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Doping in Team and Individual Sports: A Qualitative Investigation of Moral Disengagement and Associated Processes

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Abstract

The current study qualitatively investigated psychosocial processes that support PED use in athletes from a range of sports, using Bandura's (1991) social cognitive theory of moral thought and action as the guiding theoretical framework. In–depth semi–structured interviews were conducted with twelve male athletes from a variety of sports who had used illicit performance enhancing substances within the previous two years. Interviews centred on the psychological and social processes that facilitated the athletes' introduction to, and continuation of, doping. Study data were content analysed deductively using definitions for the eight mechanisms of moral disengagement (Bandura 1991), as well as three further themes identified by Boardley and Grix (2014). Data analysis provided evidence for seven mechanisms of moral disengagement (i.e., moral justification, euphemistic labelling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, and attribution of blame) and all three of the additional themes (i.e., routinisation, family and friends, and sliding scale). The mechanisms and themes varied in their frequency of use, and were discussed with reference to Bandura's (1991) theory, as well as other relevant literature on doping in sport.

Keywords: moral disengagement, performance enhancing drugs, positivism, socialisation, deductive reasoning

Introduction

Recent qualitative research investigating the psychosocial processes facilitating Performance Enhancing Drug (PED) use in bodybuilders has provided evidence that Moral Disengagement (MD; Bandura 1991) may play a key role in facilitating PED use (Boardley and Grix 2014; Boardley et al. 2014). In addition, three further themes (i.e., sliding scale, family and friends, and routinisation) relevant to Bandura's (1991) social cognitive theory of moral thought and action were identified by Boardley and Grix (2014), and supported in the work of Boardley et al. (2014). Although the work of Boardley and colleagues has provided evidence that MD and the three further relevant themes from their work may play a role in the adoption and maintenance of PED use in bodybuilders, to date researchers have not investigated their utility in sports other than bodybuilding. As such, in the current study we sought to address this limitation in knowledge by qualitatively investigating these topics with athletes from a range of team and individual sports.

Moral disengagement represents the conditional endorsement of transgressive behaviour, and can be achieved by using any of eight psychosocial mechanisms which seek to cognitively distort harmful acts, reduce personal accountability for them or their consequences, distort/avoid their consequences, or dehumanize or blame the victim of the act (Bandura 1991). Bandura (1991) describes how MD plays a key role in facilitating harmful conduct by annulling distasteful emotional reactions (e.g., guilt, shame), as anticipation of such reactions should normally regulate such conduct. Operational definitions for the various mechanisms are provided in the results section. Importantly, for the purposes of the current study, PED use was considered a

transgressive act as it contravened the rules of all sports represented at the time of data collection.

Qualitative research to date has contributed significant knowledge on the MD mechanisms used by PED using bodybuilders. Across two studies, Boardley and colleagues have provided evidence for six of the eight mechanisms of MD through semi–structured interviews with 73 bodybuilders with experience of PED use (Boardley and Grix 2014; Boardley et al. 2014). More specifically, deductive content analysis of the data from these interviews showed evidence for all MD mechanisms with the exception of dehumanisation and attribution of blame. Importantly, these two mechanisms differ from the other six in that they specifically target the victim/s of transgressive acts (see Bandura 1991). Based upon this, Boardley et al. (2014) suggested that the lack of evidence for these two mechanisms may have been due to the lack of an obvious external victim of PED use in bodybuilding. As such, research is needed that qualitatively investigates MD in PED users from sports in which external victims of doping (i.e., non–doping opponents) are more salient, as in such circumstances the likelihood of victim–centred mechanisms of MD being utilised may be increased.

Although the current study is primarily concerned with the qualitative characteristics of MD in PED users, evidence from quantitative research supports the existence of a positive link between overall MD and PED use. The majority of this support comes from the work of Lucidi and colleagues, who across three studies demonstrated statistically significant positive associations between MD and intention to use (Lucidi et al. 2004) and reported use of (Lucidi et al. 2008; Zelli et al. 2010) PEDs in Italian adolescents. However, it is important to recognise that very few of the

participants in these studies had experience of PED use, with only between 1.0% (Zelli et al. 2010) and 3.1% (Lucidi et al. 2004) reporting PED use. Also of note is that in the two most recent studies almost half of the study participants were not active sport participants. As such, the findings of Lucidi and colleagues offer limited information on how MD links with PED use in competitive athletes with experience of PED use. Based upon Bandura's (1991) theory, it is likely that environmental influences such as competitive pressure and interaction with suppliers/users of PEDs may influence athletes' use of MD to rationalise PED use. Given the vast majority of the participants in the studies of Lucidi and colleagues are unlikely to have experienced such influences, their use of MD to justify and rationalise PED use is likely to differ from that of competitive athletes who have used PEDs.

Recent work by Hodge et al. (2013) has addressed one of these limitations by investigating links between MD and attitudes toward PEDs and drug–taking susceptibility exclusively in competitive athletes (n = 224). Importantly, this research identified strong and moderate positive associations, respectively, between MD and attitudes toward PEDs and drug–taking susceptibility. However, one limitation of this work was that reported PED use was not assessed so it is not known how many – if any – of the athletes involved had experience with PED use. As such it is likely – although impossible to determine categorically – that similar to the athletes in the studies of Lucidi and colleagues, very few of the athletes in the study of Hodge and colleagues had experience with PED use. As such, the rationalisation and justification of PED use through MD is likely to different for the majority of the sample in this study in comparison to competitive athletes who have previously used PEDs.

To address the limitations identified above in the work conducted by Lucidi et al. (2004, 2008), Zelli et al. (2010) and Hodge et al. (2013), research is needed that investigates the use of MD exclusively in competitive athletes with experience of PED use. Given the inherent difficulties in recruiting large samples of such athletes, qualitative research would be a pragmatic methodological approach for such work. Pragmatic considerations apart, a more important argument for a qualitative approach would be the greater depth of understanding of how athletes may use MD to rationalise and justify PED use that would be achieved through qualitative research in comparison to a quantitative approach. As such, the investigation of individual mechanisms of MD in competitive athletes with experience using PEDs should make a significant contribution to our understanding of the psychosocial processes that facilitate PED use.

