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“An important cog in the wheel”, but not the driver: Coaches’ perceptions of their role in
doping prevention

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Abstract

Objectives: Under the World Anti-Doping Code coaches have designated anti-doping roles and responsibilities. Yet, their experiences, opinions and behaviours in relation to these expectations are poorly understood. This study responds directly to this absence of evidence in order to move the field forward.

Design: A qualitative thematic analysis approach.

Method: Twelve football and rugby league coaches, working in a performance development context, took part in semi-structured interviews to explore their (anti-)doping experiences, opinions and behaviours. Nine coaches participated in follow-up interviews where particular attention was paid to existing anti-doping policy directives. All interviews were analysed using inductive thematic analysis.

Results: Coaches were supportive of anti-doping efforts and exerted their influence by monitoring, giving advice and creating the 'right' culture. Performance prioritisation rendered coaches reluctant to engage proactively in addressing anti-doping in their practice; a situation exacerbated by a lack of self-efficacy to advise/act in accordance with the rules. Consequently, coaches tended to rely on others (both internally and externally to their club) to provide anti-doping support, and anti-doping is deemed unnecessary/irrelevant. Critically, coaches' current behaviours were not driven by policy, as they were unaware of expectations and consequences outlined in the Code.

Conclusions: Coaches are willing to support anti-doping efforts, but are generally passive in their everyday practice. The gulf between anti-doping policy and coaching practice raises cause for concern for anti-doping policy makers. To bridge this gap systematic programming of activities designed to ensure coaches are able and willing to take a proactive role in doping prevention is required.

Keywords: anti-doping; coaching; drugs; education; policy; practice

1. Introduction

The use of prohibited substances and methods in sport ('doping') is not restricted to high performance sport; doping is evident at 'lower' levels of competition and at foundational stages of athlete development (see Backhouse, Whitaker, Patterson, Erickson & McKenna, 2016). Consequently, efforts to detect and deter doping continue at pace and in recent years, social science research has played an increasingly prominent role in developing our understanding of the underlying mechanisms associated with doping (Backhouse et al., 2016). Such research indicates that a complex combination of factors can affect athlete doping behaviours (Backhouse, Griffiths & McKenna, 2017). Notably, the focus of research has shifted from a concentration on individual factors (e.g., attitudes and knowledge) to acknowledging the significance of contextual factors (e.g., sport culture, career transitions, injury) (e.g., Smith et al., 2010).

The acceptance of doping as a complex behaviour has highlighted the importance of social and cultural influences on doping in sport (e.g., significant others) (Backhouse et al., 2016). In particular, the coach has been anecdotally, theoretically and empirically verified as a 'significant other' and over many decades has been found to play an instrumental role in a number of doping incidents. This is not surprising given the amount of time coaches and athletes spend together (Jackson, Grove & Beauchamp, 2010) and the mutual interdependence of athletes' and coaches' thoughts, feelings and behaviours (Jowett & Poczwardowski, 2007). This interdependence ranges from covering up and condoning doping behaviour to supplying and administering doping substances (Dubin, 1990; Ungerleider, 2001, McLaren, 2016). On the other hand, coaches have been shown to be a significant protective factor against doping (e.g., Goulet, Valois, Buist & Cote, 2010). For example, athletes have reported that protection from doping is provided through secure attachments to coaches, whereby athletes have trust and confidence in their coach, who is perceived as providing continued support and guidance

(Erickson et al., 2015). Specifically, athletes are inspired to invest effort and commit to their sport – doing so in a drug-free way – in order to repay the coaches for their effort and commitment to them. The protective influence of coaches was also articulated in a study involving five admitted dopers (Kirby, Moran & Guerin, 2011), as one of the dopers described his coach as an important factor in why he had remained drug free for so long. In particular, the athlete had been influenced by the coach's 'anti-drugs' attitude and his beliefs that doping was not necessary, with the authors concluding that the coach was acting as a positive role model and mentor. However, the athlete went on to say that when they moved into a new training group with a new coach they began to dope almost immediately; bringing both the protective and injurious impact of the coach on doping into sharp focus.

Coach influence has been formally recognised in global anti-doping and coaching policy. For example, it is explicit in the World Anti-Doping Code (WADC, Article 21.2) (WADA, 2015) and reinforced in the International Sport Coaching Framework (ISCF) (ICCE, ASOIF & LMU, 2013). In both cases, coaches are expected to comply with anti-doping regulations and foster anti-doping attitudes among their athletes. Though, the policy document offers little explanation as to how coaches might do so. It is made clear that coaches are subject to sanctions if they engage in behaviours that violate anti-doping policy, such as assisting, encouraging, aiding, abetting or covering up the use of prohibited substances or methods, as well as use, possession, administration, attempted administration, trafficking or attempted trafficking of prohibited substances or methods (WADA, 2015). In the UK, these rules were recently applied in the case of coach George Skafidas, who received a lifetime ban for committing nine anti-doping rule violations (ADRVs) including possession, trafficking, administering and tampering (through provision of false information and intervening a letter addressed to one of his athletes regarding anti-doping proceedings) (*UK Anti-Doping vs Skafidas NADP Decision 392*, 2016).

In view of the expectations outlined in both coaching and anti-doping policy, it is imperative that we develop our understanding of the doping-related interactions that take place between coaches and sportspeople. While some studies conclude that the majority of coaches discuss doping (Engelberg, Moston & Blank, 2017), including the negative health effects (Vankhaldo & Planida, 2013), with their athletes, studies also suggest that doping-related interactions are infrequent (Laure, Thouvenin & Lecerf, 2001; Mazanov, Backhouse, Connor, Hemphill & Quirk, 2014) (i.e., two to three times per year; Engelberg et al., 2017). While the evidence base regarding coaches and their doping-related attitudes and knowledge has grown over the past ten years (see Backhouse, McKenna Robinson & Atkin, 2007 and Backhouse et al., 2016), the focus of research has been on examining coaches' doping-related attitudes and knowledge. This has led to the conclusion that coaches have anti-doping attitudes (e.g., Sajber, Rodek, Escalante, Olujić & Sekulic, 2013; Allen, Morris, Dimeo & Robinson, 2017; Engelberg & Moston, 2016) and acknowledge their influence in doping prevention (e.g., Laure et al., 2001; Judge, Bellar, Petersen, Gilreath & Wanless, 2010; Nicholls, Perry, Levy & Thompson, 2015). However, they have, or perceive themselves to have, only low to average knowledge of doping-related topics (e.g., Mazanov et al., 2014; Rodek, Sekulic & Kondric, 2012; Vankhaldo & Planida, 2013).

