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The Final Frontier of Anti-Doping:

A Study of Athletes who have Committed Doping Violations

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Abstract

Although the use of banned drugs in sport is not a new phenomenon, little is known about the experiences and perceptions of athletes who have committed anti-doping rule violations. This study qualitatively explored the experiences of 18 athletes (from the sports of bodybuilding, powerlifting, cricket, sprint kayak, rugby league, and swimming) who had committed anti-doping violations. Themes explored included motivations for initiating and maintaining doping, the psychology of doping, deterrents to doping, and views on current anti-doping policy. In most cases doping had started early in their careers. The perceived culture of the sport was considered central to the 'normalization' of doping, particularly in bodybuilding. When explaining their decision to dope, athletes engaged in processes or moral disengagement (including advantageous comparison, minimizing consequences and diffusion of responsibility). Ironically, moral arguments were perceived as the most effective deterrents to doping. Findings are discussed in relation to the difficulties in establishing credible deterrents and suggestions for the future development of anti-doping policy.

1. Introduction

In Australia, sport is a powerful cultural force and protecting the integrity of sport is a national priority (Australian Sports Commission, 2012). One of the most significant threats to the integrity of sport is doping, with a report by the Australian Crime Commission (2013) describing growing links between sport and organized crime. In the report it was alleged that 'Organised crime has been found to have a tangible and expanding footprint in this market, and their activity is being facilitated by some coaches and support staff of elite athletes, who have orchestrated and/or condoned the use of prohibited substances and/or methods of administration' (p. 36).

The apparent facilitation of criminal conduct by sporting administrators (including coaches, managers, owners and even sponsors) is not a new problem (Carruthers, 2012). It has been argued (Eitzen, 2009) that athletes may be prone to a wide range of criminal activities, such as sexual assault, than non-athletes (Chandler, Johnson, & Carroll, 1999; Crosset, Benedict, & McDonald, 1995). It has also been argued that sports administrators sometimes turn a blind eye to such conduct by their players, even to the extent of 'excusing' serious criminal offences (Benedict, 1997). Investigations of the criminal histories of players in the USA (Benedict, 1997, 2004) and Australia (Wilson, Stavros, & Westberg, 2008) reveal that in many sporting teams the proportion of players with criminal convictions is far greater than that observed in the general population. For offences, such as doping, which is not a criminal act in countries such as Australia, the anticipated performance benefits accentuate the apparent ambivalence towards misconduct. In an industry that is judged on a single criterion, winning, many in the sporting world have adopted an attitude encapsulated in the 2013 marketing campaign for Essendon Australian Football Club: 'whatever it takes' (Cotsis, 2013).

1.2 Deterring doping

The global problem of doping in sport is currently overseen by the World Anti-Doping Agency (WADA), an organization which developed the World Anti-Doping Code (WADA, 2003), which periodically undergoes revisions. The current edition (WADA, 2009) will be superseded by the third edition in 2015. To date, WADA's anti-doping policy has relied heavily on the deterrence value of doping controls. It has been assumed that if doping athletes *perceive* that there is a high likelihood of detection, and that there will be severe consequences, then they will be less likely to engage in such behaviours (British Medical Association, 2002). In criminological research this approach to crime control is known as 'deterrence theory' (Matthews & Agnew, 2008; Paternoster, 2010), and it is the premise underpinning the criminal justice systems in most countries (Matthews & Agnew, 2008). In deterrence theory it is assumed that if the perceived likelihood of detection is increased (e.g., through the introduction of more or better tests), or the severity of consequences is increased (e.g., larger fines, longer bans), then the deterrent effect is similarly increased (Pratt, Cullen, Blevins, Daigle, & Madensen, 2006). Unfortunately, despite its intuitive appeal, the theory has limited empirical support (Hanstad & Waddington, 2009; Paternoster & Iovanni, 1986). In fact, the theory is now widely acknowledged as being largely 'wrong' (Pratt et al., 2006).

One reason why deterrence theory may have failed to deter doping is because the perceived likelihood of detection is probably very low (Moston, Engelberg, & Skinner, 2014a). For example, in Australia during the reporting period 2011-12, the Australian Sports Anti-doping Authority (ASADA) conducted 7,196 biological tests of athletes, resulting in only 33 athletes or support personnel being entered into the Register of Findings of anti-doping rule violations (ASADA, 2012). Former WADA President Dick Pound acknowledged that the small number of athletes who are caught was an underestimation of the problem

(Price, 2012). Asked to estimate the true incidence of doping, Pound said: ‘It’s north of 10 and short of 90 [%], but it's more than people expect’.

WADA’s attempts to deter doping appear to have met with only limited success (Hanstad & Waddington, 2009) and doping in sport is perceived to be highly prevalent by both members of the public (Moston, Skinner, & Engelberg, 2012) and athletes (Moston, Engelberg, & Skinner, 2014b). Consequently, many academics (Kayser & Broers, 2012; Kirkwood, 2009; Smith & Stewart, 2008) and even WADA themselves (Pound, Ayotte, Parkinson, Pengilly, & Ryan, 2013) have declared anti-doping efforts to have been a failure.

