practice" in their work on sport. This is especially true when it comes to dealing with questions of the value of sport; MacIntyre defines practices in part by appeal to excellences that can be achieved within the practice, which gives rise to a conception of internal goods of the practice. These internal goods are to be contrasted with external goods that can come about through the institutions that can facilitate, but are in tension with, the practice.<sup>5</sup> However this understanding will not work for our purposes, and my use of "institution" should not be conflated with the MacIntyrian understanding.

Given that Mike McNamee has already provided a nice critique of MacIntyrian practices and institutions from the point of view of sport,<sup>6</sup> I'll here just stress two important differences between MacIntyrian usage (in the sport context) and how we'll be using the terms here.

MacIntyre has a clear distinction between internal and external goods, with the internal goods coming from the sporting practices, and external coming from anything else (including the institution). I don't want to appeal to such a strong distinction. I want to allow that, for example,

<sup>&</sup>lt;sup>5</sup> MacIntyre (1984)

<sup>&</sup>lt;sup>6</sup> McNamee (1995)

fame and fortune can be goods in just the same way as athletic excellence and personal achievement are for the professional athlete. The MacIntyrian view would separate these, with fame and fortune being said to corrupt the practice at issue. While fame and fortune can certainly be corrupting in some contexts, they need not be; in the context of professional sports, the opportunity for fame and fortune is closer to a requirement than to a corrupting influence of the institution (in my sense of the term). Professional sports just wouldn't be what they are without these possibilities.<sup>7</sup>

Similarly, the MacIntyrian view has a clear separation between practices and institutions, a separation that is undesirable for present purposes. Sporting institutions, in my sense of the term, are what they are partially due to the governing bodies and other methods of distributing power and status. Professional international athletics is what it currently is in part due to how World Athletics (WA, until very recently known as the International Association of Athletics Federations), WADA, and the myriad of national athletics federations operate.<sup>8</sup> This is importantly different from scholastic athletic competitions in the US state of New Jersey, which is partially constituted by the New Jersey State Interscholastic Athletic Association and all of school and league organizations. The MacIntyrian view would seem to say that all athletics are the same practice, but in some cases how one engages in that practice is corrupted by these outside institutions, even if they are all-things-considered required for the practice to continue. By rejecting the MacIntyrian view, we can simply say that professional international athletics and New Jersey scholastic athletics are simply different institutions, even if there are individuals who are part of both at the same time.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> McNamee makes the general point with the following: "If business and the making of war (perhaps even politics) are to be seen as practices then it would seem peculiar to use MacIntyre's list of external goods as indeed external. The making of money in business, or so it seems at least, is a partially definitive internal good. Likewise, the ascertaining of power is to the excellent politician as esteem is to the excellent academic." (McNamee 1995, p.76)

<sup>&</sup>lt;sup>8</sup> For my readers in the US, "athletics" is the broader term that covers track & field, cross country, and road racing.

<sup>&</sup>lt;sup>9</sup> For example, in summer 2019, 400m-800m runner Athing Mu represented the United States at both the Pan American Games and the USA vs Europe dual meet, despite still being a high school athlete.

What matters is that there is something beyond mere competition that we can mean by "sport." This broad context is the sporting institution. And different sporting institutions can have different values or purposes, which can impact how one should act within that sporting institution. This can be the case even if it is the "same" sport in the competitive sense. As sociologists Brissonneau and Montez de Oca put it, we can look at sport as "a social world that is governed by its own values, norms, and priorities that stand apart from the ordinary world shared by most people."<sup>10</sup> In my terms, sporting institutions have their own purposes.

The purpose, as I'm using the term here, of some sporting institution is not to be confused with the reason why some person engages in that sport. It's also not to be confused with the goal of the sport as competition (for example, the goal of golf could be something like ball-in-hole). The purpose of a sporting institution, as the term is used here, has to do with the function this institution is supposed to serve. And since these are socially constructed institutions, this "supposed to serve" is socially constructed as well, can vary wildly, and need not be an all-things-considered good function. Sporting institutions themselves needn't have any intrinsic moral value, but their purposes do create normative force for those engaged in this sporting institution.

This can be best seen through the use of examples. Let's now look at two distinct sporting institutions, but ones where the athletes play the same competitive sport of basketball.<sup>11</sup> One is the NBA, and the other is a recreational youth league.

<sup>&</sup>lt;sup>10</sup> Brissonneau & Montez de Oca (2018, p.1)

<sup>&</sup>lt;sup>11</sup> What exactly differentiates sports is far from a settled question. It is unclear exactly how much, if any, difference in rules there can be between two potentially distinct sports to have them still be the same sport. Some might want to say that any rule change will do, while others might allow for more flexibility. While I've yet to see any empirical research on this topic, I think it's safe to assume that most think it's the latter; small rule changes need not create a new sport. I doubt that many think that there is a new sport in the NCAA due to the recent rule change to have the 3-point line for men's basketball now be the same as the international 3-point line; this is a change of rules, not a change of sport. Similarly, athletics is the same sport in the competition sense from youth to professional, despite changes in throwing implement weights and hurdle heights, or at least this is what most would say. However there clearly are points at which something is a different sport; lacrosse between men and women might be that point, or perhaps it's the difference between baseball and softball. I can't weigh into that discussion here, though I recognize that it is a discussion needing more attention.

While both are institutions of the same sport qua athletic competition, they are very different sorts of social institutions. They have a different purpose, and different institutional values. While I can't fully describe the purpose of the NBA as a social institution, it is something along the lines of the following: creating the highest level of athletic excellence in men's basketball, not only for its own sake but also for the sake of significant profit through entertainment and increased economic activity and for the sake of creating communities of fans. That is incredibly different form the purpose of a local recreational basketball league, which is generally something along the lines of: creating an enjoyable activity for young people, where they can develop as not only athletes but more importantly as good sportspersons. (Remember that individual goals of participating in an institution needn't be the same as the purpose the institution; it's quite possible that participants in this youth league have the individual goal of playing to win, of impressing their friends, or some other goal that doesn't line up with the purpose of the institution itself.) Although there might be significant similarity in the activity taking place on the court, or even in many of the benefits between these two basketball institutions, the purposes of these institutions are importantly different. And those different purposes can give us some guidance about what should or should not be acceptable in those institutions.

Given that a significant part of the purpose of the NBA involves creating the highest-level athletic experience in men's basketball, it is unsurprising how much importance is put into preparation. Intense training is highly valued.<sup>12</sup> It isn't just valued to be a good player, but hard work, including off-the-court strength work, is required to survive the rigors of the season. In the words of former Lakers strength coach Timothy DiFrancesco, "[p]ro athletes don't need the weight room to make highlights, they need the weight room to endure highlights."<sup>13</sup> But working too hard is problematic, and it's becoming more common for teams to take advantage of advanced blood analysis to try to keep athletes healthy.<sup>14</sup> Athletes' work ethic not only impacts

<sup>&</sup>lt;sup>12</sup> Nardone (2016)

<sup>&</sup>lt;sup>13</sup> DiFrancesco (2017)

<sup>&</sup>lt;sup>14</sup> Lemire (2019)

their competitive performance, but how fans view these athletes; a simple search for "laziest NBA players" or "hardest working NBA players" makes this quite clear.

While athletic excellence is part of what matters for recreational youth basketball, this is comparably less important than it is in the NBA. (How much this matters varies with circumstances; under-18 leagues likely care more about athletic excellence than under-10 leagues, and various locales can have varying norms.) While some young folks may be praised for their hard work ethic – and recreational youth leagues are in part dedicated to helping to develop that work ethic – it would be viewed as a problem if athletes in these recreational youth leagues put in nearly as much work as their counterparts in the NBA. Children who specialize in sports at a young age increase the risk of injuries and burnout, and such specialization generally isn't required for future elite performance.<sup>15</sup> Spending the same amount of time and effort in preparation for a youth recreational basketball league as one does for the NBA can undermine other core goods of this sporting institution. As sports journalist Mark Hyman, quoted in the New York Times, puts it, "with each passing season youth sports seem to stray further and further from its core mission of providing healthy, safe and character-building recreation for children."<sup>16</sup>

Now that we've briefly addressed how different sporting institutions, even of the same sport, can have different values, we'll look at how sporting institutions can be undermined by actions that, in and of themselves, needn't be problematic for the sports competition itself. We'll do so by looking at the historical case of British amateurism and the contemporary case of "Big-Time" College Sports.

# 3. Undermining a sporting institution

Amateurism plays an important role in Olympic history. While it is a myth that the athletes at the ancient Olympics were amateurs – their word for "athlete" roughly meant "one who

<sup>&</sup>lt;sup>15</sup> Jayanthi (2013)

<sup>16</sup> Brody (2010)

competes for a prize"<sup>17</sup> – amateurism was important to another important group in the history of the Olympic movement: early British sport around the turn of the 20<sup>th</sup> century.

