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2013 INHDR Conference

“What do we (really) know about doping?”

John Gleaves & Ask Vest Christiansen
Managers of the International Network of Humanistic Doping Research, NHDR

Welcome to the 5th international conference of The International Network of Humanistic Doping Research, INHDR!

It has been 16 months since Verner Møller handed over the keys to the INHDR to us. In that time, small changes have been made, our membership has grown, and our fifth conference is now a reality.

Our focus on “What do we (really) know about doping?” has been well received and having seen the quality of abstracts in this book, we anticipate
exciting advances related both to methods and theories that help capture the complex doping phenomenon.

The diversity of abstracts, ranging from philosophy to sociology to methodologies rooted in the natural sciences, reveals a fundamental question about the nature of doping research. This question, which strikes at the heart of the INHDR, asks to what degree is the network bound to the humanities and to what degree does the network extend beyond its confines of traditional humanistic research? It is clear that although we have always been the International Network of Humanistic Doping Research, humanities-based scholars cannot exist unaware of the research conducted in the fields beyond their domains. For too long, many sociocultural sport scholars have dismissed the more empirical researchers for their failure to grasp the ethical, legal, historical, political, and cultural dimensions of doping. But the price for such dismissal remains ignorance over important quantitative information and methodological tools.
The INHDR has always appreciated the need for the humanities and the natural sciences to speak together. Keynote speakers have come from fields beyond the humanities and many of our members have co-authored with colleagues in fields as disparate as physiology, criminology and computer science. However, we grow ever more convinced that the doping question cannot be understood without significant research produced by colleagues from across academe. For that reason we envision an INHDR focused around sociocultural, humanities-based questions, but one always informed of and willing to listen to researchers from broader, eclectic, or even original methodological approaches to doping. We all stand on the shoulders of giants, but often forget that we are girded only by degrees of separation from giants whose names we may not know. It is that spirit that we will continue to look for ways our network can extend doping-related knowledge and remain the premier hub for scholarly inquiry on the topic.

In that senses, we must continue to consider our membership base as our greatest asset. As noted,
the INHDR has grown steadily in the past year. Our standards for membership have remained as they were, but as both the quality and quantity of international doping research continues to grow, talented candidates with interesting and sometimes novel approaches to the topic enter our ranks. However, this increase does not happen accidentally or by luck. It is always great when top-flight doping researchers reach out to join us. More often than not, however, our membership grows because one of our members actively invites scholars to join. This is the key to our success. Given the diverse nature of our research fields, and the complex nature of the doping topic, we need to continue to encourage exciting and talented colleagues to join our ranks as senior members and promising and enthusiastic post-graduate students to enter as junior members. Indeed, as we looked over the abstracts, it was among the graduate students where we found a few of the most innovative projects.

Once again: Welcome to the 5th International INHDR conference!
When studying doping issues in depth from a multidisciplinary approach, one is faced with material considerations which involve serious and complex problems and that consequently give rise to outstanding reflections of different nature (i.e. economic, social and related to the mass media), but the issues underlying the health sphere are also addressed. Thus, in this paper the term “health” refers not only to physical health, which has been adequately defined in the field of doping, where it has also been dealt with using a comprehensive approach, but also to mental or psychological aspects, which until now have not actually received the kind of attention they deserve, and consequently a more detailed and accurate research should be carried out in this regard. Thus, the ultimate purpose of this paper is
to address the abovementioned questions in order to be able to offer a general background of the health risks and the side effects which doping gives rise to from both a physical, and particularly, a psychic viewpoint. In the light of all this, this paper addresses the psychic side effects triggered by doping in sport, which in many cases result not only in the mental illness of the practitioner, but they also impair the health of the athlete's offspring, and there is some evidence in this regard. As a result of all this, this paper focuses also on the socio-psychological perspective of doping, namely, on the underlying reasons or the psychological considerations which induce athletes to resort to doping, or the reasons why they feel the need for doping.

Moreover, apart from dealing with the protection of the athlete’s health -a backbone of the antidoping policy-, ensuring equal opportunities for competitors and preserving sport values (e.g. fair play) are the three central pillars on which this paper is based.
Thus, as far as equal opportunities are concerned, this paper considers the view of sport as a business, where economic reasons are paramount. In this context, fraud and unfair competition are two aspects well worth considering. On the other hand, and as far as the preservation of sport values is concerned, the relationship between ethics and sport comes into play, and doping becomes actually one of the main problems associated to both professional and amateur sport, which are encompassed under the fuzzy definition of “fair play”.

Lastly, and being consistent with the title of this paper “(...) beyond the athlete`s liability”, the legal implications of these issues, namely, the liability of those involved in doping cases (i.e. healthcare agents, coaches or athlete's managers) is also considered. For this purpose, addressing all these issues from the point of view of Criminal Law is essential to fully understand the legally protected interest in doping. Apart from the views held by the majority doctrine regarding "public health" as the legally protected interest, a reflection on “fair
play” as something legally protected becomes of the utmost importance, and consequently —at present be it hypothetical or of lege ferenda—, the athletes themselves would be held to be liable on the grounds of their doping behaviour.
Introduction: Scholarly research on the attitudes of the general public towards drugs in sport is scant; what does exist tends to focus on the attitudes of elite athletes, high school students or steroid-using amateur athletes (Backhouse, McKenna, Robinson & Atkin, 2007). Popular media suggests the public takes a negative view of drugs in sport. However, questions have been raised whether this perspective is really that of the general public or better represents the opinions of sports journalists, administrators and athletes (Carstairs, 2003). For example, sports fans may be much stronger in their opposition to doping than athletes or journalists. Methods and
results: In light of the absence of evidence on public opinion regarding drugs in sport and the anti-doping effort an internet-based online survey of the English public is currently underway. Questions probe the public perceptions of the current doping landscape and the efficacy of anti-doping policies. To date, 279 participants have completed the survey and the sample is balanced for gender (51% male). Social media is driving recruitment in an attempt to obtain a representative sample. Thus far, all nine English counties have been reached via this approach. This paper will present the findings of the survey.

Conclusion: Determining where the English public stands in relation to drugs in sport provides a stimulus for consolidation of the current policy, policy innovation, or indicates more effort is needed to market anti-doping to the English population. If anti-doping policies do not reflect the values of broader society they risk losing relevance as the issue evolves (Houlihan, 2002).


