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Glocal Fitness Doping:

Policy, practice and prevention in the United States and Sweden

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Abstract

Situated within a framework of a globalized gym and fitness culture, this paper aims to investigate and compare how fitness doping can be understood in relation to, and how it is affected by, different national and local contexts. Representing different forms of welfare state regimes, the comparative analysis focuses on policy, practice, and prevention in the United States and Sweden. The findings indicate, among other things, how national level policy and implementation reflect local priorities, understandings, and values. Sweden's choices form a pattern reflecting the priority of protecting the collective good over individual pursuits. Conversely, that the U.S. does not police outside formally governed competitions in sports or in criminal contexts. Further, U.S. bodybuilders do not feel targeted for their appearance in the same ways, illustrating the priority of individual choice. Further, the paper discusses how each country implements anti-doping in ways consistent with global policies, but are also informed by various local understandings and values. This interplay between the supranational structures and locally diverse implementation is not only complex, but can seem contradictory as each locality partly remains within a global system of anti-doping in sport, and partly operates outside this context. We suggest glocal fitness doping needs to be understood as a process through which global ideals, organisations, and more contribute to influencing local and national prevention policies and cultures, and vice versa.

Keywords: Fitness doping, glocal, policy, prevention, welfare state regime, national variation

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In 2010, the American bodybuilding icon Jay Cutler was invited to guest pose at an annual bodybuilding competition in Sweden called the Lucia Trophy as part of the Fitness Festival, the largest fitness fair and expo in northern Europe. The competition organizers had marketed heavily on Cutler's presence, aiming to attract large numbers of visitors. Instead of flexing muscles, however, a video was played on a big screen in which Cutler, from his home in the U.S., said the following to the Swedish audience:

This is Jay Cutler from Las Vegas. I understand you have a packed house at the Fitness Festival in Gothenburg today. Let me tell you this; I would have loved to be there and guest pose for you. But; as you know, this week Toney Freeman was taken by the police in Sweden and brought in for questioning. I have talked to Toney. He says that this happened just because he is a professional bodybuilder. /.../ Having seen how this damaged Toney Freeman via the internet, I simply could not risk to experience the same. So, based on advice given to me here in the U.S., I decided that I could not come to Sweden this time. (Jay Cutler)

Following the video, the crowd booed and whistled their disappointment, and the conferencier concluded over the speakers that the anti-doping work by Swedish police should be understood as “nothing else than an attack on the sport of bodybuilding” (observational note).

As the situation above illustrates, understandings and use of doping in the gym and bodybuilding context can vary by country. Likewise, anti-doping legislation, preventative

work, and how each are understood by practitioners and potential users, varies. In the above situation, the different ways of approaching and understanding doping in terms of policy, practice, and prevention seem to intersect and implode at one occasion, at a fitness fair in a small country in northern Europe.

In research, and as a phenomenon, doping has commonly been understood as either a concern for modern competitive sport or a public health issue—thus, as a social/societal problem (Waddington, 2000). By *doping* we refer to activities banned under national legislation as well by the World Anti-Doping Agency’s (WADA) global guidelines, including use, possession, and/or selling of prohibited substances, such as anabolic androgenic steroids (AAS) and human growth hormones (HGH) (Lindholm, 2013). Although the scholarly debate has mainly focused on doping in formally governed competitions in the sports context (Dimeo, 2007), research on doping among the general public, most often understood as being in the context of gym and fitness culture, has expanded significantly in recent decades (Brennan et al., 2017). As a means of stressing the contextual differences between these spheres and cultural contexts, terms such as “vanity doping”, “fitness doping”, and “recreational doping” have sometimes been employed in the fitness context (Christiansen, 2009). We will, henceforth, use the term *fitness doping*. This way of conceptualising the use of illicit performance and image enhancing drugs (PIEDs) by fitness athletes is chosen to explicitly emphasize the context being investigated.

The focus of this paper is situated within a framework of a globalized gym and fitness culture in general, and in particular on doping in fitness and bodybuilding contexts. More precisely, the aim is to investigate and compare how fitness doping can be understood in relation to, and how it is affected by, different national and local contexts. Representing different forms of welfare state regimes, we will focus on fitness doping in the United States and Sweden. Our analysis

will be sociologically informed and structured in relation to three central aspects of fitness doping: policy, practice, and prevention. The work is guided by the following research questions.

RQ 1: In what ways has legislation concerning the use of PIED developed over time in the United States respectively Sweden?

RQ 2: In what ways is fitness doping discussed and negotiated by users in each country?

RQ 3: What kinds of preventative work are (or are not) being conducted in the context of gym and fitness culture in the two countries?

In answering these research questions, the idea is to present a comparative analysis of two rather different national approaches to fitness doping, situated within the context of a globalised western gym and fitness culture.