1.3 Prevention of doping

Given this pessimistic assessment, it is not surprising to discover that anti-doping efforts have undergone a number of significant changes in recent years. For example, a surge of social science based research suggested that a shift towards prevention rather than detection might be the best strategy for eliminating drug use in sport (Lippi, Franchini, & Cesare, 2007; Lucidi et al., 2008). However, it should be noted that the focus appears to be shifting back towards a detection based focus, with ‘coordinated investigations’ conducted by anti-doping investigators and public bodies such as police officers, seen as the way forward (Moston, Engelberg, & Skinner, 2013; WADA, 2011).

This change in focus has seen an increasing emphasis on understanding the psychological characteristics of doping athletes (Gucciardi, Jalleh, & Donovan, 2011; Wiefferink, Detmar, Coumans, Vogels, & Paulussen, 2008). However, to date, this literature has generally offered only superficial insights into the practice of doping because of three major issues (Kirby, Moran, & Guerin, 2011). The first issue is that samples typically consist of non-doping athletes (e.g., Bloodworth & McNamee, 2010). The second issue is that questionnaire based studies (e.g., Waddington, Malcolm, Roderick, & Naik, 2005) have offered pre-determined motives (e.g., financial gain, desire to win, etc.) for doping that may

not accurately reflect the actual views of the athletes. The third issue is that many cases of doping feature inadvertent (accidental) use, where no 'motive' for doping actually exists.

One solution to such problems is to conduct open-ended interviews with athletes who have committed anti-doping rule violations. A review of the anti-doping literature (Backhouse, McKenna, Robinson, & Atkin, 2007) identified athletes who had committed anti-doping violations as one of the populations that were absent from existing research. There are two major pragmatic reasons for not having studied this group in the past.

First, as discussed earlier, there is only a small pool of athletes who are known to have violated anti-doping rules. Second, athletes who have committed deliberate violations (and have not yet detected) are unlikely to participate in research studies which might result in insights into their behaviour that would facilitate their detection.

The difficulties inherent in recruiting athletes who had previously used banned substances to participate in research studies were illustrated by Kirby et al. (2011). Despite an extensive search of newspaper archives, autobiographies and doping reports, to identify possible participants, the final research sample in their study comprised only five athletes.

1.4 The views of athletes who have committed anti-doping rule violations

Despite the difficulties in locating and interviewing athletes who have committed anti-doping violations, the potential benefits of this type of research can be considerable. For example, the athletes interviewed by Kirby et al. (2011) offered insights into the factors that motivate athletes to dope (such as the attitudes and behaviours of team mates) and possible deterrents (such as personal morals/ethics). The role of coaches in influencing the decision-making of athletes was less important than the researchers had anticipated based on their own findings from a quantitative research study conducted as part of the same research project (Moran, Guerin, Kirby, & MacIntyre, 2008).

In the only other academic study to feature athletes who have committed anti-doping rule violations, Smith et al. (2010) interviewed 11 athletes using a narrative framework where the participants discussed their own histories in the context of the social and cultural events that may have influenced the decision to dope (Smith et al. acknowledge that such a process may generate reflections that are socially constructed rather than objective truths). The study found that doping practices (which are intentional, rather than accidental) were influenced by a variety of factors, with sporting culture being particularly important. When deciding to dope, athletes took into consideration the values, beliefs and practices of colleagues. In addition, the study found that influencing factors may vary across the career-stages of an athlete, suggesting that effective deterrents might need to be tailored to career stage, rather than using a generic approach.

The value of studying athletes who have been caught doping is also highlighted by the case of David Millar, a British cyclist who in 2004 confessed to using banned substances. Since serving a two-year ban, Millar has become a campaigner against the use of drugs in sport and has joined the World Anti-Doping Agency's Athlete Committee. Andy Parkinson, Head of Operations (Drug-Free Sport) at UK Sport, said that more use should be made of athletes such as Millar. 'Through our work with David we have learned important lessons about what drives athletes to choose that path'. Parkinson also said that 'We need to better understand this in order to further our efforts in tackling the issue, and we should not be afraid to utilise their insights' (Langley, 2007).

The case of Canadian sprinter Angella Issajenko, further illustrates the value of collecting data from doping athletes. Issajenko detailed the feeling that taking steroids can give to an athlete. She said,

> 'Oh, you get this amazing sense of wellbeing because, you know, the whole idea that this thing is going to make you train harder, possibly make you faster, make you

> Olympic champion. You get this outrageous feeling and so you just march through the workouts without a fear. Anything they throw at you in the workouts, you can do.' (Harvey, 1989)

Issajenko also detailed the reaction of athletes to accusations of doping:

> When an athlete is caught, that's the standard procedure. You deny, you deny, you deny. If the inquiry hadn't been called, we'd be denying to this day. But once the inquiry was called, I knew we'd have to come out with the truth. It was over (Harvey, 1989).

The inquiry Issajenko was referring to was the investigation into the doping of Canadian athletes, including sprinter Ben Johnson. Johnson was largely unrepentant after the discovery that he had been doping and offered a justification for his behaviour: 'Everybody cheats, who doesn't cheat in life? Everybody cheats on taxes, everybody cheats in everything, why Ben Johnson? I'm not the only one in this world' (Harvey, 1989).