**Dmytro Bondarev: Why Good Athletes May Use Doping: Moral Justifications of Doping Behaviour**

*Dmytro Bondarev, Lund University, Sweden*

**Introduction:** The use of substances that enhance performance is a continuing concern of the sporting community since their use not only affects the health of athletes but also undermines the moral values of sport. Hence anti-doping initiatives assume that doping is not only dangerous to health but also immoral. Because moral attitudes unlike others are strong and resistant to change (Sunstein, 2005)—researchers see that incorporating moral facets into anti-doping initiatives may strengthen anti-doping efforts. However, to date, there are quite a few programs based on ethical and moral decision making (e.g, Brand & Elbe, 2012). Moreover, the effect of moral facets on doping behaviour is inconclusive (Barkoukis et al. 2011). It is assumed that athletes may make their decisions being
motivated by a vested interest to search for potential justifications of unethical acts and may not be motivated to question or critically assess arguments against the behaviour itself. From this viewpoint, social controls that are assumed to inhibit immoral behaviour may be inoperative due to athletes’ predisposition to regulate the magnitude of the meanings of moral facets on their behaviour. This phenomenon is known as neutralisation thinking (Bandura et al., 2001). Therefore, the following hypotheses were used to guide our study:

1. Eliminating motivation to rationalise doping behaviour would reduce doping-associated behaviour.
2. Surroundings’ influence may implicitly activate appraisal of doping-relevant information and affect the decisions of participants to favour doping-associated behaviour.

**Methods and study design:** The participants were 212 tertiary university sport science students who
are currently involved in sport, aged between 18 and 23 years.

The variable of interest was whether the participants included recommendations concerning the use of performance-enhancement drugs (PEDs) as a part of their fitness program recommendation for a fictitious character. We assumed that including such a recommendation would relate to doping-associated behaviour. The dependent variable was examined in a between-participants design under three contrasting manipulations developed to affect participants’ motivation to perceive doping as permissible behaviour.

Logistic regression was performed to analyse the effect of condition manipulations on the dependent variable.

**Results:** Doping-associated behaviour decreased significantly after the manipulation in experimental conditions served to withdraw a possibility of justifying actions associated with doping in both baseline and exposure levels.
Moreover, it was found that instigating the influence of surroundings may activate appraisal of particular information related to doping in a way that participants favour doping-associated behaviour. However, preventing participants from seeing doping as moral legitimate behaviour may reduce the soliciting surroundings’ influence.

Rationalisations of doping behaviour may exploit the implicitly sanctioned manoeuvres in the normative rules created by social surroundings.

However, the fewer the opportunities for latitude in justification of immoral action, the more moral attitude acts as a deterrent factor from doping.

**Literature**


Barkoukis, V., Lazuras, L., Tsorbatzoudis, H., & Rodafinos, A. (2011). Motivational and

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What does a doper really think? How does he progress from being an enthusiastic and clean athlete to being a cheater who injects himself with EPO ten years later? This study offers an insider explanation of doping. An adapted methodology for understanding the "normality" of doping was developed during the Festina cycling scandal of 1998 and applied to other sports in the early 2000s. A detailed description of the steps involved in the analysis will be provided, as well as the resulting data. A qualitative analysis, rather than an epidemiological analysis is used, which makes results different from others. This methodology is based on the qualitative, inductive approach used in symbolic interactionism (Becker, 1985) and in the comprehensive interview technique (Kaufman, 2004). The first step is to identify drug-using athletes, and several methods were used to
obtain their contact information. The second step, and the most important, is obtaining the interviews. Within a very short initial contact, sometimes just minutes long, the researcher must demonstrate that the approach being used is comprehensive, and not at all the usual Outsider analysis. Trust must be earned quickly, since trust is fundamental to obtaining reliable data, especially details of deviant behaviour that is strongly disapproved of by those outside the world of elite sports. The next step is the interview itself, which is effective because of the non-judgemental attitude of the interviewer. For this reason, the questions are not about doping, which implies a moral stance, but on pharmacology, which implies a health perspective. The life history interview model is used both to install trust and to better understand the processes which lead to doping. Analysis of data collected in this way has resulted in a clarification of the progression of doping in the context of an athlete's moral career, pharmacological career and professional career.
Doping in sports is viewed primarily as an unethical, immoral, and deviant act of individual athletes who violate rules in the quest for competitive success. Doping control is based primarily on (a) essentialist and moralistic ideas about the purity, goodness, and integrity of sport and (b) naïve conceptions of sport cultures, high performance training, and technologies used by athletes, coaches, and trainers. Doping control protocol involves testing and investigating individual athletes and punishing rule violators who are identified and widely condemned as cheaters. Largely ignored in this process are the contexts in which athletes form and affirm their identities, make decisions about training and
competition, and deal with the realities of a commercial, high stakes occupation over which they have little control. This presentation focuses on these contexts and argues that definitions of doping and current doping control protocol are unrealistic, short-sighted, inefficient, and destined to fail.
Paul Dimeo: Researching ‘doping’ attitudes among Scottish elite athletes: methodological questions and consequences for policy

Paul Dimeo, University of Stirling, UK

This presentation describes and discusses a study of elite Scottish athletes, funded by WADA, which aimed to understand their attitudes to doping and anti-doping and use to that data to compare team and individual competitors. This was a mixed method study, employing an anonymous on-line questionnaire for the first stage, and qualitative methods of focus groups and one-to-one interviews in the second stage. The objectives will be to outline the study and reflect upon methodological questions underpinning the subsequent results and consequences for policy, by undertaking the following aims.
Firstly, a description of the methods implemented and discussions of the strengths and weaknesses thereof. Secondly, a review of the findings, specifically: a) the attitudes of the cohort to doping and anti-doping; b) comparison between team and individual athletes; c) other interesting outcomes such as reported deterrents and the culture of Scottish sport/society. Finally, the potential consequences for policy-making in this area will be discussed.