Background

Historically, anti-doping efforts have focused on the detection and deterrence of doping in **formally governed competitions in the (elite) sports context** (European Commission, 2014). Researchers have paid attention to the ways in which WADA has operated in its effort to develop effective anti-doping policies and combat doping in sport on a global scale. WADA introduced an international World Anti-Doping Code to which all countries and international sport organisations would be expected to subscribe (Hanstad & Houlihan, 2015). The role of WADA and its affiliated National Anti-Doping Organizations (NADOs) was solidified as stakeholders quickly signed onto the World Anti-Doping Code and governments were equally quick in ratifying the 2007 UNESCO Convention Against Doping in Sport, which bound governments to support the implementation of the WADA Code (Hanstad & Houlihan, 2015,

p. 587). In the wake of these developments, a growing concern over doping outside the **formally governed sports context—WADA’s jurisdiction—**also emerged. This gave rise to the belief that fitness doping had become a public health issue that also needed to be addressed on different levels, including through policy and preventative measures **aimed at securing the health and well-being of fitness athletes** (European Commission, 2014).

Contemporary gym and fitness culture is founded on the ideas of classical bodybuilding. Recently, however, the notion of the gym has shifted from something of a subcultural passion for men to a leisure activity promoting health and an active lifestyle for the masses (Sassatelli, 2010). During this process gyms reserved for the more competitive aspects of this culture, such as bodybuilding, have been increasingly marginalised. Bodybuilding attained high status in places such as the United States in the beginning of the 20th century and again in the 1970s, but since the 1990s it has often come to be associated with extreme bodies and drugs (Liokaftos, 2012; McGrath & Chananie-Hill, 2009; Monaghan, 2001). **In the late 1990s and especially during the first two decades of the twenty-first century, there has been an explosion of fitness franchises, drawing more people into fitness. During this process, the subculture of bodybuilding was gradually disconnected from a more general trend of fitness gyms and the accompanying conceptions of the gym as a place for everyone, and fitness as a mass leisure activity with strong links to health and active lifestyles. Paradoxically, at the same time cultural fitness trends and the idealisation of an active and healthy life were gaining momentum, the resulting emphasis on the body and its appearance contributed to persistent doping problems, not only in bodybuilding contexts but also among regular gym-goers.** Policymakers’ efforts to implement legislation against doping and public health organisations’ efforts to promote drug-free physical activities in these contexts have further contributed to marginalising drug use practices in public discourse (see for example Mogensen, 2011; Monaghan, 2001). **Among**

other things this has boosted the emergence of new globalised arenas for fitness doping. Social media and Internet forums, for example have become part of a new self-help culture where people can engage in doping while simultaneously minimizing the risk of legal repercussions. This has been discussed in several studies, which, in different ways, raise the question of how online communication can contribute to users' awareness and initiation to doping in a context not bound by national laws, policies, and prevention strategies (see Andreasson, 2016; Smith & Stewart, 2012; Monaghan, 2012).

A group of experts was brought together in 2011 by the European Commission to further investigate the landscape of fitness doping. The report showed, among other things, that in the EU 28 as many as 17 national coordinators for anti-doping could not identify or name any so-called good prevention practices. Whereas Austria, for example, presented only general advice on how to apply prevention in the field of doping by naming YouTube videos, countries such as Denmark have regularly conducted doping controls within fitness clubs. Overall, few examples of evaluated doping prevention programmes were noted (European Commission, 2014, p. 64). The report further emphasised that the representation of the Nordic countries was significant in terms of developed programmes, and most often community based with the aim of educating personal trainers, gym owners, and fitness athletes through various anti-doping campaigns.

(Recreational) fitness doping in the U.S. and Sweden

In the U.S., decisions to regulate anabolic substances have continually been in response to moral panics around formally governed sport and concerns over use by young athletes (Denham, 2006). The annual *Monitoring the Future* youth survey reported that lifetime steroid use dropped to 1.2% in 2017 from its high of 3.3% in 2001-2002 among 8th, 10th, and 12th grade

students combined (Johnston et al., 2018). However, this same report showed a decline in perceived risk of using steroids to a record low of 49% of students seeing great risk (Johnston et al., 2018). While youth use may have been a driver for legislation, they are far from the only group to use anabolic substances in the U.S. A meta-analysis of the general population found that age of first anabolic use is largely (78%) after age 20, later than other drug use (Pope et al., 2014). The same study estimated that between 2.9 and 4 million Americans have used anabolic substances in their lifetimes (Pope et al., 2014).