1.5 Moral disengagement

From a psychological perspective, Johnson's comments are interesting because of the moral justification he offers for his behaviour. This type of justification is known as *moral disengagement* (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001). Bandura and colleagues described a process whereby a person committing a transgression or causing harm (such as cheating, or hurting an opponent) reinterprets their own behaviours such that they can disengage from their own moral standards that would normally inhibit such conduct. For example, a person might compare their own reprehensible behaviour to behaviour which is far worse (e.g., 'I insulted him, but I didn't hit him'), a process which Bandura labelled as '*advantageous comparison*'. Similarly, a person might blame their actions on the decision making of a group ('*diffused responsibility'*), or the pressures exerted by authorities or circumstances ('*displaced responsibility*'). The process of moral disengagement has observed in a variety of sporting

transgressions (Boardley & Kavussanu, 2007; Corrion, Long, Smith, & d'Arripe-Longueville, 2009; Lucidi, Grano, Leone, Lombardo, & Pesce, 2004; Lucidi et al., 2008), although to our knowledge no peer reviewed study has attempted to examine moral disengagement in the context of studying athletes who have committed doping violations.

2. The present study

The present study aims to increase our understanding of the motivations and justifications of athletes who have committed anti-doping violations. It features open-ended interviews with, what is to date, the largest sample of doping athletes ever recruited for a research study.

3. Method

3.1 Recruitment Process and Sample

Recruiting athletes who have committed a doping violation is a particularly problematic research exercise (Kirby et al., 2011) and data collection was expected to be a complex process. With such concerns in mind, a variety of recruitment and data collection strategies were employed. First, the study was promoted through Australian national and state sporting organizations (e.g., in emails, or newsletters). Second, the study was promoted through 'opinion leaders' within the sporting industry (senior coaches and administrators, elite athletes, and other key stakeholders known to the research team). In all communications, the study was clearly identified as 'a study of athletes who have committed anti-doping rule violations'. The recruitment stressed that all data collected would be confidential and that anonymity was assured. It should be noted that since the time of data collection the rules on confidentiality of such data have undergone changes, such that it is unlikely that future studies could offer a similar set of assurances.

Potential participants were asked to contact a member of the research team (via email or telephone) in order to schedule an interview. Athletes who contacted the researchers were

first screened for eligibility, specifically that they had committed an anti-doping violation. As participants were recruited and data collected, a ‘snowball recruitment’ process was initiated, whereby participants invited others they personally knew to have committed anti-doping violations to also participate in the study.

A total of 18 athletes who had committed anti-doping violations participated in the study. There were 15 males and three females; the mean age was 26.6 years (median 23.5; range 19-50 years). The sample were mainly competing in national level competitions (e.g., inter-state competition), with one also competing at an international level (Olympics). Most of the athletes (n = 15) were currently competing, the others (n=3) were retired. Sports represented included: bodybuilding (n = 8), powerlifting (3), cricket (3), basketball (1), rugby league (1), sprint kayak (1) and swimming (1). All participants were from Australia.

3.3 Interview guide

A semi-structured interview guide based on previous research (Kirby et al., 2011; Smith et al., 2010) was designed for the study. Topics included:

Doping in sport in general

- Perceived incidence of doping is in sport
- Factors influencing others to use banned substances
- Justifications of others for doping

Type of doping violation by participant

- Substance(s) taken
- Career stage when doping
- Reasons for selecting particular substance(s)
- Effects on performance

Factors influencing the decision to dope

- Influences on the decision to take a banned substance

- Factors considered before doping
- Effect on perceptions of participation in sport

Detection and consequences

- Whether the doping was detected
- Reaction of athlete to detection
- Reaction of others to athlete's detection

Sanctions

- Factors that could deter an athlete from using banned substances
- Perception of the sanction process
- Suggestions for changes to the doping testing and sanctions process

Background information

- Age
- Gender
- Main sport
- Length of professional career

All participants were given each of the above prompts, although due to the semi-structured nature the exact wording and order of the topics varied across the sample. A copy of the interview guide is included in the Appendix.

3.3 Procedure

The primary method of data collection was face-to face interviews. However, some of the athletes requested that they be allowed to submit written answers. Consequently, an online (restricted access) version of the structured interview was created. The structure of the online version of the interview was identical to the face-to-face structured interview. Half of the sample (nine athletes) were interviewed face-to-face using a structured interview guide. The other athletes completed an online version of the same structured interview.

To preserve confidentiality and anonymity, the face-to-face interviews were not audio recorded; instead a combination of verbatim (where possible) and comprehensive written notes were taken by the researchers during each interview. Shortly after each interview these notes were proof-read and corrected (mainly for spelling errors and legibility). Participants were offered the chance to read the notes, but most declined. Only two participants requested to read the notes, making small additional comments, but no significant changes.

Ethics approval for the conduct of this study was granted by the lead author's institutional HREC.

3.4 Approach to analysis

The main method of analysis was the Analysis Method Framework (Ritchie, Spencer, & O'Connor, 2003). This involved two main steps: data management of the records of interviews and making sense of the participants' accounts. During the data management stage, emerging themes were identified. These were subsequently used to create an index with main themes and subthemes. This index was applied to the raw data (i.e., the transcripts of interviews) by all members of the research team independently. This process led to a further refinement of the index and to the final index which was once more applied to the raw data. Finally, the data were sorted through thematic charting, a process which further reduces the data but also allows participants' verbatim accounts to still be kept. Each member of the research team created thematic charts for a different subsample of the athletes and then all charts were checked for consistency.