The conclusions will reflect upon the limitations of social science research in explaining how doping and anti-doping attitudes are formed and articulated; how research investigations and methods might be improved; and some observations made about the relationship of research and policy in this field.
Erickson & Backhouse: Protective Factors Buffer Effects of Risk Factors on Doping Use Amongst Competitive Athletes

Kelsey Erickson & Susan Backhouse, Leeds Metropolitan University, UK

Introduction: Identifying risk factors for performance enhancing substance (PES) use in sport has been the chief concern for researchers in the field. However, a growing number of studies in the prevention field have found that psychosocial protective factors are important in countering the effects of psychosocial risk. This points to a need to identify and understand the protective factors which might serve to buffer athletes from the risk of doping in sport. Therefore, the purpose of this qualitative study was to explore the reasons athletes do not use PES. Design: A semi-structured interview approach, implementing the principles of the life-
cycle model (Petroczi & Aidman, 2008) and social ecology theory (Graham, Marks & Hansen, 1991), was utilised in order to gain an in-depth understanding of the individual’s lifelong athletic career. This served to identify the levels of the ‘buffers’ which have prevented athletes from the risks of using PES. Method: Ten competitive athletes (M=5, F=5) representing five different sports (field hockey, boxing, football, triathlon, rugby) were interviewed. The interviews were analysed using a three-stage coding process, identifying common themes throughout the narratives. Results: The interviews revealed that protective factors exist at various levels. More specifically, personal factors (i.e. self-confidence, resilience) and systematic factors (i.e. strong connections with parental figures, positive influences from coaches) serve to protect against the use of PES. Conclusions: The findings complement and extend the current evidence base by suggesting that previously identified protective factors in social science research appear to exist within the context of sport and
doping behaviours. This implies that comprehensive doping prevention programmes for athletes and support personnel should focus on enhancing a variety of protective factors in addition to reducing doping risk.

References


Bertrand Fincoeur: Doping in Belgian cycling: results of an online survey using the RRT

Bertrand Fincoeur, KU Leuven, Leuven Institute of Criminology

The presentation will be based on the preliminary results of an ongoing doctoral project about doping in Belgian and French cycling. More particularly, this doctoral research is intended to investigate empirically the supply of doping products and to assess the impact of anti-doping policies in Belgium and France. Indeed, unlike use, the topic of the supply of doping products has been largely neglected by researchers and not least by criminologists.

The project relies, for its data collection, on a multi-method instrumentation set, i.e. the analysis of policy documents and criminal proceedings, semi-structured interviews with policy-makers, law enforcement officers, cyclists and their
sporting and medical staff, and the organization of an online survey among up to 3,000 Belgian competitive cyclists.

At the INHDR conference, we will present the first results of the survey as well as the methodology which has been used. To carry out this survey, we have used, in partnership with the Saarland University (Germany), the randomized response technique (RRT), which is, up to now, one of the most reliable data collection method in order to assess the prevalence of hidden deviant behavior. The RRT is supposed to increase the accuracy of the answers to sensitive questions thanks to a randomization process that allows to avoid social desirability bias.

With this survey, we aim: 1/ to estimate the prevalence of the use of doping products by competitive non-professional Belgian cyclists, 2/ to better identify the supply channels for doping products, and 3/ to understand the impact of the current anti-doping policies.
The results of the survey will then be linked to a conceptualization of the evolution of the role of the suppliers on the market for doping products.
Monika Frenger: How to produce the belief in clean sports – a mathematical fight against tacit premises

Monika Frenger, Saarland University

International federations typically present themselves as struggling to eradicate doping. As “producers” of athletic competitions they “sell” a good which is composed of high performance and the belief in the compliance with the rules and especially with Anti Doping Rules. In terms of sporting performance, spectators can easily observe the quality of the good. As an undetected deviation from the norm, doping enhances peak sporting performance; as a detected deviation from the norm it is detrimental to the integrity of competition. Depending on the frequency of its occurrence, detected doping at the same time helps to stabilize faith in the compliance of the performance of athletes who do not test positive
(Durkheim, 1999, 181). The two complementary co-products performance and compliance each have a different significance with respect to the value of the competition. The perceived compliance is a necessary prerequisite for the performance to be valuable. However, an increase in compliance does not increase the value of the complement, which in turn – assuming spectators have confidence in compliance – depends on the level of the sporting performance.

The demand for elite sport is at its highest when tests do not catch too many guilty deviators. At the same time credible investments must be seen to go into control efforts as a means of symbolizing the ethical quality of competition. Additionally peak sporting performances must be achieved (cf. Emrich, 2006).

Organizers of international events as well as Anti-Doping organizations have to choose a certain rate of tests. Intensive testing has a high potential to deter athletes from using illicit substances or methods. As a result of many non-dopers due to
the deterrence, intensive Anti Doping Tests will lead to a low rate of detected dopers. On the other hand, a low rate of tests will produce a weak deterrence and thus a high doping prevalence. But even with a high prevalence a low rate of tests will also lead to a low number of detected dopers. Both strategies can help to support the belief in the compliance but they will have a different impact on the performance. A numerical re-modelling of these thoughts will be presented. It shows (1.) that the model is without inherent contradictions and (2.) that the present rate of about 2 % adverse analytical findings is an optimum to maximize the value of the complementary co-products peak performance and belief in the compliance.

References:

Martin Hardie: How do we know about the Invisible Act of Doping?

Martin Hardie, Deakin University, Australia

This paper describes the construction of the visual space of surveillance by the global anti-doping apparatus and which is inhabited daily by professional cyclists. Two principal mechanisms of this apparatus will be discussed - the Whereabouts System and the Biological Passport; in order to illustrate how this space is constructed and how it visualises the invisible act of doping.

The Whereabouts System and Biological Passport are the instruments by which the anti-doping apparatus intensifies the construction of the space of surveillance in professional sport. This space of surveillance not only locates and makes visible the physical location of each individual cyclist, but it also makes visible their internal bodily functions, in this case the composition and the fluctuations of the composition of their blood. In making the
cyclist visible the instruments do not allow the cause of doping, or the event of doping to be known or observed. Rather what they do is cast the body in terms of abnormalities of time, place or blood. In the case of an abnormality of the cyclist's blood, the cause itself cannot be identified with any certainty, all that is made visible is a suggestion, or a probability, that doping may have occurred.

These mechanisms are considered against the background of the law and Foucault’s Panopticon paradigm. The ultimate effects of the regime are twofold – an internalisation and continual monitoring of one’s self as well as by the authorities, and a radical change in the nature and the definition of the offence of doping. No longer is it positive evidence of doping that is punishable, but what becomes punishable is an abnormality, in the cyclist’s location, or their body, which suggests a probability that the invisible act of doping may have occurred. In the course of this process accepted manners of proving an offence
by the use of scientific evidence and expert commentary are transformed.