Currently there is little understanding of what coaches do (i.e., their behaviours) and why they do it (i.e., reasons/influences) in the context of doping prevention. Most recently, Allen and colleagues (2017) found that Scottish high-performance coaches could be categorised as those who appreciate the issue of doping (n=6) and those who do not see doping as a problem (n=17). The coaches who do not see doping as a problem rationalised this view through a belief that their athletes were 'safe', and this perception elicited a degree of complacency. However, the threat of inadvertent doping (i.e., through the use of medications and nutritional supplements) was acknowledged by all coaches. Allen et al. (2017) noted that

the coaches' role in doping prevention was influenced by a number of individual (e.g., clean sport values and knowledge) and situational (e.g., Scottish/British sporting culture and perceived potential for athletes to benefit from doping) factors.

These insights serve as a solid foundation for developing a greater understanding of coaches' roles in doping prevention. Yet, there remains an urgent need to increase research efforts with coaches in order to gain a more nuanced and in-depth understanding of the nature of their interactions with sportspeople. Specifically, who is involved, how frequently exchanges occur, and with what intentions and impact on future behaviours. Such research will assist in the development of evidence-informed interventions that are targeted at coaches, and tailored towards their needs (Backhouse & McKenna, 2012). Therefore, the purpose of the present study was to give a voice to this key group of support personnel by exploring coaches' roles in anti-doping, including what behaviours they undertake and what factors influence these behaviours. With regard to influential factors, the current study specifically explored coaches' awareness and fulfilment of global anti-doping roles and responsibilities under the World Anti-Doping Code in order to elicit how policy impacts practice in this domain.

2. Method

2.1 Philosophical underpinnings

Situated within an interpretive paradigm, this study was informed by our relativist ontology and constructionist epistemology (Sparkes & Smith, 2014). We align with the view that reality is socially and experientially influenced and shaped; through the research process the findings are co-created through our interactions with the coaches participating in the study (Guba & Lincoln, 1994). As reflexive researcher-practitioners, the dynamics of this relationship is informed by our autobiographies, values and beliefs. In addition to researching doping in sport from multiple stakeholder perspectives for well over a decade, both authors are

involved in the design and delivery of anti-doping education. Therefore, they engage with coaches on a regular basis and have the lived experience of applying current anti-doping rules and regulations in practice. They have also carried out doping control at several major sporting events and this has given them insights into the broader anti-doping system and its impact on stakeholders. The reflexivity of this research team is also enriched by their athletic histories. For XX this includes past relationships with an athlete who served a period of ineligibility from their sport due to doping, and a personal coach who routinely professed that you cannot succeed in sport at the highest levels without doping.

2.2 Participants

Twelve coaches from Football (n=6) and Rugby League (n=6) were recruited via purposeful sampling. They worked in academies and scholarship programmes of professional/semi-professional clubs, representing the top three domestic leagues in England (e.g., Super League to Championship 1 in Rugby League and Premier League to League 1 in Football). Therefore, coaches worked with players aged 15 to 23 years who were “emerging” due to their increased commitment to one sport (ICCE & ASOIF, 2012). Sportspeople within this domain are likely going through key stages of moral development (Damon, 2004) and may be vulnerable to doping due to wanting to progress to high-performance sport (e.g., Mazanov, Huybers & Connor, 2011; Whitaker, Long, Petroczi & Backhouse, 2014). Furthermore, coaches from Football and Rugby League were targeted because both sports featured in the top three sports for ADRVs in the UK at the time of conducting the study. Therefore, it was anticipated that coaches working in this context (i.e., these sports, at this stage of athlete development/level of competition) might be experiencing doping-related interactions in their practice and/or might be more likely to be undertaking actions to prevent doping; thus, they would be well-positioned to offer insights relevant to the study aim of exploring coaches’ roles

in anti-doping, including what behaviours they undertake and what factors influence these behaviours, in line with the purposeful sampling approach.

All coaches were male and aged between 27 and 54 years. Coaches' experience ranged from being in their first season to 15+ years. All coaches held or were working towards coaching qualifications equivalent to UKCC Level 2 or above. Specifically, Football coaches held or were currently working towards UEFA A ($n=4$) and Pro Licences ($n=2$) and Rugby League coaches held ($n=5$) or were working towards ($n=1$) Level 2 certificates. The terms of the Rugby League coaches' current coaching positions varied between part-time volunteering or hourly paid, whereas all Football coaches were full-time and receiving salaries. Due to the range of coaching positions, the coaches spent between 2 and 30+ hours per week engaged in activities related to coaching. Taken together, the demographic data indicates heterogeneity across the coaches in the sample, particularly in terms of their age, stage of coaching career, and time devoted to coaching each week.

2.3 Procedures

Following institutional ethical approval, participants were given an information sheet and signed a consent form prior to taking part in individual semi-structured interviews. They were assured of their anonymity in the study and advised that their individual comments would not be linked to their sport specifically. This approach has been used in previous research in this domain (e.g., Smith et al., 2010; Kirby et al., 2011; Allen et al, 2017) to encourage participants to respond honestly and protect participant identities. Therefore, data is collectively represented and pseudonyms have been used throughout

2.3.1 Interview details

Coaches' roles in anti-doping efforts were explored during *two phases* of individual semi-structured interviews. Interviews are a valuable tool to elicit rich and detailed insights into individual's experiences and perceptions (Smith & Sparkes, 2016) and enable in-depth, contextualised, *why* and *how* of coach opinions and behaviours, as opposed to only the *what* (Potrac, Brewer, Jones, Armour & Hoff, 2000; Patton, 2002). A semi-structured approach ensured the exploration of all relevant topics with each coach (Sparkes & Smith, 2014), while also allowing flexibility for each interview to take on 'a life of [its] own' (Hardie, Shilbury, Ware & Bozzi, 2010), including the researcher asking unplanned questions to gain unanticipated insights (Smith & Sparkes, 2016).