4. Results

The statements by the athletes were grouped into a series of main themes. These were:

1. The drive to doping: reasons for initiating doping.
2. The short-term effects of doping: how athletes perceived the physical and psychological effects of doping

3. Justifying doping: how athletes morally disengage when doping
4. The long-term effects of doping: how doping changes perceptions of competitive sport
5. Deterrents to doping

4.1 The drive to doping

Most of the athletes in the sample started to use banned substances early in their careers. However, there were no clear single events or simple explanations for when that starting point, or 'critical incident' (Kirby et al., 2011) occurred. Personal factors, specifically the desire to be the best in their chosen sport or to win, prevailed over all other personal factors. In most cases, the decision to dope was carefully planned. As one bodybuilder stated: 'I decided that if I wanted to make any impact or have any chance in the sport, then I needed steroids'. Athletes appeared to be very aware of their capabilities and limitations and it was this awareness that led athletes to a carefully calculated decision to dope:

> I was doing very well, but not that well and I knew that by using [name of substance] that would give me the edge I needed.

The desire to increase size and strength was most notable amongst bodybuilders. Athletes in other sports were more concerned with general recovery and stamina. Athletes who had been recently injured were guided by concerns about their recovery. It is worth noting that motivations evolved with time, particularly with athletes whose violations were, at the time of this study, undetected:

> I started using [names of substances] to achieve that edge, but then when I got there, not only did I have to stay there, but I felt I had become a different person and it became more about that.

Another athlete noted:

> My initial decision was based on my need to be competitive, to be the best. But now, I am just like all the other guys who are doing this just to stay at the top. We know we are all doing it.

Some of the athletes talked about their idealism in the early days of their careers and the quick realization that doping was, in their view, 'necessary'. A bodybuilder noted:

> [I started] when I was 20 years old. I had just competed in a Natural Bodybuilding Comp. I was natural at that time. After being outclassed in every way I made some enquiries and discovered my competition was by no means natural. I started taking steroids shortly after the competition.

Another bodybuilder said:

> … my competition were in on it, I decided that If I wanted to make any impact or chance in the sport I needed steroids. I always wanted to be bigger but struggled with eating enough food to put on weight.

For the most part, once the decision to start doping was made, athletes did not appear to reconsider their options. As one cricketer said: 'I had already done considerable research on the products …. I decided I would go ahead'.

Goal-orientations, particularly task-orientation, emerged as a factor with a strong link to the pragmatic nature of their choice. One athlete said: 'If you want to achieve your best and you know this is the only way, because you need the strength or to recover or to make your career last longer, then it's simple, you dope'. Another said: 'It's an achiever's thing. You don't think about others, you don't think about the consequences, you just focus on your goal.'

4.2 The short-term effects of doping

Many of the participants were reluctant to identify the substances they had taken, although almost half (eight athletes) provided some information. Of those athletes who named specific substances, many admitted to using more than one. Substances used included: Sustanon 250 (five athletes), Methandrostenolone/Dianabol (three athletes) and Testosterone Enanthate (three athletes). Two athletes used 'unspecified steroids'. Half of the athletes (nine) also used supplements. Choice of substance/s was largely determined by availability,

followed by affordability and health considerations. This suggests that doping involves a highly pragmatic set of choices.

Participants described the effects that doping had had on their bodies and performance and whether these matched the anticipated physical and psychological effects of the drugs in question. With respect to physical effects, all respondents experienced a significant increase in strength and size in a very short period of time and many commented that the actual results were better than they had expected. However, without any objective data to verify the effects of the doping, the comments here may be post-doping rationalizations or justifications for the behaviour. A bodybuilder said: 'Strength increased drastically, putting on size became a lot easier than when I was natural. I looked better and felt better.'

Another bodybuilder noted: 'I gained 30 kg in 12 months'. The rugby player said: 'Not only do I look better, I feel better, I am stronger. I had anticipated this, but not to this extent.'

Many athletes commented on the non-physical effects of doping: '[It did have a] limited influence on performance but did influence motivation'. A cricketer said 'I expected an increase in stamina and in power, what I had not expected was the he psychological boost I got. I felt more relaxed, more focussed, and at times, I felt invincible.'

4.3 Justifying doping

Morality emerged as a crucial factor both in the decision-making process and in later discussions about deterrence. In making the decision to use banned substances and in continuing to dope, athletes engaged in forms of 'moral disengagement' (Bandura et al., 2001). One such example is the mechanism of 'advantageous comparison' when a person compares a reprehensible behaviour (in this case, using banned substances) to another behaviour that is far worse. One athlete said 'You are told to be a 'good boy or girl', so I am. What I do is nothing compared to some awful behaviour you see on and off-field.'

Another disengagement mechanism is ‘minimizing or ignoring the consequences’ which occurs when individuals commit a transgression in order to obtain personal goals and minimize or ignore the harm. One athlete gave an example of this mechanism in her reasoning:

> When I made the decision to take [name of substance] I thought about the consequences. I realised that the only one I could hurt with all this was me. It’s not like I would be screwing everybody else’s health up.