Although there were multiple motivations for amateurism and a thorough understanding of the phenomenon is far outside the scope of this paper, it's worth noting that one key feature was how exclusionary amateurism was. As historian Norman Baker puts it, "[t]hough often advanced as an objective set of values, the amateur ethos was, of course, highly subjective and subjectivity rested heavily on social class, gender, nationality and even regional identity."<sup>18</sup> In addition to caring about what happened on the sporting field, it was more important that one went about not just competition but preparation the right way. This not only involved not being paid to train, but could even preclude working a physically demanding job. "Every working-class occupation—from factory worker to miner, from bricklayer to stevedore (dockworker)—were disqualified from amateur standing regardless of whether they accepted money when they took the field to play games."<sup>19</sup> Part of being a participant in some British sporting institution in this era required being an amateur (as that term was understood at the time).

What this tells us is that the sporting institution of "gentlemanly" sport at that time was undermined by actions – hiring a professional coach, being paid to support more training – that in and of themselves didn't undermine the on-the-field competition. If anything, these actions would actually enhance the performance on the field! But while a naturally talented gentleman-athlete could be praised for that same high level of performance, a hard-working laborer could be rejected for that same high level of performance if their performance was caused in part by the ungentlemanly acts of professional training.

It's worth noting that this is also an example where undermining a sporting institution needn't be all-things-considered wrong. While it is *prima facie* wrong to undermine an institution of which you are a part, clearly the institution of classist British amateur sport is an unjust institution. Undermining an unjust institution seems good. The specific moral value of folks who

<sup>&</sup>lt;sup>17</sup> Klein (2018)

<sup>&</sup>lt;sup>18</sup> Baker (2004, p.2)

<sup>&</sup>lt;sup>19</sup> Kretchmar et al (2017, p.179)

undermined British amateurism in this way needn't be addressed here, but it does illustrate how something can be wrong in the particular sporting context but needn't be all-things-considered wrong.)

There is a more familiar example that also uses the word "amateurism," although it is used in an incredibly different way. I'm talking of course about college sports. More specifically, we'll look at Big-Time College Sports, of which the paradigmatic cases are men's football and basketball at the Power-5 Conferences.<sup>20</sup>

Big-Time College Sports are a hallmark of the contemporary US university, even for those who are not on a college campus, and even though the system as currently practiced is clearly unjust.<sup>21</sup> They are a significant part of advertising for the university, and have been shown to impact who applies where.<sup>22</sup> They can create strong community identity, although this isn't always used for good.<sup>23</sup> Movies and TV shows glorify them, both in documentaries and in works of fiction. In 39 of the 50 states, the highest paid public employee is a men's basketball or football coach.<sup>24</sup> It's estimated that \$8.5 billion is gambled on the NCAA Men's Division 1 Basketball Tournament alone.<sup>25</sup> The power of Big-Time College Sports is so wide that it even spills over to the courts; for example, surprise losses of home LSU football games lead to harsher sentences for juvenile black boys by Louisiana judges (with no statistically significant difference for white boys).<sup>26</sup>

<sup>&</sup>lt;sup>20</sup> Other sports, from women's basketball to men's baseball, can be "Big-Time" depending on the institution, and some non-Power-5 Conference schools are trying to treat their teams as "Big-Time." There isn't a hard and fast definition, but the general idea should be familiar.

<sup>&</sup>lt;sup>21</sup> For a good recent introduction, you can read Nocera (2016). Alternatively, just read the news.

<sup>&</sup>lt;sup>22</sup> Chung (2013)

<sup>&</sup>lt;sup>23</sup> Theisen (2018)

<sup>24</sup> ESPN (2018)

<sup>&</sup>lt;sup>25</sup> Ginsbach (2019)

<sup>&</sup>lt;sup>26</sup> Eren & Mocan (2018)

Like professional sports, Big-Time College Sports care deeply about athletic excellence. This is seen in the fanfare around national championships, in the constant social media posts from the home institution, through the reporting of journalists local and national, and in the many levels of athletic awards — from All-American to All-Conference, each with multiple "teams," to individual campus awards. The "Student-Athlete Handbook" from one of the major Power-5 schools starts by stressing the following "Vision": "To be nationally recognized as a premier athletic department, by providing a world-class and holistic student-athlete experience, operating in a fiscally responsible manner, while consistently competing for and winning championships."<sup>27</sup> As is the case for professional sports, winning (and money) matters. A lot.

However, unlike professional sports, Big-Time College Sports as an institution also care about academics. The competitors are supposed to be student-athletes, who put academics first. As the NCAA puts it, "[t]he association's belief in student-athletes as students first is a foundational principle."<sup>28</sup> This leads to limits on the amount of mandatory training and competition time athletes can engage in, although the rules notoriously don't count many related activities.<sup>29</sup> To be allowed to compete with their team, athletes must be students in good standing.<sup>30</sup> And honors, including being named an Academic All-American, are given out not only for performance on the field, but in the classroom as well.

As an institution, Big-Time College Sports value high quality athletic performances as well as academically successful student-athletes. But as anyone remotely familiar with Big-Time College Sports knows, these values are in tension. Individuals can be both great athletes and great students, but often what makes one great in one of those areas is detrimental to the other.

The infamous University of North Carolina scandal was a prime example of how on-the-field competition could be enhanced by means that undermine the overall sporting institution. An indepth exploration can be found in Smith & Willingham (2015), but the basics are that, for well

- $^{28}$  NCAA (c)
- <sup>29</sup> NCAA (a)
- <sup>30</sup> NCAA (b)

<sup>&</sup>lt;sup>27</sup> University of Colorado Boulder (2018)

over a decade, college athletes (as well as some non-athletes) were taking fake classes to boost their GPAs. This kept them eligible to compete for UNC, which enhanced the athletic performance of the relevant UNC squads (the scandal mostly impacted football and men's and women's basketball). While the competitive aspect was enhanced, it came at a drastic cost for the academic side of this sporting institution.

But not all cases of undermining a sporting institution are so egregious.

Many argue that the very nature of Big-Time College Sports undermines the institution of collegiate sport. While I won't argue for that claim here, it's clear that much of what goes on in many Big-Time College Sports departments does undermine their institution. For example, despite an NCAA rule capping mandatory countable hours at 20 hours per week (although this doesn't count each hour as an hour when it comes to traveling and competition, but I digress), it's typical for athletes to spend much more time on their sport, which cuts into their academics. Despite much of the supplemental work – for example media appearances, watching film, visiting with an athletic trainer – being technically optional, it is rarely treated this way.

A 2015 report by the Pac-12 Conference (one of the Power-5 Conferences) highlighted that "[w]hile voluntary athletics are 'not required,' the general consensus is that they are actually mandatory."<sup>31</sup> The report found that these athletes were spending 50 hours a week on their sport during their season, or 250% of the claimed maximum. It's no surprise that it found that "[s]tudent-athletes feel they have the resources at their disposal to succeed academically, but do not have the time to do so."

There are many factors that lead to this, and multiple viewpoints about whether this is problematic overall, but we needn't engage with that here. What is relevant for our purposes is that this academic sporting institution is undermined by these practices, despite the competitive aspect being enhanced. (I take it as a given that so much more time and energy devoted to the sport generally enhances the competition.)

<sup>&</sup>lt;sup>31</sup> Pen Schoen Berland (2015)

You might reject my discussion about Big-Time College Sports above, claiming that all their talk about "student-athletes" – a term that was introduced to save the NCAA from having to pay workers' compensation to athletes injured or killed on the field<sup>32</sup> – is, to quote an anonymous faculty member at a school with Big-Time College Sports, "window-dressing or even ideological cover" to hide the true purpose. Rather, you might say that the actual purpose of Big-Time College Sports is to make significant sums of money for a disproportionately white and male ruling class off of the backs of unpaid disproportionately black workers,<sup>33</sup> all while enforcing a "New Jim Crow" on college campuses,<sup>34</sup> and building allegiance for institutions that serve to reinforce race-based barriers in our society.<sup>35</sup> While I admit that this picture sounds familiar, I'm not convinced that this descriptive accuracy is enough to say that this is the purpose of Big-Time College Sports; how something actually operates needn't be identical to its purpose. For example, the purpose of mass standardized testing is quite plausibly to enhance the educational experience of our youth, even though there's reason to think that the tests actually just undermine our educational system at best.<sup>36</sup> All this being said, I recognize this does illustrate how difficult it could be to apply this theory to the real world.

What the brief discussion of British amateurism and contemporary Big-Time College Sports shows is that a sporting institution can be undermined due to events that happen off the competition field, and even if such events actually enhance the competition itself. But sporting institutions can be undermined by actions taken on the competitive field as well, as we'll briefly discuss now.