As regards the situation in Sweden, (fitness) doping as a societal problem was recognized by the Public Health Agency in Sweden in the late 1980s (Statens Folkhälsoinstitut, 2011), and further addressed through the implementation of an anti-doping act in 1992. Few surveys looking at the extent of **Swedish doping in general and fitness doping in particular** have been conducted. But a survey study carried out at elementary schools in a municipality in the south of Sweden showed that 1% of the girls and 2% of boys in elementary school and 2% of high school girls and boys reported use of banned substances (Hoff, 2013). At fitness centers, 4% of women and 5% of men reported doping use, most commonly in the 31-35 (15%) age group. We will return to the policy, practice, and prevention situations in both the U.S. and Sweden in the findings section.

Conceptual framework

The work of Esping-Andersens (1990) is useful for contextualizing the case studies. Esping-Andersen developed a model that has been used when comparing different welfare regimes, predominantly in Europe and in the West. The model identifies and categorizes clusters of nations that represent different political ambitions and perspectives on, for example, individual responsibility/freedom and social policies. Although the model often has been used to

understand the relationship between the state, the capitalist market, and the individual in terms of social class and gender, it has utility here for contextualizing how fitness doping has been approached in terms of policy and structure within the specific contexts of the U.S. and Sweden. The cluster of nations that includes the U.S. is the *liberal welfare state regimes*, which are characterized by the twin ideologies of individual responsibility/freedom and reduced government found within neo-liberal discourses. Another cluster of nations, where we find Sweden, is the *Nordic welfare states*. These are often referred to as social democratic and characterized by more general social security systems in the public sector. One key tenet is that social policy is developed to redistribute resources for equality among citizens. Esping-Andersen also describes a third cluster of nations called the *conservative welfare state regimes* that includes Germany, Belgium, and France. These are developed welfare policy regimes but with less extensive economic support for the public sector than Nordic states.

There are limitations to Esping-Andersen's model (see Esping-Andersen, 2009). Critics have emphasized that the typology marginalize certain countries, such as those in Central and Eastern Europe (Pierson, 1998; Hearn & Pringle, 2009). Others have argued that the model is insufficient in taking the role of public services and gender politics into account, and have attempted to develop alternative typologies (Bambra, 2004; 2007). But Esping-Andersen's model nevertheless provides a broad tool for discussing the characteristics of different welfare state models and the impact they may have, in this case, on how fitness doping policy and prevention has developed, as well as the ways in which fitness dopers view their practice in terms of individual choice. We argue that the U.S. and Sweden represent two extreme welfare state positions relative to Esping-Andersen's model, creating fertile ground for our analysis of fitness doping (cf. Rush, 2015). Taking the criticism expressed by scholars into account, we

also move beyond Esping-Andersen's model in our analysis to capture some of the complexities of the international character of fitness doping.

One way of doing this is through the concept of *glocal*. While globalisation often refers to a more general process, the term *glocal* explicitly addresses how national and local variations of supranational economic, cultural, and symbolic processes may occur (Urry, 2003). We will use the *glocal* concept to capture how global processes blend into and impact local patterns in gym and fitness culture generally, and fitness doping in particular. The fitness industry appropriates local traditions, which are molded into new cultural and symbolic expressions, influenced both by global trends and ideals of different welfare state regimes. Looking at fitness doping in a national comparative manner we can thus see a combination of structural uniformity, where homogenisation and power occurs, and of symbolic and localized diversity (Ram, 2004).

In relation to this discussion we will analyze how fitness doping is understood, transfigured, and met within different national welfare regimes, as well as in relation to global sport and drug contexts. On a more abstract level we will argue that it is possible to discern and describe certain patterns and understandings of fitness doping as representations of transnational ideals and understandings within gym and fitness culture. However, the relationship between such hegemonic representations and ideals/understandings defined at national and local levels is complex, multi-layered, and sometimes contradictory (Elias & Beasley, 2009).

Research design and methodology

Our investigation of two national cases is based on empirical data in the form of interview material, research on fitness doping, and on readings of secondary literature. Structuring our findings, we have been inspired by Hall & Jefferson (1976), who identify three central nodes

or analytical levels: structures, biographies, and cultures. We have modified these to suit our study. Here, *structures* will be used to discuss the formation of anti-doping policy and how policy makers in the two countries have met/approached fitness doping as a social problem/issue to be addressed through legislation **over the past 40 years**. *Biographies* will help us study individual narratives and how doping trajectories are formed and connected to policy and to the formation of a bodybuilding community within gym and fitness culture. When it comes to the final level, *cultures*, we will explore the symbolic landscape of **current** preventative work being conducted within each country. Although these levels overlap to some extent, they form the basis for the research questions and the structure of the case studies.