By far the most commonly stated form of moral disengagement was that of ‘displaced responsibility’, where the athletes justified their doping by blaming the external pressures that had been placed on them. Peer pressure was a common justification for doping.

> A good friend of mine had just completed his first cycle and looked like a different person. I thought if he could do it so could I. He told me his story and then he encouraged me too. It all went from there.

The impact of peer pressure appeared to be linked to athletes’ conceptions of sport or team culture, and the perception that ‘everybody does it’. In the case of the bodybuilders, as one of these said: ‘You dope to compete on an equal footing as we are all doing this’, and with the remaining athletes, their sentiment was summed up by a rugby league player: ‘because this is what it takes to succeed in the ruthless world of competitive sport’. Another athlete said ‘I think it’s more about pressure we feel ourselves, rather than explicit pressure from others. At this level there is a culture of doping, you can call that a kind of silent pressure.’

The role of coaches, health professionals and other club or sport personnel was raised by several athletes. In most cases, the role of these professionals in encouraging (or attempting to deter) drug use was clearly very important, however, there were notable differences between sports. In professional sports (such as rugby league), the network of support staff was perceived as crucial to the decision to dope and to continue to dope. One athlete noted: ‘We are constantly reminded that we have to win, to do what it takes to win’.

Another player said ‘The doctors don’t say anything as such, but they just keep pushing the pills, the potions and the injections, they never even ask you what you think of all this’.

Another professional athlete mentioned the financial imperatives of the sport made it almost ‘necessary’ for doping to continue. In other sports, the influence of support staff was seen as more subtle and depended on individual circumstances. For example, the cricketer noted:

> I had a long- standing injury and I was in a lot of pain. The team doctor refused to give me anything that was banned… I was not getting any better. I feared I would not play again for long periods of time. So I talked to the assistant doc, he was so helpful. He handed me some stuff all hush-hush. Mind, the coach knew and he did not say a word.

The role of other sources of influence, such as the media, was downplayed by this group of athletes. One athlete noted:

> They go on about the importance of winning but then they picture you like some kind of cheating scum if you are found to be on something. Personally, I don’t care what the papers, the TV or anyone says. They are all vultures.

Coping with pressure to be the best, or with pressure to succeed, was only addressed by one athlete, the swimmer:

> This country expects so much of us, at times it feels unbearable. I just see [using drugs] as a little help. At the big events, all eyes are on you. Yes, I’d say in my case, it helps with the pressure.

Each of the athletes was asked to estimate the prevalence of doping both in all sports, and in their own sport. The average perceived incidence of drug use in all sports was 57% (that is, participants believed that, on average, 57% of all elite athletes use performance enhancing drugs). The perceived incidence of drug use within their own sport was higher, at 61%. These estimates varied by sports. Amongst bodybuilders, the perceived incidence in all sports was 73% (of athletes in all sports) and 81% of athletes in their own sport. A belief that ‘everybody does it’ is entrenched in this sample of athletes in this sport.

4.4 The long-term effects of doping

Doping changed the way athletes viewed their participation in sport, as one bodybuilder noted ‘I would no longer wish to compete in a natural bodybuilding competition whilst on steroids… I would feel guilty, even though my competitors are all in on it, and also because of fear of being caught.’

In sports where doping is considered to be prevalent (such as bodybuilding), athletes did not perceive themselves differently after doping ‘In the bodybuilding arena everyone knows everyone is using something and everyone also knows that denying it was just part of the 'game'. Even when I wasn't using anything people said I was, so I figured what the hell!’ Neither did athletes perceive others who are doping as different in any way.

> Doping is for the most part misunderstood. In the case of steroids, the media have portrayed people turning into juiced up knuckleheads who can't control their anger. Some of the nicest people I've met are on steroids. They don't harm anyone, they don't rob stores just to get their fix. They are purely interested in their personal appearance.

The sprint kayaker noted:

> I have no regrets about using performance enhancing drugs as you still have to train hard to achieve your goals and genetics have a huge part of the end result....I know of many people who take steroids and it makes no difference

4.5 Deterrents to doping

Although all of the athletes in this study had previously taken an anti-doping control test, doping by only two of them had been detected. One athlete chose to neither confirm nor deny it to the anti-doping authorities and to other parties. However, from this athlete’s account it was clear that the reaction of other athletes, coaches or sport administrators to the discovery of the violation was not one of surprise. In this athlete’s view this was because doping in his sport is perceived to be both prevalent and widely accepted:

> I just knew the test was going to return positive, to be honest I had not taken any measures to avoid detection. I felt a little guilty, but not enough

> to confess everything or to give some sob story. No one judged me, not my team mates, the coaches, the doctors, my sport's governing body. If anything, people just said I had got unlucky this time.

Neither career (e.g., bans or suspensions) nor financial (e.g., fines) sanctions were seen as effective deterrents. However, the potential effect of deterrents based on moral reasons (or 'values') were mentioned frequently by participants. The 'deterrent effect' of the high financial cost of doping was also mentioned by several athletes. In the words of one bodybuilder 'Some people may have ethical issues, or not have enough money. It's a pity that they don't, though: they won't stand a chance against their competition'.