The Whereabouts System and the Biological Passport open up a new manner in which the invisible can be visualised. Through the discourse and the attendant commentary of the expert a new alliance between doping and the law is constructed. The result is a redistribution of the way in which the law visualises and treats the symptoms (the signifier) and the signified act of doping. What we find is that in order to ascertain the invisible the methods of law and sovereignty no longer apply.
April Henning: “What is Doping? What Non-Elite Runners Don’t Know About Doping” 1

April Henning, City University of New York, USA

A major challenge to determining rates of banned substance use among post-collegiate, non-elite road runners is the lack of education regarding what constitutes doping. New York City-based runners competing in New York Road Runner (NYRR) races are subject to United States Track and Field (USATF) anti-doping rules, which follow the World Anti-Doping Agency’s (WADA) prohibitions of performance enhancing substances. Non-elite runners are not subject to doping control tests and do not receive information or training on how to avoid performance enhancing substances, yet these runners make up the vast majority of competitors in many local, national, and international road

1 The author was supported by NIDA grant (T32 DA007233); points of view are the author’s alone.
running events. Posing the question “what is doping?” to non-elite runners elicits responses ranging from the practical to the scientific to the philosophical, with some responses barely resembling the sport’s accepted definition. In this paper I examine the various ways non-elite runners define, understand, and view doping, in both technical and more philosophical terms. Data are drawn from in-depth interviews with 28 competitive, non-elite road runners in New York City who are members of competitive teams affiliated with the USATF-sanctioned NYRR. I make three arguments: firstly, the interviewees vary greatly in their understandings of both the technical and philosophical definitions of doping, reflecting a lack of education about doping; secondly, these runners view doping as mostly an elite sports problem that is and should be handled by various sports governing agencies; thirdly erroneous understandings of doping and banned substances may lead non-elite runners to make potentially dangerous decisions regarding dietary supplements or self-medication with both over-
the-counter and prescription drugs. These findings have implications for the health of non-elite runners, and also highlight the lack of education and understanding of anti-doping regulations as a major obstacle in the fight against doping at all levels of sport—the central objective of anti-doping efforts.
John Hoberman: "What do we (really) know about how to do 'anti-doping education'?"

John Hoberman, University of Texas, USA

What is generically known as "anti-doping education" has been a highly visible aspect of WADA's campaign to reduce the consumption of doping drugs by elite athletes around the world. Various forms of anti-doping "education" have been implemented (or, at least, announced) by many countries, even including such tiny island nations as Fiji, The Bahamas, the Cayman Islands, Santa Lucia, and Trinidad and Tobago. Anti-doping "education" has also reached the developing world in nations such as Sri Lanka, South Africa, Nigeria, Tunisia, Pakistan, and even North Korea.

The available reports of these activities tell us little about pedagogy or effectiveness; they do present a coherent message in the sense that all of these initiatives share WADA's rejectionist
position regarding doping drugs. The most visible content of these programs appears online and in the slogan campaigns that recall the uplifting and hortatory tradition of the "Up With People" movement of the 1960s. The UCI has its "True Champion or Cheat" campaign; USADA has a True Sport Awards Program and an "I Compete Clean" video campaign; the International Rugby Board sponsors a "Keep Rugby Clean" program; WADA and FIFA co-sponsor a "Say NO to Doping" slogan campaign; the FIS has a "Skiers and Snowboarders say NO! to Doping – Clean as Snow" campaign; the Swedish cycling federation promotes a "True champion or cheat?" campaign; even the pharmaceutical giant GlaxoSmithKline sponsors a Sport Anti-Doping Challenge and a Scientists in Sports contest. A different type of pedagogical event was dropped at the 2010 Tour de France: the oath of loyalty read by the youngest rider on behalf of the peloton at the beginning of stage 1. The oath was cancelled, according to an ASO source: "Because we realized it had no impact on whether people cheated or not."
Only a few interventions by professional psychologists have been attempted, including a small WADA-funded effort in Switzerland. Autobiographical reflections on doping careers by David Millar (Riding Through the Dark, 2011) and Tyler Hamilton (The Secret Race, 2012) make it clear that effective "anti-doping education" requires deep interventions into the lives of athletes. Small groups of athletes, such as cycling teams, may be able to build an anti-doping ethos based on a consensus to which athletes are willing to conform. The primacy of winning must be demoted to a secondary status below the psychological benefits of drug-free competition. In summary, the "anti-doping education" produced by sports organizations has proven to be superficial. The more promising alternative is the formation of teams of athletes led by people committed to the integrity of sport rather than an economically-driven mandate to win.
Thomas M. Hunt: Doping and the Cold War: What Do We (Really) Know about the Subject?

Thomas M. Hunt, University of Texas, USA

The social scientific and humanities-based literatures on doping have expanded substantially in recent years in both number and conceptual diversity. In providing opportunities for virtual and face-to-face dialogue on the subject, the International Network for Humanistic Doping Research has played an important role in this growth. Moreover, the operational leaders of the network have served the community of doping scholars well by reminding them to consistently keep in mind “the big picture” as they go about their research. The choice of “What Do We (Really) Know about Doping” for the 2013 INHDR theme fits perfectly within this tradition. It is at the same time broad enough to stimulate a wide-ranging set of responses and narrow enough to ensure a clear departure point for discussions. In
response to the question posed by the INHDR conference organizers, this conference paper evaluates the evidentiary and interpretive state of the existing scholarship on doping and the Cold War. In addition to critiquing the present literature’s overreliance on English- and German-language primary sources, it identifies a number of issues pertaining to the subject that deserve additional scrutiny by historians. Among them, the lack of archival documentation (the former German Democratic Republic aside) regarding the origin and subsequent development of Soviet and Soviet-bloc doping is listed as particularly noteworthy. In the hopes of offering a constructive plan for the future, the conference paper concludes by suggesting that those who are interested in studying doping and the Cold War should consider the merits of multi-national, multi-lingual research partnerships.
Lawrence W. Judge: The Attitudes and Perceptions of Juvenile Field Athletes toward Performance Enhancing Drug Use

Lawrence W. Judge¹, David Bellar², Jeffrey Petersen³, Erin Gilreath⁴, & Elizabeth Wanless¹

¹Ball State University, Muncie, IN; ²University of Louisiana-Lafayette, Lafayette, LA ³Baylor University, ⁴Indiana State University, Terre Haute, IN.