Nine (of the original 12) coaches took part in follow-up interviews (n=5 coaches from Rugby League and n=4 from Football), affording coaches the time to reflect on what has already been told and build upon the rapport that has already been developed (Josselson, 2013). This approach serves to clarify and expand upon the coaches' descriptions to gain full, rich and unrestrained accounts of experiences with depth and breadth beyond surface-level reflections (Polkinghorne, 2005). The two interviews were conducted between 7 and 14 months apart, depending on coach availability (with 7/9 conducted within 11 months and 2/9 conducted at 14 months).

Guides for the two phases of interviewing were developed on separate occasions but through the same step-wise process of engagement with existing literature and policy documents (e.g., WADC, 2015), reduction/refinement of questions, and structuring/theming/ordering (Smith & Sparkes, 2016). Interviews began with a discussion of the coach's background, including past coaching experience (first interview only) and current coaching position. This discussion enabled the interviewer to verify that participants worked with emerging sportspeople, helped build rapport and trust from the outset (Patton, 2002), and gave context to the subsequent discussions. During first interviews, the focus was on asking

participants to consider their experiences (e.g., *Do players come to you to talk about or for advice about doping-related topics?*), opinions (e.g., *Do you have a part to play in working with players on doping-related topics?*) and behaviours (*What do you do in your every-day coaching practice?*) related to anti-doping. Scenarios were also used as a projection technique as they required participants to consider their feelings, opinions and possible behaviours (e.g., what might/will you do?) in relation to hypothetical future events. All participants were presented with three scenarios, which involved 1) a player's curiosity about supplements and other substances to enhance recovery from injury, 2) individuals raising suspicions of others doping, and 3) an individual admitting doping. The scenarios were informed by the limited published research regarding the nature of coaches' doping-related interactions with their athletes (Laure, Thouvenin & Lecerf, 2001; Ozbek, 2013) and previous unpublished work by the authors. Taken together, the three scenarios represent escalating degrees of player doping involvement in order to see if this impacted the coaches' responses.

Based on insights from the first interviews, the second interviews paid particular attention to exploring 1) if, and how, coaches *proactively* prevent doping in their environment, 2) coaches' awareness and fulfilment of existing anti-doping policy directives, and 3) coaches' broader approach to player development and 'off-field issues' (e.g., gambling, racism). To facilitate the exploration of policy, coaches were presented with a printed copy of Article 21.2 of the WADC (WADA, 2015), which lists their roles and responsibilities to: 1) use their influence on athlete values and behaviour to foster anti-doping attitudes, 2) be knowledgeable of, and comply with, all anti-doping policies and rules applicable to them or their athletes, 3) cooperate with testing/doping control procedures, 4) cooperate with doping-related investigations, 5) refrain from personal use of banned substances, and 6) inform sporting and anti-doping organisations of any involvement in doping behaviours within sports that are not signatories of the Code. Coaches were asked if they were aware of these expectations, if and

how they were currently meeting them in their every-day coaching practice, what they thought they might/could do to meet them in the future, and what their opinions of the expectations were (i.e., were they appropriate).

2.4 Data analysis

First interviews lasted between 31 and 84 minutes ($M=49.93$, $SD=16.74$) and second interviews lasted between 31 and 126 minutes ($M=80.9$, $SD=30.9$). Subject to the consent of participants, all interviews were digitally recorded to facilitate verbatim transcription. Prior to analysis each coach was asked to review an emailed copy of their transcript(s) for accuracy and to advise if they wished to remove their data from the study (Patton, 2002). Inductive Thematic Analysis (Braun & Clarke, 2006; Braun, Clarke & Weate, 2016) was used to examine the data during both phases of interviewing. It is important to highlight that the process of thematic analysis described here may seem relatively linear (i.e., Step 1, Step 2, Step 3). However, the analysis undertaken was complex, and ‘recursive’ (Braun, Clarke & Weate, 2016, p. 196).

The six-stage thematic analysis process began with familiarisation to ensure that the lead author was immersed in the data and fully understood each case; this involved listening to the audio recordings, transcribing these into written documents (transcripts), checking these documents against the audio recordings, reading and re-reading the final transcripts, and making brief notes of ideas that this familiarisation process had prompted related to the research aims (Stage 1). The next stage (2) consisted of generating initial codes through open coding each interview transcript. Specifically, descriptive labels (i.e., codes) were added to segments of text that were deemed relevant to the research aims (i.e., what coaches do and why they do it). Coding of each transcript was repeated twice, with both semantic and latent coding included in both rounds (though, latent codes were often identified in the second round).

After the second round of coding, all codes from all transcripts were collated. In Stages 3 and 4, codes were grouped into themes. This process involved the researcher identifying patterns in the codes, including ‘clusters’ where several codes appeared to represent the same or similar concepts. The findings were discussed in-depth with the second author at this stage. In line with the ontological relativist perspective, the researchers were ever-mindful that realities are multiple and subjective – meaning that the coaches’ perceptions and experiences were likely to be diverse. Thus, the researchers were focused on looking to identify patterns in the data that represented contrasting findings, not just consensus. Additionally, in line with the constructionist epistemology, the researchers actively created the themes by drawing upon their personal autobiographies and interpretation of the coach accounts. Thus, the themes did not ‘emerge’ from the data (Braun, Clarke & Weate, 2016). By the end of this stage, the researchers had developed two themes (1: Supportive of anti-doping efforts, 2: But not keen to lead them); each comprising several subthemes. Adopting this two-tier thematic structure enabled a diverse range of ideas related to each theme to be captured.