Technology is central to practically any sport. From the field to the equipment, technology is vital. But it can also undermine a sport, by altering the athletic excellences meant to be tested in the competition.

<sup>&</sup>lt;sup>32</sup> Byers (1995)

<sup>&</sup>lt;sup>33</sup> Collins-Dexter (2018)

<sup>34</sup> Jackson (2018)

<sup>&</sup>lt;sup>35</sup> McDermott (2013)

<sup>&</sup>lt;sup>36</sup> Ryan & Weinstein (2009)

Take the sport of baseball. The competitive goal of baseball is (something along the lines of) runner crossing home plate. To make this goal harder to achieve (and worth our time to care about) there are many rules in place concerning how athletes can move from base to base. In doing so, baseball tests a wide range of athletic excellences, e.g. hand-eye coordination, strength, speed, tactical savvy, teamwork, and fine motor skills. (This is not a complete list, and certainly not an ordered one; I leave a full discussion of the athletic excellences central to baseball to others.) But some of these athletic excellences could be partially ignored through various methods of better achieving the goal, such as the use of corked bats.

It is against the rules of baseball to use corked bats because they can lead to increases in home runs, thereby greatly reducing the amount of action taking place on the diamond.<sup>37</sup> Using corked bats could thus do away with many chances to exhibit some of the athletic excellences we care about in baseball, largely in the realm of tactical savvy, both with regards to knowing how best run the bases and how best to defend the bases. (Of course, this would also increase the number of big hits, which is another athletic excellence in baseball, so the overall acceptability of this would have to be determined by those in the baseball community, as they weigh what they think is most important for their sport.) We could say that using corked bats could undermine the sport of baseball, by overly skewing the balance of athletic excellences that matter.

Similar reasoning can apply to issues of doping in baseball, and it's to that topic that we now turn.

In the 1990's and early 2000's, MLB went through its "steroid era" where many athletes used (or allegedly used) steroids to increase their strength, leading to significant increases in home runs.<sup>38</sup> While many found this spectacle enjoyable and one that benefited baseball – at minimum

<sup>&</sup>lt;sup>37</sup> This is the standard narrative, at any rate. It turns out that some academic research seems to undermine the claim that corked bats actually lead to longer hits, although there is some support for them making the batter connect slightly more often. For present purposes we will accept the standard narrative, though those interested in the physics should see Nathen et al (2011).

it certainly seemed to benefit MLB's pocketbook<sup>39</sup> – others saw this as problematic in a similar way that corked bats are problematic.

It was this connection between steroid-using athletes and corked bats that Travis Tygart, the CEO of the US Anti-Doping Agency, appealed to during a recent discussion about the wrongness of doping with one of my philosophy and sports classes. A former baseball player himself, Tygart viewed this as an unacceptable change to the sport, one which, despite adding some positives with regards to the added attention given to big hits, was overall detrimental to the sport of baseball due to undermining some of the most important aspects of baseball. He specifically mentioned how these bigger hits took away from the importance of tactical awareness on the infield, dramatically changing what made a team successful.

While I needn't weigh into the discussion about whether this was all-things-considered an acceptable or an unacceptable change to the sport of baseball – that's for the baseball community to decide – this gives us a nice example of how paradigmatic cases of doping can undermine a sporting institution through significantly altering how competitions play out. But not every means of altering performances in such a strong way needs be problematic or undermine the sporting institution at issue. This can become clear by looking at changes over time in views on doping. To do so, we'll look at changes in a sporting institution over the years, as well as changes in how a particular substance has been viewed.

# 4. Doping changes over time: cycling and caffeine

By looking at changing views over time, we can get a better grasp on why we need to understand doping relative to a particular institution, situated in a particular socio-historical context. First, we'll look at the sport of professional cycling over the years, and then we'll look at the curious case of caffeine.

Cycling is not unique in having a history of athletes using performance-enhancing substances, but given the wealth of material written about its history of drug use, it'll illustrate well that what is acceptable for a competitive sport in one context can be unacceptable in another. Note that this

<sup>&</sup>lt;sup>39</sup> Koslosky (2014)

will be incredibly simplified, as reality is unsurprisingly complex; fortunately, significant scholarship has been done on the history of cycling and doping, so those who are especially interested can explore such issues in much more depth<sup>40</sup>

As we briefly saw above, much sport at the turn of the 20<sup>th</sup> century was mainly for the upper classes, with notions of amateurism limiting who competed in sport, and how they did so. And while there were societal pressures, including from the National Cyclists Union (the precursor to today's British Cycling), to keep cycling the domain of the "gentleman," cycling connected to the working class relatively early in its history. By the inter-war years, cycling was seen as a sport for the working class.<sup>41</sup> Given the connection with the working class as opposed to the gentlemanly amateur, it should be no surprise that there were differences in how various preparation routines – from hard work to scientific supplementation – were viewed. But it's not just the population that matters here; the incredible challenge of competitive cycling played a key role in shaping views of what was acceptable for training and competition.

As Fincoeur et al (2019) discuss, actions that are now generally considered doping were an accepted part of cycling even before the turn of the 1900's. The use of (allegedly) performanceenhancing substances wasn't something that was looked down upon or hidden. Rather, it was seen as part of the job, as "professional cyclists often employed alcohol, opium, or cocaine as antidotes to the unnatural fatigue that came with their extreme efforts."<sup>42</sup> This makes sense when realizing that the Tour de France – cycling's crown jewel – was purposefully designed by Henri Desgrange to be incredibly difficult just to complete.

Many stories, the folklore of the Tour, portray Desgrange imposing tough rules on the racers to protect the difficulty of the event, to ensure that its winners, even those who just managed to finish, were seen as heroes, and the race itself as the stuff of legend, the triumph of will over nature and human frailty. The distances were immense; regulations banning help were draconian; when mountain climbs were included, the conditions could

<sup>&</sup>lt;sup>40</sup> For some good, in-depth investigations into the connection between doping and cycling, see Brissonneau & de Oca (2017), Dimeo (2007), Fincoeur et al (2019). For a nice autobiographical look from a mid-tier professional cyclist, see Kimmage (2007)

<sup>&</sup>lt;sup>41</sup> Cox (2008)

<sup>&</sup>lt;sup>42</sup> Fincoer et al (2019, p.2)

be atrocious – wind, rain, snow; tales of Pyrenean bears stalking the route added a hint of further danger.<sup>43</sup>

While writing about the Tour de France more generally, Angela J. Schneider put things as follows:

The link between long-distance cycling and the effects of doping is also very direct. While all sports practiced at the elite level push participants' bodies to the limits, in some sports pushing to the limit is the entire point of the endeavour. In this way, cycling is like weight lifting. In weight lifting the point of the sport is to push the body to the limits of its strength. The effects of doping on strength are direct and obvious. This is similar for long-distance cycling. The point of long distance cycling is to push the body to the limits of its endurance. The appeal of doping for cyclists is thus apparent. (Schneider, 2006, p222)

One way to put this is that a major athletic excellence to be tested in the institution of competitive cycling was "survival." Clearly much more mattered as well – e.g. speed, grit, and tactics – but pushing oneself to the limit was so central to competitive cycling, at least when it comes to long stage races, that doing what one could to survive the endeavor was something to be praised. It is no surprise that the use of pharmacological support, often considered doping now, would be viewed not merely as not a negative, but as a positive for athletes in this institution.

It now seems to be the case that much usage of performance-enhancing substances in cycling is looked down upon. While the reason for this shift might very well be due to external influences, it is nonetheless a shift in perception by those involved in the sport. But it's important to see that not all use of such substances is unacceptable. As Brissonneau and Montez de Oca note in their deep sociological dive into elite French sport, some substance use fits with the goal of the institution while others can push beyond what is acceptable. Summarizing their research with cyclists who were professional in the late 1990's to early 2000's, they tell us that

The cyclists explained their passage to using peptide hormones as the result of an individual choice, but the consequences of that choice run contrary to the values and goals of the collective. As discussed above, the usages of steroid hormones conformed to the rules of their family. But the usage of peptide hormones can be understood as over-conforming to the norms of elite sports in the sense that their commitment to winning, which is a normative

<sup>&</sup>lt;sup>43</sup> Dauncey et al (2003, p.7)

attitude, is pushed beyond the constraints of normative behavior within the extraordinary world  $^{44}$ 

The views of the athletes – and likely others who push their views on the athletes – tells us what is or is not acceptable, and it seems that much (but not all) use of performance-enhancing substances is not currently acceptable in elite professional cycling.<sup>45</sup>

While the specifics of cyclists' and cycling-fans' attitudes are certainly more nuanced than I can explore here, the lesson should be clear. The goals and desires of the stakeholders can impact what is acceptable for a given sport. What counts as undermining that sport will be determined not merely by the substances or particular actions in and of themselves; the goal of the institution matters too. This is why the same substance use can be not-doping in one institution of professional cycling – say in the first half of the 20<sup>th</sup> century – while that same substance use can be doping in some other institution of professional cycling – say in the first half of the 21<sup>st</sup> century.