The research of Boardley and colleagues with bodybuilders also suggested that a further three themes may be important in understanding the psychosocial processes that facilitate PED use (Boardley and Grix 2014; Boardley et al. 2014). The first of these themes – sliding scale – represents a progression in training supplementation in which athletes first use legal dietary supplements, then move to use of orally administered PEDs, before subsequently using injectable PEDs. This progression is also generally accompanied by an increase in the volume and range of PEDs used. Importantly, this process is supported by further research that has identified a link between athletes' use of legal dietary supplements and subsequent PED use (e.g., Backhouse, Whitaker and Petróczi 2013; Martinez and Bilard 2003; Papadopoulos et al. 2006). However, although such research supports its potential existence, researchers to date have not specifically investigated the existence of the sliding scale process in sports other than bodybuilding.

The second of the further themes identified by Boardley and Grix (2014) is termed family and friends. This theme represents the categorisation of close associates of PED users into gym friends, non–gym friends and family, with knowledge of athletes' PED use only being shared with associates placed in the first category. Aligned with this theme, Bandura (1991) takes an interactionist perspective to the regulation of moral conduct, in that he considers transgressive conduct to be regulated by both personal and social sanctions. As such, whilst MD may prevent personal sanctions (e.g., guilt) for conduct that contravenes an individual's moral standards, it will not necessarily avert social rebuke for such actions. It is therefore possible that the family and friends theme represents proactive attempts by PED users to avoid social censure for their PED use by only acknowledging it to those anticipated to approve. Although this theme may potentially facilitate PED use by preventing social condemnation, its existence has not been investigated in athletic populations other than bodybuilders.

The final additional theme identified by Boardley and Grix (2014) was that of routinisation. This theme originated based upon descriptions by bodybuilders of how PED use had become automated into their daily routines in such a way that it took place without conscious thought. Importantly, Bandura (2002) describes how such automation can facilitate engagement in transgressive conduct as the eradication of conscious processing eliminates the possibility of controlling emotional reactions being stimulated. As such, once PED use becomes an established aspect of athletes' daily routines, associated reductions in conscious processing may make it less likely athletes will reflect on whether they should continue to use PEDs. However, although the initial study of Boardley and Grix (2014) provided support for bodybuilders' routinisation of

PED use in a sample of athletes from a single gym, subsequent research investigating this theme in a much larger and more diverse sample of bodybuilders suggested its use was relatively uncommon (see Boardley et al. 2014). Also, similar to the other themes, it is not currently known whether routinisation exists in athletic populations beyond bodybuilding. As such, further research is needed to establish the potential importance of this theme in understanding the psychosocial processes that contribute to PED use in sport and exercise.

To summarise, accumulating evidence suggests MD and the three further themes identified by Boardley and Grix (2014) may represent important psychosocial processes that facilitate PED use. However, the current evidence base is limited by either an exclusive focus on bodybuilders (i.e., Boardley and Grix 2014; Boardley et al. 2014), or by quantitatively investigating overall MD – rather than individual MD mechanisms – with competitive athletes whose use of PEDs was not determined (i.e., Hodge et al., 2013), or with convenience samples not necessarily representative of athletic populations (Lucidi et al. 2004, 2008; Zelli et al. 2010). As such, this study aimed to contribute to the current literature base by addressing the following research questions: (a) does MD occur when team– and individual–sport athletes discuss the circumstances that influenced their initiation and continuation of PED use, (b) if so, which specific MD mechanisms are apparent, (c) do these athletes also reveal evidence representing the sliding scale, family and friends, and routinisation themes, and (d) what is the relative frequency of use for each MD mechanism as well as the three further themes?

Methodology

Participants, Interviewer, and Ethical Considerations

The study entailed conducting semi–structured interviews with twelve male athletes from the sports of athletics (n = 1), swimming (n = 2), American football (n = 3), boxing (n = 1), basketball (n = 2), wrestling (n = 1), rugby (n = 1), and mixed martial arts (MMA; n = 1). To ensure anonymity, in the results section participants are referred to using codes based on their sport (e.g., AF1 represents American footballer 1). Interviews were conducted with participants based either in Texas in the United States of America (n = 9) or the northern counties of the United Kingdom (n = 3). Participants were aged between 19 and 24 years, and had been training in their sports regularly for between four and 14 years (M = 7.5 years). Six of the athletes were PED users at the time of interview and the remaining six had doped within the previous two years, but had discontinued use at the time of interview. Specific information on interview location, type of PEDs used, and whether participants were current or past users can be found in Table 1.

Athletes were purposefully sampled to gain the perceptions of athletes who had actual experience of PED use, and participants were contacted in person to determine whether they would like to participate in the study and if so to make arrangements for interview. Recruitment occurred through personal contacts of the interviewer, contact through online forums, and attendance at local gyms where athletes trained. Ethical clearance for the study was obtained from the ethics committee of the host institution and informed consent was obtained from all participants prior to data collection.

The interviewer was an elite basketball player and although he was not a PED user himself, he prepared for the interviews by ensuring he was familiar with the different types of PEDs and the colloquial terms used to refer to them. Prior sport participation potentially influences acceptance in athletic subcultures, as well as the

responses of those who occupy such environments (see Woodward 2008). Accordingly, the interviewer's extensive sport experience and familiarity with terminology relating to PED use appeared to facilitate a high level of acceptance and trust during interviews, therefore increasing the likelihood of participants responding openly and honestly. To ensure participants did not assume specific knowledge in the interviewer and potentially withhold detail in their responses, the academic nature of enquiry and therefore the importance of answering all questions fully were explained to each participant before interviews commenced.