In Stage 4, each interview transcript was reviewed against the codes, sub-themes and themes. The volume and complexity of the dataset led to the researchers going back and forth between the transcripts and the thematic map for some time. This resulted in a decision being made to create a third theme (Anti-doping policy: limited reach and impact), whereby data related to policy was separated from the factors underpinning coaches’ opinions and behaviours (Theme 2). Although the policy-related data interconnects with the other two themes, a more coherent and compelling story of coaches’ anti-doping roles - and the factors that influence their roles – could be offered through the formation of a third theme. Providing a concise, coherent and interesting account was emphasised as vital by Braun, Clarke and Weate (2016).

Stages 5 and 6 consisted of final findings being summarised in a ‘thematic map’ and the analytic narrative presented in this publication being written. During this process, the names

of themes and subthemes were identified, with compelling quotations being used for these where possible. In this vein, the inclusion of quotations has been prioritised throughout the narrative, with excerpts being used for both illustrative and analytical purposes. It should be noted that the second author played a pivotal role in ‘challenging’ the thematic structure, shaping the narrative within each theme, and selecting rich quotes to represent and illustrate the sub-themes.

2.5 Research Quality

Given our interpretivist philosophical position, reflexivity is crucial to the quality of the study and we acknowledge our influence on the study from start to finish. Specifically, our assumptions, knowledge, skills and experiences led us to devise the research aim, ask the particular questions that were asked during the first interviews, reflect on the first interviews and identify areas of interest (and develop questions) for the second interviews, and create and interpret the themes (including in relation to existing research evidence) the way we did during the analysis process and writing of this paper. Throughout the study, the researchers paid close attention to how their own thoughts, feelings and behaviours were impacting the research process. This reflexivity was very helpful during the period between the two interviews, when the first author (who conducted all interviews) had the time and space to reflect on the data and question the initial interpretations. In particular, some of the initial findings from the first interviews had been unexpected (such as the passivity shown by coaches towards the issue) and this challenged the first author’s preconceptions about the anti-doping roles that coaches might undertake. Building on this, the second interviews provided an opportunity for the researchers’ initial interpretations of the data from the first interviews to be checked and challenged (i.e., corroborated or contradicted).

In line with contemporary views of enhancing the quality of qualitative research (e.g., Smith & McGannon, 2017), conversations with ‘critical friends’ were prioritised. Throughout the study, the lead author was repeatedly prompted by the second author to be reflexive (as described above) and regularly challenged the interpretations of the data. A second critical friend, who was not involved in the study but was knowledgeable of the anti-doping field and was a retired coach, read an early draft of this paper and concluded that the interpretations resonated and offered a coherent narrative. Lastly, the lead author presented this work at an internal event attended by staff and post-graduate students from a number of disciplines (e.g., sport and exercise psychology, nutrition and coaching) and external stakeholders (e.g., coaches, coach educators, anti-doping educators). This provided an opportunity for the lead author to share the research findings by constructing, delivering and ‘defending’ a coherent narrative and engage in ‘critical dialogue’ with the audience. This engagement with a wider audience again implied that the interpretations were seen as plausible and coherent.

It should be noted that the researchers do not advocate the use of universal criteria to judge the quality of this study. Instead, the reader is encouraged to consider a time-, place- and purpose-contingent list of criteria (Sparkes & Smith, 2014). This is a relativist approach, where ‘evaluative criteria should be study specific’ (Sparkes & Smith, 2014, p. 334). In conducting the study, we aimed to gain an understanding of what coaches do and why they do it and we placed considerable importance on honouring the stakeholder insights, i.e., we prioritised giving a voice to coaches on the front-line. We feel we achieved this and enhanced the quality (e.g., width, credibility, rich rigour and coherence) of the research by (a) sampling from a group of coaches who were able to provide meaningful insights appropriate to the purpose of the study, (b) conducting two interviews which increased the time spent with each coach, giving them greater opportunity to communicate their perspectives and enabling the relationship between the coach and the interviewer to develop (including greater trust and rapport), (c)

adopting an inductive approach to analysis which allowed the data to drive the thematic structure and participants' own words are utilised as sub-themes where possible, and (d) conducting the research in a manner that considered, and addressed, the checklist for "good" thematic analysis by Braun and Clarke (2006) and Braun, Clarke and Weate (2016). Beyond this, we wish to highlight the study's worthiness, satisfied by the relevance, timeliness and significance of the findings relative to recent allegations of coach involvement in doping (e.g., systemic doping in Russia) and substantive contribution, as the findings extend knowledge and the thick descriptions will serve to stimulate future research. We acknowledge that other qualitative researchers may adopt differing criteria when reflecting on the quality of our work and their own.

3. Findings

The purpose of the study was to explore coaches' anti-doping roles, including what coaches do and why they do it. Although it was difficult to portray the complex and dynamic nature of the coaches' accounts in a single illustration, Figure 1 shows the themes and sub-themes constructed through the inductive thematic analysis. In brief, it captures the essence of the conversations in which coaches professed that they are supportive of anti-doping efforts, but are not keen to lead them.

The first theme represents the coaches' declared anti-doping attitudes and acknowledgement of their position of influence in players' lives. It also encompasses their description of how they exert their influence by undertaking a number of behaviours, namely monitoring players, giving advice and role-modelling. These behaviours have been interpreted in relation to a dynamic environment that drives reactive responses that are passive and indirect nature. We also situate them in the coaches' general approach to player development.

The second theme brings to the fore several individual and environmental factors that were interpreted as influencing coaches' opinions and behaviours. These include: 1) prioritisation of performance-related development, 2) low self-efficacy to work with players on doping-related matters, 3) diffusion of responsibility to colleagues or external partners to take the lead on anti-doping, and 4) lack of buy-in to the importance of anti-doping action. The latter perspective appears to have been driven by two fundamental assumptions made by the coaches; that their players already know about anti-doping and that doping does not happen in their specific environment. Arguably, these assumptions threaten the pursuit of doping-free sport as they point to a wilfully blind community, motivated to protect their players and their sport from the negative stigma that comes from doping in sport.