This cycling discussion illustrates how context matters with regards to internal sporting issues. Turning our attention to caffeine, we can see how context matters with regards to broad external factors.

Caffeine is an interesting example to look at when trying to understand the concept of doping. It seems to fit a typical unreflective view on doping – it is unnatural as typically used (e.g. gels, pills, energy drinks), it can be harmful in large doses, and it can give a clear performance benefit – but caffeine is not currently a banned substance, and most folks don't consider using caffeine to be doping. Why is that?

<sup>&</sup>lt;sup>44</sup> Birssonneau & Montez de Oca (2018, p.108)

<sup>&</sup>lt;sup>45</sup> At least this is how it seems to an outsider; if the competitors on the whole do want to use these substances but our perceptions from the outside are skewed due to various forces causing them to hide their true beliefs, then it might not be the case that the use of these substances does undermine the contemporary sport of cycling.

The United States Anti-Doping Agency, as part of their social media outreach to make antidoping more transparent, gave the following explanation as to why caffeine is no longer on the List of Prohibited Substances and Methods:

Caffeine's actually really interesting because, of all the drugs that have been studied, caffeine has probably been studied and shown to be very ergogenic. The problem with caffeine is that it's in everything, from our foodstuffs to the drinks that we drink every single day. And so it's really hard to set a threshold that allows us to determine whether it's being used as a performance-enhancing substance or not. So, it once was on the List, but currently caffeine is not prohibited in sport.<sup>46</sup>

It's important to note that the reason given for doping not to be banned has nothing to do with what happens on the competition field. The reason caffeine is no longer banned is that it is everywhere!

Of course, the mere fact that it is very hard to avoid caffeine doesn't by itself determine that caffeine use cannot be something that undermines the sport. Imagine if a substance that led to extreme calm and focus – the anti-caffeine if you will – were to become terribly widespread and normal. This could completely undermine the sport of archery (of the target shooting variety), as everyone would be able to focus correctly on hitting the target. Even if the substance were to be as ubiquitous and helpful in society at large as caffeine is now,<sup>47</sup> there would still be good reason for athletes to reject it as undermining, rather merely altering, their sport. There would be good reason to view uses of that substance as instances of doping. Caffeine, on the other hand, while altering sports performance, doesn't radically alter it in the same way. Even if we otherwise wouldn't introduce some other substance to the sport domain itself to get the change in performance that we see from caffeine, given the ubiquity of caffeine, it is now simply adopted as a background condition for sports performance.

<sup>&</sup>lt;sup>46</sup> @usantidoping (2019)

<sup>&</sup>lt;sup>47</sup> I don't make any genuine substantive claim that caffeine is actually helpful to society at large, but as this paper was fueled largely by caffeine – from cheap on-campus coffee to not-terrible home-made coffee to that rare fancy coffee-shop coffee – I'd like to think it's doing something good. Unless you hate this paper. Then blame caffeine.

With these discussions about sport as institution and how the values and goals of these institutions are more than merely particular athletic excellences on the field of play, it's time to turn our attention to the new understanding of the concept of doping.

# 5. A new understanding of the concept of doping

In the above, I've tried to center the discussion of doping directly in sport – as something that is relative to some particular sporting institution – rather than simply based on intrinsic properties of some substance or activity. This has led to my newly proposed definition of doping:

Doping: a means of gaining a competitive advantage through the use of exogenous substances entering an athlete's body, where such means undermine the relevant sporting institution.

Much of this paper has been addressing the last clause. This is the major alteration in our new understanding from how doping has generally been discussed, so deserves the most attention. Still, we should address the other two components, that of competitive advantage and that of exogenous substances.

First, the inclusion of "competitive advantage" in the definition. Imagine a world-class athlete competing in a world-class competition, where that athlete used an exogenous substance to alter the competition radically, such that the athletic excellences that mattered to that sport could not be tested as they typically are. But instead of this substance use improving that athlete's performance, they dramatically hindered it. This is what happened at the 2008 Athletissima meeting, where Ivan Ukhov got drunk before the high jump. As any of the millions of people who have watched the video online can see with their own eyes, Ukhov absolutely had no advantage from his use of alcohol.<sup>48</sup> Although his personal best was superior to the winning height of the competition, he not only failed to place but failed to clear a single bar. While he was not invited to prestigious meets later that season — meets that an athlete of his caliber would otherwise be expected to compete in — he was not penalized for anything connected to doping. This is how it should be. There could be good reasons to have rules and/or norms against the use of alcohol in many sporting events — be it due to concerns of the fans' entertainment, health of

<sup>&</sup>lt;sup>48</sup> YouTube (2008)

the athletes, or quality of the competition — but these are not doping-related reasons. While this is not a thorough defense of the inclusion of "competitive advantage" being required for some act to be an act of doping, it should illustrate the reasoning. And given that advantage seems so central to most everyone's view of doping, my hope is that it doesn't need further exploration here.

Next, onto the inclusion of "the use of exogenous substances entering an athlete's body" in the definition of doping.

Some act that gave a competitive advantage and undermined a sporting institution, but did not involve the use of exogenous substances, would be prima facie wrong in just the same way that doping is, despite not being doping on my definition. And there is no in-principle reason why our important doping-related concept must be like this. Rather, this is a contingent fact about how "doping" was used throughout sporting history. Paradigmatic cases of doping all involve exogenous substance use, be it through injections or taking things orally. While there is discussion about what sorts of things on the margins might count as doping - from blooddoping (where an athlete extracts then reinjects their own blood to get a boost in oxygen-carrying capacity) to use of high-altitude chambers to stimulate EPO production — there isn't a consensus. My view fits all of our paradigmatic cases, and can weigh in on those on the margins. For the examples above, blood-doping would be doping, as it involves the use of exogenous substances, even if that substance was once in the athlete's body. The use of high-altitude chambers would not be doping, even if this undermines the relevant sporting institution in the same way that exogenous EPO usage might. (Both increase oxygen carrying capacity through means distinct from mere training and natural talent.) No "mechanical doping" would be cases of actual doping, even if they are to be looked down upon for the same reason. While one might view this as a weakness for the view – that two things can have the same impact on a sporting institution but only one is doping – I'd rather view it as a positive; my view can discriminate among different ways one can undermine an institution while fitting our pretheoretical views on (most) doping cases.

In addition to ruling against "mechanical" doping, my definition gives direction on another non-standard form of doping: doping unknowing others.

While paradigmatic cases of doping involve some athlete putting substances into their own body, my definition allows for doping in which the person injecting the substance is not the athlete being injected. It's hard to imagine why we would think any differently of athlete who injected themselves with human growth hormone (HGH) as opposed to an athlete who knowingly had a friend, teammate, coach, or doctor inject them with HGH. But this allowance for others to do the doping allows for more than merely an "extended self," so to speak.

Two other sorts of doping that are included in my definition are doping an unknowing athlete to give that athlete a competitive advantage, and doping an unknowing athlete to give that athlete's competitor a competitive advantage. Let's start with the latter.

As written, my definition would call the following doping: one athlete giving an unknowing competitor some substance, when doing so both gives the first athlete an advantage and when this undermine the sporting institution. For example, if in the above high jump example Ukhov had his drink spiked by a competitor rather than choosing to imbibe the alcohol himself, this would be a case of doping. It would not be a case of Ukhov doping, but rather it would be doping by whomever spiked Ukhov's drink.

For what it's worth, the historical use of the term "dope" support the idea that such cases should count as doping. According to lexicographer Ben Zimmer, the first time the words "dope" and "doping" were connected to sport was in horse racing, when horses could be "doped" to go faster *or to go slower*.<sup>49</sup> While the historical use of the term itself doesn't dictate how we must understand the concept of doping, it does suggest that drugging other athletes for one's own benefit could plausibly be accepted as doping.

Similarly, my account allows for doping an unknowing athlete to give that athlete an advantage. While there is little evidence for the claim, Justin Gatlin blames his 2006 positive doping test on his massage therapist, Christopher Whetstine, rubbing testosterone cream onto an

<sup>49</sup> Zimmer (2013)

unaware Gatlin.<sup>50</sup> If this were true, my account still would be able to call this doping, albeit doping by Whetstine as opposed to doping by Gatlin. This would still be a case of an athlete getting an advantage in a way that undermines the sporting institution (presumably; the specifics would depend on the institution's view on exogenous testosterone) through the use of an exogenous substance entering the body. This seems like the result we'd want; it seems clear that Gatlin would still have been doped in such a case, even if he didn't dope himself.