Interview Structure and Data Analysis

In–depth semi–structured interviews were conducted during the winter of 2012/13. These interviews were based on a protocol aimed at identifying rationalisation and/or justification of PED use through the eight mechanisms of moral disengagement, as well as narratives corresponding with the three further themes (i.e., sliding scale, family and friends, and routinisation) identified by Boardley and Grix (2014). The interview guide – available from the first author upon request – comprised of open–ended questions relating to athletes' initiation (e.g., 'What were the initial reasons you started using performance enhancing drugs?) and continuation ('Are your current reasons for using performance enhancing drugs the same as the reasons that you started?') of PED use, as well as targeted questions (e.g., Displacement of Responsibility: 'Are there people in your training group who encourage the use of performance enhancing drugs?') aimed at investigating the eleven predetermined constructs of interest. Such approaches are suited to the investigation of existing theory through qualitative research (see Hsieh and Shannon 2005). Each interview was conducted face–to–face and audio–recorded before

being transcribed verbatim, with interviews ranging in length from 19 to 31 minutes (*M* = 24 minutes). All transcripts were sent to the relevant interviewee to check its accuracy; no athletes requested changes and a total of 23,777 words of transcript were analysed.

In accordance with the recommendations of Hsieh and Shannon (2005) for the qualitative investigation of existing theory, study data were analysed deductively through directed content analysis. Accordingly, operational definitions (see results section) for the eleven constructs of interest were created by the first author based on definitions in the literature, and the second author used these to then content analyse the data. Analysis involved reading each transcript and highlighting and coding any text that represented one or more of the eleven definitions. Complete responses to questions were used as the unit of coding to ensure responses were coded whilst taking into account entire responses to prevent any potential loss of context if individual sentences had instead been used. A consistent unit of coding was used to facilitate intra– and inter–rater reliability in coding and to make comparisons with findings from similar studies more meaningful (De Wever et al. 2006).

To assess the reliability of coding, indicators of intra– and inter–rater reliability were calculated (De Wever et al. 2006). Regarding intra–rater reliability, the second author coded the interview with AF1 on two occasions a month apart, resulting in 14 of 15 coding decisions being replicated and resulting in an intra–rater reliability of .92. For inter–rater reliability, this was estimated through calculation of percentage agreement and Cohen's Kappa using the results from the separate content analysis of AF1's transcript by both the first and second authors. These two indicators of inter–rater

reliability were chosen based upon the common use of percentage agreement, and the fact that Cohen's Kappa takes into account chance agreement among coders and its appropriateness when two coders are involved (De Wever et al. 2006). Overall, very good levels of percentage agreement (.95) and Cohen's Kappa (.86) were observed (Banerjee et al. 1999, Riffe et al. 1998).

The methodological approach adopted in the current work reflects a variant of a post–positivist position. Whilst upholding worldviews closely aligned with positivism, the researchers are open to a wider range of methodologies and are more reserved regarding the ability to fully discern reality in comparison to 'strict' positivists (Brustad 2008). The post–positivist position of the researchers is reflected in the deductive analysis of qualitative data in the present study.

Results and Discussion

In this section we present and discuss the results for each of the pre–determined categories that were evidenced in the data. When appropriate we have provided exemplar quotes from athletes, and the numbers that follow these refer to the interviewee number and relevant page and line numbers from that interviewee's transcript. In addition, when necessary we have used square brackets [ ] to provide additional words or phrases to clarify quotes. Table 2 shows the number of times participants elicited statements reflecting one of the 11 constructs of interest. As shown in Table 2, we found evidence for 10 of the 11 themes, with no evidence of dehumanisation emerging. On average participants demonstrated use of 4.25 individual MD mechanisms and a mean number of MD occurrences per participant of 9.42.

1. Displacement of Responsibility

Displacement of responsibility is apparent when people see their actions as resulting from social pressure rather than something for which they are personally responsible (Bandura 1991). In male bodybuilders it has been shown that such social pressure can be either implicit or explicit in nature when this mechanism is applied to PED use (Olrich and Ewing 1999). The present data suggests use of this mechanism can be similarly dichotomised in other sports. Regarding implicit pressures to dope, the performances of other athletes known to use PEDs appeared to create a pressure for athletes to adopt similar practices; this was seen in both team– and individual–sport athletes. For instance, one of the American footballers described how 'You see people in the gyms, benching 150kg, it's not a good feeling to walk over to the bench and take off 50kg, I wanted to walk over and add weight on' (AF2, 3; 3–4). Similarly, the 100m sprinter explained how 'you see them, they're toned, they're fast, you're like, f**k… if I take that maybe I'll be that quick… so you do, and you do become that quick…. It's like a magic pill.' (A1, 4; 44–45). As such, just as Olrich and Ewing (1999) described the presence of an implicit pressure to keep up with peers who were already taking PEDs, athletes in the current study described how they felt compelled to start doping to achieve/surpass the performances of athletes perceived or known to be using PEDs.

One divergence in the present findings from work that has identified implicit pressures to dope in bodybuilders was the nature of the implicit pressures perceived. Whereas with bodybuilders implicit pressure to dope was generated largely through the appearance of bodybuilders' peers (see Boardley and Grix 2014; Olrich and Ewing, 1999), here the focus was on performance, as reflected in the aforementioned quotes by

the amount of weight lifted in the gym or the speed with which an athlete moved out on the track. Thus, the common thread may be the salient goals in a given context with bodybuilders motivated by appearance, American footballers by strength, and sprinters by speed. In essence, an athlete may be more likely to externalise responsibility for adopting PED use when they see others who are perceived to dope achieving the goals they have set for themselves.

As well as implicit pressures to dope, athletes also described more explicit forms of coercion. Here athletes described specific incidents in which they had felt pressured by others to start doping. For instance, when describing his initiation into PED use one of the American footballers described how:

> … it was mainly down to being with the wrong person at the wrong time. It was after practice, we were walking to the dorms and he went, you ever took steroids. I went no. He went they're good, want to… the next week I was swallowing HGH (AF2, 4; 11–13).

External pressure to dope was also perceived by B1, who suggested he:

> … didn't want to take them during the season as I didn't want to get caught… the guy I got them off told me that I wouldn't get caught, he said with these and hard work I'd be the next big thing in boxing, all the big boys take them (4; 5–7)

Thus, consistent with that through implicit means, displacement of responsibility through explicit pressure was also seen in both team and individual sports.