An athlete’s decision to take PEDs has been credited to a multifaceted interaction of individual and environmental factors (Nicholson & Agnew, 1989; Tricker et al., 1989) that makes the issue challenging to investigate. Studies examining adolescents, report a doping incidence between three and five percent (Laure, 1997). Wroble, Gray, and Rodrigo, (2002), conducted a survey of 1,553 pre-adolescent (10 to 14 year-old) athletes
from 34 states and found a much lower anabolic steroid (AS) usage percentage among 10-14 year olds (0.9% male) and (0.2% female). The purpose of the present study is to examine the attitudes and perceptions of adolescent track and field athletes in the United States on PED use. The TPB survey of 22 questions was administered to assess favorable attitudes, unfavorable attitudes, unfavorable subject norm, favorable intent behavior, unfavorable intent behavior, and drug testing attitudes. The subject pool was comprised of 48 males (15.9±2.2yrs) and 52 females (15.8±1.9yrs) participating in track and field.

Results of the questionnaire were assessed for differences by demographic variables using Pearson's Chi-Square analyses. Statistical significance was set a priori at alpha < 0.05.

The results of chi-square analysis reveal different responses regarding the desired intent to use prohibited performance enhancing substances to enhance performance in the upcoming season ($\chi^2=7.225$, p=0.027). The female participants all answered 'strongly disagree' or 1
on the likert scale to this query. The male participants responded with 87.0% (n=40) strongly disagree, 8.7% (n=4) answered 2 on the likert scale and 4.3%(n=2) answered strongly agree or 7 on the likert scale. Chi-square analysis also revealed a difference in the reported social pressure male and female athletes feel to use prohibited performance enhancing substances ($\chi^2=11.225, p=0.024$). Of the female participants 98.1% (n=51) answered 'strongly disagree ' or 1 on the likert scale and one respondent (1.9%) answered 4. The male participants responded 81.4% (n=40) for strongly agree, 11.6% (n=5) for 2, 4.7% (n=2) for 3, and one participant responded 7 or 'strongly agree'. Though not statistically difference ($\chi^2=4.70, p=0.098$) it is noteworthy that while none of the female participants reported any history of the use of prohibited substances to increase performance, 2 of the male participants (5.1%) reported "Yes I use/have used prohibited substances occasionally to enhance my performance" and one male reported " Yes, I have used prohibited substances once (one time or one
cycle), but not ever since." in regard to the use of PED. This result is particularly disturbing given the age of the male participants and the high likelihood of this use occurring during the age of puberty. The results of the present study are in partial agreement with the Theory of Planned Behavior (Ajzen & Fishbein, 1988), namely that the level of intentions to perform a particular behavior depends on the individual's attitude towards the behavior (Ajzen, 1991).
Bodybuilding appears to have been an exceptionally inviting area of research for those exploring issues of performance enhancement. Irrespective of how one chooses to categorize it, bodybuilding often transpires as a reflection of and breeding ground for the cultural fantasies, technological experimentations and social identities that form around doping. Due to methodological choices or research focus, it is a highly visible, dominant bodybuilding culture that has so far been the almost exclusive object of research (Brady 2001; Evans 1997; Klein 1993; Locks and Richardson 2011; Lowe 1998; Monaghan 2001; White and Gillett 1994). The
present paper brings attention to drug-free ('natural') bodybuilding, a body/sport culture that remains largely under-researched in the bodybuilding, sport, and anti-doping literature. Self-identified in direct juxtaposition to its 'enhanced' counterpart, drug-free bodybuilding is analytically interesting both as a progressively organized culture with an articulated model of 'clean' sport as well as an 'insider' population to the wider gym world whose formative influence on doping-related attitudes is increasingly recognized (Kornbeck 2013). Framing the discussion with reference to the specifics of drug-free bodybuilding, the paper will ultimately touch upon broader questions regarding research on doping, such as the following: How do we define and learn about performance enhancement in terms of its concrete practices and the meanings attached to them? In an environment where performance enhancement is becoming increasingly available, normalized and object of intense public debate, isn’t 'clean' practice and the cultures for which this constitutes a key
component an equally significant part of the larger dynamic and, by extension, a legitimate area for doping research?

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Verner Møller: Listening to athletes’ narratives – a reliable (scientific) research method to learn about drug use in sports?

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In the wake of the establishment of WADA a vast number of doping and anti-doping studies have been carried out with purpose such as to establish the size of the problem, to measure athletes’ attitudes to doping, to better understand why athletes dope, and to identify various doping cultures. Humanist and social scientists have applied various methods to the topic. During the reading the resulting books and articles I have observed that loosely documented information, typically of dramatic or worrying kind, is often recycled; research results into how widespread doping is differ so much that the safe answer is that we really cannot tell 3) when qualitative interviews are utilised – despite the guarantee of
anonymity – a vast majority of the interviewees distance themselves from doping leaving the impression that doping in elite sport is a practise of the past luring only a tiny fraction of fools who have not taken the anti-doping message on board and thus end up caught by today’s much improved anti-doping system.

Drawing on two thought-provoking interview experiences one in relation to elite sport and the other in relation to doping in fitness centres this paper will present and discuss attractions and challenges related to qualitative research in controversial sport related issues. The underlying question the paper asks is whether qualitative research qualifies as science.
**Laurie B Patterson**: Coaches and the quest for clean sport: Exploring perceptions of relevance and role

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*Introduction*: Anti-doping policy states that athlete support personnel (ASP), such as coaches, have a responsibility to 1) "be knowledgeable of and comply with all anti-doping policies and rules", 2) "educate and counsel athletes in relation to anti-doping policies and rules" and 3) "use their influence on athlete values and behaviour to foster anti-doping attitudes" (World Anti-Doping Agency [WADA], 2009, pp. 99 and 113). Despite this governance of ASP under the WADA Code, there is very little research regarding coaches’ opinions of their role in anti-doping efforts.
Consequently, the voice of the coach is missing from this research field and this limits our ability to employ evidence-based practice in doping prevention. Currently, our understanding is limited to the acknowledgement that coaches accept that they play a part in doping prevention (Backhouse & McKenna, 2012). Therefore, the purpose of this qualitative study was to investigate coaches’ perceptions regarding the relevance of anti-doping and to explore their perceived role in anti-doping efforts in relation to their everyday coaching practice. Methods: Semi-structured interviews were conducted with a purposive sample of twelve UK-based coaches working in a performance development context within Football (n=6) and Rugby League (n=6). A series of open-ended questions explored coaches’ perceptions, values, beliefs and behaviours in relation to their role in anti-doping efforts. All interviews were transcribed verbatim and analysed using inductive thematic analysis (Braun & Clarke, 2006). Findings: Overall, coaches were accepting of anti-doping efforts, including
education. However, they did not prioritise anti-doping with regards to their own personal development or within their aims for the development of their players. In line with this, coaches saw themselves in a supporting role rather than a leading role in anti-doping efforts. While coaches perceived their role to involve monitoring and giving advice to players, they relied on colleagues and external partners to educate their players on anti-doping matters. Moreover, when placed in a hypothetical doping situation, the coaches stated they would turn to others for support rather than dealing with the situation themselves and often proposed actions that would constitute an anti-doping rule violation (ADRV). 