As ridiculous as these examples might seem to an outsider, the worry of having an athlete unknowingly doped is alive and well in the world of athletics. (Or at least the public perception is, perhaps so that some can build an excuse to knowingly dope athletes.) Nike's star athletics' coach Alberto Salazar – the former coach of four-time Olympic Champion Mo Farah, two-time Olympic Medalist and many-time US Champion Galen Rupp, and many others via Nike's Oregon Project – was caught testing the use of testosterone cream on his own sons, allegedly to help determine the dangers of his athletes being unknowingly doped.<sup>51</sup> While none of his recent athletes have been banned, Salazar himself (along with doctor Jeffrey Brown) received a four-year ban from USADA.<sup>52</sup>

That my account suggests that such behavior counts as doping seems to me to be the correct result. Nonetheless, I recognize that some folks might resist this due to thinking that doping can only involve one person or that doping is necessarily – not just *prima facie* – blameworthy. While I disagree, my definition can be easily modified for either of these commitments. For the former, one could change "an athlete's body" into "the athlete's own body," and for the latter one could add "purposeful" ahead of "use of exogenous substances."

It is worth noting that, while I am offering up a novel understanding of the concept of doping, it's not too radically far afield from what some other philosophers have gestured at. While most philosophical work on doping merely uses the term "doping" rather than trying to define the term, there are some important similarities between some others' arguments about what to do

<sup>&</sup>lt;sup>50</sup> Hersh (2006)

<sup>&</sup>lt;sup>51</sup> Longman & Hart (2019)

<sup>&</sup>lt;sup>52</sup> United States Anti-Doping Agency (2019)

about doping and mine about what doping is. Two illustrative examples of similarities can be seen in Devine (2010), where he argues that "doping threatens to undermine a central purpose of sport" by "threaten[ing] to obscure the display of at least some relevant sporting excellences,"<sup>53</sup> and in Gleaves (2013), where he stresses a "test-relevant" approach, where "sporting communities ought to examine how a performance-enhancing substance would alter each sport's test and the values associated with that test."<sup>54</sup> But while others have correctly called attention to how certain activities that we call doping might undermine the skills and values we intend to test in sport, they've taken for granted that we have a clear enough concept of doping in the first place. This is not criticism of any particular people; it's simply a reflection on how pretty much all of us have engaged with the term "doping" over the decades.

While my view does overlap with some discussions by some other philosophers of sport, it is a novel view about the concept of doping – rather than merely of what we should do about it – and with such a novel view comes many important consequences. While I cannot clear everything up in one paper, we will now turn our attention to some of the key consequences of and potential worries from this definition.

# 6. Conceptual consequences and key worries

There are of course many important consequences and potential worries that fall out of the view presented here. I can't hope to solve everything in this one paper, but there are some important concerns to address here.

Quite possibly the biggest concern one might have is the determination of the goal or purpose of some sporting institution. While the view presented here can be true even if we can never determine what some sporting institution is for, it would be a lot less useful if that were the case. We can't really talk about undermining a sporting institution without having a good grasp of the purposes of that institution.

<sup>53</sup> Devine (2010, p.637)

<sup>54</sup> Gleaves (2013, p.50)

The purpose of a sporting institution, as mentioned above, is going to depend on the function that the sporting institution is supposed to serve. What exactly this function is will be determined in large part by the key stakeholders of that institution. But who counts as the key stakeholders? I very much want to put the participants (athletes, coaches, referees) in the center of this, but other fans and supporters matter too. The officials and administrators who organize a more structured institution – such as in professional sports or professional-like scholastic sports – certainly play a role in determining the function an institution is supposed to serve as well. And the specifics of this function can change over time; for example, college sports at the turn of the 1900's were (arguably) supposed to predominately serve the function of toughening up America's young men, but this is (arguably) far from the major function that contemporary college sports are supposed to play now.

An exploration of how precisely to determine the purpose of some sporting institution could use a paper all its own, so I won't pretend to be able to solve the problem here. Nonetheless, we can note that understanding the broad type of sporting institution should help give some guidance on how to balance the interests of various stakeholders, and by looking at an example we should be able to get a better grasp on how this might go.

Take some recreational under-8 basketball league. For such a league, even if every player wants nothing more than to maximize their short-term physical ability and to test this ability on the court, this would be insufficient to determine that the goals of the sporting institutions are merely about raw physical ability. This is because there is more to this sporting institution than merely the players. While the exact reasons for putting their kids in this league will vary among parents, presumably most care more about personal growth and developing values deemed important by the community (e.g. hard work, respect for others, teamwork). Similarly, the coaches and referees almost certainly care more about developing some of these values than about developing raw physical ability. Often, youth leagues will have descriptions of the goals of the league, or even official mission statements. Given the nature of youth sports leagues, these other considerations can play a key role in the purpose of this sporting institution.

(That said, it is in principle possible for there to be a sporting institution for under-eight basketball players that cared about nothing more than raw physical ability and for which no use of any exogenous substances was doping. This would require that at least most of those who set up the league and the parents who put the kids in the league shared roughly these views, or that this was some league put together purely by the kids themselves, and while possible, seems far from what we'd expect to see in general. Then again, given some parents of young athletes and the obscene attention some communities put on youth sport, such a sporting institution sadly might not be as far from reality as one would hope.)

The situation in professional sports is arguably quite different. While there are many people who impact the institution of professional basketball in the US, arguably the athletes should have the biggest impact on what counts as acceptable within this institution. In the case of youth basketball, there were important social reasons – pushed by parents, referees, and league officials – to have institutions that value more than merely raw athletic ability, and most of those forces are non-existent in the case of professional basketball. While there might still be some external pressures from non-athletes – for example, perhaps the social position of the professional league as central to so many fans' lives puts pressure on the athletes also being role-models of some sort – the major determination of what is acceptable seems to be vested in these elite, adult athletes. But it's important to recognize that a professional sporting institution need not only care about pure athletic excellence.

The case of professional basketball in the US illustrates this last point rather well. We have two professional basketball institutions in this country, the NBA and the WNBA.<sup>55</sup> While I haven't talked to any of the athletes myself, as an outsider the WNBA comes across to me as an institution in which there is more value on empowering folks broadly and building a strong community, as compared to the NBA. This is not to say that the NBA doesn't have some individuals who care deeply about being role models or about bettering their community – from

<sup>&</sup>lt;sup>55</sup> By the time you read this, there might be a third professional sporting institution, the Professional Collegiate League (PCL), which is supposed to balance athletic excellence and professionalism with academics, in an importantly different way from the NCAA (which only has professionalism for coaches, staff, and administrators).

LeBron James<sup>56</sup> to Dwyane Wade<sup>57</sup> to Mahmoud Abdul-Rauf<sup>58</sup> – but rather that, as a league (or even just as individual teams) the WNBA seems to do more collectively. This is seen through how players collectively stand together to fight injustice<sup>59</sup> and support their community,<sup>60</sup> as well as through formal league initiatives such as "Her Time to Play,"

a national grassroots initiative created by the WNBA and NBA to inspire the next generation of girls, ages 7-14, to play basketball in a positive and healthy way. Through sports, girls learn important life skills such as teamwork, leadership, and self-confidence. However, twice as many girls compared to boys drop out of sports by the age of 14 (Women's Sports Foundation), which can be attributed to societal barriers that are primarily faced by girls.<sup>61</sup>

While it might be hard, if not impossible, to specify the balance of purposes of these institutions exactly, it does seem that the WNBA puts more value on some of these community and social goods than does the NBA. The balance of values would give guidance for what sort of behaviors are acceptable or not.<sup>62</sup>

You might be wondering how all of this connects to doping. It's possible that these two professional leagues would share what counts as doping, but there's an argument that they should differ.

While the WNBA cares deeply about athletic excellence, the institution also seems to care deeply about encouraging young girls to work hard and be self-confident. Being role-models to

58 Fedotin (2018)

59 Ziller & Prada (2017)

<sup>60</sup> WNBA (2004)

<sup>61</sup> Jr. NBA (a)

<sup>56</sup> Lebron James Family Foundation (a)

<sup>&</sup>lt;sup>57</sup> Hendricks (2016)

<sup>&</sup>lt;sup>62</sup> While I think it's good to act as the WNBA seems to act with regards to promoting important values in society and being an inspiration to so many, one might think that there is something wrong with a major focus of the most elite women's league being concerns external to mere athletic excellence. The men's league gets to focus more on the highest level of competition and needn't do anything else (or much else), so why should the women? This seems like an interesting question to address, but for present purposes can only be mentioned, not discussed.

these young girls – and to others – might lead to a more limited role in the use of substances that are not easily accessible, or that have effects on your body beyond merely how they impact performance. If the WNBA cares about promoting self-confidence among young girls in sport, but models behavior in which only those with access to the latest and greatest pharmacological support can succeed, there might be the opposite effect. These young people might take the wrong impression that one's worth is determined in large part by external factors over which one has no control; they don't necessarily have the money or connections to have the best pharmacological support. (Of course, we already see similar sorts of things when it comes to resources - often in interscholastic or inter-city competition, teams with vastly unequal resources can compete, which can have a significant impact on performance - as well as with regards to natural talent.) With regards to body changes, sense of physical self is incredibly important to all, but seems disproportionately to impact how young girls see themselves, at least in our current cultural climate. If these young girls saw that to be athletes they had to alter their body in uncomfortable ways, that could have the opposite effect of what the WNBA as an institution is trying to model. This is especially important given the WNBA's specific focus on girls, given that there is some research supporting the claim that "dissatisfaction with body image and weight was not significantly correlated with self-esteem for boys but was significant for girls."63 All of this is to suggest that it might be the case that the NBA and WNBA should differ on what counts as doping, given the differing importance they (seemingly) place on these external-to-the-court considerations.