Building from themes one and two, the final theme calls into question the reach and impact of current anti-doping policy on practice. Coaches in this study reported a lack of formal role-related guidance and it was determined that they did not fulfil all their anti-doping policy-prescribed responsibilities. On the contrary, some coaches proposed acting in ways that could violate anti-doping rules when faced with doping-related scenarios. Moreover, it became apparent that coaches were becoming aware of their anti-doping roles and responsibilities for the first time through the interview process. This learning experience initiated a process of reflection and coaches concluded that, despite this acquired knowledge, they were unlikely to change their behaviours to align with the policy-based expectations in the future. As a direct challenge to current anti-doping policy and practice, coaches asserted that whilst the roles and responsibilities are reasonable, they are not realistic (based on the influencing factors described in theme 2). In drawing this conclusion, it should be noted that the coaches age/experience, employment status (part-time/full-time, paid/volunteer) and the number of hours they devoted to coaching each week created no obvious effect on the coaches' anti-doping behaviours and influencing factors.

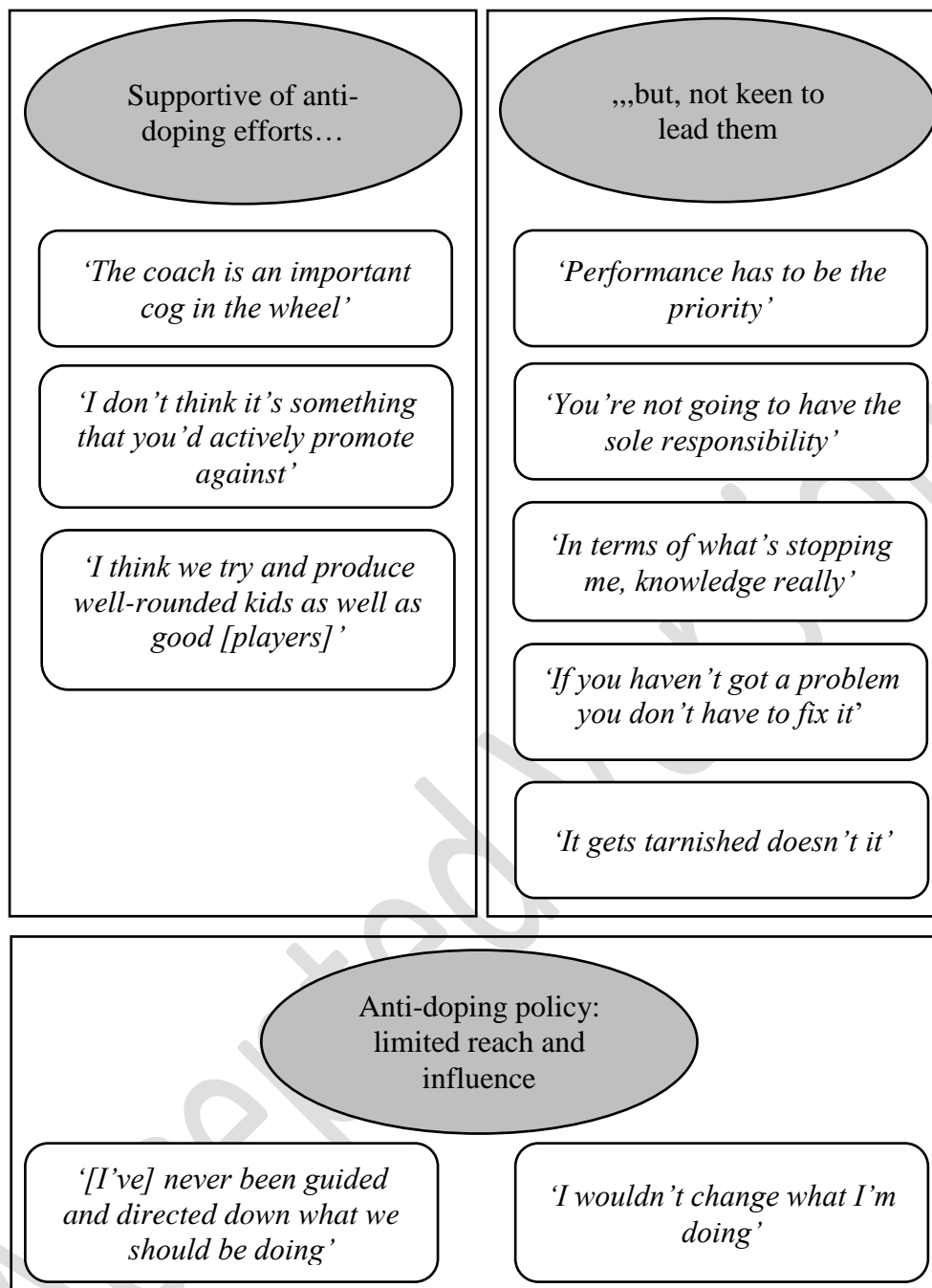


Figure 1. Thematic map, wherein shaded ovals represent the three main themes and rounded rectangles represent the sub-themes contributing to these themes.

3.1 Supportive of anti-doping efforts

'The coach is an important cog in the wheel'

The majority of coaches expressed anti-doping views, describing doping as *'bad'*, *'unfair'* and/or *'wrong'*. Most coaches also believed they have a part to play in anti-doping

efforts, with one coach remarking that the coach is *'an important cog in the wheel'* (Lucas). He and a number of coaches suggested that *'coaches do have an important role to play'* because a coach is the person *'that players look up to and they will listen to'* (Ben). Coaches explained that players listen to their coach because they are *'the people who are in charge'* (Jack) and this was reinforced by Lucas when he says *"I'm the one who picks the team, so I'm the one they listen to the most. Not because I'm more important, but just because I'm the one who picks the team..."* However, when asked if they play a part in anti-doping efforts a number of coaches initially stated that they did not. Sam said *'Is it our job to do it? To speak to them and advise them? I don't think it is'*. Yet, he added *'but certainly know where to send them and to support them is our job yeah'*.

For all coaches, whether they did or did not explicitly identify themselves as having a role to play in anti-doping efforts, consensus emerged in terms of the actions they would be willing to undertake. These actions were framed by their position as vigilant observers of behaviour and being able to recognise when players were not themselves. In turn, coaches felt well placed to give advice and monitor players. Steve explained:

I think I'm pretty good at spotting when something's up with somebody. I might not necessarily know what it is straight away, but I think I can tell when something's not right and I'm not scared to pull somebody to the side and say.

