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No intention to cheat: Coping with unintentional Anti-Doping Rule Violations

Herman Ram

Anti-Doping Authority Netherlands, Netherlands

A considerable number of Anti-Doping Rule Violations (ADRVs) are not the consequence of deliberate 'cheating', but are unintentional. Three kinds of athletes' behavior are particularly relevant in this respect:

1. The use of social drugs that are on the Prohibited List,
2. The consumption of food or food supplements that may contain prohibited substances, and
3. The use of prohibited substances for therapeutic purposes.

Coping with unintentional ADRV's is daily practice for Anti-Doping Organisations (ADOs).

First and foremost, ADOs have to deal with such cases when they occur. A number of Dutch cases are presented in order to demonstrate what (more or less satisfactory) solutions can be found within the existing legal framework of the World Anti-Doping Code. In addition, it will be shown that the way in which unintentional cases are managed by ADOs is far from harmonized.

Secondly, ADOs are obliged to look for ways to diminish the risk of unintentional ADRV's. Education is key, but other preventive actions can certainly help as well. A number of such preventive measures (realized either in the Netherlands, elsewhere or globally) are examined and evaluated.

Thirdly, ADOs are obliged to submit proposals, not only to World Anti-Doping Agency, but also to governments and other regulatory bodies, that may help to further diminish the number of unintentional ADRV's. A number of such proposals (both proposals that were accepted and proposals that did not make it into the rules) are examined and evaluated.

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War on drugs, war on doping? A comparative analysis and some policy recommendations

Letizia Paoli

University of Leuven, Belgium

The presentation compares the markets for illegal drugs and doping products (i.e., both doping substance and methods) and their respective control policies on the following issues:

- The drugs/doping products and their legal status
- The incidence of their use and the users' motivations
- The suppliers, including the suppliers' background, motivation and modus operandi
- The role state agencies/representatives play(ed) in the market
- The supply chains and the legal status of these, as well as
- The evolution, justifications, main measures and effectiveness of the respective control policies.

For this analysis I draw on (1) several studies conducted over the past fifteen years on illegal drug markets and drug policies, (2) the study on the Italian market for doping products and (3) ongoing research on doping, doping supply and anti-doping policy in Belgian and French cycling, as well as (4) the recent scientific literature.

On the basis of this comparative analysis of the drug and doping markets and their respective control policies, I draw some policy implications and recommendations with the aim to make anti-doping policies more accountable and effective.

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Policy changes and unintended consequences: How history has shaped the present

Paul Dimeo

Stirling University, Scotland, United Kingdom

The formulation of anti-doping policy – as an idea and as a set of regulations – in the 1960s, set the foundation for the successes and failures of subsequent decades. The unintended consequences

are varied and complex; it is proposed here that many of them are the result of misguided attempts to achieve the unrealistic goal set out over 50 years ago: 'clean sport'.

When the International Olympic Committee and other international governing bodies sought to understand and regulate drug use in the mid-to-late 1960s, their chief concern was stimulants. Thus, the establishment of a test for amphetamines and other similar drugs seemed like a solution to the problem. 'Clean sport' was perceived as a realistic possibility through in-competition testing.

The ensuing steroid epidemic of the 1970s and 1980s was perhaps unforeseeable to the pioneers of the 1960s. Anti-doping leaders were facing an uphill struggle with few resources, against governments, suppliers, coaches and athletes, many of whom came to view steroids as a necessity and innovated in drug use and masking agents. Thus, the unintended consequence of the simplicity and idealism of the 1960s was the impotence of sports organisations in the face of a crisis.

The scandals of the late 1980s and 1990s pushed the issue into the public domain. The debate was framed by the same dichotomies of clean/dirty, good/evil, moral/corrupt; the idealism was persistent. Yet, in the attempt to enhance their powers and pursue a crackdown, numerous innocent athletes were punished, while the organised dopers could easily evade sanction.

By the time the World Anti-Doping Agency (WADA) was formed, the idealism of clean sport had inadvertently produced a highly contentious situation. However, in a desire to focus upon the only aspect they could control – the athlete's body – WADA's introduction of strict liability, excessive surveillance, and sanctions for non-performance-enhancing drugs, the consequence has been that the reason for anti-doping has been forgotten in the midst of de-humanising institutionalisation and over-bureaucratisation. Moreover, the only solution that can be proposed by WADA is for more funding for scientific research, more surveillance, more testing, tougher sanctions and tighter regulations; in other words, more of the same.

Yet, we are no closer to 'clean sport', and innocent parties continue to be victimised in a culture where following the rules is deemed more urgent than reflecting upon the nature of those rules or upon the traumas faced by those who are (rightly or wrongly) accused of doping. The unintended consequences of a consistent failure to live up to historical expectations include a raft of problems for sport: mistrust between stakeholders, lack of engagement with athletes, compliance inconsistencies, some dubious sanction decisions, and lack of transparency and accountability. In sum, the principled aim of clean sport and a failure to deliver it, have, over time, metamorphosed into a 'regime system' that does not always meet the broader ethical ambitions of protecting the rights of athletes to compete on a level playing field.

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Why the ban on doping is harmful

Torbjörn Tännsjö

Stockholm University, Sweden

Doping is wrong. Why? Because it is forbidden. Doping therefore means cheating. But when has an athlete cheated? I distinguish between three ideas of what it means to cheat: a realist one, a weak verificationist one, and a strong verificationist one. The realist understanding spoils the sport event. We can never know who the real winner is. The verificationist understanding, strong or weak, is at variance with the rationale behind the ban on doping: he who is the winner in the genetic lottery should also be the winner of the sport competition. The ban on doping is therefore unstable. I argue that it should be given up. The rationale behind it cannot stand

to reason. The notion of justice and fairness it depends on should be rejected. It is indeed harmful to the sport society in particular and to society in general when it is upheld.

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The road to hell is paved with good intentions

Verner Møller

Aarhus University, Denmark

On the World Anti-Doping Agency's (WADA) website the organisation presents itself as a body of Integrity, Accountability, and Excellence, which among other things mean that:

- "We are impartial, objective balanced and transparent."
- "We observe the highest ethical standards..."
- "We develop policies, procedures and practices that reflect justice, equity and integrity".
- "We respect the rights and integrity of clean athletes."
- "We benchmark off and apply best practice standards to all our activities."

Few will disagree that anti-doping is a noble idea with laudable aims. Sports' administrators and responsible governing bodies have an obligation to protect athletes' health, and fair competition. If they neglect the health risks associated with a given sport they are rightly deemed reckless. If they do not oppose various agents' attempt to create unfair competitive advantages for themselves, their athletes, or teams, the integrity and allure of the affected sports is undermined. Hence it makes sense to implement safety regulations and procedures, financial fair play etc. Anti-doping measures are implemented to the same effect. However, since the formation of WADA it has become still more apparent that the current anti-doping strategy is not the right cure if the purpose of the enterprise is to protect athletes' health and secure a level playing field. A significant number of controversial cases justify the hypothesis that the current system works to the opposite effect.

In this presentation it is argued that the original and laudable aims of anti-doping has been lost in the pursuit of drug cheats leading to a situation where we now find that the protection of athletes' health, rights, and integrity has been sacrificed and the noble values WADA claims as fundamental to anti-doping under their auspices are severely compromised, which leads to the conclusion that a new approach is needed in order to resurrect sport as a healthy and fair competition with respect for the integrity of athletes.

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Judicial deference and anti-doping: Sport, arbitration and redefining the limits of law

David Mcardle

Stirling University, UK

This paper analyses The United States' Olympic and Amateur Sport Act, which was passed by Congress in order to streamline the governance structures of US Olympic and amateur sports, and to compel athletes and governing bodies to submit any disputes between them to arbitration rather than the ordinary courts. A consequence of the Act is that the circumstances in which the US courts can intervene in disputes involving these athletes are very limited, being largely restricted to due process and civil rights violations.

While it would be stretching the point to say that an unintended consequence of the Act is that anti-doping disputes involving these athletes must be resolved through arbitral processes rather

than courts, it is certainly the case that the courts' willingness to acknowledge that they are not the best forum for resolving such disputes, and the extent to which they have been willing to defer to arbitrators' decisions was more extensive than Congress envisaged when the Act was passed. Accordingly, this paper uses the Texas court's decision in the Lance Armstrong case (*Armstrong v Tygart and USADA*) and other rulings to explore the extent of the courts' willingness to defer to arbitral bodies. In the light of the German court's decision in *Pechstein v ISU* the paper also considers whether an unintended effect of the Act is that it provides the most viable mechanism for other countries that wish to prevent the courts from interceding in sports arbitration.