The article should primarily be understood as explorative and comparative in nature, although it rests on empirical data from two different projects on fitness doping. The data is mainly used as an inspiration to the exploratory, theoretical, and comparative work being conducted. The rationale for choosing the two national case studies of Sweden and the U.S. is of course related to the research interests and nationality of the authors'. **More importantly, however, Sweden and the U.S. represent two different forms of welfare states. Analyzing the different national approaches to fitness doping can, firstly, bring insights in terms of national characteristics when it comes to prohibition, the presence (or absence) of preventative work, and more. Secondly, the case study approach may facilitate the possibility for insights concerning fitness doping in relation to glocal processes through variability and the principle of comparative methodology.**

The first national study concerns fitness doping in the U.S. This case is built on analysis of U.S. drug and anti-doping policies and mainstream and niche media coverage of fitness doping. While not an exhaustive account of fitness media, the chosen examples highlight views within and outside of the fitness community in the U.S. The second case study is based on a larger

ethnographic study on bodybuilding, doping, and gym and fitness culture in Sweden. In this project, thirty-two bodybuilders and dedicated gym-goers with fitness doping experiences were interviewed and observed in different situations, such as in training and in everyday life. The data gathered in this project have previously been analyzed elsewhere (Andreasson & Johansson, 2014; Andreasson, 2015).

As regards data selection, webpages and niche-media used were mainly selected strategically based partly on volume of readers and partly on analytical and theoretical relevance. Accordingly, the aim of our selection strategy, in addition to sampling popular bodybuilding websites, was to ensure that the chosen sites reflected different aspects and representations of glocal fitness doping. Our selection of individual postings on forums, biographies gathered through interviews, and policy documents followed the same logic.

In our findings, we have not separated our use of data and secondary literature from the theoretical framework and the concepts used in the analysis. Instead, we have treated and understood the data as already impregnated or saturated in/by theory. Using our two national case studies, the ambition is to develop not just an understanding of fitness doping, but also a theoretical and methodological understanding of how an occurring phenomenon (fitness doping) simultaneously manifests at the national level and within a globalized western culture. Our descriptions of the two cases will by necessity be quite schematic and not completely parallel. Our aim is not to present two complete case studies, but rather to initiate and indicate possible ways of writing about fitness doping and national variations in the context of contemporary gym and fitness culture.

Findings

Individual freedom and doping in the U.S.

Doping substances in the U.S. are regulated under federal laws. The U.S. does not currently criminalize use at the federal level, but criminal penalties may be given for possession and trafficking. Substances are scheduled—placed in to categories of potential for medicinal use, abuse, and/or dependency—under the Controlled Substances Act (DEA, 2018). The Anabolic Steroid Control Act of 1990 (ASCA, 1990), as part of the Crime Control Act, expanded the Controlled Substances Act to include anabolic steroids. Anabolic steroids are Schedule III substances. According to the Drug Enforcement Agency, “Schedule III drugs, substances, or chemicals are defined as drugs with a moderate to low potential for physical and psychological dependence” (DEA, 2018). The 1990 Act was in response to cheating scandals in sport, notably Ben Johnson’s positive test at the 1988 Olympic Games (Denham, 1997). Years later, sparked by P(I)ED use in professional baseball, the U.S. Congress again held hearings and took up legislation to address doping (Denham, 2006). The Anabolic Steroid Control Act of 2004 (ASCA, 2004) further expanded the scheduled substances list to include hormone precursors (ethers, esters, salts), increasing the number of banned substances from 23 to 59. The ASCA 2004 additionally installed new sanctions for falsely labeling products containing banned anabolic substances. Similarly in 2014, the Designer Anabolic Steroid Control Act expanded the list to include substances “structurally similar” to listed anabolic steroids, known as designer steroids (DASCA, 2014). As the focus of these laws tended to be doping on professional, formally governed sport and issues around trafficking, use among fitness athletes tended to slip through. Because many fitness athletes do not compete within organized sport contexts (including professional bodybuilding), and acquire substances for their own use, they may use a variety of substances without drawing the attention of any sport, police, or other enforcement

agency, including WADA. This situation offers an environment where fitness athletes have a kind of freedom to use.

As regards users' understanding and negotiations on fitness doping, one large mainstream U.S. media outlet, *The New York Times*, has touched on the issue of steroids in two recent pieces on bodybuilders. One profiled former professional bodybuilder and now trainer Charles Glass. In the article, the author notes Glass's history with, and view of steroids:

He's not about to voice blanket opposition to performance-enhancing drugs. "I'd be a hypocrite," he said. He acknowledges the role steroids play with bodybuilders competing at the highest levels. But he does want clients using them to start making choices that factor in their health, including going to a doctor regularly and getting blood work done. (Bernstein, 2018)

This is reflective of harm reduction approaches to substance use. In such an approach the focus is on reducing health risk through information and support. The decision to use is left to the individual, while support and advice on safer use is made available without moral judgment (Stewart & Smith, 2008). A second profile focused on Phil Heath, who has won the Mr. Olympia contest six times. After describing Heath's workout and diet, the author described Heath's vagueness in response to a question about steroids and testing. The author notes that "Fans of Mr. Olympia do not seem caught up in the issue, perhaps because the sport is entirely about aesthetics, not strength or performance" and then moves on (Branch, 2016). Though not the focus of either profile, steroid use is assumed and noted in both. That fans are agnostic on the topic of doping points to a general understanding that steroids are part of the global

bodybuilding scene and the everyday life of fitness athletes, despite broader negative social attitudes towards doping in formally governed sport competitions.