The potential for displacement of responsibility through explicit compulsion to dope seen here is consistent with two previous qualitative studies with male bodybuilders. First, athletes interviewed by Olrich and Ewing (1999) described how explicit encouragement to dope was a key influence when initially deciding to dope. More recently, Boardley et al. (2014) also described athlete narratives that illustrated

similar influences. In both of these studies, athletes described similar processes to that explicated by B1 above. Taking these findings as a whole, across three studies we see examples of explicit pressure to dope, whereby friends/associates encourage adoption of PED use by suggesting it may allow athletes to be successful in their chosen sport. Importantly, in doing so these people are creating the potential for displacement of responsibility as those targeted are then able to externalise accountability for those encouraging the adoption of doping practices.

2. Diffusion of Responsibility

In sport, diffusion of responsibility often occurs through collective action, with responsibility for transgressive acts being socially diffused within a group of offenders (Bandura 1991). Such diffusion was evident here, and consistent with its use in doping bodybuilders (see Boardley and Grix 2014), an athlete's training environment was central to use of this mechanism. This is clearly evident in the response of one American footballer when asked if he thought PED use was cheating:

> I don't think I'm cheating no… I'm not the only guy who takes it… you're in the locker room especially in college... you're like… him him him… they're all on it, so if they are… I may as well [be] (AF2, 3; 35–37).

Interestingly, the sprinter echoed this view:

> I knew there was steroids in my sport, I mean there's juice in all sports … I didn't know I'd be running with people who used it, maybe if I was in a team without dopers, I wouldn't do it… (A1, 4; 48–50).

Qualitative accounts of admitted dopers from other sports echo this finding. When interviewing five such athletes from the sports of cycling and weight lifting, Kirby, Moran and Guerin (2011) found that most athletes doping behaviour was

informed by awareness of team–mates and opponents doping. This led these athletes to argue that PED use is not cheating because the practice is so extensive in their sports. This again supports the contention that perceiving widespread use of PEDs allows athletes to diffusion personal responsibility for their actions within a large group of perceived offenders, resulting in a distorted perception of the nature of their transgression.

Friends within the training environment appeared particularly influential when this mechanism was utilised, with numerous athletes referring to them. A good example of this is one of the basketball players who described how the reason he doped was:

> Probably down to my friends… if you train with a bunch of lads who are all juiced up… chances are you're gonna end up on the juice… If I had a different bunch of mates would I be on the juice? Who knows? (BB1, 4; 10–12).

Thus, just as in bodybuilding (see Boardley and Grix 2014; Boardley et al 2014), it seems training in environments where others – particularly friends – use PEDs can facilitate doping through diffusion of responsibility. Statistical support for such an effect is provided by Wiefferink et al. (2008), who conducted a questionnaire–based study with bodybuilders. The study data showed that athletes who perceived a greater number of their social network (i.e., gym owners, gym instructors, gym users, friends, training partners and relatives) were definite users of PEDs reported a greater intention to use PEDs in the future.

Like all mechanisms of MD, this mechanism is thought to facilitate transgressive behaviour by preventing unpleasant emotions, anticipation of which normally regulates such behaviour. Such a process was supported here, with the potential power of diffusion of responsibility in preventing athletes from experiencing emotions such as

guilt and shame when using PEDs being demonstrated through the experiences of one of the swimmers. When asked whether he thought doping was immoral, this athlete said 'At first I thought of course it is – it's against my standards – but because I thought everyone was doing it, it kind of made me feel okay about it' (S1, 2; 48–49). Clearly the perception that PED use was rife in his sport changed his view of its moral implications and consequently the emotions he experienced as a result.

Interestingly, S1 subsequently found out that PED use was not as prevalent in swimming as he thought. When asked whether this changed his views on the morality of doping, he answered 'Yes, it really has' (2, 38). Importantly, the emotions he experienced when doping also changed at this time, as he described how he then '…used to kinda feel guilty' (2, 38–39). This clearly influenced his decision to discontinue his PED use, suggesting that 'now I know not many athletes use them, I wouldn't think twice about doing it again' (2, 39–40). The experiences of S1 resonate strongly with those of admitted PED users interviewed by Kirby et al. (2011), as the most frequently internal deterrent for doping cited by these athletes was the guilt and shame they experienced as result. Just like S1 here, two of these athletes had voluntarily ceased doping without having tested positive, with the distasteful emotional consequences of doping playing an influential role in this decision. Thus, consistent with Bandura's (1991) theorising, anticipation of unpleasant emotions as a result of PED use may deter future doping behaviour.

3. Advantageous Comparison

Advantageous comparison takes advantage of the contrast principle, occurring when a transgressive act is compared with another that is perceived to be more heinous, making

the transgression being considered appear inconsequential in comparison (Bandura 1991). In research with bodybuilding populations (i.e., Boardley and Grix 2014; Boardley et. al. 2014), use of this mechanism often focused on comparisons with the unhealthy lifestyles of the general public. In contrast, here advantageous comparisons were more frequently made through comparisons with illegal activities such as stealing and use of illegal recreational drugs, as well as other associated hedonistic activities. Evidence of this is seen in the following quote from AF1:

> I know many guys go out and spend their money on ecstasy in clubs, I've never done this… I spent my money on steroids… ecstasy is sure worse than steroids. You see athletes these days hiring out prostitutes, going to strip clubs, surely that's worse than steroids? (3; 16–18).

Interestingly, in contrast to the bodybuilders interviewed in past research (i.e., Boardley and Grix 2014; Boardley et. al. 2014), this athlete compared his PED use to the behaviours of other athletes rather than those of non–athletic populations. This was again seen when MMA1 compared his PED use to that of others perceived to use prohibited substances more frequently, '…people who use them every day are worse than me. I only took them whilst training, not fighting.' (3; 27–28).