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The preventive effects of ignorance in Anti Doping

Werner Pitsch

Saarland University, Germany

Heinrich Popitz's work on the "preventive effect of ignorance" demonstrated multiple beneficial effects of non-knowledge for the functioning of a normative system as well as for those who are in charge of observing rule compliance and sanctioning deviant behaviour. Popitz's ideas covered several aspects which he discussed as at least functional and in some cases even necessary preconditions for a normative system:

1. The idea of (un)constrained information: Knowledge about others is necessarily limited and coherent total balancing covering different sources of knowledge is typically an exception. This is the reason why there will always be a dark figure for crime as well as for doping. And even in cases where one segment of social life tries to gain complete information access, this will be limited by other norms as well as by the individual behaviour of those under inspection.
2. Norm application is limited: The structure of the process which renders norms effective sheds light onto the many possibilities, where norm validity is tacitly or deliberately limited. The number of rule infringements which are never detected is (according to Popitz) the most protective factor for any normative system.
3. Even in those cases, where rule infringements are detected, we still find a significant number of cases which are never sanctioned.

In Anti Doping, we find these three issues as well. The development of the World Anti Doping Code including the introduction of out-of-competition tests and the expansion of the right to penetrate into athletes' privacy and their private lives can be understood as a movement towards the idea of unconstrained information (point 1). Nevertheless, the still very limited number of tests which can be conducted in relation to the number of athletes under the WADC guarantees a low probability of detection (point 2). This low probability is combined with a limited proportion of cases which is in fact sanctioned (point 3). The combination of these three points protects the Anti Doping system from being found out as inefficient and as ineffective.

The combination of Popitz's thoughts with results from empirical social research are used to demonstrate that the "dark figure" in Anti Doping is not only an inevitable weakness of the system (like in any other normative system) but also an important factor to pursue the fight against doping in the way it has been conducted until now.

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Theorising unintended consequences

Ivan Waddington

Norwegian School of Sport Science, Norway

There is a growing recognition of the fact that unintended consequences are a commonplace feature of everyday social life, not just in sport but in all aspects of social life (for a dramatic example, consider the many unintended consequences of Western intervention in the Middle East). In relation to doping, the most obvious unintended consequences – in this case collateral harms – include the fact that existing anti-doping policy has (i) constrained athletes to use more dangerous but less detectable drugs and (ii) to use additional masking drugs to conceal their use of performance-enhancing drugs; (iii) driven drug use underground, thereby making it difficult to control the quality of drugs and (iv) making it more difficult for athletes, especially below elite level, to obtain medical monitoring of their drug use.

The increasing recognition of the ubiquity of unintended consequences is to be welcomed, together with the implication that policy formation and implementation are complex processes which almost inevitably have unintended consequences. But we need to go beyond merely listing and describing unintended consequences. In particular we need to develop a theoretical understanding of how such processes occur and why they are so commonplace. And this in turn raises other questions in relation to policy formation and implementation. If policy almost invariably has unintended – and often unwanted – consequences, is the attempt to develop effective policy an inevitably fruitless task? Does not the process of policy implementation, and the regulation which it implies, necessarily do more harm than good, as some have argued in relation to economic policy and free markets? Should we not just give up policy formation as an impossibly complex and difficult task, doomed to failure?

This paper seeks to provide at least partial answers to these questions by, firstly, examining the ways in which social scientists have used the concept of unintended consequences and similar concepts. Attention is focused, in particular, Robert Merton's classic conceptualisation of "the unintended consequences of purposive social action" and on Norbert Elias's concept of "unplanned outcomes" and his analysis of the relationship between planned and unplanned social processes. The paper concludes with some thoughts about the implications of these analyses for the practical processes of policy formation and implementation.

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Anti-doping protecting clean athletes – Who protects their privacy?

Nils Zurawski ^{1,*}, Marcel Scharf ²

¹ University of Hamburg, Germany

² German Sports University, Cologne, Germany

Pieter Bonte's excellent essay on "Anti-Doping Absolutism – A Darwinian Demasqué" (2015) paves the way to introduce a problem that receives only little attention regarding doping: the consequences of the doping control system, namely the protection of athletes' privacy. Although Bonte's essay does not attempt to tackle this issue, he nevertheless refers to an important aspect in this regard:

"These criticisms rock anti-doping (im)morality to its core. They expose a dark side of anti-doping absolutism as an attempt to consolidate the biological status-quo by policing people in the intimacy of their very bodies, enforcing the orthodoxy of 'naturalness'."

Elite athletes are asked to comply to a system of controls, with little chance of alternatives and on the prize of giving up much of their privacy, often guaranteed by various laws, not least the European directive of data protection. This paper aims to initiate a discussion on the consequences of doping controls on privacy. However, research on the ADAMS system in particular or doping test in general is mostly focusing on legal provisions and implementations, their practicability or effectiveness. Far less attention has been paid to the dimensions of control, civil rights and democracy from the athlete's perspective. Almost no knowledge exists on how the athletes themselves cope with those controls, with the necessities of the ADAMS system and the associated rules. From a social science perspective this is an omission which needs to be addressed.

We sought to do this by the means of approximately 50 interviews in which we inquired athletes about their assessments of and attitudes towards the doping control system. The qualitative interviews aimed to understand the athlete's perspective on the issue as part of their everyday lives and routines. We believe that an understanding of the anti-doping control system must introduce such a perspective, in order to uncover the various modes of rationalisation of the controls and the use of performance enhancers in sports.

Most notably is the fact that despite possible infringements, athletes most often comply with the system, sometimes even despite voiced scepticism or overt criticism. From our research it has emerged that social practices, daily routines, especially those that concern training and competition, are essential to understand the argumentative basis of support or resistance against controls and the whereabouts system, but also the assessments of doping practices and opinions thereon.

In this presentation we discuss the various narratives voiced by the athletes regarding anti-doping measures and their attitudes towards doping in general. The aim is to contribute to the general debate on this issue, in order to lessen what in many ways has developed into an unnecessary moral panic.

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French speaking athletes' experience and perception regarding anti-doping control practices and therapeutic use exemptions

Barbara Broers^{1,*}, Fanny Bourdon¹, Lucie Schoch², Bengt Kayser²

¹ University of Geneva, Switzerland

² University of Lausanne, Switzerland

Two main elements of anti-doping efforts by the World Anti-Doping Agency (WADA), the obligation to inform on whereabouts in the Anti-Doping Administration and Management System (ADAMS) and the Therapeutic Use Exemption rule (TUE), directly affect athletes' lives. Little is known about athletes' perception and experience. French-speaking elite athletes ($n=69$) from France, Belgium and Switzerland responded to an anonymous web-based questionnaire. We found strong ambivalence towards the whereabouts system. Some 94% considered anti-doping controls necessary, accepting them as part of athlete's duties; 34% considered that the system infringes too much on private life; 54% that it reduced the pleasure of being an athlete; 50% that it caused anxiety; 74% felt under surveillance; 54% found it too time-consuming; 57% encountered technical hurdles. Over half (58%) perceived inequality of anti-doping controls between different countries and sports. Trust in the system's capacity to detect doped athletes was incomplete (83% of those under ADAMS, 60% of those not). Concerning the management of TUEs, 49% of athletes

had low trust in their management by authorities, 47% suspected abuse by fellow athletes and 46% had refrained from medically justified treatment. Similarly as reported before for Norwegian, Danish and UK athletes, our findings suggest that considerable dissatisfaction with ADAMS and TUE also exists among French-speaking athletes. We conclude that there is a need to improve these aspects of WADA's anti-doping efforts in order to increase athletes' satisfaction and adherence to anti-doping policies.

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Anti-doping's new way of the world – ASADA & the AFL v the Essendon Football Club

Martin Hardie

Deakin University, Australia

Events in Australia over the last two and a half years have caused me to wonder as to whether the practice of anti-doping in professional cycling in the last decade are only just the beginning of something more far reaching and in fact frightening.

In February 2013 a press conference in Canberra, Australia announced the Australian Crime Commission (ACC) "Drugs in Sport Report". It is what follows this announcement and the course embarked upon by Australian Sports Anti-Doping Agency (ASADA) and the Australian Football League (AFL) which has turned the so-called athlete rights and protections contained in Australian anti-doping law on their head and which signal the end of modernity. Some of the key events that have shaped this new way of doing anti-doping in Australia include:

- the leaks of confidential information and the media campaign (January 2013–March 2015);
- the charges of bringing the game into disrepute brought by the AFL against coaches and other staff of the Essendon Football Club (August 2013);
- the drawn out investigation (January 2013–December 2014);
- the legal challenges and response by the Australian Federal Court (August 2014–February 2015); and
- the hearing of assertions of doping against that club's players and the sports scientist, Stephen Dank (January–February 2015)

Notably and consistently, for many, in the light of the first of these events (the media campaign) everything else that followed was merely window dressing, tardy or superfluous. Guilt had already been adjudged and determined through the mechanisms of moral panic and media demonization. Once again it seems the law, as we knew it, has been overdetermined by the spectacle. And it is this spectacle that seems to govern. As so many have howled over this period "I don't care about the law or process – I just want to watch footy".