With regard to giving advice, Hugo said *'If there was a comment you might say something back'* and Sam stated *'If they come to us and ask questions we give them the correct answers'*. In particular, coaches reported giving advice in relation to nutrition and supplements. This creates a potential doping risk as, generally speaking, coaches are not registered nutritionists and dieticians. Therefore, they may not be qualified to offer advice on this topic

when asked for it by their players and any advice offered could be misguided. William recalled *‘I’ve been approached about nutritional advice, which I’m happy to give because I think I’m quite up on that...I mean, nutritional conversations we have’*. Similarly, Ben said *‘You speak with them regularly, you know, you question them about their diet and are they doing the right things’*. In addition to requests for nutritional advice, coaches reported that doping-related conversations with players or other staff are often about medications. Noah explained *‘it comes up when people are ill. “Oh be careful what you’re taking”’*. Several of the coaches drew particular attention to cold remedies, with Lucas commenting *‘What we get questions about is some of the substances in things like Lemsips, etc’*. These routine approaches serve to reinforce the importance of supporting the coaching community to not only be fully cognisant of the risks associated with supplement and medication use, but also feel confident in guiding players towards a food first approach and seeking support from qualified health care professionals.

‘I don’t think it’s something that you’d actively promote against’

Coaches’ anti-doping behaviours were typically discussed as an acute reaction to a situation arising and several coaches admitted that they do not outwardly promote anti-doping messages. Hugo said *‘I don’t think it’s something that you’d actively promote against anyway...It’s not like I’d walk round with a t-shirt on saying “don’t take drugs” in the gym’*. Our interpretation of the evidence led us to conclude that coaches reported approaching other ‘undesirable’ behaviours (e.g., racism, gambling) in a similarly reactive way. William commented *‘It’d just be one of those things that if and when it raises its head it gets dealt with straight away’* and Daniel remarked *‘I don’t think there’s any of them [from the list of ‘undesirable’ behaviours] that are kind of tackled directly before anything happens’*. These findings were noteworthy in light of the assertion by almost all coaches that *‘(doping) rarely comes up’* (Noah).

For us, the indirect influence that coaches assumed they were having on players' anti-doping values and behaviours was striking. Daniel illustrates this point when he says:

I think that's done not massively overtly, but just in the general kind of conduct and behaviour of, it's made explicit that there's a right way to behave and a wrong way to behave.

One aspect of this indirect influence related to coaches openly communicating with players about their performance and development. Oliver said *'I think what you try and do is you try to be as fair and as honest and as open with them as you can'*. Hugo also explained *'It's getting them to understand that, you know, they should be, you know, developing their performance in a safe and ethical way'*. A number of coaches also drew particular attention to *'promoting the right lifestyle for these players'* (Ryan) and giving the players *'a bit of advice on lifestyle'* (Ben), including *'eating the rights things, drinking at the right time, having the right rest'* (Oliver).

'I think we try and produce well-rounded kids as well as good [players]'

Building on our interpretation that coaches' anti-doping behaviours are indirect – and passive – coaches stressed the importance of creating a club/team environment where behavioural expectations and values are clear. Ben commented *'It's very important, especially as a coach, you're creating a culture with young people and young players coming through'*. Across the group, the coaches reported that they worked on a multitude of areas, including players' respect, honesty, patience, good manners, positive work ethic, open-mindedness, humility/humbleness and grace in defeat. Noah said *'We want them to be happy, shake hands with people, say hello, look you in the eye. We want them to be decent people, help around the*

house, tidying up. *We want good, honest people*'. Indeed, coaches said that they took an interest in, helped with, and prepared individuals for life outside of the club/sport. This included encouraging the players to take responsibility, be punctual, be prepared and make good decisions. A few coaches specifically commented that they adopted an '*holistic approach*' (Jack) and worked to develop '*rounded individuals*' (Oliver). Ryan commented:

Well in terms of sort of making people prepared for society really. So, making sure that they understand how to be a good person, so everything away from [sport]...I think in sort of everything you do you sort of try and discipline the players in the rights and wrongs – and that's across the board, not [just] lifestyle and everything else, but trying to get them to work hard and everything else. You're trying to teach them right and wrong really, just like any parent does.

However, it was apparent that some of the coaches found it difficult to articulate how they achieved this type of holistic player development in their practice. As an example of this, Lucas struggles to articulate the process of doping prevention:

I wouldn't quite know how to quantify it...We have certain values at this club and I have certain personal values and I think that if you spoke to any of our kids about me they would know what my thoughts on that (doping) were because of my personal values and how we speak over a period of time...we have got a reputation of fair play. And I think that goes with everything...I think [it] leads to off the [field of play] as well...I think we try and produce well-rounded kids as well as good [players]. But I have to say, without particularly being specific towards that (doping)...I think you can use it as a get out to say, "we do it", "it just happens". I can almost hear myself saying it, but I

524 *can genuinely hand on heart say here it isn't. It's a bit like a bubble here, "it's a special*
 525 *place" and all that, but it is. I think most of that comes from not what you can see if*
 526 *that makes sense. I'm not trying to make some mythical magical thing, but it's a bit like*
 527 *the ingredients, the environment, everything is, I think the values and how that, we do*
 528 *not sit down at any point and say "right twice a year we'll have a thing with the kids*
 529 *when we talk to them about this (doping)". We don't.*

530
 531 Although coaches found it difficult to articulate the way they prevent doping, or other
 532 'undesirable' behaviours, through the culture they create, several coaches described setting out
 533 their expectations (often at the start of the season), monitoring behaviour, and disciplining the
 534 players if they compromised these expected standards. Jack said '[you] make them aware that
 535 taking, sort of, performance enhancing drugs and, you know, recreational drugs and
 536 supplements, you know, are not the done thing'. Beyond this, the coaches also discussed
 537 encouraging the 'right' behaviours in players through their own behaviours by 'setting an
 538 example to the kids' (Noah):