In contrast, other athletes expediently contrasted their behaviour with those of criminals, 'If I went round robbing banks all the time and was a criminal… people would see me as that… I take steroids... steroids aren't as bad a theft.' (AF3, 3; 5–6). Clearly for this athlete, how his behaviour was viewed by others was important. This was again evident in the following comparison made by MMA1, 'I'd rather be known as a roidhead than a crackhead or someone who sits in a public toilet smoking illegal drugs.' (2; 37–38). This latter contrasting of PED use with use of illegal street drugs was

also seen in other athletes such as AF2, ‘It’s not like I’m taking illegal drugs such as coke is it?’ (AF2, 3; 22).

Overall, the use of this mechanism by these athletes appeared to be aimed at changing how they and others view the act of PED use, rather than focussing on the health consequences of such behaviour as seen in past research. More specifically, advantageous comparisons made by bodybuilders in the work of Boardley and Grix (2014), Boardley et al. (2014), Monaghan (2002), and Probert and Leberman (2009) have predominantly focussed on making the health consequences of PED appear less serious. In contrast, in the present study the emphasis appears to be much more on making the behaviour itself appear more acceptable. It is possible the strict regulation of PED use in the sports represented here requires PED users from these sports to find ways to convince themselves of its appropriateness. In contrast, bodybuilders may place more emphasis on the perceived impact of PED use for their health because they engage in other behaviours (e.g., strict diet, low alcohol use) associated with improved health. Regardless of the differences seen in the specific nature of its use across sporting populations, the apparent ubiquitous application of advantageous comparison across PED users from a diverse range of sports suggests it may help facilitate the adoption and maintenance of PED use in sport.

4. Distortion of Consequences

Distortion of consequences is apparent when perpetrators of transgressive acts actively evade or cognitively minimise the harmful outcomes resulting from their actions (Bandura 1991). If one can see no harm in one’s actions then no negative emotional experiences should result, therefore facilitating ongoing engagement in the behaviour.

Use of this mechanism centred on two overarching potential harmful outcomes. These were harm to the PED user's health and harm to opponents through unfair advantage.

Regarding the potential harmful health consequences resulting from PED use, the athletes either disputed these would occur, or purported to be able to prevent them through controlled use. An example of disputing the likelihood of harmful consequences as a result of PED use, when asked about his awareness of possible side effects, AF3 said 'yeah obviously, you hear of them all the time… I think most of them are just made up lies to try and scare people… so I take no notice.' (2; 36–37). Such trivialisation of the potential side effects of doping has been seen previously in qualitative studies involving elite–level cyclists (Lentillon–Kaestner, Hagger and Hardcastle 2012) and competitive bodybuilders (Probert and Leberman 2009). Others expressed beliefs that the potential side effects can be prevented or minimised if PED are used correctly. For instance, AF1 described how 'People class them as bad drugs, they're not if used correctly' (2; 19–20). Similarly, B1 suggested that 'I've got medical supervision… I know I'll be ok' (2; 16). Similar beliefs have been expressed in past research with competitive bodybuilders (Probert, Palmer, and Leberman 2007). Thus, either by disputing the validity of claimed side effects or perceiving that they were able to avoid experiencing them through controlled use, the athletes used this mechanism to distort the possible consequences of PED use for their health.

This mechanism was also used by the interviewees to dispute any potential harm to their opponents. Such use focussed either on denying any associated competitive advantage, or on the use of PED in training or to recover from injury rather than during competition. Athletes who claimed no competitive advantage made statements such as 'I

use them to aid my performance in regards to my throwing, I've never thought that my performance enhancing drugs ever hurt anyone. I never thought if we won this was down to my performance enhancing drugs' (AF1, 3; 6–8) and:

> If I play well, I wouldn't say it was down to the steroids, maybe they might have increased my jump, so if I get rebounds over someone I wouldn't of, if I didn't use them, maybe he's unfortunate but not a victim no. (BB1, 3, 44–47).

Thus, it seems that although these athletes can see the potential benefits for particular skills (i.e., throwing, jumping), they appear able to separate these benefits from any overall performance advantage. Interestingly, the majority of athletes who disputed a competitive advantage through PED use were from team sports. Such athletes appeared able to downplay any competitive advantage gained through doping by viewing their performance as just one element of the performance of the overall team. This possible distinction between team and individual sports is supported by the following response from AF1 when he was asked if he thought PED use was cheating, 'If you take them to get an advantage over someone in individual sports, then yes it is.' (AF1, 3; 5).

Some athletes also disregarded any competitive advantage over their opponents as a result of their PED use on the basis that they only used them away from competition or to recover from injury. For instance, when asked whether he felt opponents were victims of his PED use, BB2 said 'Definitely not… I didn't play whilst using them so nope they couldn't have been victims.' (3; 4). Similarly, S2 suggested '…if you're using them to directly cheat they're bad… but I used them to recover from injury, so in my eyes I wasn't being immoral towards my standards' (2; 13–14). Previous qualitative research with athletes across a range of sports supports the underlying assertion that use of PEDs to recover from injury is not morally reprehensible (Bloodworth and McNamee

2010; Kirby et al. 2011). Clearly, such beliefs ignore the unfair advantage gained from an expedited recovery from injury that PED use is likely to facilitate. Never the less, it seems some athletes are able to downplay the effect of their PED use on their opponents by making a distinction between PED use during competition and PED use away from the competitive environment. This suggests this mechanism may be particularly effective for athletes who only use PEDs during the preparatory phases of their training year or when rehabilitating from injury. This finding is supportive of research that has identified periods of injury rehabilitation as a potential primary intervention point for anti–doping prevention programmes (Mazanov and Huybers 2010; Mazanov, Huybers, and Connor 2011).