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Reconceptualising the gender of fitness doping: Performing and negotiating masculinity through drug-use practices

Jesper Andreasson

Department of Sport Science, Linnaeus University, Sweden

The project focuses on self-portrayals and gender constructions among Swedish male bodybuilders who are engaged in fitness doping. The empirical material comes from a larger ethnographic investigation into gym culture. The results show that

there is a strong propensity to conform to particular gender fantasies that rests heavily on a binary understanding of gendered, doped bodies. However, this storyline does not apprehend the entire self-presentation of the analysed drug users. Negotiations and inclusive subversions of traditional gender norms are also expressed. For example, the narratives show how the use of performance-enhancing substances makes it possible for (heterosexual) men to approach, touch and express feelings of desire towards other men and their bodies. As such, this practice can be viewed as a contestation of hegemonic gender values, in which masculinity and fitness doping are detached from a quite heterosexist understanding, and turned into a symbolic world of homoerotic pleasure.

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Underrated but not undisputed – The establishment, activities and implications of the IOC Medical Commission's "Subcommission on Doping and Biochemistry" (1980–1988)

Jörg Krieger

German Sport University, Cologne, Germany

On the basis of hitherto largely unnoticed and inaccessible historical sources from the archive of the International Olympic Committee Library and Archives and the Carl and Liselott Diem-Archive of the German Sport University Cologne, this paper addresses the establishment, activities and implications of the IOC Medical Commission's "Subcommission on Doping and Biochemistry" (IOC MSD) from 1980 until 1988. Therewith the omission on the role of scientists in the history of anti-doping is addressed (Dimeo, 2007, 104). It is highlighted that the IOC MSD is a much-underrated anti-doping body, and the activities of its members, who were all heads of anti-doping laboratories with professional competencies in the field of doping analysis, shaped the IOC's anti-doping policy considerably in the 1980s.

This paper emphasizes that the members of the IOC MSD under the leadership of Prof. Dr. Manfred Donike, a biochemist of the German Sport University Cologne, prompted groundbreaking initiatives in three areas during its early years. First, they installed a global accreditation process for anti-doping laboratories and therefore created an institutional network to support the IOC's fight against doping. Second, they were responsible for the technical developments needed to detect an increasing number of doping substances. Third, they implemented and conducted educational activities for laboratory staff members to enhance the reliability of doping tests. All these initiatives were in place for the 1984 Los Angeles Olympic Games and led to the conviction of several Olympic athletes.

Whilst policy makers like IOC president Juan Antonio Samaranch, IAAF president Primo Nebiolo and the head of the Organising Committee of the 1984 Los Angeles Olympic Games, Peter Ueberroth, praised such initiatives in public, the progressively increasing influence of Manfred Donike, and other IOC MSD members, simultaneously entailed high potential for conflicts. These are documented in numerous letters, which demonstrate that the operations of the IOC MSD members did not remain undisputed, and verifies that sport politicians were anxious about the impact of the IOC MSD.

The identified developments presented in this paper allow one to conclude that a complete account of the history of the IOC's fight against doping in the 1980s can only be given by taking into consideration the specific role of the IOC MSD. In fact, the initiatives of the

IOC MSD members resulted in an institutional and process-related legacy from which the World Anti-Doping Agency still profits today.

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Doping perception in Spanish high-school students

Rodrigo Pardo

Universidad Politécnica de Madrid, Spain

The project 'Preventing Doping: Sport as School of Values', led by Spanish Agency for the Protection of Health in Sport (AEPSAD) and financed by UNESCO's Fund for Elimination of Doping in Sport, was conducted during the 2013–2014 academic year. The participants of this program were a total of 1575 students from 12 high-schools (14.87 ± 2.13 years-old).

This program, entitled 'Live without Cheating', had two objectives:

1. To prepare students to acquire, appreciate and apply the values of sport, promoting fair play and equal competition.
2. To promote health in sports, including the promotion of physical activity and healthy habits, with special attention to the prevention of doping.

The program combined two types of actions:

- Informative: including the participation of experts (athletes, AEPSAD staff, medical doctors and scientists), which imparted the theoretical content through lectures and expositions.
- Sports: by organizing activities and games in each school. In addition, at the end of the program a meeting took place in the Center for High Performance at Madrid, with the participation of a selected group of students from each school and professional athletes from different disciplines.

This paper is focused on the responses to the questionnaire that students had to complete on-line before and after their participation in the program. The questionnaire included a definition of doping given by the respondents themselves, the validated version of PEAS in Spanish, questions from WADA's Attitude Survey and questions related to the evaluation of the program itself. The Crowne and Marlowe's social desirability scale (MCSDS) was used to discard those answers that scored a high level of social desirability.

Results show that a large majority of students (70.8%) defined doping as 'performance improvement', followed by 'ethical concerns' (30.3%). The value of PEAS was $35.28 (\pm 12.82)$, indicating that respondents generally had an explicit unfavorable attitude toward doping. Women showed lower PEAS values than men and also younger students as compared to older. Gender and age differences were also found in the responses to WADA's Attitude Survey. Regarding sports, those who practiced fitness activities and racquet sports scored a higher PEAS value.

Data collected in this study indicate that the opinion held by Spanish students on doping is mostly negative but show certain unawareness about what doping really is. In addition, many only defined it as substances that enhance performance or as something that only concerns professional athletes.

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Unintended outcomes, civilising processes and doping in cycling

John Connolly

Dublin City University, Ireland

In this paper I argue that professional cyclists have undergone civilising processes in respect to doping. By civilising, following the figural sociology of Norbert Elias, I mean that thresholds of repugnance towards doping advanced, and that a shift in the balance between social and self-restraint, in the direction of latter, occurred in relation to doping. More specifically, I contend that over the course of the last 100 years cyclists have come to experience doping as more shameful, it has increasingly been 'pushed behind the scenes', and individual conscience has become a greater regulator of behaviour. Given the series of investigations, reports and confessions that have emerged in the recent past this, perhaps, appears somewhat surprising. Indeed, the changes I have referred to have occurred alongside the persistence of doping within the sport. Consequently, this civilising process has not been linear but rather replete with fractures, breakdowns and reversals. Indeed, although it is my contention that significant advances in the inculcation of greater shame feelings has occurred, it has been an acutely slow process. Despite this a civilising trajectory is evident.

In seeking to explain this complex and contradictory process I connect these changes to: the failure of a comprehensive monopoly apparatus for the control of doping to develop and its perceived legitimacy amongst cyclists; the structure of the wider cycling figuration, the constraints and compulsions generated by this; the meaning and function of suffering, and the inter- and intra-generational identification that developed around this that pushed against the regulating offensives directed at cyclists.

Despite the intentions and plans of regulators and agents of the state this has been an unplanned and unintended process. Indeed, one, unintended, outcome of the interweaving of these social developments has been reluctance, in an intra- and inter-generational sense, for cyclists overtly to condemn fellow cyclists for their transgressions. In recent times, though, this solidarity has also begun to breakdown – an indication too of an advance in the frontier of repugnance to doping. My data is derived from historical monographs of European professional cycling; news media; and 20 autobiographies and nine biographies of professional cyclists from France, Italy, Spain, Belgium, Britain, Ireland, Australia, Denmark and the USA, covering the period from 1910 to the present.

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Dying to be big: Use of oil injections for body shaping among Brazilian bodybuilders

Azenildo Santos^{1,*}, Michael Bahrke²

¹ Goldsmiths University of London, UK

² Health, Fitness, and Wellness, USA

Introduction: Anabolic-androgenic steroids (AAS) and other drugs are often used to improve athletic performance and appearance. Use of these drugs is also associated with numerous deleterious health effects. However, use of appearance- and performance-enhancing drugs (APEDs), including AAS, is not the only threat to the health of users. Use of oil injections to increase muscle size has recently become popular among bodybuilders. The aims of this study were to investigate use of oil injections by Brazilian bodybuilders and to document the harmful and sometimes lethal effects of using oil injections to "build" muscles, in what can best be described as "aesthetic" doping.

Methods: We combined previously published data, obtained from bodybuilders in a large northeastern Brazilian city, with new cases of oil injection documented by Brazilian national media (journals) in order to highlight the number of cases of amputations and permanent damage resulting from injection of "oil", including ADE (emulsifiable injection containing vitamins A, D, and E used in animals), into muscles to increase size. We describe how this practice has become popular among users and document the increasing number of victims.