To evaluate whether the above rough argument could yield a difference in what counts as doping between the NBA and the WNBA, there would be a lot of questions we'd have to answer. We'd need to know a lot more about how young people view various outside impacts on physical ability. We'd need to know how young people's actions are impacted by their role models. We'd need to know how open athletes were about use of various substances. None of these issues can be evaluated here, but this can still nonetheless give guidance for how to determine what counts as doping in some sporting institution.

<sup>63</sup> Furnham et al (2002, p.593)

A more radical example could be seen by looking at how the sport of Athletics as currently practiced and contrast that with what some folks think would be a good idea: legalizing everything. We could imagine that, in addition to our institution of world-class Athletics (that which is under the purview of WA), there was a separate institution of Athletics that embraced the goal of physical human excellence by any means necessary. Many find the question of "how fast can humans run" valuable, and might want to include any and all means in answering this question. We're arguably seeing this with the contemporary debate over what kind of footwear aids are acceptable for running, thanks in large part to Nike's Zoom Vaporfly and Alphafly shoes. These shoes not only have a proprietary foam, but have various amounts of carbon fiber which, some claim, acts as an unacceptable spring.<sup>64</sup> But it's plausible that, if the goal is determining how fast can we get a human to move without jetpacks and wheels, such shoes should be embraced. For the same reason, such an institution might embrace any and all substances that might otherwise be considered doping, such as HGH, testosterone, and anabolic steroids. Given that some do legitimately question if we should have a "doped Olympics," there is evidence to point to such a distinct institution of Athletics (and other Olympic sports) as possibly desirable (for some).<sup>65</sup> Such an institution would clearly have a radically different answer to what counts as doping as our current institution of world-class Athletics.

Other explanations for why some actions that we often consider doping would continue to be doping in certain sporting institutions are more simple, and perhaps more crass. "I don't want to have to stick needles in my butt every day to be an athlete," is a claim that many athletes would plausibly make. While silly on its face, such a view can point to something important. If all or most of the participants in a given sporting institution have a similar preference about how participants should promote athletic excellence in their sport, a view that precludes standardly putting needles in butts, then this gives us guidance about what that institution cares about. While it might not seem as principled as the classist views of amateurism or the academic views of college athletics, if this is important to the majority of the participants in some given sporting

<sup>&</sup>lt;sup>64</sup> Burfoot (2019)

<sup>65</sup> Burnett (2016)

institution, then this view should be important to that institution. Exactly how important these sorts of views would be for guiding the purpose of an institution would depend on many other factors of that institution; again, it seems plausible that the collective goals of athletes in an under-eigh league will have less weight in determining the purpose of their sporting institution than the collective goals of athletes in a professional league.

Another common view from those opposed to the use of performance-enhancing substances is along the lines that sport shouldn't be a test of who has the best medical team. While one might find it odd that many athletes think that contests should not be testing this external factor but are fine having other external facts – from coaches to facilities to national support – impact contests, it can still be the case that this distinction is important to those within the institution. If so, the use of some substance that can only be used (well or safely) in conjunction with significant medical support would undermine an important value of this particular institution.

Note that it's a separate question whether it is all-things-considered better to have an institution that has these views and has more things be considered doping than not to have these views. All I'm saying here is that these views can underlie the values of some institution, and tell us what is or is not acceptable with regards to that institution. This is the same issue we see in the classist views of amateurism.

Even if we can answer the question of what undermines a sporting institution, there is the additional, practical problem of what to do about contests that occur at the overlap of distinct sporting institutions. Take the following three examples, where the values of these distinct sporting institutions with regards to doping conflict.

Youth sport and professional sport can at times overlap. Especially in sports such as swimming and gymnastics, athletes can be elite at a very young age. There can be competitions for young age groups that include some of the very best in the world, say at some age-group national championship meet. While not currently the case, it is plausible that elite gymnastics could embrace the use of various performance-enhancing substances, perhaps ones that slow the body's typical growth patterns so as to help athletes maintain their smaller stature that seems to be beneficial in their competitions. It seems far less likely that the use of such substances would be embraced by most youth sporting institutions. Given this, we could see cases of age-group national championships involving athletes who are only part of this youth sporting institution – say because they are very good but not phenomenal, or because they just don't want to devote their lives to sport – competing against folks who are also part of an elite, international sporting institution where such means are accepted.

Adult recreational sport and collegiate sport can overlap in certain individual sports, such as athletics. It isn't uncommon for meets to be open to all, provided they can hit minimum qualifying marks. It's currently the case that institutions of collegiate sport ban the use of most performance-enhancing substances, and for present purposes we'll accept that this is correct for those institutions as they are. For many recreational adult athletes, the use of various performance-enhancing substances that undermine collegiate sporting institutions might help enhance their recreational – but still serious – sporting goals. Given that it's still recreational – these aren't the world-class athletes dropping down to compete against the collegians – the values at play are likely to be more about enjoyment, self-respect, and personal accomplishment. It is quite plausible that this could lead to competitions where collegiate athletes who are part of an institution that looks down upon the use of performance-enhancing substances will compete against others who can use many more means to enhance their performance without undermining their main sporting institution.

There can also be especially narrow, specialized sporting institutions that overlap with more broad sporting institutions. Take the example of the Gay Games, and how it can overlap with elite international sport. The Gay Games are not only a sporting institution that cares about athletic excellences, but that cares deeply about inclusivity and empowering folks to live their best lives. As seen on the official website, "[t]he mission of the Federation of Gay Games is to promote equality through the organization of the premiere international LGBT and gay-friendly sports and cultural event known as the Gay Games."<sup>66</sup> To do so, the gay Games must be inclusive of various sorts of performance-enhancing substances, most notably testosterone. This is because such substances can often play a key role in helping athletes transition, or to help fight off HIV,

<sup>66</sup> Federation of Gay Games

which disproportionately effects members of the LGBTQ+ community, and having an institution that is welcoming to all requires accepting participants who do what they need to live their best lives.<sup>67</sup> While elite athletic competition is not the major goal here, the Gay Games in no way precludes the most elite athletes from competing, and there are certainly elite athletes who are members of this LGBTQ+ community. One of the more exciting up-and-coming middle-distance athletes is Nikki Hiltz. She is an out lesbian who uses her platform empower others, especially youth in the LGBTQ+ community.<sup>68</sup> She is also one of the best athletes in the world; she won gold in the 1,500m at the 2019 Pan American Games, and represented the United States at that distance at the 2019 World Championships in Athletics. It's conceivable that she would want to compete at these Gay Games herself one day (though I have no insight into her actual desires), or that other athletes of her stature would want to do so.

In all three of these cases, we could have conflict between what sort of means of gaining a competitive advantage are acceptable. This is because there is an overlap of distinct sporting institutions that have importantly different values, values that lead to different acceptable means and therefore different views on what counts as doping. Even if we accept the whole theory, we still have a practical worry about what rules should be in place in competitions at such intersections.

My tentative answer to this practical problem is simply to have rules that address the strictest restriction on the use of various means or substances. This would address practical concerns, though would lead to some cases where means that are beneficial to some sporting institution are restricted in some competition that is part of that institution, just because that competition is also part of some overlapping institution. This could also lead to some athletes being unable to compete in competitions that they would seemingly be a good fit for, such as in the case of elite gymnasts being barred from their age-group-national championships due to their use of performance-enhancing substances that are embraced by their institution of professional

<sup>&</sup>lt;sup>67</sup> Burke & Symons (2016)

<sup>68</sup> Strout (2019)

gymnastics (in our fictitious but plausible example) but are not in the institution of youth gymnastics. Specifics will of course vary, but this seems like a plausible tentative guideline.

Beyond these bigger-picture issues, there are some more practical consequences of understanding doping in this way that are worth mentioning.