5. Moral Justification

Moral justification is the construal of harmful activities as achieving commendable social or moral purposes (Bandura 1991). Use of this mechanism was consistent with that reported for PED using bodybuilders (i.e., Boardley and Grix 2014; Boardley et al. 2014). For instance, athletes justified PED use based on advice on safe doping they provided to others as a result of their experiences, 'I blog on a website which gives information on good/bad steroids… I like doing it as I can help people.' (B1, 4; 19–20). Interestingly, findings from a study involving young elite cyclists suggest similar processes may operate it that sport (see Lentillon–Kaestner and Carstairs 2010). In this qualitative investigation, potential and current neo–pro cyclists described how veteran professional cyclists with experience of doping transmitted the culture of doping by teaching them how to dope, and which substances to use. Although the providers of the information were not interviewed – and therefore justification of PED use by them could

not be determined – clearly the process described here resonates with that seen in the present study, and in past work by Boardley and colleagues. As such, social processes whereby experienced users of PEDs promulgate their use by advising non–users on how to use them "safely" may be present in a range of sports. Thus, those looking to deter PED use should be made aware of the potential for such processes when identifying and prioritising potential intervention points.

In addition, athletes such as AF1 justified PED use based upon the resultant ability to provide for his family due to the financial benefits of successful sport performance, 'I didn't class it as immoral because I knew it was going to give me a good life, one in which I can provide for my family' (AF1, 2; 40–42). This form of moral justification was also evidenced by some of the professional bodybuilders interviewed by Boardley et al. (2014), as well as one of the five elite athletes interviewed by Kirby et al. (2011), who described how the desire to provide stable financial circumstances for him and his fiancé had been an important factor in his decision to start doping.

Although the way in which moral justification was used resonated with that seen in past research it was far less prevalent here, with only four instances of its use. In contrast, Boardley et al. (2014) found its use to be relatively common, with 42 of the 64 bodybuilders interviewed evidencing it. As discussed earlier with reference to distortion of consequences, downplaying the negative health consequences of PED use appears to be more of a concern for bodybuilders who dope compared to the athletes in the present study. Given the majority of moral justification in the bodybuilders of Boardley et al. (2014) justified PED use based on advice that could be provided on this topic, it is

possible the relative lack of concern for negative health outcomes resulting from PED use explains the minimal occurrence of this mechanism in the present sample.

6. Euphemistic Labelling

Through the intentional use of anodyne language, euphemistic labelling makes harmful conduct appear less damaging and therefore more acceptable (Bandura 1991). In this study it occurred through the use of esoteric terms when referring to PEDs rather than using more accurate terms such as 'drugs' or 'steroids'. All athletes demonstrated this mechanism at some point, such as when AF1 referred to 'Riding the juice.' (2; 24), and AF2 explained how 'You get the guys saying juice, gear, test… pokes for the injection' (2; 43). Past research has shown use of such language in PED users in bodybuilding (e.g., Andrews et al. 2005; Boardley et al 2014; Monaghan, 2002); the current study extends this to PED users from a range of team and individual sports.

Interestingly, many of the athletes in the current study appeared acutely aware of why they used such language. For instance, R1 described how 'Saying juice hides the negativity behind the word steroid… same meaning, less harmful in conversation' (3; 5–6). Similarly, AF1 linked the use of euphemistic terms to how others view PED users, 'If people know you're on steroids they think you're like some crazy bastard… so it's like just another way of saying it without seeming like some kind of beast' (2; 26–27). The suggestion that use of such language can make PED use appear more acceptable to both users and others in their social environment links well with the interactionist perspective described by Bandura (1991), which considers that transgressive actions are regulated by both personal and social influences. As such, based on the current data it

seems possible that euphemistic language may facilitate PED use by reducing potential personal and social constraints on this behaviour.

In an ethnographic study of bodybuilding culture, Andrews, Sudwell and Sparkes (2005) suggested that use of terms such as juice and gear by PED using bodybuilders is part of a specific language that is common to all bodybuilders. These researchers then went on to describe how this language helps form (along with other rituals, etiquettes, beliefs and actions) a collective culture symbolising hard–core bodybuilding. However, given that use of these terms – and explanations for why these terms are used – are remarkably consistent across PED users from different sports and countries (e.g., UK, USA), their use as a form of euphemistic labelling as described by Bandura (1991) may provide an alternative explanation for their use.

These findings highlight the importance of understanding how and why athletes use language in particular ways when talking about drug use in sport. This contention is supported by the work of Lamont–Mills and Christensen (2008), who utilised a discursive psychology framework to analyse the language used by Shane Warne during his first public press statement subsequent to testing positive for hydrochlorothiazide and amiloride. This analysis demonstrated how Warne constructed his statement in a way that described his drug use as being unrelated to performance enhancement, and merely as a single incident that occurred as a result of ignorance and not a deliberate act. These findings emphasise another way in which language can be used to obfuscate the nature of PED use in addition those seen here and in previous work.

7. Attribution of Blame

Analysis of the study data identified the first example in the literature of attribution of blame when rationalising PED use. This mechanism occurs when transgressors feel as they were forcibly provoked to transgress by the victim of the act (Bandura 1991). Its use here was seen when MMA1 described how he felt 'Intimidated by the competition, if your opponent was on them, you'd think, shit…I'm gonna get beat, best get on a level par' (3; 36–37). Given this was a single case it is not known whether this was an isolated occurrence or if this mechanism is used by other athletes. One possibility is that this mechanism is used primarily in combat sports, where the increased potential for physical harm as a result of opponents' perceived PED use may result in athletes feeling provoked into doping so they feel more able to protect themselves. Clearly future research specifically targeting PED users in combat sports is needed to determine the accuracy of this interpretation.

8. Family and Friends

Family and friends relates to who PED users choose to be honest with regarding their PED use, often distinguishing between gym friends, non–gym friends, and family, with only the former group being privy to information on the athletes' PED use (Boardley and Grix 2014). Previously, such distinctions have only been investigated and identified in bodybuilders, but the current findings showed support for their use in other sports too, with all but one of the athletes interviewed describing processes relating to this theme. For instance, when asked who he shared information on his PED use with, AF3 answered, 'Just the people I train with really… we all take them, me and my group of friends, well gym friends… none of the team know I take them, because it would cause tension.' (2; 22–24). Similarly, the response of MMA1 showed similar distinctions

when referring to his family, ‘I’d only ever tell people who use them, I’d never tell my family or like people who didn’t know about them… people just take what they hear on the news and believe it.’ (2; 29–31).