Results: We found the practice of injecting oil into muscles to be widespread, particularly in rural areas of the Northeast and Mid-western regions of Brazil. We found the motivation for applying oil injections to be primarily to enhance appearance and "look big". Also contributing to the popularity of oil injections is ease of purchase in veterinary stores and, in comparison to the cost of AAS, oil injections are less expensive. Further, it is not unusual to find ADE counterfeits, where cooking oil is substituted. Injecting oil directly into muscles to increase size can cause local tissue inflammation and necrosis in extremities leading to permanent limb damage and paralysis, sometimes necessitating ablation and amputation of injured parts, or even death.

Discussion: ADE is a substance used in animal husbandry and, unlike AAS, it is not a hormone. Oil injections, especially counterfeits, offer an available and inexpensive substance/method for quickly increasing muscle size but come with adverse health effects including death. Unfortunately, the current Brazilian anti-doping system (Autoridade Brasileira de Controle de Dopagem – ABCD) is ineffective in reaching the most susceptible population of users – beginning recreational bodybuilders. The black market for aesthetic doping drugs thrives in Brazil, especially in rural areas and far from the eyes of the ABCD (which has adopted the World Anti-Doping Code of the World Anti-Doping Agency). It's here where bodybuilding gyms are often the "open door" for athletes and non-athletes to use illicit drugs to enhance performance and appearance. In Brazil, especially rural areas, anti-doping control has a long way to go in implementing effective anti-doping policies.

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Blowing the whistle: A qualitative study of student-athletes' willingness to report doping in sport

Kelsey Erickson*, Susan Backhouse, Dave Carless

Leeds Beckett University, UK

From its conception, global anti-doping policy and practice has employed a detection-deterrence model for the pursuit of Clean Sport. However, recent high profile doping cases have highlighted the limitations of this approach and greater resource is now being directed towards collaborative intelligence-led investigations. At the same time, changes to the World Anti-Doping Code (WADA, 2015) place greater responsibility on athletes and support personnel to come forward and 'blow the whistle' on doping. However, the willingness of individuals to fulfil their obligations and address the use of performance enhancing drugs (PEDs) in sport is not well known. Therefore, the purpose of this qualitative study was to explore the experiences of university student-athletes in relation to doping in sport.

Design: Cross-sectional qualitative methodology.

Method: Semi-structured interviews were conducted with 28 track and field university student-athletes from the UK (Male = 8, Female = 6) and US (Male = 5, Female = 9). Using an inductive thematic analysis approach (Braun & Clarke, 2006), verbatim transcripts underwent an individual analysis and a thematic map was

created for each country respectfully. Next, the individual thematic maps were compared in order to identify similarities and differences.

Results: Student-athletes upheld the view that using PEDs in sport is 'wrong', whilst the word 'cheating' was used repeatedly to describe the behavior. For the majority of student-athletes role ambiguity was evident and a dichotomy existed. On the one hand, they want to help ensure Clean Sport; on the other hand, they exhibit a desire to protect their fellow athletes. Ultimately, athletes are faced with a 'true moral dilemma' involving two equally valid and demanding moral options (Uys & Senekal, 2008). Thus, an unintended consequence of current anti-doping efforts is that athletes are forced to compromise their loyalties regardless of whether or not they choose to report PED use. Stemming from this dilemma, four options for addressing PED use emerged in the transcripts: (1) confront PED user directly, (2) report to 'someone' (e.g. coach), (3) report to anti-doping 'authorities' (e.g. Report Doping Hotline), or (4) ignore the behavior. The most commonly suggested option was to confront the PED user directly, particularly when a relationship exists with the user. However, student-athletes questioned the appropriateness of this action within the context of fostering Clean Sport.

Conclusion: The findings suggest that the shift in focus to intelligence-led investigations and whistleblowing might be met with resistance. Student-athletes are seemingly reluctant to report PED use to the authorities despite demonstrating a strong moral stance against the personal use of PEDs. Having said this, student-athletes indicate a willingness to personally confront PED users. Therefore, the findings suggest that anti-doping efforts are currently overlooking a potentially effective – and preferred – means for pursuing Clean Sport. Further research into prevention through confrontation is therefore warranted.

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A system under strain? Organisational insights into the complexities and challenges of providing anti-doping education

Laurie Patterson*, Susan Backhouse

Leeds Beckett University, UK

Introduction: As the core policy document in the anti-doping landscape, the World Anti-Doping Code (World Anti-Doping Agency [WADA], 2015) provides clear guidelines on the roles and responsibilities of signatories to the Code. One such directive is that National Anti-Doping Agencies and International Federations should 'promote anti-doping education', including 'requiring National Federations to conduct anti-doping education in coordination with the applicable National Anti-Doping Organisation' (WADA, 2015, pp. 65 and 67). Although these guidelines are communicated widely, our understanding of the lived experience of key stakeholders operationalising these directives is limited. Thus, the purpose of this qualitative study was to gain an in-depth understanding of the system through which anti-doping education is delivered from those who deliver it.

Methods: Semi-structured interviews were conducted with thirteen individuals responsible for anti-doping education within national and international sporting and anti-doping organisations. All interviews were transcribed verbatim and analysed using inductive thematic analysis (Braun & Clarke, 2006).

Findings: The complexities and challenges of the anti-doping education system emerged from the accounts of the key stakeholders. Specifically, interviewees described a landscape in which limited resources – including money and personnel – were

available for anti-doping education. At the same time, interviewees called for more coordinated efforts (e.g., better communication and sharing best practice) across all levels of the anti-doping system (i.e., WADA, NADOs, IFs and NGBs) and the importance of individuals at every level of the system 'buying in' to and valuing anti-doping was articulated. They noted a specific challenge in this regard was the negativity of 'anti-doping' messages that become associated with 'catching cheats'. To address this, several individuals endorsed a shift in narrative from anti-doping to 'Clean Sport', whereby positive educational messages prevail and the focus is on protecting the rights of clean athletes. Finally, there was a consensus that anti-doping education requires long-term planning, with several individuals highlighting the need for patience in allowing the impact of education to be shown in the next 'generation'.

Conclusions: The findings suggest that individuals tasked with managing anti-doping education within national and international sporting and anti-doping organisations are under strain to fulfill their Code obligations. In acknowledging this stress in the system, the study underscores the importance of coordination and cooperation between organisations at every level. Moreover, if WADA's vision for prevention through education is to be realised, increased fiscal and human capital investment into 'clean sport' education is required. Without this investment, anti-doping education might never be highly valued by sports organisations and engagement with preventive programmes will remain perfunctory.

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Vain cheaters or victims of muscle dysmorphia? On the current status of theories explaining the use of anabolic steroids in gym environments

Ask Vest Christiansen

Aarhus University, Denmark

Recent years have seen a dramatic increase in the number of publications addressing the use of anabolic androgenic steroids by recreational athletes. In line with this scholarly interest in the field has since the turn of the century shifted from competitive body-builders and weightlifters to ordinary young men attending gyms. Besides a significant effort in trying to establish reliable figures for the prevalence of anabolic steroid use in these environments, scholars have focused on trying to find the reasons for the use in a milieu where gaining a competitive edge does not seem to suffice as way of explanation. This paper assesses the most dominant theories attempting to explain young men's strive towards more muscular bodies. These theories includes (but are not limited to) (1) the theory concerning increased cultural exposure to well-trained male bodies, (2) the theory of masculinity in crisis, (3) the theory on the small man syndrome (lack of self-esteem), (4) the theory of muscle dysmorphia, and (5) evolutionary theories. The paper discusses the strength and weaknesses of these theories in light of the available empirical evidence, assess the theories' respective explanatory power and finally suggests a synthesis to be used in future research in this field.

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Effects of unintended effects: A history of the International Olympic Committee's dealing with therapeutic use

Marcel Reinold

University of Münster, Germany

The term "therapeutic use exemption" or "TUE" was first introduced at the turn of this century (Fitch, 2013). However, sport organizations were faced with the problem of how to deal with athletes who need to take substances from the prohibited list for therapeutic reasons since the introduction of doping tests. On the one side, it is morally indefensible to refuse athletes with health problems access to optimal medical treatment or force them to discontinue their medication, thus aggravating their medical condition. On the other side, granting exemptions for therapeutic use allows athletes to abuse the system by presenting a doctor's certificate attesting that a certain drug was indicated for the treatment of some invented disease. This historical study examines the question of how this unintended effect affected the International Olympic Committee's (IOC) dealing with the therapeutic use of prohibited substances and methods.

The study focuses on the IOC as the leading anti-doping organization until the foundation of the World Anti-Doping Agency (WADA) and concentrates on the period between the introduction of doping tests at the Olympic level in 1968 and WADA's foundation in 1999. The work is primarily based on sources from the IOC-Archives in Lausanne. The most important files for questions on doping and anti-doping policy are the minutes of the IOC Medical Commission. The commission was primarily founded to deal with the doping problem and comprised the most recognized experts in this field. Furthermore, the minutes of the Executive Board, as the IOC's governing body, and the minutes of the sessions, as the IOC's general meeting of members and supreme organ, have been analyzed. Apart from this archive material, the *Olympic Review* as the official publication of the IOC has been assessed in order to review how the internal decisions were made public. These sources give insight into the origins and history of TUEs and particularly allow to analyse IOC's changing strategies to reduce the risk of abuse.