**Conclusions:** Although coaches’ behaviours did not meet their responsibilities under the WADA Code, it was unclear if this lack of compliance was intentional or unknowing. Therefore, further research should explore coaches’ awareness of existing anti-doping policy, as well as their willingness to act in line with their responsibilities under the Code.
References


Andrea Petroczi: Getting inside the athletes' minds: potentials and pitfalls of self-reports and timed response measures in doping research

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Doping can be considered as contextualised behaviour that lasts only during the active athletic career and triggered by athletic-related life events. Thus doping use may be justified on the grounds of functionality, moving the decision regarding doping away from morality and fair play to being ‘tools of the trade’ [1]. Having an understanding about the way athletes cope with social and normative realities of high performance sport is fundamental in the implementation and creation of valid prevention programs. Anti-doping messages unrelated to the key motivators of doping behaviour (e.g. moral argument against functional use and vice versa) are deemed to be
ineffective, thus understanding how doping is represented in athletes' mind is vital.

Literature evidence supports the notion that the efficacy of persuasive messages is influenced by congruency between message-framing, the individual's motivations and motivational tendencies. Social policies, anti-doping being no exception, generally but inaccurately assume that people are aware and able to control the causes of their behaviour, when in fact thoughts and feelings under conscious control can only provide a small window into peoples' minds [2]. Thus, effective prevention and intervention strategies should pay attention to the motivators of doping behaviour both under and outside conscious awareness and design intervention strategies that at least take both consciously and subconsciously held thoughts and feelings toward doping into consideration.

Explicit measures rely on cognitive resources and involving deliberate and conscious thought processes, whereas implicit cognition involve less
control and awareness. Research in implicit cognition has proliferated in social and experimental psychology examining socially sensitive issues, transgressing behaviour and motivations outside conscious control [3]. Although the work on implicit doping-related cognition is currently limited to a handful of completed studies, discriminatory and predictive power has been shown [4-7]. Research that considers the interactions between explicit and implicit cognition about the (un)desired behaviour when investigating the complexity of athletes’ thought processes can address a specific research question about mental representations of doping and actively contribute to the design and evaluation of anti-doping strategies.

From the methodological point of view, measures of implicit associations, such as the Implicit Association Test [8] and its brief variant [9] are versatile methods that are highly sensitive to structural and content changes. The paper will address this important issue via empirical work investigating the framing effect on doping-related
implicit associations and timed response tests. Results from a study assessing the contextualised nature of doping-related associations will be presented to inform anti-doping efforts. Cautionary findings relating to the application of the implicit association concept for detecting concealed life events (e.g. Sartori et al.'s autobiographical Implicit Association Test [10]) will be presented. Considering the potentially strong confounding effect from vicarious experiences and other general associations [11], along with the expected framing effect, re-examination of the lie-detector variants of the implicit tests is advised before the application of such instrument to identify doping users.

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Werner Pitsch: Tacit premises and assumptions in anti-doping research

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The dynamics of the fight against doping within the Anti-Doping Test Regime in the recent past has widely been dominated by an increase in the number of tests, in the number of substances tested for, in the technical subtleness of testing and in the shortenings to athletes’ civil rights and privacy. This development can only be understood if the techniques which are used so far are appropriate. Thus, this development implicitly refers to two tacit premises which underlie the construction of the fight against doping by testing and sanctioning.

The first premise is related to actions and decisions met by institutional stakeholders in this field, i.e. the WADA, the NADOs and the major international sports organisations. It is the assumption that
these organisations are really aiming at eradicating doping. This cannot be taken for granted. If we model these organizations as rational collective agents, we see that their maximum utility occurs if they succeed in finding equilibrium between tacitly admitting and eagerly fighting doping. This equilibrium enables them to present their work as effective but also to show that their work will be necessary in the future, and that the endeavours in the past were necessary, but ought to be enhanced in the future in order not to lose this fight. What is important here is that ADOs cannot but partly admit doping in order not to threaten their legitimacy – an effect, which is strongly interconnected with the second premise.

The second premise refers to the joint efforts of ADOs and Accredited Anti-Doping Laboratories. An increase in the number of substances as well as in the number of tests per year is only consistent if the means used by these organisations, and here especially the testing and sanctioning, have the potential to be effective in the fight against doping. This second premise also cannot be taken
for granted. It has been shown, that the different objectives which WADA has defined can by principle not be reached simultaneously. Thus, any strategy explicitly or implicitly selected by ADOs has a potential to damage the legitimacy of the fight against doping as either the fairness or the effectiveness of the fight against doping are threatened.

Interestingly enough, the development in the past was possible because of a third tacit premise: that the effectiveness of the fight against doping cannot be measured because there is no possibility to reliably measure the prevalence of doping among athletes. As this third premise also does not hold true in the light of an increasing number of empirical studies on the prevalence of doping in different settings, it will be interesting to see, how ADOs will act in the future in order to preserve the belief in the first two premises among stakeholders and in their public perception.
Marcel Reinold: What do historical sources really tell us about the history and prevalence of drug use in the past and what conclusions might be drawn for future anti-doping?

Marcel Reinold, University of Muenster, Germany

The lecture deals with the question of what kinds of historical validity and accuracy we really have about doping practices and doping prevalence in the past. Apart from the state-run doping program of the GDR, doping practices were not well documented. Nevertheless, the presentation will discuss several methodologies and sources which come into consideration. The lecture will finally try to make further conclusions for future anti-doping on the basis of the results found.

Historians used different methodologies and sources to get objective information about doping practices and doping prevalence in sport history.
First, scholars statistically analyzed sporting performance and attributed escalating performance in certain sports and disciplines to growing drug use (see Pelizza, 1973; Lames, 2002; Singler/ Treutlein, 2012). Second, statements of athletes, doctors and functionaries in press articles or interviews seem to offer many details about doping in the past. Third, surveys about athletes’ drug use were carried out (for example Silvester, 1974; Lundquist, 1975). As a first step, the lecture will shortly summarize the results of these approaches and discuss the possibilities and limits of these methodologies in a source-critical way.