That use is so common and tolerated is highlighted in bodybuilding and fitness media and online forums. Some bodybuilding websites such as *Bodybuilding.com* offer information and debate about steroid use and its role in bodybuilding, but make clear that the site itself does not condone steroid use (i.e. Charlebois, 2017). Other fitness websites are more open to questions of use, such as *Rxmuscle.com* and *T-nation.com*, offering articles and information on how to most effectively use various steroid products, how to control side effects, and even tips on best ways to procure substances. Each promotes individual choice and responsibility for use. One article by a professional bodybuilder, published under the Shadow Pro pseudonym, noted the open-secret nature of steroid use and how speculation misconstrues the issue:

Today things have changed, but I still hear a lot of lies and misconceptions about steroid use in professional, amateur, and “natural” bodybuilding. Most of this comes from online rumors and internet “gurus” throwing around nonsense. (Shadow Pro, 2015)

Shadow Pro goes on to lay out the risks and risk reduction measures bodybuilders and others can take before outlining 16-week cycles for moderate to heavy use. The harm reduction approach is evident in Shadow Pro’s stated myth-busting and risk reduction aims. Rather than ostracizing users or avoiding the issue altogether, members like Shadow Pro engage (potential) users as rational individuals who have chosen to use while empowering them to make the best decisions for their health. He, and presumably his readers, understands that steroid use happens in the fitness world and that correct, harm minimization information from within the fitness community will benefit users.

New York-based *Rxmuscle.com* has a decidedly open view of steroid use and takes a harm minimization approach in many articles. One feature on the multi-media site is “Ask Dr. Blau” in which Dr. Mordcai Blau fields questions from readers about gynecomastia, a possible side effect of steroid use. Similarly, under the forum for topics related to “Chemical Enhancement, Science & Medicine” is a thread for “Medical Q&A with Dr. Joel Nathan” (Nathan, n.d.), whose profile indicates he is a medical doctor with expertise in “hormone replacement therapy for Age Management”. Nathan fields questions related to steroid use, side effects, and addiction in addition to supplements and nutrition. In responding to one question about using a topical or injected testosterone, Nathan counsels:

Injections are the way to go. Topical testosterone gets converted to dihydrotestosterone (DHT) to a much greater degree than injections of testosterone. High DHT concentrations [sic] can increase prostate enlargement and baldness. (Nathan, 2014 August 20)

This provision of information and open attitude is consistent with the guiding ideas behind *Rxmuscle.com*, which it claims to be “the truth in bodybuilding”. It is also illustrative of a general acceptance of fitness doping in the U.S. That a for-profit company like Rxmuscle is offering harm reducing advice directly to potential users is in line with neo-liberal values. The responsibility for ensuring safe use is downloaded from the state onto the individual, creating a market for this information and any measures to counter unwanted effects (i.e. Esposito & Perez, 2014). Outlets like Rxmuscle provide this in exchange for page views and advertising, along with any services or products users may purchase as a result.

Bodies, as well as knowledge about how to chemically enhance them, are also commodified in the U.S. As lean, muscled bodies are celebrated and idealized in consumer culture, people who achieve these results are normalized and celebrated as healthy (Dworkin & Wachs, 2009). Bodybuilders can craft non-normative bodies that may be viewed as freakish outside of bodybuilding spaces but normal within them (Liokaftos, 2012). Producing those bodies, including the use of drugs, is the core of bodybuilding culture. As the founder and central personality behind Rxmuscle David Palumbo notes that while steroid distribution is policed, fitness athletes are not penalized for appearing “suspiciously” muscular. In an interview with Palumbo conducted by the first author, he says the following regarding the situation in the U.S., in comparison with Sweden:

I think it's much more tolerance here, aside from anabolic steroids that they love to arrest people for, no one is like profiling people because they are big, and say let's arrest him cause he must be doing something wrong you know. In Sweden, you know they can arrest you if think you are taking something or if you look too big. It's really bad.
(David Palumbo)

Palumbo's observation links widespread beliefs about the built body and steroids with enforcement. As suggested above, steroid use (in terms of fitness doping) is fairly accepted in the U.S., and definitely in comparison with Sweden. Built bodies are not criminalized or viewed as unhealthy, but instead seem to symbolize work to craft muscles and dedication to the pursuit by a variety of means. Enforcement of anti-doping laws in the U.S. focuses on distribution and trafficking rather than personal use. This is in stark contrast to many views about the acceptability of recreational drug use and the provision of anti-drug education and prevention

programs as exemplified by the broader war on drugs and doping in formally governed sport (Henning & Dimeo, 2017).