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A critique of current anti-doping education from the perspective of university student athletes

Sarah Teetzel^{a,*}, Charlene Weaving^b

^a University of Manitoba, Canada

^b St. Francis Xavier University, Canada

This presentation discusses the results of a recently completed qualitative study of Canadian student athletes' experiences and perceptions of banned performance enhancement drugs, ergogenic aids, and supplements marketed to enhance athletic performance. In-depth, semi-structured interviews were conducted with 38 student athletes enrolled at three Canadian universities. In these interviews, student athletes were asked to share their perceptions and evaluations of the moral acceptability and effectiveness of doping rules, the World Anti-Doping Agency's current banned substances list, and anti-doping testing procedures. They were also asked to comment on and evaluate the anti-doping education they had received prior to their current competitive seasons as well as throughout their athletic careers. A key finding from this study is that university student athletes, who represent a highly educated and intelligent subset of all athletes, continue to hold many inaccurate assumptions, perceptions, and stereotypes about doping

in sport, particularly with respect to the intent of educational materials that discourage using banned substances and methods. This presentation analyzes the gaps in students' understanding about anti-doping policies and the rationales for supporting the drug-free sport movement. In doing so, emphasis is placed on making sense of university student athletes' scepticism toward anti-doping educational initiatives, both electronic and in print format, applied by their own educational institutes, their National Anti-Doping Organization, and the World Anti-Doping Agency. Analysis of the participants' responses is framed by Karsten Stueber's theoretical work on understanding rule following behaviour as complex dispositions, as well as Sandra Harding's arguments on inexperience and the distinctions between willful and strategic ignorance. Specifically, this presentation focuses on answering why some student athletes resist and ignore education about anti-doping violations, and from a practical standpoint, how the format and content of educational materials produced by the World Anti-Doping Agency, and in Canada by the Canadian Centre for Ethics in Sport, can contribute to young athletes' disengagement with the intended messaging the materials are designed to express. From this analysis, recommendations are made for improving anti-doping education provided at the university level to student athletes, specifically, and why generic anti-doping information is insufficient to promote anti-doping attitudes in highly educated athletes.

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Anti-doping attempts in professional bodybuilding and their unintended effects: an examination of US case studies in the '90s

Dimitris Liokaftos

Goldsmiths University of London, UK

In its form as organized competition, bodybuilding has had a reputation nearly synonymous with doping. Its professional variety in particular is often imagined as a type of extreme sports entertainment where 'anything goes.' This presentation examines anti-doping attempts in professional bodybuilding in the USA in the 1990s. My case studies will be major bodybuilding competition events (the 1990 Mr Olympia and the 1991 Arnold Classic contests) and publications (*Muscular Development* magazine) that, however briefly, embraced an anti-doping agenda during this defining period in bodybuilding's recent trajectory. I first try to situate these anti-doping attempts in their larger cultural and historical context, such as the criminalization of anabolic steroids in the USA, as well as examining what prompted them inside the confines of the bodybuilding world, such as highly publicized cases of doping-related health problems of elite bodybuilders. Subsequently, I examine the disenchantment of the bodybuilding public as a central unintended effect of these anti-doping attempts and the responses this provoked on the part of authorities, audiences, athletes, event promoters and media. Both ideologically and practically driven responses are discussed: the former included processes of identity negotiation and were typically structured around debates over the 'essence' of bodybuilding as sport and lifestyle in relation to mainstream society and sports; the latter included tactics for financial and symbolic gains and were typically structured around concerns over market demand. The type of sociological exploration of the effects of anti-doping I am proposing aims at understanding these as both shaped by and shaping the dynamics and antagonisms amongst different players inside a given field as well as the relation of that field to wider culture. Based on a qualitative methodology, my discussion draws on original primary material (interviews with

key figures involved in the for-profit promotion of bodybuilding) and secondary sources (key online and print bodybuilding media).

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WADA and imperialism? A philosophical look into anti-doping as a western power structure

Emmanuel Macedo

California State University, Fullerton, USA

Since 1999, the World Anti-Doping Agency (WADA) has led a worldwide campaign “to protect the athletes’ fundamental right to participate in doping-free sport and thus promote health, fairness and equality,” and to ensure “anti-doping programs . . . with regard to detection, deterrence and prevention of doping”(WADA, 2015). But where, in fact, has their endeavor led? Empirical evidence documenting WADA’s anti-doping enforcement efforts does not exactly paint a picture of success. Such outcomes raise troubling questions: What if sporting organizations unfortunately deployed the wrong approach when creating WADA? Might the shortcomings of the system explain, at least partially, a perceived inability to achieve the organization’s goals? In this paper, I investigate the connection between WADA and imperialistic ideology. Imperialistic ideology refers to the attitude and practice of a dominating center extending rule over an other (often a territory and its people). One of the ideology’s upholding notions is that certain people “require and beseech domination”(Said, 1993). I argue that a prevalence of imperialistic ideology in the Western world precluded variability in WADA’s power structure. However, considering alternate power structures reveals the potential for a new, and perhaps more effective way of achieving anti-doping’s goal. I conclude that WADA has not been able to fully prevent doping by explaining the shortcomings of the system of power it uses. This paper consists of three sections. First, I explain imperialistic ideology and argue that WADA mirrors an imperialistic ideology in operation and structure. Second, following the comparison, I outline the practical implications and consequences WADA has experienced due to its structure. Finally, I detail the moral implications of WADA’s existing structure. The moral implications section uses Foucault’s (1988) juridico-discursive power in attempting to alter behavior. Previous literature examining the ethics of WADA’s anti-doping efforts has largely overlooked this point (Kayser et al., 2007; Møller, 2010; Ritchie, 2013). WADA consists of a juridical/disciplinary notion of power, but this system is not without its negative moral implications. Rampant amongst these systems of power is the use of self-abnegation and conformity. I conclude the paper by discussing my arguments’ implications. That discussion involves the ideas the anti-doping world must begin using to achieve a goal of equity and fair play. This section offers an approach, inspired by Lugones’ (1987) feminist ontology, for, reconsidering how anti-doping can better achieve the goal of an elite athletic world with the ideals of fair play and equity.

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Beyond testing: Potential for race organizers as resources for health

April Henning

National Development and Research Institutes, USA

Road racing organizations in the U.S. annually host millions of runners in thousands of mass participation events. In order to comply with the regulations of the sports international governing body, the International Association of Athletics Federations, organiza-

tions hosting events with an elite component must also abide by anti-doping protocols. While they could test any elite or amateur runner, race organizers generally conduct the minimum number of required tests within the pool of elite athletes and podium finishers at a given race. For organizers, the decision for which athletes to test often comes down to balancing the cost of testing with what the organization may gain from that testing. Preventing a doping athlete from winning large cash prizes and preventing negative media coverage for the sport justifies the cost of testing elites. The benefits of testing amateurs are less clear, as amateurs present little danger to the racing organizer of reaping ill-gotten prizes. In this presentation, I draw on interviews with racing organization officials and public statements by racing organizations regarding doping in road running. Using this data I examine how racing organizations’ current accounting-based approach to anti-doping and the accompanying silence regarding performance enhancing substance (PES) and other non-enhancing substance use among amateurs work to reinforce several misconceptions about doping in running (i.e. PES are only a concern of elite sport; preventing doping elites from winning prizes is the ultimate goal of anti-doping). I argue that because these organizations are often the only point of contact adult amateur runners ever have with an official sporting body, they are in a unique position to move beyond the detect and ban system aimed at elites in favor of a more inclusive, educational approach about performance enhancing and other substances and other health-related risks that may better fit the needs, concerns, and practices of amateurs.