In a second step, the lecture will deal with testing statistics. Scholars generally agree that the numbers of positive tests do not constitute reliable indicators for the prevalence of drug use in sports since the dark figure is estimated much higher than the low numbers of positive samples suggest. In fact, experts rather tend to interpret them as indicators for athletes’ success in beating the testing system. However, it is important to
realize that dopers’ success strongly depends on sufficient information about the control system. Doping practices which beat the system base, for example, on detailed knowledge about the range of substances for which the analytical scheme is devised. Accordingly, controls with an element of surprise should reveal drug use to an extraordinary extent. Advantageous conditions which dopers probably do not anticipate include unannounced or newly introduced tests, newly developed and more sensitive testing methods or exceptional forms of controls which were not taken into account. In fact, the analysis of published sources and archive material from the IOC-archives show that there have been controls and further anti-doping measures in the past which revealed by far the most cases of drug use. This is an interesting research result since it not only gives us information about doping practices and doping prevalence in the past but also about certain changes which come into consideration for more effective anti-doping in the future.
Since the first iteration of the World Anti-Doping Agency’s Code in 2003, there have been seemingly endless references to the ‘spirit of sport’ and those who criticize the language in the Code for being, for example, too vague, while others who defend the clause as an effective policy tool used against the ‘battle’ on drugs. However, the Code’s language is usually discussed in the abstract. What, exactly, was the process that led to the inclusion of the ‘spirit of sport’ clause in the Code? This paper addresses this important question by tracing the history of the ‘spirit’ clause. Information gleaned from personal interviews with some of the important agents involved in the creation of the original 2003 Code is used alongside primary document analysis and secondary sources. In their consultations with
Olympic stake-holders, such as International Federations, National Olympic Committees, and others, during 2001 and 2002, members of WADA’s “Code Project Team” had to concern themselves with (at least) three separate issues. The first two were practical: ‘grey areas’ of substances or methods that did not conflict with one of the two other major benchmarks justifying prohibition (harm to the athlete and the fair playing field) but were considered ‘unsportsmanlike’ (e.g. hypoxic tents); and rumours regarding athletes using substances that they believed were performance-enhancing when in fact their effectiveness was questionable (e.g. glucocorticoid steroids). Third, the spirit clause reflected discussions about whether the Code’s purpose was to catch ‘cheats,’ to promote a certain positive image of sport, or both. Interestingly, the ‘spirit’ wording came from Canada and, ultimately, the Ben Johnson scandal in 1988. The resulting Dubin Inquiry in Canada recommended an anti-doping watchdog be formed and the organization that resulted – the
Canadian Centre for Ethics in Sport – created, in 1993, its “Spirit of Sport” campaign, the purpose of which was to warn of the dangers of substance use in sport, but also to promote a positive image of sport participation to Canadians. This aspect of the ‘spirit’ language’s history will also be traced. The paper will reflect on the implications of the real history of the ‘spirit of sport’ clause and the specific context out of which it emerged in terms of anti-doping effectiveness and Olympic ideals more generally.
The French philosopher Gilles Deleuze (1994) once argued that the framing of questions does not simply uncover a pre-existing ‘truth’ about a given problem, but performs the ‘truth’ pertaining to the problem in question. There are few areas in which this observation is as poignant as the related fields of alcohol and drugs research (AOD) and drugs in sport (DIS) research. In recent years, researchers from both fields have begun to more critically consider the kinds of questions that we ask about drug use – whatever the context – and how the framing of questions might operate to actually enact ‘truths’. The idea here is that in
asking new and different questions and combining methodological and theoretical approaches, we might develop more sophisticated methods for understanding social problems. Within AOD research, for example, there has been a concerted effort to move away from ‘realist’ notions of drug use where assumptions about the ‘properties’ and ‘effects’ of drugs, the ‘aims’ of drug programs and policies and the ‘motivations’ of people who use drugs are often made (e.g. Fraser and Moore 2011, Race 2009, Fraser, Valentine and Roberts 2009). There is no assumption, for example, that drugs are inherently (either) good or evil, or that they act upon subjects in particular and/or uniform ways. Recent work has turned, instead, to a consideration of the way substances ‘materialize’ as drugs with productive ‘effects’, the ways drugs are ‘enacted’ through various practices, the diverse experiences of people who use drugs and the symbolic and material dimensions of drug use, policies and programs. Such work also attends to the co-constitutive functions of various drug regimens. In this respect,
much can be learned, for instance, from the work of scholars like Judith Butler (1993), Karen Barad (2007), Annemarie Mol and John Law (2002), which examines, variously, questions around performativity and multiplicity, and the materialization of subjects, objects, politics and ethics via a range of practices. In this presentation, I consider what kind of questions have been asked in doping research thus far, what questions might instead be asked, and how approaches from AOD and DIS might be brought into a mutually-constructive dialogue. I consider what assumptions might still exist within some DIS research, the way that the framing of questions enacts ‘drugs’ and their ‘effects’, and the performative dimensions of these assumptions. In order to illustrate how we might do things differently, I consider how these approaches could be brought to bear on the study of two ‘doping’ cases involving high-profile professional cyclists: Michael Rasmussen and Lance Armstrong. I conclude with some reflections on the potential for inter-disciplinary research that approaches the
framing of questions and the production of truths more critically.
Katinka van de Ven: Doping structures in Europe. An analysis of the illicit trade of doping substances on a transnational level

Katinka van de Ven & Kyle Mulrooney, University of Kent, UK

This research focuses on the nature of doping structures in relation to sport within Europe. The field of research comprises the various stakeholders and enterprises involved in the semi-illegal trade of doping substances. Momentarily, the doping market seems to be explained by a more old fashion view on organized crime (Donati, 2005 & 2007); consisting of a hierarchical structure, systematic use of violence and a strict labor division. However, more recent research seems to contradict these findings. The strong social connections that are formed in relation to
the sport play an important role in doping networks. People who supply performance enhancing drugs (PEDs) seem to be involved in the life of doping users (Brissonneau & Ohl, 2010; Maycock & Howat, 2007). The doping trade seems to be better understood using a social network model (Morselli, 2009). This approach focuses on the social dynamics of “criminal networks”. The doping market does not seem to fit in the stereotype of violent competition and a tendency towards monopolization. So, in what sense can we really consider doping structures as a part of (mafia-type) organized crime? In order to capture the variability in the structure of these networks both lower- (retailers) and upper-level trafficking (importers, manufacturers and wholesalers) will be studied. To examine the structure of lower-level PAEDs trafficking recreational (bodybuilding) and professional (powerlifting and Olympic weightlifting) weightlifting are used as a case study. Qualitative methods, such as participant observation (e.g. competing in weightlifting) and semi-open interviews (e.g. coaches, weightlifters,
etc.) will be implemented to analysis this doping culture.
Antoine Vayer: Not Normal: Forget "I never tested positive". It needs to be replaced by "I was never clocked by a radar doing 430 watts standards in the final col of a long mountain stage"

Antoine Vayer, d'EPS au collège de Plérin, France

While everyone is obsessed with the use of forbidden substances and methods as regards doping, and while they blindly trust anti-doping measures that are easily circumvented, I focus on performance.