The swimmer stated 'Moral and ethical standards of athletes stop them doping…. money is an issue, a lot of performance enhancing drugs are very expensive'.

Other athletes suggested that doping could bring shame and would be letting down their families, fans and the community 'Being caught and called a drug cheat would stop most athletes… being frowned upon by the others'.

The prospect of detection and related sanctions did not appear to deter athletes. As one athlete noted 'Fear of being caught is not in my view a great concern as hardly anyone is tested and those who are tested know how not to get found. Just ask me'.

However, other athletes acknowledged that the 'fear of being caught' may be a strong deterrent for athletes considering using drugs.

Surprisingly, health concerns were not seen as deterrents to doping. As the kayaker explained 'Propaganda about the substance side effects which are generally unproven or largely exaggerated might affect some athletes, but most of them would know better that it's just scare tactics'.

Athletes were asked whether doping could ever be justified. Some athletes agreed it could, under certain conditions:

> If the sport is tested and athletes sign waivers to say they are not doping, then you can't justify doping, it's cheating. However, if in some cases it is well known that every single athlete is doping then I think that is justification enough. For example, every single contender in the [name of contest] bodybuilding competition is on a cocktail of performance enhancing drugs, fact.

Others believed the decision should be up to the individual athlete ‘I believe it should be up to the individual as is smoking and alcohol consumption. Both of these produce more death and hardship than steroids’.

The widespread view was one of scepticism about the sanction process, a process that was largely seen as hypocritical and unfair. One bodybuilder said:

> In my sport it is all largely overlooked. Testing is more of a front for the media, we all know each other is doping. It’s not a secret. The mandatory tests are just there to satisfy the legal requirements I guess.

Another bodybuilder added ‘It’s a joke as there’s no such thing as natural bodybuilding competition as [governing body] has a ruling that you can compete as long as you have not used performance enhancing drugs for at least 12 months’. Athletes in other sports were less pessimistic and generally believed the system, although fallible, was fair. Education efforts were praised as were current awareness campaigns and efforts to sanction not just athletes, but coaches, clubs, support staff and suppliers. In these athletes’ view, the main obstacle to widespread success was that doping athletes were not easily caught.

There were marked differences between athletes with respect to suggested anti-doping efforts. In this respect there seemed to be two key considerations guiding athletes’ suggestions. First, the perceived incidence of drug use in their own sport (the ‘culture’ of drug use) meant that athletes in sports such as bodybuilding and powerlifting had ‘normalized’ doping and saw little point in prohibiting drug use, at least for certain drugs such as steroids. One power lifter noted: ‘You can't expect athletes to compete 'clean' when they know other athletes they are up against are using the 'gear'‘. Another two athletes suggested legalising steroids only: ‘Steroids should be legal in bodybuilding because

everyone is using them, all professional bodybuilders are on steroids'. Most of the bodybuilders favoured a system whereby each sport is self-governing, with little intervention from anti-doping authorities, and with less punitive sanctions (smaller fines or shorter bans) than those currently in place. Athletes in other sports, however, were in favour of stringent and strict sanctions for all drug violations. Suggestions provided included: increasing the number of tests, out of season random testing on all athletes (even those who are injured or currently not competing), higher fines, and implementing life bans. Five athletes representing the sports of swimming, rugby league, cricket and basketball favoured the criminalization of performance enhancing drug use and suggested strict fines and imprisonment for users and suppliers.

Second, the perceived general environment with respect to drug use, including the attitudes and actions of governing bodies, sport organizations, the media, and the public had an impact on athletes suggested actions. For example, athletes who believed that 'no one really cares' viewed anti-doping efforts as futile. One athlete said:

> People want it both ways. People are happy to see world records broken all the time but they will neglect the fact that without performance enhancing drugs this would not happen. People think they you don't have to train hard to achieve results with drugs. They don't know that it doesn't matter how much you take if you don't train hard you will not reach the desired goal. People are always asking for more, and then they are quick to call you a cheat and a liar when they find out that you are on something. Well, what do they expect?

Others believed that professionalization of sport meant that there were no easy answers to the drug problem:

> We have to press on with education and sanctions, but there are no easy answers. Sport is not what it once was. It is now big business, it is now big money. Depending on your sport, doping may become a necessity to those competing at the highest level. And then of course, there are those competing at sub-elite level and kids. What do we tell them? Even if deep down we don't believe in the effectiveness of sanctions and existing measures, we should press on because we have to send the right message.

5. Discussion

The aim of the present study was to increase our understanding of the motivations and justifications of athletes who have committed anti-doping violations. We present the implications of the findings for theory, sport management policy, and future research. We begin by considering the psychology of doping.

5.1 The psychology of doping

Athletes in this study had started doping early in their careers and many of them had normalized the use of banned substances to the extent that it was not widely seen as 'cheating' particularly in those sports were drug use was high, notably bodybuilding. This finding supports Kirby et al.'s findings with relation to how doping athletes perceive their own behaviour. Additionally, the role of morality, more specifically, 'moral disengagement' was a prominent factor in the decision to dope, but most importantly, the decision *to continue to dope*. Several moral disengagement mechanisms, as identified by Lucidi et al. (2008), emerged during the interviews: advantageous comparison, minimizing or ignoring the consequences, and displaced responsibility. These forms of disengagement served to justify transgressions (i.e., the use of banned substances).