Prevention strategies have largely targeted young people. Two doping-focused were the team-based Adolescents Training and Learning to Avoid Steroids (ATLAS) Program for male students and the Athletes Targeting Healthy Exercise & Nutrition Alternatives (ATHENA) Program for female students (Goldberg et al., 1996). These programs combined classroom sessions with practical alternatives to AAS use. Though early evaluations were positive for reducing interest in doping (Elliot et al., 2006), a meta-analysis revealed the programs had less impact on actual behavior (Ntoumanis, et al., 2014). Apart from such school-based programs, most anti-doping education is handled through the United States Anti-Doping Agency (USADA). Such programs often miss the fitness population, though. Anti-doping prevention tends to focus on formally governed and competitive sport contexts, teams, or the school environment rather than communities or spaces where adult fitness athletes are likely to engage with or frequent.

Fitness doping as a societal problem in Sweden

Reports in the late 1980s showed that the use of doping in Swedish society had become an issue even outside the sphere of formal competitive sport. Due to this, an investigation was initiated in 1989 in which the abuse of AAS, HGH, and other chemical substances that increase the levels of testosterone in the human body was defined as both a societal problem and a severe public health issue. From a public health point of view, pressure was put on policymakers to do something in response. The result was a new law, the Swedish Doping Act (1991:1969).

Unlike many other countries, Swedish law does not just prohibit the possession and trade of doping substances, but also the presence of these substances in the human body (cf., Pedersen, 2010; Christiansen, 2009). The Swedish Doping Act, adopted by the Swedish Parliament and brought into effect in 1992, made it possible to intensify anti-doping work by criminalizing use and possession of doping substances, and by implementing stricter criminal penalties. Following this development, public health organisations from the 1990s onwards contributed to comprehensive anti-doping work in Sweden. As a result, doping has mainly been connected with crime, mixed abuse, and described in terms of deviance beyond a **formally governed competitive sport** context, in public discourse, by policy makers, and in research (see for example Moberg & Hermansson, 2006). The framing of fitness doping as a social/societal problem has also meant that (ab)use has been incorporated in the Swedish educational system. To this end, there is an almost linear relationship between the development of the Doping Act and the institution of the Swedish anti-doping educational system. Beginning at the high school level, Swedish youth are educated on how to make sound and healthy choices in life, and on the health risks associated with drug use, including the use of PIEDs (Skolverket, 2011).

Due to this and other policy measures in Sweden, fitness doping has increasingly been marginalized in public discourse and connected to physical decay, violence, and unhealthy lifestyles, among other negative things. This, of course, has also influenced users' understanding of the drugs and the ways in which their lifestyle choices are negotiated in relation to non-users. A bodybuilder discussed his perception of fitness doping in relation to what he thinks is public opinion in Swedish society.

I don't like being labeled as shabby. I mean you can have a bad reputation if you are mean person, or have done something bad. But when you don't think that you have that. I don't

like it, being labeled as dirty. Today, they are resembling a steroid, which makes your body's tissue heal a little faster, with other drugs. To me, these are two completely different worlds. (Markus)

Markus is expressing his irritation concerning how the use of PIEDs has come to be connected to drug addiction by policy makers, in the Swedish school curriculum, and in public discourse (cf., Monaghan, 2001). Common in this type of representation is, according to him, that his actual lifestyle choices are made invisible. He sees himself as a healthy person and works to distance himself from tobacco, alcohol and narcotics. He exercises on a regular basis, but his experiences are shaped by the association with steroids that his muscular body brings. Another user, Louise, explained what happened to her one afternoon when leaving the gym after a training session:

Well, I'm on my way to the car and these five civilian officers' approach me, "give us your bag and phone, okay". Yeah and they start asking questions, about steroids and things, and this was 3 weeks before competition. /.../ They had this really tough attitude when they picked me up, like I was this worst kind of thug. (Louise)

Louise describes her lifestyle as being limited by Swedish state policy. Thus, the political level is highly relevant at the individual level regarding her bodybuilding practices. Being a professional bodybuilder, Louise has also competed internationally, and she sees official policy and preventative measures in Sweden as far more rigorous and strict than in many other countries. This view corresponds very well with Palumbo's thoughts presented earlier. Adding to this, in both above narratives there is also an understanding that the (perceived to be) doped bodybuilding body often is stigmatized in Swedish society (see also Christiansen and Bojsen-Møller, 2012; Maycock & Howat, 2007). In relation to this it is not surprising that numerous

“new” ways to learn about and access these types of drugs have emerged. In both the Swedish and transnational contexts, social media and Internet forums, have increasingly become a means through which people can anonymously approach PIEDs, discuss their experiences, and minimize the possibility of encounters with the police (Andreasson & Johansson, 2016).