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‘Keep a Lid’ on the crisis: Anti-doping in Canada since 1983

Ian Ritchie

Brock University, Canada

The year 1983 was pivotal for anti-doping in Canada. Before the Pan American Games held in Caracas, Venezuela, the country had no anti-doping policies whatsoever, yet only a few weeks after two Canadian weightlifters tested positive for steroid use, after surprise testing was conducted at the Caracas Games, Sport Canada quickly commissioned the country’s first policy – Drug Use and Doping Control in Sport (Minister of State, Fitness and Amateur Sport, January 1984). Indeed, Canada would then go on to create some of the most stringent anti-doping policies in the world in relatively few years, with the Dubin Inquiry after the Ben Johnson scandal playing a follow-up, and ultimately much more influential role. Effects of the original 1984 policy and Charles Dubin’s recommendations continue to be felt in both Canadian and international anti-doping today. However, while most people are familiar, at least in general terms, with the Dubin Inquiry, few are aware of Canada’s original policy. This presentation first places the 1983 ‘Caracas scandal’ in context in terms of the direction the Canadian high-performance sport system had taken in the immediate years prior to 1983, the on-going movement towards stronger anti-doping policies internationally, and the specific embarrassment felt by those managing the Canadian high-performance sport system in the wake of the scandal. All played roles in the creation of the 1984 policy and affected its content. Specific details regarding the manner in which Drug Use and Doping Control in Sport was created, and who created it, is then summarized, along with the short and long term impacts of the policy. Methodologically, this study utilizes: interviews with important stakeholders in the Canadian sport system at the time of the creation of the first policy, including those who wrote it; athletes influenced by the surprise testing in Caracas, including those who tested positive; media accounts from 1983;

and, finally, secondary literature. The policy that emerged out of the 1983 scandal, it is argued, ultimately influenced the direction of anti-doping in Canada in the long run and had both intended and unintended consequences in terms of other policies' influence on the lives of athletes, public thinking about doping, and the specific direction policy makers would take after 1983. Increasingly a 'hard line' was taken after 1983 by managers of the Canadian sport system, in terms of punishing athletes caught and creating strongly worded policies. The 1983 'Caracas scandal', then, is what drew the proverbial line in the sand for anti-doping in Canada. Because Canada would come to play such an important role in the anti-doping movement internationally, it is important to understand the full context in which the country's first policy was written, and both the intended and unintended consequences of its creation.

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Anti-doping and legitimacy; An international survey of elite athletes' perceptions

Anna Efverström^{1,*}, Nader Ahmadi¹, Åsa Bävkström², David Hoff³

¹ University of Gälve, Sweden

² The Swedish School of Sport and Health Sciences, Sweden

³ Lund University, Sweden

Although there are a number of studies on policy making concerning doping and anti-doping in elite sports, the athletes' perspective has largely been neglected. The present study contributes to bridging this gap. Since forming and developing the anti-doping policy utterly depends on how legitimate the practitioners believe this policy to be, the specific aim for this paper is to study how elite athletes at the broad international arena perceive the legitimacy of anti-doping policy and practices. An on-line questionnaire, designed to capture elite athletes' perceptions, was answered by 261 respondents from 51 different countries and four international sports federations. Respondents were elite athletes belonging to the International Registered Testing Pool of each federation. The respondents were generally supportive towards anti-doping policy. Over 80% agreed that different anti-doping activities, from doping controls and the whereabouts system to storing of test samples and biological passports, are essential parts of the work against doping in sports. Support for anti-doping policy is also shown when 80% of the athletes agreed that anti-doping work should develop in a way that there is the same level of, or more, anti-doping activities compared to the current. The principle of anti-doping is, in this study, shown to be legitimate. However, at the level of practices, four areas were perceived as challenging. Regarding practical procedures, 34% experienced difficulties filing whereabouts information and 73% felt worried that they won't be available for testing at the right place and right time in correlation to the whereabouts information they had provided. Concerning the athletes' personal life and privacy, 50% of female athletes and 30% of males stated that they feel somewhat or very uncomfortable regarding their privacy when providing a urine sample. Furthermore, in regard to the whereabouts system, 47% of the respondents stated that they feel monitored. The efficacy and equality of anti-doping work is put under question by 58% who believed that users of forbidden substances/methods escape detection and 44% who did not believe that the whereabouts system is working properly in all countries. 70% of the respondents did not believe that all athletes applying for a therapeutic use exemption are treated in the same way. Regarding the athletes influence and participation in the policy work, 85% believe that athletes should be more involved. These four areas can be seen as unintended consequences of the work and reveal a weak point for

the legitimacy of anti-doping when the athletes not fully perceive procedural justice. In conclusion, legitimacy for anti-doping policy in general is strong while a questioning of the legitimacy in the execution of the rules is discerned. If anti-doping authorities wish to maintain and increase the legitimacy of the anti-doping efforts, a thorough understanding for and consideration of the athletes' perceptions is beneficial.

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Evaluating the unintended effects of anti-doping – Creating an anti-doping industry?

Carsten Kraushaar Martensen

Aarhus University, Denmark

Based on the hypothesis 'better economy – in the form of more money – will give better anti-doping' this paper examines how the current anti-doping system was developed, how it has evolved and if it needs to be continued. By using the 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) for data collection, information on the number of employees, doping tests, positive doping tests, income and expenses have been found on 15 national anti-doping organizations (NADOs) and WADA for the period 2002–2012. Analysis of how the current system was developed draws on Paul Cairney's theory on 'policy making' and shows how a number of scandals, which resulted in negative publicity, has been a contributing factor to the founding of WADA, but ultimately the Tour de France of 1998 was the 'triggering event' that made it happen. Data analysis showed that the expenses used on anti-doping has doubled within ten years and that the number of doping test also increased, but not by a 100 per cent. Surprisingly, the number of positive doping test did not increase – in some NADOs it even fell despite of an increase in the number of doping test. The decrease in positive tests is not seen as result of better and more effective anti-doping, because studies by Pitsch and Emrich has shown that the prevalence of doping was the same in 2012 as in 2005. Furthermore, this emphasizes how WADAs goal of harmonizing the anti-doping system has not been fulfilled, among others because of the difference in the average price per test between all NADOs. WADAs announced 2% success rate cannot be supported by the results found in this thesis. All success rates found was under 1.6% and more often under 1%. Nevertheless, the conclusion is that the current anti-doping system ought to be continued because it serves as a catalyst for economic growth in the 'anti-doping industry'. Also, this paper underlines and demonstrates how the increased finances in anti-doping are used to hire more people and sustain economic growth in fields not normally related to anti-doping, resulting in a conclusion that more money fails to give better anti-doping, simply more anti-doping.

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The unintended effects of detection: How anti-doping lost its way and how it might find its way back

John Gleaves*, Matt Englar-Carlson

California State University, Fullerton, USA

Anti-doping efforts have historically followed incidents where athletes' doping use generated some sort of public scandal (Dimeo, 2007; Hunt, 2011). Such "framing events" spurred administrative action, often taking the form of "moral panic" (Coomber, 2014; Critcher, 2014). These actions often resulted in efforts to detect existing doping use among athletes and punish those athletes

using rather than a comprehensive effort that includes prevention. However, the desire to detect and punish has unintentionally diverted anti-doping research (and efforts) down an unproductive road. To date, anti-doping research has typically centered on the act of “doping” itself with the existing knowledge base being overly problem-focused on athletes’ deficits (Backhouse et al., 2007). Though ample research indicates athletes do not begin sport with a desire to dope, a knowledge gap exists around identifying the reasons some athletes continue to abstain from doping, even when they perceive detection and punishment as ineffective deterrents. This paper argues that anti-doping research must move beyond “business as usual” anti-doping efforts (i.e., eradicating “the bad”) and focus on developing strategies that capitalize on the attitudes, behaviors, and existing resilience of athletes who chose not to engage in doping (i.e., promoting “the good”). To defend this claim, the paper first asserts that anti-doping (and consequently anti-doping research) has remained overly focused on detection and punishment. Second, the paper argues that a “strengths based” approach rooted in positive psychology (Englar-Carlson and Kiselica, 2013; Seligman et al., 2005), which identifies tools that help non-doping athletes resist the pressure of using banned substances, provides a novel anti-doping intervention strategy. Third, the paper outlines a community-based participatory research (CBPR) methodology that effectively allows researchers to identify strengths among non-using athlete populations. Finally, the paper shares preliminary findings from this methodology for discussion. These findings point towards an effective anti-doping prevention strategy that uses strengths-based education to improve athletes’ “buy in” to anti-doping efforts and subsequently increase their resilience to doping pressures.

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Doping in mass sport: An inexplicable phenomenon?