Forget "I never tested positive". It needs to be replaced by "I was never clocked by a radar doing 430 watts standards in the final col of a long mountain stage." It's utterly more convincing.

It's just as convincing as the last thousand-page US Antidoping Agency report revealing the Armstrong scandal and just as convincing as the police and
customs investigations which brought to light and brought to justice the "Festina" and "Puerto" scandals. The proof of the hoax lies in performance analysis and interpretation. Imagine a Christophe Lemaitre, first "white" man to break the ten second barrier in the 100 meters in track and field, running a 9.6 second sprint! You'd be ripping your hair out. In cycling, we can measure "Ben Johnson's" thanks to a unit of power: watts instead of seconds. I've been ripping my hair out for 21 years.

The mountain tells the truth and tells you who is doped. On cols, with little wind, no drafting, and established grades: those are the ideal conditions to calculate the muscle power of each rider according to his build and to install "radars". This power, generated in watts, is the most reliable indicator of presumed doping. For the last twenty years, with my collaborators, we have compiled data. I have interpreted them using a proven method. To compare the performances of a "lightweight" (Marco Pantani, 56 kg) and a "heavyweight" (Miguel Indurain, 80 kg), we base them on a "standard racer" of 70 kg. By calculating power generated in the cols we have been able to identify three levels of performance: the
"Suspicious" threshold starting at 410 watts, the "Miraculous" threshold above 430 watts and finally the "Mutant" threshold above 450 watts. It is intended for the every day fan, for cycling authorities, and for scientists, with the aim of bringing clarity. We show how the Hinault-LeMond duo, despite their eight Tour victories between them, hand-in-hand winners in 1986, still took ten more minutes to climb the Alpe d'Huez, on a 13.8 kilometer grade, than riders like Pantani and Armstrong. They generated 15 % to 20 % fewer watts, even when taking into account the technical and training enhancements that have occurred over time. It makes no sense.

In the provided magazine we explain our method; we look at all the top finishers since 1982 and are thus able to identify "Doping Eras". They correspond to different performances and different types of products and methods of different intensities. For the last twenty years, we set up radars, varying them according to race conditions.

Source:  http://www.alternativeditions.com/not-normal/editorial/
Mixed martial arts (MMA) is a professional combat sport that has rapidly grown in popularity since 2005. MMA was originally conceived as a competition among combat sport athletes from different disciplines (e.g., boxing, karate) to determine which fighter, and which fighting style, was superior. The sport has since evolved, such that fighters train in multiple combat disciplines. The rules have been standardized to protect the fighters and MMA is now a heavily regulated activity similar to other sports.
While the sport is considered controversial, it has become more publically accepted and is featured on network television during primetime hours in many countries. In recent years, the number of events organized by the main promoter of MMA, the Ultimate Fighting Championships, has increased nearly ten-fold. As the sport has grown so too has the earning potential for fighters. As the potential for financial reward increases, so does the temptation for athletes to use performance-enhancing substances (PES) (Connor, 2009). What is unknown however, and the focus of this study, is the extent to which the rise in the popularity of MMA has impacted fighters’ attitudes towards PES.

As an emergent sport, MMA is subject to conditions that could encourage doping abuse. First, fighters are independent contractors and are not unionized. The relationship between fighter and promoter is one of utility, and in many cases is short lived. Fighters cannot afford to lose many fights, particularly consecutively. Those that do risk having their contracts terminated. MMA is a
merciless profession, even when compared to other professional sports. The threat of loss of support, via contract termination is an identified risk point for doping, as is the pressure on athletes to ‘step-up’ in performance to the next level of fighting (Mazanov et al., 2011).

Second, as MMA is not unionized negotiation over doping policy is not mandated. Moreover, MMA only has a nascent governing body. Consequently doping control is left to third party regional Athletic Commissions that provide oversight for combat sports. These regional governing bodies operate independently resulting in variation in doping regulations. The relationship between fighter and promoter, coupled with inconsistent doping control potentially creates an environment where doping abuse may proliferate.

This exploratory study will help determine the extent to which a doping problem exists in MMA. To achieve this goal semi-structured personal interviews with professional MMA fighters will be conducted. A semi-structured interview is
employed because it enables the researcher to cover core topics, to depict the participants’ ‘life world’ and to start to understand the interviewee’s perspective on an issue (Kvale & Brinkman, 2009). Conducting personal interviews is considered suitable where a goal is to recognize and define an issue (Feinberg et al., 2008). This approach is warranted, as there is meagre research on MMA fighters and their attitudes toward PES. Fourteen professional MMA fighters will be recruited from professional fight teams. This number meets recommendations for interview studies (Kvale & Brinkman, 2009). Recruitment of participants has begun and results will be ready for presentation at the INHDR conference.

References:


Risk behaviour such as the abuse of alcohol and drugs has been associated with doping in sport. This article investigates doping use in relation to substance abuse, health risks, risks of being caught in a doping control, and other risk behaviours, in a qualitative interview study of 11 Swedish elite athletes sanctioned for using anabolic androgenic steroids (AAS) during their sports careers. The interviews show that most respondents have not experienced any serious negative side effects due to AAS use, and report several positive effects. The respondents were using moderate doses to avoid health risks, and their use was characterised by conscious risk management to avoid being caught in doping
control. Most respondents were not abusing other substances than AAS, and did not perceive themselves as risk-takers. The results point to the possibility that doping use in sport needs to be studied by methods and perspectives other than as abusive and/or health risk behaviour. Instead, the internal logic of sport and sport specified norms have to be visualised and analysed to understand doping phenomena