First, since we now better understand that doping is directly relative to a particular sporting institution, there can't be any universal doping list, such as there currently is under WADA. Instead, each professional sport would need its own banned list. The real difficulties could come when we have important differences between national and international competitions of the "same" elite sport; for example, imagine that raw athletic power is significantly more valued in professional American athletics, such that very little if anything is doping, but values such as hard work and equal access are more valued in most other countries' professional athletics, such that much more is doping. As mentioned above, I'm tentatively leaning towards thinking that the correct practical result would be to have the strictest rules for overlap, but I stress that this is tentative. Relatedly, non-elite competitions that are technically under the umbrella of the elite, professional league, should discriminate what they test for; for example, it's hard to see how a 90-year-old – who was the only entrant in his age group at a Masters National Championship – could undermine such age group competition by having steroids in his system.<sup>69</sup>

Second, there will be significantly fewer banned substances than there are now, and the amounts to trigger a ban will in many cases be significantly higher than it is now. Many folks are banned with no fault for doping, as trace amounts of banned substances end up in their system from non-sport-specific behavior, such as taking over-the-counter cold medicine,<sup>70</sup> kissing folks met on Craigslist,<sup>71</sup> and eating meat.<sup>72</sup> It's hard to imagine how such things undermine a sporting

<sup>70</sup> Raynor (2019)

<sup>69</sup> Mather (2019)

<sup>71</sup> Gillespie (2016)

<sup>&</sup>lt;sup>72</sup> AP (2019)

institution.<sup>73</sup> Similarly, recreational drugs such as alcohol, marijuana, cocaine, and others are unlikely to count as doping for most sporting institutions, even if it is the case that they are harmful and their use should be looked down upon.<sup>74</sup>

Third, given that the purposes and values of some sporting institution are formed (more-orless in part) due to the views of the practitioners, we'll need to make it so that athletes have a real seat at the table in the relevant anti-doping organizations. There is already a strong push for better athlete representation, and this is just one more reason why the athletes need to win that fight.

There are of course many other practical concerns, but addressing them is a task for another time.

# 7. Conclusion

Doping is an incredibly important topic in the sports world, but unfortunately the concept is far too undertheorized. This paper is an attempt to promote a new way of understanding doping. This new understanding is that doping is

a means of gaining a competitive advantage through the use of exogenous substances entering an athlete's body, where such means undermine the relevant sporting institution.

Key to this new understanding is the importance of sport as social institution, and not merely individual athletic contest. By recognizing that various sporting institutions can have differing aims and values, we see that the "same" actions with the "same" substances can be acceptable or not depending on the particular sporting institution.

<sup>&</sup>lt;sup>73</sup> Note that this is not meant to imply that all of these behaviors are ethical. It is abhorrent for folks to eat animals in most circumstances when non-animal food sources are available, and doing so is by no needs needed for athletic success. Nonetheless, it's hard to see how this undermines their sporting institution.

<sup>74</sup> Lopez (2018)

All told, this project should help us not only better understand the important concept of doping, but help guide our actions to make our sports world more just. But as always, there is still lots more work to do!<sup>75</sup>

<sup>&</sup>lt;sup>75</sup> Thanks to my dissertation committee of Alastair Norcross, Chris Heathwood, David Boonin, Garrett Bredeson, and Nick Villanueva for their helpful feedback on this project. Thanks also to Colin Smith for his help in the painstaking task of editing for grammar; all remaining errors are mine alone.

# **Bibliography**

AP (2019). "Agent: Former UA long jumper expects doping ban; tainted beef at Arkansas restaurant cited" *Arkansas Democrat-Gazette*. https://www.arkansasonline.com/news/2019/may/ 31/agent-former-ua-long-jumper-expects-doping-ban-tai/

Baker, Norman (2004). "Whose Hegemony? The Origins of the Amateur Ethos in Nineteenth Century English Society" *Sport in History* 24(1), 1-16

Brissonneau, Christophe and de Oca, Jeffrey Montez (2017). *Doping in Elite Sports: Voices of French Sportspeople and Their Doctors, 1950-2010.* New York: Routledge

Brody, Jane E. (2010). "For Children in Sports, a Breaking Point" New York Times. https://www.nytimes.com/2010/05/25/health/25brod.html

Brown, W.M. (1985). "Paternalism, Drugs, and the Nature of Sports" *Journal of the Philosophy* of Sport 11, 14-22

Burfoot, Amby (2019). "Those Superfast Nike Shoes Are Creating a Problem" *New York Times*. https://www.nytimes.com/2019/10/18/sports/marathon-running-nike-vaporfly-shoes.html

Burke, Michael and Symons, Caroline (2016). "Anti-doping policies and the Gay Games; Morgan's treatment-enhancement distinction in action" *Journal of the Philosophy of Sport* 43(2), 267-280

Burnett, Dean (2016). "Olympics to the max: what if doping were allowed?" *The Guardian*. https://www.theguardian.com/science/brain-flapping/2016/aug/12/olympics-to-the-max-what-if-doping-were-allowed

Byers, Walter (1995). Unsportsmanlike Conduct. Ann Arbor: University of Michigan Press

Carr, Craig L. (2008). "Fairness and Performance Enhancement in Sport" Journal of the Philosophy of Sport 35(2), 193-207

Chung, Doug J. (2013). "The Dynamic Advertising Effect of Collegiate Athletics" *Marketing Science* 32(5), 679-698

Collins-Dexter, Brandi (2018). "NCAA's amateurism rule exploits black athletes as slave labor" *The Undefeated*. https://theundefeated.com/features/ncaas-amateurism-rule-exploits-black-athletes-as-slave-labor/

Cox, Peter (2008). "Class and Competition: The Gentrification of Sport Cycling" presented at 5<sup>th</sup> Cycling and Society Symposium, Bristol, UK

Dauncey, Hugh and Hare, Geoff (2003). *The Tour De France 1903-2003: a Century of Sporting Structures, Meanings and Values*. Routledge

DiFrancesco, Timothy (2017). "6 Things I've Learned in my 6 Seasons as an NBA Strength & Conditoning Coach" *TD Athletes Edge*. https://www.tdathletesedge.com/blog/2017/2/1/jqfzp51tsm3mmi1cizwx3jboaqyco1

Dixon, Nicholas (2008). "Performance-Enhancing Drugs, Paternalism, Meritocracy, and Harm to Sport" *Journal of Social Philosophy* 39(2), 246-268

Dimeo, Paul (2007). A History of Drug Use in Sport 1876-1976. New York: Routledge

Devine, John W. (2011). "Doping is a threat to sporting excellence" *British Journal off Sports Medicine* 45, 637-639

Eren, Ozkan and Mocan, Naci (2018). "Emotional Judges and Unlucky Juveniles" *American Economic Journal: Applied Economics* 10(3), 171-205

ESPN (2016). "The Steroids Era" ESPN. http://www.espn.com/mlb/topics/\_/page/the-steroids-era

ESPN (2018). "Who's the Highest-Paid Person in Your State" *ESPN*. http://www.espn.com/espn/feature/story/\_/id/22454170/highest-paid-state-employees-include-ncaa-coaches-nick-saban-john-calipari-dabo-swinney-bill-self-bob-huggins

Federation of Gay Games. "Mission & Vision" *Federation of Gay Games*. https://gaygames.org/ Mission-&-Vision

Fedotin, Jeff (2018). "Before Kaepernick: Mahmoud Abdul-Rauf Sacrificed NBA Career To Protest Injustice" *ThePostGame*. http://www.thepostgame.com/mahmoud-abdul-rauf-big3-nba-kaepernick-anthem

Fincoeur et al. (2019). Doping in Cycling. New York: Routledge

Furnham et al. (2002). "Body Image Dissatisfaction: Gender Differences in Eating Attitudes, Self-Esteem, and Reasons for Exercise" *The Journal of Psychology* 136(6), 581-596

Gardner, Roger (1989). "On Performance-Enhancing Substance and the Unfair Advantage Argument" *Journal of the Philosophy of Sport* 16, 59-73

Gillespie, Kerry (2016). "Shawn Barber tested positive for cocaine before Rio Olympics" *Toronto Star.* https://www.thestar.com/sports/amateur/2016/10/06/shawn-barber-tested-positive-for-cocaine-before-rio-olympics.html

Ginsbach, Jay (2019). "Sports Betting Explodes During March Madness, And AGA Estimates \$8.5 Billion Bet On NCAA Tournament" *Forbes*. https://www.forbes.com/sites/jayginsbach/2019/03/19/sports-betting-explodes-during-march-madness-aga-estimates-8-5-billion-bet-on-ncaa-tournament/#2c863c082ea8

Gleaves, John (2010). "No Harm, No Foul? Justifying Bans on Safe Performance-Enhancing Drugs" *Sport, Ethics and Philosophy* 4(3), 269-283