Monika Frenger*, Werner Pitsch, Eike Emrich

Saarland University, Germany

Doping in mass sports can be seen as an unintended effect of doping in elite sports as well as of anti-doping. Because of anti-doping, positive tests are reported in media or newspapers. One effect of the subsequent public discussions is that knowledge about doping substances and their assumed effects spreads among mass sport participants who may be inspired to consume doping substances like elite sportsmen and -women. Doping in elite sport is mostly understood within an (implicit) rational choice explanation, assuming that athletes try to maximize their benefit from engaging in elite sport by increasing their probability to reach high placements. At present, the phenomenon of doping in mass sport is increasingly in the focus of social scientific research, media and the Anti Doping Organizations, although there is only little knowledge about the prevalence and the determinants of doping in this segment of sport. We conducted empirical studies, investigating the prevalence of doping in three different settings: (1) among university students in four different European countries ($n = 8224$), (2) among sportsmen and -women in Palatinate (a region in Germany, $n = 1930$) and (3) among amateur cyclists, licensed by USA Cycling ($n = 3756$). The research in all these studies was conducted using the Randomized Response technique in a web-based survey. This technique allows interviewees to answer embarrassing questions honestly without fear from social sanctions. The overall analysis showed that about 5% of the participants deliberately used forbidden substances or methods in order to increase their sporting performance. This percentage is somewhat lower than comparable

results in elite sports. Nevertheless, among the huge number of recreational sportspersons the absolute number of deviators is high. The challenging issue for social sciences as well as for any Anti Doping measures is that this behaviour cannot easily be explained by using similar patterns as in elite sport. Especially the influence of a monetary or non-monetary utility from high placements cannot be hypothesized as a driver for doping decisions in mass sports. Additionally, although there are few doping tests at these levels (e.g. finalists of regional championship in tennis in Germany are tested), this affects only very few participants in mass sports while for the huge majority, neither in-competition nor out-of-competition tests are conducted. Therefore, neither the loss of reputation due to a positive doping test result nor sanctions work as deterrents from doping. Thus, only secondary effects from success in mass sports like increased occupational career chances or increased social attractiveness can be assumed as the basis for the perceived utility from doping. By conducting comparative analyses over the three independent studies, we describe which determinants are stable or unstable predictors of different doping prevalences. From these data, we are then able to formulate assumptions concerning the drivers for doping in mass sport.

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Utilitarianism and anti-doping

Rasmus Bysted Møller

Aarhus University, Denmark

This paper investigates the connection between utilitarian reasoning and anti-doping. The fundamental rationale for anti-doping, according to the World Anti-doping Code, is to promote health, fairness and equality for athletes. However, utilitarian thinkers such as Torbjörn Tännsjö and Claudio Tamburini have argued that the notion of fairness in sport is morally flawed and that equality is best promoted by abandoning anti-doping. With regard to athletes’ health Tamburini furthermore claims that it would be paternalistic to deny athletes the right to make decisions with regard to their own health in relation to doping. This position has been problematized by doping scholar Verner Møller who argue that with such a liberal position there is a risk that sports directors and managers will coerce athletes to use drugs and thus run health risks if athletes’ are allowed to make free use of performance enhancing substances. If Møller is right, there are good reasons to preserve anti-doping. But even more so, utilitarian reasoning can legitimize the current anti-doping policy even if it involves infringements of athletes’ rights to privacy and a relative high risk of miscarriage of justice. This is the case if the negative impact on the individual athlete, due to a felt lack of privacy and miscarriage of justice, is outweighed by the positive effect of promoted health generated by such practices. A side effect of utilitarianism – well known to its critics – is its potentially terroristic tendency towards individuals. As many scholars, including Møller and Christiansen have argued, the current anti-doping system does have individual-terroristic tendencies and is therefore unacceptable. This paper claims that such tendencies by anti-doping (and utilitarianism) can be avoided by adherence to a quasi-utilitarian rationality that grounds its normativity on empathy-driven moral insights. In conclusion it is argued that a quasi-utilitarian rationality is inefficient in comparison with the current anti-doping system, it is likely to be efficient enough to prevent the health problem feared by Møller, and therefore ought to be adopted.

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Blurred lines: The convolution of anti-doping in sport and national policies towards the use of performance and image enhancing drugs

Kyle J.D. Mulrooney*, Katinka van de Ven

University of Kent, UK

Anti-doping has evolved from a historically independent and un-coordinated movement to what is now a largely coherent and unified crusade, inclusive of global government, national government and sport authorities, and headed by the World Anti-Doping Agency (WADA). The growth of the anti-doping movement has not been limited to size but the scope has likewise expanded as the movement has consistently called for and successfully accrued more powerful weapons in the doping fight. While doping controls within sport have been successively ratcheted up, our attention here is with the breach of anti-doping beyond the boundaries of sport, to target social consumers and traffickers of performance and image enhancing drugs (PIEDs). Indeed, PIEDs have become progressively viewed as a wider social problem and a number of actors have been successively identified as the carriers of this social harm. As a result the list folk devils has grown and so too have the control mechanism employed to combat them. However, while the “war on doping” has advanced beyond the arena of sport, there remains a tendency amongst policy makers to frame PIEDs as an issue within sport, and to call for the same types of policies that are being used in anti-doping. Contributing to the conference theme of “evaluating the unintended effects of anti-doping” this paper explores the PIED policies of Sweden, Belgium, and Denmark, highlighting the ways in which anti-doping in elite sport is informing the national drug policies of these three countries. We argue that by confounding PIED use in society with the conceptualisation of doping in elite sport, not only do the contours of social doping remain uncharted, but the national response to PIEDs inevitably impedes public health initiatives, while advancing a zero tolerance approach to PIEDs as a criminal justice issue. We suggest that so long as national efforts to address the use of PIEDs remain interwoven with sport policy, measures are inclined to adhere to the intolerant mantra of the anti-doping movement and the punitive policies that flow from it, hindering the exploration of alternative actions and aggravating harms associated with PIED consumption and trafficking.

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The redundancy of the concept of ‘Spirit of Sport’ in discussions on the Prohibited List

Olivier de Hon

Anti-Doping Authority Netherlands, Netherlands

The criteria that guide the contents of WADA’s Prohibited List International Standard have always been, and probably will always be, open to individual interpretation, and thus discussion. Article 4.3 in the World Anti-Doping Code speaks of ‘the potential to enhance ... sport performance’ and a ‘potential health risk to the Athlete’, in addition to the third criterion that states ‘WADA’s determination that the Use of the substance or method violates the spirit of sport described in the introduction to the Code’. When two out of these three criteria are fulfilled, the substance or method in question ‘shall be considered for inclusion on the Prohibited List’ by WADA. The fundamental background of banning doping in sports is the belief that it is unethical to use potentially dangerous substances or methods with an expected performance enhancing effect. Hence, this belief includes all three of the current criteria, even though they may not be weighed in equal importance. It can be argued that the decision to prohibit something is already an

ethical judgment in itself. Apparently, there are things (substances, methods, anything) that justify a prohibition in the eyes of a majority of the people involved, or at least in the eyes of the decision makers. This means that the inclusion of the criterion of ‘Spirit of Sport’ in the rules that guide the contents of the Prohibited List is in fact circular: the ‘Spirit of Sport’ is being protected, at least partially, by the mere existence of anti-doping regulations, not as much by the possible inclusion of this criterion in the determination whether a particular substance or method should be banned within the anti-doping rules. If the criterion of the ‘Spirit of Sport’ is taken out of the World Anti-Doping Code, discussions on prohibition of substances or methods can focus on two criteria alone, which hopefully will allow for further, focused discussions. Will such a revised instrumentalisation of the concept of doping be able to provide a 100%-water-tight definition of doping? Probably not, and borderline decisions and interpretations will always need to be made by a committee that is given these powers. And WADA’s list committee is the obvious judge to do this. Maybe such a re-evaluation of the current criteria will not even change the Prohibited List International Standard itself, but it would focus discussions, and likely guide the issue of doping towards the abuse of medical substances. These decisions should be driven by science, but also by the practical consequences that lie behind the decision to place something on the Prohibited List International Standard or not. But foremost these decisions should be based on a clear set of criteria, and it is argued here that two criteria (enhancing sport performance and health risks) suffice to provide input for the ethical decision to ban a certain substance or method, or not.

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The symbolic effect of criminal anti-doping legislation

Arthur Kullok

University of Coimbra, Portugal

Symbolic effects are typical of criminal law. However, the drawing of new crimes without the observance of the criminal policy criteria and without a proper dogmatic configuration redound to merely symbolic offenses only operated with intentions directed to the fulfillment of mere particular aspects disguised as a real protection of social interests. The pursuit of these interests reveals dissociation with the true mission of criminal law. The anti-doping fight has seen an overwhelming increase of incriminations related to doping. Examples of this issue can be seen in alterations to German legislation and in the creation of new offenses in Portugal, Italy, France, Colombia, Belgium and Spain. The creation of new crimes is not a problem. However, the particular rationality of criminal legislation must be respected. It is precisely here where it identifies an asymmetry of the rules of the game between criminal and sports law. Although it identifies the existence of a protected legal interest deserving of punishment, the empirical judgment of the necessity of criminal punishment concerning doping offenses will not be satisfied. In other words, as much as we identify a qualified criminal value associated with the spirit of sport, the intervention of criminal law for the fight against doping is not necessary, especially because the criminal law is the ultima ratio of the legal system. Therefore, it is important to point out some deficiencies presented by criminal law and its unintended effects of anti-doping fight. Firstly, the illegitimacy of the criminalization by failure is one of the elements of the criminal policy criteria (absence of suitability and necessity). As a consequence of this statement, it imposes the inefficiency of the law in relation to the interests that would desire protect. This means

that the desire to prevent and repress anti-doping offenses will not be achieved by the establishment of new crimes; it is sufficient to keep these purposes just to maintain the anti-doping controls already carried out by sports organizations. These new crimes will result in inefficiency and forgetfulness of the doping crime, making it a "dead letter". The solution for the protection of legal interests involved in the issue of doping will take place through traditional offenses established in favor of the protection of life and physical integrity, as well the intervention of other areas of law such as civil and administrative law. The second deficiency concerns to the construction of an accurately dogmatic statute of the crime, particularly in confrontation between autodoping and heterodoping. This discussion is so elementary that is possible to observe different legislative solutions regarding this problem creating a disharmony in comparison with the unification established by World Anti-Doping Code. Thus, some countries have chosen to criminalize only the heterodoping, while other countries have chosen to criminalize both behaviors. Finally, if is not possible to rule out the doping offenses from national legal systems, at least the countries should develop their legislation fully in line with the World Anti-Doping Code.