Although the role of psychological factors has been studied extensively (Anshel, 1991; Donovan, Egger, Kapernick, & Mendoza, 2002; Petróczi & Aidman, 2008), few of these factors appeared were identified amongst this sample of athletes. Only the nature of goal-orientations emerged as a significant factor. The 'desire to win' was a salient motivational factor (Ehrnborg & Rosén, 2009). However, athletes acknowledged that their motivations changed with time and that as time went by, their motivations were also guided by pragmatic concerns, such as recovery from injury.

Athletes talked about being task-oriented and held a pragmatic view about drug taking, whilst acknowledging the punishing nature of competition. Unlike Kirby et al. (2011)

where athletes talked about ‘wanting to stay in their sport as long as possible’, many of the athletes in this study talked about using drugs as a means of ‘having a chance at all in their sport’ (notably, bodybuilding) to ‘focusing on the goal of winning’ (all other sports sampled). Interestingly, the anticipated and actual effects of doping, both physical and psychological, were frequently addressed by these athletes as motivational forces to continue doping. For example, some athletes talked about experiencing a psychological boost, feeling more relaxed and even feeling invincible, largely echoing Issajenko’s claims that doping created an ‘outrageous feeling’ (Harvey, 1989).

The negative health side-effects of doping were not addressed by any of the athletes. This finding echoes that of previous research (Kirby et al., 2011) and calls into question the effectiveness of the health message in trying to prevent doping. Moreover, the message here appears to be ‘use of banned substances may actually be good for you’. The use of scare tactics in anti-doping campaigns may actually backfire. Research on recreational drug use by adolescents (in non-sporting contexts) has shown that when negative physiological consequences of drug use are not observed, the resulting expectancy violation increases the likelihood of subsequent drug use (Skenderian, Siegel, Crano, Alvaro, & Lac, 2008).

An additional finding in this study was that the athletes estimated that the incidence of drug use within their own sport was higher than all other sports combined. Studies (Petróczi, Mazanov, Nepusz, Backhouse, & Naughton, 2008; Wolfson, 2000) have shown that people who are using drugs tend to offer higher estimates of such drug use amongst similar others, than people who are not using such drugs. This behaviour is usually explained in terms of a psychological process called the ‘false consensus effect’ (Ross, Greene, & House, 1977) whereby individuals overestimate the “extent to which others behave the same way as they do, especially if the behaviour in question is deemed to be socially questionable or

unacceptable" (Petróczi et al., 2008). This study provides some additional support for this hypothesis.

5.2 Implications for anti-doping management and policy

The basic message in anti-doping communications (doping athletes will be caught and punished) does not seem to work, particularly in sports with a strong doping culture. Neither does the message about the detrimental effects to health (as Kirby et al. noted). Interestingly, the athletes suggested more testing and stricter punishments as a way of increasing the credibility of deterrents. They also wanted to see punishments extended to those complicit in promoting or facilitating doping (i.e., coaches, support staff and suppliers). In short, there was a call for serious action on doping, not just rhetoric. However, athletes from sports where doping was normalized preferred a different approach: legalization of selected banned substances.

Of these two solutions, the most politically acceptable response to doping would be to increase the deterrents, rather than legalization. Given the high costs of anti-doping controls (ASADA, 2012) and the low detection rate (Pound et al., 2013), there seems to be little likelihood that the number of tests will be increased. The onus will thus probably shift to even harsher punishments, a strategy that seems extremely unlikely to have any discernible effect on doping.

Increasing the severity of punishments for doping is highly unlikely to succeed. Legalising doping is an alternative solution that struggles to generate the widespread public support that such a radical solution would require before it could be implemented (Engelberg, Moston, & Skinner, 2012). Consequently, other solutions are required.

In this study of admitted dopers, there was still a prevailing view that doping was a form of cheating and that it was wrong. Athletes resorted to forms of moral disengagement (Bandura, 1990; Lucidi et al., 2008) in order to justify doping, including the process of

‘displaced responsibility’. This form of disengagement included blaming peers, support staff and even society.

In order to counter forms of moral disengagement it is essential that sports managers first recognise how such a process is used by athletes, and second, develop appropriate counter arguments or strategies. For example, the conduct of support staff might be better regulated with penalties for doping extended to include such personnel. Similarly, support staff should undergo anti-doping training (noting that some of the support staff in direct contact with athletes are already subject to such requirements). In terms of strategies to counter moral disengagement, campaigns that seek to involve sporting fans (and non-fans) in anti-doping efforts, perhaps by making their disapproval of doping a central message, might be effective in challenging the perception that the public only care about winning. Strategies to negate the implementation of moral disengagement might make doping harder to justify, thereby preventing doping from either starting, or continuing.

One final suggestion that arises from this study is that anti-doping messages need to be tailored to each sport. In some sports doping is already so prevalent (or at least, perceived to be prevalent), that anti-doping messages are likely to be almost entirely ineffective.