Consistent with the explanation for this theme presented by Boardley and Grix (2014), the latter example suggests athletes may be selective with whom they discuss their PED use with to avoid social censure that could potentially challenge their beliefs regarding the appropriateness of PED use. Bandura (2002) suggests that such social censure of transgressive behaviour can constrain immoral actions by stimulating negative moral emotions such as guilt or shame. Given this possibility, it may be in the interest of PED users to proactively avoid discussing their PED use with people who are likely to respond in such a way that may stimulate such emotional constraints. In support of this possibility, Kirby et al. (2011) reported that the majority of the elite athletes they interviewed described how they had not involved their family and friends in any way when taking to decision to start doping.

Attempts to hide PED use are not always successful though, as non–sport friends or family members sometimes find out. Presently, B1 described such an occurrence when he responded affirmatively when asked whether he had experienced emotions such as guilt or shame due to his PED use:

> Yes I have… My girlfriend… sorry ex–girlfriend, found out I was on them… Her friend died of cocaine and then she sees me taking steroids, a drug which has killed… safe to say… I haven’t seen or spoke to her in a few weeks.’ (3; 28–31).

B1’s acknowledgment that this incident resulted in him experiencing emotions such as guilt and shame supports the possibility that the family and friends theme represents a pre-emptive attempt to avoid the social censure described by Bandura

(2002; see also Boardley et al. 2014). Similarly, elite athletes in Kirby et al.'s (2011) study described how a distressing outcome from their PED use becoming public knowledge (either through a positive test or through public admission of doping) was a resultant loss of personal relationships. These athletes also described how this had not been a potential outcome of doping they had considered when first deliberating whether to use PEDs. Also, 79% of 645 elite athletes from 40 sports surveyed by Overbye, Knudsen, and Pfister (2013) indicated that family/peers disapproval of doping would have a "great effect" as a deterrent against doping, with a further 13% indicating it would have "some effect". Thus, given its potential to deter doping, those implementing anti–doping education programmes may consider including the likely reactions of family and friends in education programmes to increase athletes' awareness of these.

9. Sliding Scale

Sliding scale represents responses describing a process of training supplementation that reflect the initial use of legal supplements, followed by progression to use of PEDs in tablet form, before the eventual use of injectable PEDs ensues. Key boundaries for athletes to cross when progressing along this continuum are the initial use of PEDs as well as the move from oral PED use to that of injectables. This theme is important to consider because although causal links between supplement and PED use have not been established, there is increasing evidence that the two are linked (e.g., Backhouse, Whitaker and Petróczi 2013; Dodge and Jackard 2006; Dunn, Mazanov and Gomathi 2009, Hoffman et al. 2007; Mazanov et al. 2008).

When athletes were asked about a potential link between supplement use and PED use, we again found evidence supporting perceptions of a natural progression from

use of legal supplements to increasingly more serious PED use. For example, when asked whether he thought use of legal supplements and PEDs are linked, AF1 responded, 'I would say they were like a family, supplements are the little babies, whilst performance enhancing drugs are the fathers; you take supplements then when you grow up and learn more, you take performance enhancing drugs' (2, 17–19). This eloquent use of the family unit as an analogy effectively illustrates how this athlete viewed supplement and PED use as being inextricably entwined with one another.

Similar to research with bodybuilders (see Boardley and Grix 2014; Boardley et al. 2014), athletes described how plateaus in training effects were a strong motivator for progression along the sliding scale. This was illustrated effectively in the words of the two swimmers when they commented on whether they thought supplement and PED use were linked, with S1 describing how '…supplements can only get you so far, so once supplements wear off, you take the next best thing.' (2; 16–18) and S2 suggesting 'they are kind of similar yes… I think it's like you use one… wear it out… use another etc.' (1; 49–50). Related to this, interviews with elite athletes have revealed that temporary loss of form can be a potential motivator of PED use (Mazanov et al. 2011). The growing evidence for the sliding scale theme suggests that lack of perceived performance improvement – in addition to loss of previous form – may also be a period of greater potential for adoption of PED use. As such, coordinators of anti–doping education programmes should consider targeting interventions toward athletes experiencing sustained plateaus in performance improvement, as well as those undergoing career instability or acute/chronic injuries (see Kirby et al. 2011; Mazanov et al. 2011).

Just over fifty percent of the athletes interviewed described processes representative of the sliding scale, processes that were remarkably similar to those described previously by bodybuilders (see Boardley and Grix 2014; Boardley et al. 2014). This, alongside the numerous similarities in how athletes from different sport populations morally disengage suggests the possibility of a common environmental link that explains these similarities. Although research to date has not investigated what the nature of this link may be, possibilities include athletes from different sports training in the same gymnasia, being supplied with supplements/PEDs by the same people, and obtaining information on supplement and PED use through similar sources such as the internet. As such, a useful avenue for future research would be to investigate the nature of such environmental influences, and how they may explain similarities in the psychosocial processes observed in PED users from contrasting sports.

10. Routinisation

Routinisation describes how supplement and PED use can be automated through incorporation into athletes' daily routines (Boardley and Grix 2014). Consistent with Boardley et al. (2014), this theme was not widely represented here. In fact, there were only two instances of it, with just one relating to routinisation of PED use. Describing how he used PEDs during the first six weeks of the off–season so 'they would be out my system by the time the season started' (1, 37), BB2 evidenced routinisation when he explained how 'for them six weeks I did it the same every day… I'd go the gym, eat, sleep, take my tablet… you know it was like a lifestyle for me.' (1; 37–39).