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Does anti-doping policy contribute to the development of a real doping market?

Bertrand Fincoeur

University of Lausanne, Belgium

While doping in sport has long been explored and tackled predominantly from a user-perspective, the anti-doping policy-makers tend now to increasingly consider and support the development of a (complementary) approach of anti-doping which is intended to tackle the supply-side of the doping market. However, looking back at the recent history of elite cycling, we could state that, at least until the end of the 1990s, there was no "real" doping market. Elite cycling teams massively provided themselves performance-enhancing drugs, including illicit ones, to their cyclists. Not least due to the zero tolerance approach of anti-doping policy, these "culturally-embedded dealers" are today often no longer prepared to take risks by (openly) supplying doping products. As a result, the supply chains of doping substances in elite cycling have considerably evolved over the course of the past two decades. Actually, the evolution of doping supply mirrors the evolution of doping use. Whereas doping use was previously the result of a socialization process, it has become a more and more secretive and individual practice. Both for users and suppliers, the anti-doping policy has thus increasingly driven the doping activities underground. As a consequence, it has progressively led consumers to increasingly consider the "black market" as a potential source for performance-enhancing drugs, therefore opening a space for the development of a "real" doping market. During the presentation, we consider these (possible) unintended effects of anti-doping. This presentation is based on the results of an empirical research about the impact of the anti-doping policy on the evolution of the doping market in Belgian and French elite cycling. This research relied on a multi-method instrumentation set, including the analysis of policy documents and criminal proceedings; 75 semi-structured interviews with policy-makers, law enforcement officers, cyclists and their sporting and medical staff; and the organization of a survey among 767 Belgian competitive cyclists.

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Experiences from my cycling career

Michael Rasmussen

MR Consulting & Trading Aps, Denmark

During my career as a professional cyclist first as a mountain bike rider, and later as a road racer I have gathered experience of what it means to be a top-level athlete in a progressively competitive milieu in an increasingly medicalized world. The driving force throughout my career was to make the most of my talent for cycling. My passion for the sport made me one hundred percent focused on improving my performances. I have trained like mad, kept a strict diet and sacrificed many of the pleasures enjoyed by young people living ordinary lives, always with an aim to win big races. When I realised that success in cycling required more than hard work and a strict diet I had some difficult decisions to make, and conflicting considerations to take into account. Based on personal experiences throughout my professional cycling carrier and the time after having admitted to using performance enhancing means including my 2013 testimony to the anti-doping authorities, I discuss the ideal and the reality of the level playing field and present illustrative examples of situations, where – and why – the fight against doping have had undesired and counter-productive effects.

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Elite athletes' perspectives on key elements of current anti-doping policy

Marie Overbye

University of Southern Denmark, Denmark

This paper provides an overview of how key elements of current anti-doping policy have an impact on elite athletes' everyday lives as well as how athletes perceive key policy elements and their implementation. In particular, the aim is to briefly describe and discuss key findings relating to how elite athletes perceive, experience and trust the following key policy elements: (i) the prohibited list of substances; (ii) the TUE system; (iii) the whereabouts-reporting system; (iv) doping testing efforts; and (v) sanctions. In addition, the study identifies whether athletes' responses vary among athletes of different gender, age and type of sport, as well as whether (and, if so, how and when) other factors such as personal experience of certain policy measures has an effect on how athletes perceive or experience these measures. To explore these questions, the presentation combines the key findings of a larger study assessing, among other things, elite athletes' perceptions of doping and anti-doping efforts, in particular the findings of a web based questionnaire emailed to Danish elite athletes ($N = 645$; mean age: 22.12, $SD = 5.82$; response rate 43%) (Overbye, 2013). From this study, particularly relevant unpublished as well as published findings (Overbye, 2013; Overbye & Wagner 2013, 2014; Elbe & Overbye, 2014; Overbye et al., 2013, 2015) have been selected for the presentation. The results are discussed in relation to current policy and focus on elite athletes' experience of, attitudes to and trust in anti-doping efforts regarding the key policy elements. Overall, the results show some ambivalent attitudes towards the system, which can be described (in a simplified way) as the combination of, on the one hand, great support for anti-doping measures/efforts in elite sport and, on the other hand, some unintended consequences when policies are implemented, such as negative emotions or experiences for some elite athletes in their daily lives, a low level of trust in the harmonisation of the WADA Code and the efficacy of anti-doping measures across the world. However, each key 'policy element' has its own purpose and faces different challenges;

thus, these elements vary in their levels of support and trust, differ in their (positive or negative) impact, and have an effect on a varying number of athletes. More detailed results concerning these specific issues are presented at the conference. Thus, the study outlines positive and negative effects of as well as challenges for key policy elements, e.g. by identifying elite athletes' levels of support and trust besides their experiences and perceptions of anti-doping measures, while simultaneously identifying whether, or to what extent, certain policy elements seem to have unintended consequences for specific groups of athletes. Implications of the results as well as recommendations are outlined in the presentation.

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The justice of WADA . . . or lack thereof

Klaas Faber

Chemometry Consultancy, Netherlands

Three types of disturbing (non-)doping convictions are suggested as food for discussion, presented in decreasing order of assumed prevalence. These three types of conviction are used as a starting point for discussing whether we are looking at 'corrupt idealism' or merely a blind spot.

First are factual non-doping cases, mainly attributable to an apparently thoughtless systemic lack of thresholds for performance enhancing drugs (PEDs) that are expressly allowed outside competition in the Code. The World Anti-Doping Agency (WADA) maintains a fundamental distinction between PEDs that are expressly allowed outside competition, such as stimulants, and PEDs that are prohibited throughout, such as erythropoietin (EPO). This distinction can be motivated from an essential property of the various PEDs; short-lived effect PEDs are allowed outside competition and long-lived effect PEDs are prohibited throughout. This distinction therefore makes sense from WADA's perspective of the level-playing field. However, this distinction has a logical implication in terms of thresholds that are currently being glossed over. For a PED that's prohibited throughout, a threshold is not indicated, unless the PED is endogenous of course. For a PED that's allowed outside competition, a threshold is *always* indicated to avoid artificial 'false-positives' due to an irrelevant minute trace resulting

from an 'act' that's allowed. Be it deliberate consumption (for recreation or performance enhancement during training) or accidental contamination.

There exist thresholds (arbitrary?) for a few PEDs that are allowed outside competition, e.g. cannabis, ephedrine and alcohol, but not for the large majority. For many years now, we have been looking at roughly 500 questionable cases per year or even a lot more resulting from this systemic lack of thresholds. What could be the underlying rationale for this inconsistent but extremely harmful lack of thresholds? Athletes are convicted because of their 'strict liability' concerning the mere presence of certain PEDs in their body fluids. However, with the ever-increasing sensitivity of analytical instruments that 'principle' was always deemed to be overly simplistic for this broad class of PEDs, without logical safeguards in place like a functional threshold. Does perhaps recourse to the athlete's 'strict liability' qualify as a rationale to WADA? This kind of 'convenient' zero tolerance finds no justification in science.

Second are potential doping cases that must be won by anti-doping at all cost. It has been known for a long time that "The rules are designed to make it as easy as possible to convict an athlete." If the athlete nevertheless resists, no cost is spared to convict him/her anyway, to maintain the perfect score. Famous examples are:

- Floyd Landis: false-positive(?) and convicted for exogenous testosterone and false-negative(!) for EPO and growth hormone;
- Lance Armstrong: 6-month bans for once complicit riders that required considerable bending of the rules, while at least one of them may have lied under oath
- Claudia Pechstein: two different ad-hoc decision rules, namely (1) for taking her out of a tournament and (2) for convicting her + collusion(?) between WADA and CAS

Third relates to class justice. An example is Yuri van Gelder, a Dutch gymnast who received a reduced ban on a ground that was not even mentioned in his verdict. Dutch anti-doping authorities misinformed the media as well as WADA, otherwise surely an appeal had followed, ruining Van Gelder's chances for a gold medal at the London Games.

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