Gleaves, John (2013). "Exploring New Avenues to the Doping Debate in Sports: A Test-Relevant Approach" *Fair Play* 1(2), 39-63

Hendricks, Maggie (2016). "Dwyane Wade wants to be more than just a basketball player in his return to Chicago" *USA Today*. https://ftw.usatoday.com/2016/09/dwyane-wade-chicago-gunviolence

Hersh, Phillip (2006). "Gatlin's masseur disputes allegation" *Chicago Tribune*. https://www.chicagotribune.com/news/ct-xpm-2006-08-03-0608030195-story.html

Houlihan, Barrie (2004). "Civil Rights, Doping Control and the World Anti-doping Code" Sport in Society 7(3), 420-437

Jackson, Victoria L. (2018). "Take it from a former Division I athlete: College sports are like Jim Crow" *LA Times*. https://www.latimes.com/opinion/op-ed/la-oe-jackson-college-sports-20180111-story.html

Jayanthi et al, (2013). "Sports Specialization in Young Athletes Evidence-Based Recommendations" *Sports Health* 5(3), 251-257

Jones, Carwyn (2010). "Doping in Cycling: Realism, Antirealism and Ethical Deliberation" *Journal of the Philosophy of Sport* 37(1), 88-101

Jr. NBA (a). "Her Time To Play" Jr. NBA. https://jr.nba.com/hertimetoplay/

Kimmage, Paul (2008). Rough Ride: Behind the Wheel with a Pro Cyclist. London: Yellow Jersey Press

Klein, Christopher (2018). "5 Myths About the Ancient Olympics" *History*. https://www.history.com/news/5-myths-about-the-ancient-olympics

Koslosky, John-Erik (2014). "How the Steroid Era Saved Baseball" *The Motley Fool*. https://www.fool.com/investing/general/2014/01/14/we-cant-ignore-the-steroid-era-it-just-might-have.aspx

Kretchmar et al. (2017). History and Philosophy of Sport and Physical Activity. Human Kinetics

LeBron James Family Foundation (a). https://www.lebronjamesfamilyfoundation.org

Lemire, Joe (2019). "NBA's Hawks Partner with Orreco to Test Blood for Training" *SportTechie*. https://www.sporttechie.com/orreco-nba-atlanta-hawks-dallas-mavericks-new-york-knicks/

Loland, Sigmund (2018). "Performance-Enhancing Drugs, Sport, and the Ideal of Natural Athletic Performance" *The American Journal of bioethics* 18(6), 8-15

Longman, Jeré and Hart, Matt (2019). "Alberto Salazar, Coach of the Nike Oregon Project, Gets a 4-Year Doping Ban" *New York Times*. https://www.nytimes.com/2019/09/30/sports/alberto-salazar-doping-ban.html

Lopez Frias, Francisco Javier (2019). "Unnatural Technology in a 'Natural' Practice? Human Nature and Performance-Enhancing Technology in Sport" *Philosophies*, 4(35), 1-16

MacIntyre, Alasdair (1984). After Virtue: A Study in Moral Theory. University of Notre Dame Press

Mather, Victor (2019). "This Cyclist Tested Positive for a Steroid. He's 90." *New York Times*. https://www.nytimes.com/2019/01/08/sports/cycling-steroids-tainted-meat.html

McDermott, Casey (2013). "U.S. Higher-Education System Perpetuates White Privilege, Report Says" *The Chronicle of Higher Education*. https://www.chronicle.com/article/US-Higher-Education-System/140631

McNamee, Mike (1995). "Sporting Practices, Institutions, and Virtues: A Critique and a Restatement" *Journal of the Philosophy of Sport* 12, 61-82

Melero, Shannon (2020). "An Older Woman Broke a Cycling Record While on Menopause Meds; the USADA Called It Doping" *Jezebel* https://jezebel.com/an-older-woman-broke-a-cycling-record-while-on-menopaus-1844767071

Møller, Verner (2010). The Ethics of Doping and Anti-Doping. Routledge

Møller, Verner and Dimeo, Paul (2014). "Anti-doping — the end of sport" *International Journal of Sport Policy and Politics* 6(2), 259-272

Morgan, William J. (2009). "Athletic Perfection, Performance-Enhancing Drugs, and the Treatment-Enhancement Distinction" *Journal of the Philosophy of Sport* 36(2), 162-181

Murray, Thomas H. (2019). "What's the point of sport?" International Journal of sport Policy and Politics 11(2), 355-364

Nardone, Alex (2016). "Top 15 NBA Players With An Unbelievable Work Ethic" *The Sportster*. https://www.thesportster.com/basketball/top-15-nba-players-with-an-unbelievable-work-ethic/

Nathan et al. (2011). "Corked Bats, Juiced Balls, and Humidors: The Physics of Cheating in Baseball" *American Journal of Physics* 79(6), 575-580

NCAA (a). "Countable Athletically Related Activities Reference Charts" *NCAA*. http://www.ncaa.org/sites/default/files/Charts.pdf

NCAA (b). "Division I Academic Eligibility" NCAA. http://www.ncaa.org/about/division-i-academic-eligibility

NCAA (c). "Frequently Asked Questions About the NCAA" *NCAA*. http://www.ncaa.org/about/ frequently-asked-questions-about-ncaa

Nocera, Joe (2016). Indentured: The Inside Story of the Rebellion Against the NCAA. Portfolio

Penn Schoen Berland (2015). "Student-Athlete Time Demands" *Penn Schoen Berland*. https:// sports.cbsimg.net/images/Pac-12-Student-Athlete-Time-Demands-Obtained-by-CBS-Sports.pdf

Raynor, Kayon (2019). "Jamaican Briana Williams tests positive for banned diuretic" http:// rjrnewsonline.com/local/jamaican-briana-williams-tests-positive-for-banned-diuretic

Ryan, Richard M. and Weinstein, Netta (2009). "Undermining quality teaching and learning: A self-determination theory perspective on high-stakes testing" *Theory and Research in Education* 7(2), 224-233

Sharon, Adam (2003). "Cold cures and caffeine taken off banned list" *Independent* https:// www.independent.co.uk/sport/general/cold-cures-and-caffeine-taken-off-banned-list-88390.html

Strout, Erin (2019). "Breaking Tapes and Trolls, Nikki Hiltz is on a Roll" *Women's Running*. https://www.womensrunning.com/2019/07/news/breaking-tapes-and-trolls-nikki-hiltz-is-on-a-roll\_102725

Tamburrini, Claudio (2013). "WADA's anti-doping policy and athletes' right to privacy" Fair Play 1(2), 84-96

Theisen, Lauren (2018). "How Big Colleges Prey On Fan Loyalty To Fight Back Against Scandals" *Deadspin*. https://deadspin.com/how-big-colleges-prey-on-fan-loyalty-to-fight-back-agai-1823903554

United States Anti-Doping Agency (2019). "AAA Panel Imposes 4-Year Sanctions on Alberto Salazar and Dr. Jeffrey Brown for Multiple Anti-Doping Rule Violations" *United States Anti-Doping Agency*. https://www.usada.org/sanction/aaa-panel-4-year-sanctions-alberto-salazar-jeffrey-brown/

University of Colorado Boulder (2018). "2018-2019 Student-Athlete Handbook" *University of Colorado Boulder*. https://s3.amazonaws.com/sidearm.sites/cubuffs.com/documents/ 2018/12/4/2018\_2019\_Handbook\_.pdf

WNBA (2004). "WNBA Focuses on Giving Back to the Community in August" *WNBA*. https:// w w w . w n b a . c o m / a r c h i v e / w n b a / c o m m u n i t y / WNBA\_FOCUSES\_ON\_GIVING\_BACK\_TO-116001-260.html

World Anti-Doping Code (2019). *World Anti-Doping Agency*. https://www.wada-ama.org/sites/ default/files/resources/files/wada\_anti-doping\_code\_2019\_english\_final\_revised\_v1\_linked.pdf

YouTube (2008). "Ivan Ukhov drunk(?) before his last jump at Athletissima 08" *YouTube*. 4 Sept, 2008. https://www.youtube.com/watch?v=oZq-6PL8L6A

Ziller, Tom and Prada, Mike (2017). "The WNBA has been at the forefront of protesting racial injustice" *SB Nation*. https://www.sbnation.com/2017/9/24/16357206/national-anthem-protest-wnba-history-donald-trump

Zimmer, Ben (2013). "Doping Gives Dutch 'Sauce' Nastier Tone" *Wall Street Journal*. https://www.wsj.com/articles/doping-gives-dutch-sauce-nastier-tone-1376698379

@usantidoping (2019). ""I've heard rumors that caffeine isn't allowed in sport. Is that true?" Reply with your question for Dr. Matt below. #cleansport #antidoping" *Twitter*. 12 Feb, 2019, 6:35 a.m. https://twitter.com/usantidoping/status/1095315505093709826