539
 540 *I suppose the role models thing [is] big on this. So, the fact that like, I mean, if we*
 541 *turned up and we looked like we'd been on recreational drugs the night before, or sort*
 542 *of looked hungover or whatever, then it wouldn't send the right message to the players*
 543 *really. So, the fact that we're always prepared properly and living the right lifestyle*
 544 *ourselves hopefully that would rub off on them a little bit. (Ryan)*

545
 546 Although several coaches discussed 'holistic' player development as involving life
 547 beyond sport (i.e., the whole person) and referred to the 'complete player' (Alex), many of the

548 coaches seemed predominantly concerned with player development aligned to match
549 performance:

550

551 *If you get good people they tend to be better performers. You want people that are going*
552 *to work hard. You want people who are well-mannered. You want people who show*
553 *respect...if you develop good people, then you've got half a chance at developing a*
554 *good player...our job basically is to produce players for our first team that we can, that*
555 *our first team can sell on...So, we're trying to produce the complete player. (Lucas)*

556

557 *3.2...not keen to lead them [anti-doping efforts]*

558 *'Performance has to be the priority'*

559 Despite being generally supportive of anti-doping efforts, some coaches stated that
560 purposely working on 'off-field' behaviours such as anti-doping, gambling and racism was not
561 an essential part of their remit. Noah commented *'I don't see it as my department. And if it is*
562 *in my contract then I'd have to hold my hands up'*. Similarly, Hugo said that coaches *'are not*
563 *there to deal with these other issues...they're there to coach [sport]'*. Several coaches stated
564 that their focus must be on *'the performance side of things'* (Ben). Corroborating this, a number
565 of the coaches highlighted that they would only work on undesirable 'off field' behaviours if
566 they thought they were negatively affecting their players' performances. Otherwise, coaches
567 suggested that their time was better spent on other 'more relevant' matters. Lucas remarked:

568

569 *We only get so many hours so performance has to be the priority...Our thoughts are*
570 *constantly about improving players and producing players and that is a, believe me is*
571 *a 24/7, 7 days a week, 365 days a year drug in itself. So, this other stuff, although it's*
572 *there and it's, then I have to say it is secondary in our thoughts.*

573

574 *'You're not going to have the sole responsibility'*

575 Coaches demonstrated a strong desire to share, and in some instances diffuse,
 576 responsibility for anti-doping with/to others. Discussing their internal support network (i.e.,
 577 within their club), all but one coach (who had only one other member of staff in his club)
 578 reported that they would seek support from other individuals if they ever faced a doping-
 579 dilemma. William said he would prefer *'to make a group decision. You know, you're not going*
 580 *to have the sole responsibility of what effects might happen for that player on your shoulders.*
 581 *You kind of acted as a team'*. In response to hypothetical scenarios, including being approached
 582 by a player who was struggling to recover from an injury and becoming curious about
 583 supplements and substances, coaches would turn to 'medical staff' in the first instance. When
 584 medical staff were not available, coaches turned to sports scientists and strength and
 585 conditioning coaches. In the event of a player reporting suspicions that another player is doping
 586 and a player admitting that they are doping themselves, coaches would turn to welfare/child
 587 protection officers or their superior (generally the academy or scholarship manager). Indeed,
 588 common to all the hypothetical scenarios, several coaches commented that they would 'pass
 589 the buck' or seek support from someone who was *'senior'*, an *'authority'* and/or *'higher in the*
 590 *chain of command'*. Our interpretation of the risk in this situation is that no one takes
 591 responsibility for addressing the doping behaviour and consequently doping persists.

592 Beyond authority figures, we found that coaches turned to individuals whom they
 593 perceived as having more expertise/knowledge. For instance, Alex commented *'I don't know*
 594 *everything that's on the banned substance list...if a player comes up and says "am I alright*
 595 *taking this?" [I'll] send them to the doctor because the doctor will know'*. It was not surprising
 596 then when asked if they played a part in educating their players, coaches described how they
 597 drew on 'specialists' from outside their club. For instance, Oliver shared:

598

599 *We leave [it] to the professional people that come in. You know, the advice that they*
 600 *pass on or impart to the players. Erm, so I mean that side of it, you know, we're aware*
 601 *of it, you know, we're aware that it's under control and everything like that, but we*
 602 *basically leave it to the professional people that come in...really it is a field that's like*
 603 *for experts.*

604

605 For the first time this study highlights important barriers to engagement in doping
 606 prevention by this influential stakeholder group. Under this sub-theme the coaches we spoke
 607 to perceived that anti-doping is a field for experts and they did not see themselves as that.

608

609 *'In terms of what's stopping me, knowledge really'*

610 Coaches' behaviours were driven by a perceived lack of anti-doping knowledge and
 611 low self-efficacy to partake in (anti)doping conversations. Hugo said *'It's that extra pressure*
 612 *of having to deal with something they [coaches] are not sure about'*. Further explaining their
 613 reservations, coaches reported concerns about giving incorrect information/guidance, as
 614 illustrated by Ryan, *'In terms of what's stopping me, knowledge really...I would maybe feel*
 615 *more comfortable that we get somebody, an expert, in and come and speak to the players*
 616 *rather than me doing it...just in case what we're saying is not quite right'*. A similar fear of
 617 'getting it wrong' was evident in William's analysis of the issue, and served to highlight
 618 another barrier to engagement in doping prevention:

619

620 *I mean if you are in a shop and you sell them the wrong thing they can return it, but if*
 621 *I advise somebody the wrong thing that they can take and they ultimately get banned*
 622 *for two years, you're probably to blame for their entire career, that's the thing. I think*

623 *that any coach would be the same, they would be wary of giving that advice...I think*
 624 *that people probably just think "I'd rather not say anything".*

625
 626 *'If you haven't got a problem you don't have to fix it'*

627 The coaches' anti-doping actions (or lack thereof) seemed to be strongly influenced by
 628 how likely they believed it was that their players would dope. Most coaches stated that doping
 629 did not, and was unlikely to, occur in their current environment, and this framed the relevance
 630 of the issue. For example, William stated '*Certainly not with the group I work with*'. Other
 631 coaches were less assertive, but still suggested that doping was not prevalent, or likely, in their
 632 environment. Jack said '*I'm sort of pretty confident in saying that it doesn't happen at this club*
 633 *anyway*' and Steve indicated '*I'll be honest with you, maybe beforehand, possibly, but this*
 634 *group, no*'.