In the online community *Flashback*, which describes itself as “Sweden’s largest forum for freedom of expression, opinion and independent thinking” (Flashback, n.d.), we find extensive discussions on prohibited activities including the use of PIEDs. In contrast to official national policy, we enter a somewhat virtual, subcultural, and glocalised arena in which national prohibitions are contested. One member of the Flashback community initiates a discussion on the official policy in Sweden:

Why do the police want to stop us? There’s something fishy going on. That’s clear. Results that you could get from AAS within a year now take 3–5 years instead. Why? Is it a conspiracy against ripped guys? There aren’t many people who have the patience to get there, and if there were a short-cut, surely loads of people would train to get in shape. (NoPolice). (Andreasson and Johansson, 2016, p. 964)

Exemplified here and in hundreds of postings that follow, is an intentional process of deregulation, in which the acceptance of fitness doping practices is extended and expanded. In line with neoliberal attitudes and the cult of the individual, the possibility to challenge norms and regulations are widely promoted. However, there is a significant difference between discussing the use of PIED anonymously in an online forum and facing possible encounters with the police when going to the gym for a daily workout, as Louise experienced.

Preventative measures in Sweden can be understood as somewhat multifaceted. Great efforts have been made by the police and through mandatory prevention programs in the Swedish school curriculum. Additionally, the Swedish Sports Confederation coordinates and is the responsible organizing body and NADO in Sweden. It takes the lead in delivering leaflets, newsletters, videos, and organizing educational conferences. The official mission also requires collaborations with other organizations or agencies. One that has specialized in preventative work for fitness doping is the organization *Prevention of Doping in Sweden* (PRODIS), which is a co-operation between fitness centers and other stakeholders, aiming to support a doping free gym environment. The most prominent intervention program of PRODIS is called “100% pure hard training”. From the program website:

The main goal for the years to come is to spread this method to more training facilities in Sweden and to make more people cooperate against doping. We also want to develop the effectiveness, accessibility and feasibility of the method, and evaluate these parts. One important part of the method is the interaction between various actors like the police, prevention coordinators and training facilities [our translation]. (Prodis, 2018)

Currently, 28 municipalities in Sweden are connected to PRODIS. This community based intervention program builds on a model originally developed for alcohol. Its intent is to establish local anti-doping plans and policies at different gyms, through a combination of educational components directed at managers and trainers at fitness facilities, and in co-operation with the Swedish Sports Confederation, the police, and media advocacy. A process through which training facilities can receive a diploma for promoting a drug free environment is intended to link involved local actors together to create a national network and knowledge base that can be spread to other municipalities in the country. The operation of PRODIS builds

on the idea of creating a set of values concerning doping, directed not only to doping users but all people operating within this context. As such, it is almost an archetypical example of what Esping-Andersen (1990) calls a social democratic welfare state model.

Discussion

By comparing the cases of the U.S. and Sweden we can see that anti-doping policies are developed within multiple contexts across various policy levels. The first context is the global level of formally governed and competitive sport. This is largely led by Olympic and international sport, but also includes organized professional sports outside the Olympic Movement. Sport in this context is heavily commercialized and spectacle-driven. The highest profile doping scandals are usually at these most competitive levels. The second context is the hegemonic prohibitionist approach to drugs (e.g. the war on drugs). Within this context all drugs outside of medical need are assumed to be dangerous and morally unacceptable, including PIEDs. Users of any illicit substance tend to be stigmatized. Global fitness culture sits within these two broader contexts and similarly shaping and being shaped across several levels of doping policy, practice, and prevention.

Policy

Anti-doping policies are determined and implemented across several levels. Policies are determined at the global level according to two main bodies: WADA and the United Nations. Policies are refined, and possibly expanded, at the national level. Each country can pass anti-doping legislation to provide additional clarity or responsibility for different stakeholders. Both the U.S. and Sweden have set up NADOs that work with national sport governing bodies to implement global and national anti-doping policies. Implementation is thus predominantly directed at formally governed and competitive sport at the local (national or sport group) levels,

which largely leaves the fitness context out of the equation. The specific form anti-doping has taken in the U.S. and Sweden aligns partly with the Esping-Anderson model. As a Nordic welfare state, Sweden tends to be focused more on ensuring communal good. As such, Sweden's expanded anti-doping policies include non-formally governed sport contexts such as fitness centers through the connection between the NADO and the anti-doping organisation PRODIS. Together with the formation of the Swedish Doping Act, this allows a legal mechanism to ensure anti-doping policies are followed for the good of the individual and for society as a whole. In contrast, the U.S. is a liberal welfare state regime that prizes both individual responsibility and freedom, as well as less governmental control and regulation. Accordingly, the U.S. has taken an approach focused on criminal trafficking and fraud rather than on individual policing.