5.3 Limitations

Interviews with athletes who have committed anti-doping violations presents a number of problems, including locating and recruiting any such athletes. The present study illustrates some ways in which these problems can be overcome, but the fact remains that the athletes are a self-selecting sample. Many doping athletes will refuse to participate in research studies and consequently the athletes who do participate may not be representative. To complicate matters even further, the poor rate of detection of doping may mean that the sports where doping athletes are detected, may not necessarily be those where doping is most prevalent. According to the latest WADA statistics (WADA, 2012), the sports with the

highest numbers of adverse analytical findings (blood and urine tests combined) are weightlifting, athletics, cycling and rugby. In Australia, anti-doping control statistics (ASADA, 2012) reveal that the sports with the highest numbers of adverse findings are rugby union and bodybuilding (4 cases each), followed by rugby league (3 cases), Australian rules football, cycling and powerlifting (2 cases each). Most of the athletes in this sample were bodybuilders and powerlifters. The other sports represented included cricket, rugby league, basketball, sprint kayak and swimming. While this sample appears features athletes from several of the sports where doping has been detected, the representativeness of the sample remains a concern.

Despite these limitations, this research provides significant answers to the question 'Why do athletes dope?' by targeting those who have actually committed the violations ('the final frontier') and builds on earlier studies that have featured doping athletes (Kirby et al., 2011; Smith et al., 2010).

5.4 Conclusion

The core problem now facing sports managers is, should anti-doping continue or be discarded? If it is to continue, it is unlikely to be in its current form involving costly and highly inefficient randomized anti-doping controls. Both solutions will require significant changes to how sports are managed and marketed, and both run the risk of violating and thus destroying the nebulous concept known as the 'spirit of sport'.

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APPENDIX: QUALITATIVE INTERVIEW TOPIC GUIDE

A Study of Athletes who have Committed Doping Violations

The aim of this research study is to explore athletes' views on doping, particularly the views of those who have personal experiences of doping.

We are seeking the cooperation of athletes who are willing to talk or write confidentially about taking performance enhancing and/or recreational drugs during their athletic career. We hope to explore the motivations, pressures and decision-making processes an athlete goes through when they are involved in doping.

PARAGRAPH REMOVED – AUTHOR DETAILS

Athletes can participate in the study in the following ways:

- Completing an online survey (available at www.surveymonkey.com/xxxxxx)
- By telephone interview with a member of the research team (see below)
- By face-to-face interview with a member of the research team (see below)

Participation in the study is voluntary. To ensure confidentially and to protect anonymity, all data collected for this project will be de-identified and no details that might identify individual athletes will be revealed in subsequent reports.

All athlete contact data from telephone and face-to-face interviews will be destroyed upon completion of the study.

The survey takes between 10 and 20 minutes to complete (depending on the length of your responses).

PARAGRAPH REMOVED – AUTHOR CONTACT DETAILS

Eligibility for participation in the study

For the purposes of this study, banned substances that are either:

Performance enhancing: e.g., *stimulants* (amphetamine, ephedrine, etc.); *beta-blockers*; *diuretics; steroids*; *HGH*; *EPO;* and *blood doping*

OR

Recreational: *tranquilizers; barbiturates (sedatives); cannabis; heroin; cocaine/crack; speed;* and *hallucinogens* (e.g., LSD, PCP)

Substance use **not** to be considered for the purposes of this study:
Alcohol, tobacco, or inhalants

- Have you ever taken illegal or banned substances either during competition or during the off-season?

If NO, interview concludes here. THANK YOU

About you

What is your current age?

What is your gender?

What is your main sport? Please use the full title of your sport (e.g., Rugby Union)

How long have you been a professional in your sport (number of years)?

What is your current status as an athlete?

Type of doping violation

What banned substance(s) did you take?

At what stage(s) of your career did you take this substance? (e.g., as a development athlete; after turning professional)

What were your *main* reasons for taking this substance?

What effect did this substance have on your performance?

Personal factors influencing your decision

What made you choose that specific substance(s)?

Did anyone influence your decision to take the substances. If so, how?

Were there any factors that might have persuaded you NOT to take substance at that time?

Did doping affect the way you viewed your participation in sport? If so, how?

Detection and consequences

Was your doping violation detected?

IF APPLICABLE

How did the detection occur (e.g., anti-doping test; personal admission)

What was your reaction?

What was the reaction of others (e.g., team mates, club, media)

Doping in sport

In your opinion, what percentage of elite and professional athletes in ALL sports use performance enhancing drugs?

In your opinion, what percentage of elite and professional athletes in ALL sports use recreational drugs?

In your opinion, what percentage of elite and professional athletes in YOUR OWN sport use performance enhancing drugs?

In your opinion, what percentage of elite and professional athletes in YOUR OWN sport use recreational drugs?

Deterring drug use

Aside from your own experience, what factors do you think typically influence a person in the decision to use banned substances?

Are there any situations in which you think doping can be justified?

What factors do you think typically deter an athlete from using banned substances?

"Everyone wants to win, but not everyone takes illegal substances. Why do you think this is the case?"

Sanctions

What do you think of the sanction process in your sport and the general sanction process?

What changes, if any, would you make to the doping testing and sanctions process?

In your opinion, what is the best way to deter drug use? (e.g., sanctions only, education,)

Final comments

Please add any other comments about the topic that are not covered above.

THIS CONCLUDES THE INTERVIEW.

THANK YOU FOR YOUR PARTICIPATION.