Although routinisation of PED use could potentially allow it to occur without conscious thought, the low frequency of its use here – and in the bodybuilders

interviewed by Boardley et al. (2014) – suggests this may not be a particularly important process for many PED users. A potential explanation for this relates to the particular category of PEDs – anabolic steroids – used by the majority of the athletes interviewed here and by Boardley et al. (2014). Given athletes typically administer anabolic steroids in distinct cycles of 6–12 weeks separated by an equivalent period of abstention (see Graham et al., 2008), the lack of a consistent routine may deter the integration of their use into athletes' daily routines. As such, specific investigation of this theme in other sports is warranted to determine whether its frequency differs as a result of different types of PED being more dominant in some sports. For instance, Kirby et al. (2011) identified a "routinisation" subtheme when analysing interview data from four elite cyclists and one elite weightlifter all of whom had doped.

Limitations and Future Directions

Although the current work has contributed important knowledge on psychosocial processes that facilitate PED use in sport, there were inherent limitations in the work that should be considered when interpreting the findings, and serve as possible stimuli for future research. First, although a fairly broad range of team and individual sports were represented in the sample, no single sport was represented by more than three participants. As such, it was not possible to investigate the likelihood of the nuanced application of themes in particular sports. Given this, future researchers may consider investigating the presence of such applications by interviewing a larger number of athletes from single sports. Second, although information on whether participants were current or previous users of PEDs was collected, the relatively small number of participants meant it was not possible to investigate potential differences between

current PED users and those no longer using such substances. Therefore, an interesting avenue for future work would be to strategically sample current and previous users and investigate whether certain themes are more prevalent in the former group compared to the latter.

Third, although the deductive approach to data analysis was appropriate for the stated research aims, a more inductive approach may have identified further themes relevant to the psychosocial processes that facilitate PED use in team and individual sports. As such, future researchers are encouraged to utilise inductive approaches with athletes from these populations to determine whether any further relevant themes emerge. Finally, although the qualitative data presented identifies some clear links between moral disengagement and PED use, it is not possible to establish statistically supported links between these two variables, and therefore establish the strength of any such link. As such, future researchers are encouraged to empirically test some of the findings of the current study by employing quantitative methodologies.

Conclusion

Through analysis of the study data, the stated research aims were successfully achieved. More specifically, when explaining their reasons for doping, PED users from team and individual sports morally disengaged frequently; deductive analysis of these explanations demonstrated the use of all MD mechanisms with the exception of dehumanisation. In addition, the athletes also provided evidence representing the sliding scale, family and friends, and routinisation processes. Finally, thematic count analyses suggested euphemistic labelling, distortion of consequences and family and friends occurred most frequently, both in terms of the number of athletes evidencing

them and the total number of instances.

Previous research investigating similar research questions was limited in that it only investigated these issues with bodybuilders. By extending this work to athletes from a range of team and individual sports, the current study has provided evidence that MD, sliding scale and family and friends may be ubiquitous in PED users, rather than being constrained to a particular physical activity context. This is important because it means that any future interventions aimed at deterring PED use by preventing MD, or ameliorating its detrimental effects, would potentially be suitable for widespread application. Given this, the current findings emphasise the need for expediency in the development of such interventions. This need is further emphasised by the continued pervasiveness of doping in elite sport (see Striegel et al., 2010), and prevalence rates in non–elite adolescent populations that suggest doping may be becoming a public health issue (e.g., Hoffman et al., 2008). By extending current knowledge on the psychosocial processes that facilitate PED use in sport and exercise, we believe the current findings make an important contribution to the collective efforts of researchers working towards the development of interventions aimed at deterring PED use.

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Table 1. Participant Information.

Participant Code	Sport	Location	Type/s of PEDs Used	Current/Past User
AF1	American Football	USA	Anabolic Steroids	Past
AF2	American Football	USA	Human Growth Hormone	Current
AF3	American Football	USA	Anabolic Steroids	Current
A1	Athletics (100m Sprint)	USA	Anabolic Steroids	Current
BB1	Basketball	USA	Anabolic Steroids	Past
BB2	Basketball	USA	Anabolic Steroids	Past
B1	Boxing	UK	Anabolic Steroids	Current
MMA1	Mixed Martial Arts	UK	Anabolic Steroids	Past
R1	Rugby (Union)	UK	Anabolic Steroids	Current
S1	Swimming	USA	Erythropoietin	Past
S2	Swimming	USA	Erythropoietin	Past
W1	Wrestling (Greco Roman)	USA	Anabolic Steroids	Current

Table 2. Thematic Count of Athletes Evidencing the Ten Themes Represented (*N* = 12)

Theme	Number Evidencing Theme	Total Instances	Exemplar Quotes
Moral Justification	4	4	'I blog on a website which gives information on good/bad steroids… I can help people.' (B1, 4; 19–20)
Euphemistic Labelling	12	21	'Juice… it kinda hides the fact that they're frowned upon' (MMA1, 2; 24–27)
Advantageous Comparison	9	14	'....I don't drink or smoke weed....I don't do that. I use them [PEDs] to make myself a better player.' (BB1, 3; 14–15).
Displacement of Responsibility	8	21	'…because it wasn't my idea to take them I feel ok about it… ' (S2, 2; 28)
Diffusion of Responsibility	9	18	'It's like all the top sprinters are on them… Johnson… Tim Montgomery… all the big ones, I just kinda thought to be up there you need to get on it.' (A1, 3; 20–21)
Distortion of Consequences	10	23	I didn't ever see the people I played against as disadvantaged, we've all got testosterone in our bodies, I just had more.' (AF1, 3; 50–51).
Attribution of Blame	1	1	'Intimidated by the competition, if your opponent was on them, you'd think, shit…I'm

			gonna get beat, best get on a level par'. (MMA1, 3; 36–37)
Sliding Scale	7	10	'Supplements weren't getting me to where I wanted … I'm starting to think it's [current steroid] not strong enough, I'm tempted to hit bigger things.' (AF3, 2, 7–9).
Family and Friends	11	17	'I did yes, when in high school, my parents found that I was on them, they found them in my draw, my mom was gutted' (AF1, 3; 10–11).
Routinisation	2	2	'I can't remember not taking it to be fair, it's like a second nature, make my shake, go to bed, then repeat it the next day' (AF1, 1; 24–25)

1

2