Practice

Fitness communities also exist across several different levels, as well as within both global and national contexts, subject to global and local laws and regulations. Online groups, forums, and media illustrate global fitness communities. Members of this broad community may share aesthetic ideals, training goals, methods, and substance use practices (licit and illicit). PIED use is broadly accepted as part of the culture, though views and use at the individual or local level are likely to vary. In practice, this means there may be little difference between Swedish and U.S. fitness athletes' approaches to their training regimes and PIED use since all are guided by globalized norms and ideals. However, Swedish fitness athletes exist within a national context where other exercisers may view PIED use negatively, in contradiction to global fitness norms. They may also face social sanctioning from those outside the fitness community, as PIED use by individuals is viewed as damaging to the communal good. This is exemplified by the way Swedish bodybuilders are policed at all times, often based on their non-normative musculature.

In this way, bodybuilding and civil/criminal contexts are elided in Sweden, resulting in civil policing of fitness athletes. This local reality then informs and constrains individual choices regarding doping. In contrast, U.S. fitness athletes are in a context where those inside and outside the local fitness community may disapprove of PIED use but they are unlikely to face social consequences. Individual use—and health and safety—is viewed as the individual's responsibility. Because U.S. fitness athletes are policed only if they enter **formally governed competitions in sport contexts** or in the cases of criminal trafficking or possession, their use often bears little external consequence despite widespread disapproval of sport doping.

Prevention

Differences are also visible in prevention. In terms of fitness doping, the Swedish prevention strategy is directly related to the national communal ethos. Mainly, the goal of prevention is to get fitness athletes to police themselves while turning the focus to non-drug methods for improvement. **This is possible due to the general social rejection of PIED use in Sweden and the high levels of local enforcement of national-level strategies in which the Swedish Sport Confederation and PRODIS, in collaboration with local municipalities, work together to counteract fitness doping.** The U.S. has little in the way of prevention among adult fitness athletes. Instead, the more neo-liberal U.S. approach relies on criminal laws to deter **trafficking** or it relies on anti-doping organizations to police **athletes competing in formal competitions in sport contexts.** Fitness athletes are thus unlikely to police one another as expected in the Swedish system, as PIED use is more widely tolerated, if not accepted. This results in little prevention among individual PIED users who are left to make their own choices and bear the consequences.

Conclusion

Fitness doping and anti-doping process operate within multiple contexts and across various levels. This interplay between supranational structures and locally diverse implementation is not only complex, but can seem contradictory as each locality works to remain within the global system. The policies, practices, and prevention techniques within national contexts can be partly explained using the Esping-Andersen model (1990; 2009): Sweden's Nordic welfare ethos are exemplified in policy and prevention methods that rely on social policing and **public health**, while the U.S.'s approach sees use as a primarily individual choice and responsibility. However, we must consider the interplay between structured global systems and the more diverse local implementation. Fitness doping is widely tolerated, if not outright accepted or promoted, by the global fitness community, while doping in the global sports context is widely rejected. Global anti-doping policies and conventions are intended to deter use of PIEDs through prohibition and sanctioning. The countries considered here, Sweden and the U.S., are governed by these global policies and exist within the global sport and drug context. Yet, implementation has been transfigured within the (g)localized fitness context.

Anti-doping policies and intervention campaigns need to be understood within a framework of national and sometimes even local and community-based approaches to doping that impact how **fitness doping** is understood and approached by users as well as people operating within the field of anti-doping. The two national contexts/cases frame fitness doping and the notion of the doping user differently. At the same time, the results indicate that there are some basic similarities in the ways users negotiate the meaning of use, and in transnational trajectories, such as within the context of online communication. **What we suggest is that glocal fitness doping needs to be understood as a process through which global ideals, organisations, and more contribute to influencing local and national prevention policies and cultures, and vice versa. The contribution of this study thus lies in connecting the intersection of policies,**

practices, and prevention of fitness doping across local, national, and global levels. As shown through the cases of the U.S and Sweden, there is reason to think that these levels are highly interconnected and dependent on each other on the one hand, and that there are great national fluctuations in the ways in which fitness doping is perceived and met in terms of policy and anti-doping work on the other. We suggest there is a gap between the global and the local level, which has been largely unaddressed by researchers and policymakers. To this end, and within this gap, the meaning and understanding of fitness doping has been largely negotiated within the context of the global fitness community both online and off.

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