635 The coaches' perceptions of doping prevalence and relevance are important because
 636 they factored into coaches' decisions to explicitly address doping and other off-field
 637 behaviours. For instance, Daniel said '*It doesn't feel like there's a need to [work on any 'off-*
 638 *field' behaviours] because it's kind of a well-disciplined group...I think the performers are old*
 639 *enough to realise that it's not something that we would support*'. Similarly, Hugo stated '*the*
 640 *players know right and wrong*' and Lucas corroborated this view:

641
 642 *I don't think it's (anti-doping) particularly relevant for [sport]... [Anti-doping is] a*
 643 *small drop in what we do on a day to day basis, that's what it is. It is a small drop in*
 644 *it, and for that day it might be that you think about it. To make it influence your day-to-*
 645 *day workings I suppose the obvious thought is – if you haven't got a problem you don't*
 646 *have to fix it. Now that is what, if I was speaking to you in a pub and we were having a*

647 *chat, that's what I'd say to you. We haven't got a problem with [club], I haven't got to*
 648 *do anything...until somebody comes to me and says "look there's, this is happening".*

649
 650 Through the interview process it was apparent that coaches consistently deflected the
 651 issue of doping onto other environments. Firstly, they proposed that *'in team sports it's not*
 652 *necessarily as big an issue as it probably is in more individual sports'* (Hugo), with cycling
 653 and athletics being the sports most frequently identified as high risk. Secondly, some coaches
 654 were willing to acknowledge that doping had occurred in their sport, but they asserted that such
 655 behaviours *'happened in the past'* (Noah) or deflected the issue onto *'the amateur game'*
 656 (Hugo). However, a small number of coaches acknowledged that they might be naïve in
 657 thinking that doping is not prevalent in their sport or club. Oliver said *'I don't think it's that*
 658 *prevalent to be honest. I might be blissfully not knowing that it's out there'*. Similarly, Hugo
 659 commented:

660
 661 *I don't think it's a major issue [in our sport], but, [I] don't know – maybe I'm wrong,*
 662 *maybe I'm a bit naïve...If you asked me if I thought any of the players [at my club] are*
 663 *taking anything I'd probably say no, but obviously, it's err, you don't know.*

664
 665 Given that some coaches had knowledge of specific cases in their own sport (i.e., one
 666 coach knew someone who was serving a sanction for doping and another coach had witnessed
 667 someone being dismissed from a club for suspected doping when they were a player), it is not
 668 unreasonable to suggest that the coaches' self-identified naivety is actually demonstrating that
 669 coaches may be wilfully blind when it comes to doping in sport. Alex supported this notion in
 670 his comment that *'I do think it's there – and anyone who says it isn't is lying and kidding*
 671 *themselves'*.

672

673 *'It gets tarnished doesn't it'*

674 Several coaches described sports with an association to doping as having a '*bad*
 675 *reputation*'. For example, Sam said '*It's a shame for the sport because I know that there would*
 676 *be a lot of players, I mean cyclists, who don't. There'd be a hell of a lot of them [not doping],*
 677 *but it gets tarnished doesn't it*'. This view that doping-related incidents lead to negative
 678 connotations appeared to influence the coaches' proposed behaviours in response to a
 679 hypothetical scenario where a player within their team approaches them and admits that they
 680 have engaged in doping. In response to this scenario, only one coach proposed involving
 681 external individuals or organisations (i.e., reporting doping). Instead, coaches turned to
 682 colleagues or superiors for support, with a number of coaches specifically emphasising that
 683 they were keen to resolve the matter within their club. For example, Hugo said '*I don't think*
 684 *I'd, you know, report them. I don't think I'd report the player...even though, I know, you know,*
 685 *it's against, like I said before, my beliefs*'. Similarly, Lucas stated:

686

687 *If I'm being brutally honest, if a boy came to me, one of our [players] came to me and*
 688 *said "I've took"...I don't know..."cocaine on Saturday night. I totally regret it and I*
 689 *can't believe I've done it" – this that and the other, then I think I'd try and counsel*
 690 *them through it. We've got a Welfare Officer, and we wouldn't be reporting that I don't*
 691 *think. I think we'd try to deal with that in house.*

692

693 Having broadly interpreted the coaches' responses to hypothetical scenarios in the first
 694 interviews as protective, we took the opportunity during the second interviews to enquire as to
 695 why some individuals or clubs might not disclose known cases of players doping to external
 696 individuals or organisations. Protection again surfaced with several coaches stating that they

could understand a reticence to report in order to protect the player. However, there was also a strong sense of protecting the club, and the sport more broadly, from reputational risk. Specifically, some coaches indicated that clubs might not report known doping because they *'don't want the bad publicity'*. Lucas commented *'our worry truthfully is probably more that, you wouldn't want it, it's bad for the club if somebody's, it comes out that somebody's been tested for something'* and expanded:

We're trying to persuade kids to come here, we've spent years producing these values that we keep talking about, if all of a sudden somebody damages that with something then you're knocked back and you're trying to build your reputation back up.

Through the interviews it became apparent that doping stigma is not a beneficial tool for tackling doping in sport. Rather, stigmatization of dopers interferes with effective prevention efforts.

3.3 Anti-doping policy: Limited reach and influence

'[I've] never been guided and directed down what we should be doing'

Based on their responses to the hypothetical scenarios, coaches did not appear to consider themselves vulnerable to committing the ADRV of complicity. On the contrary, coaches were under the impression that they were fulfilling their obligation by reporting known doping to their superior. Daniel commented:

I would speak to either one of the Head Coaches or [Academy/Scholarship Manager] about it. But that's not because of wanting to try to hide it, that's just because of the chain of command I guess.

722

723 Yet, they had some awareness that there would be ‘consequences’ for coaches involved
 724 in doping-related situations. Some participants knew that coaches could be banned and most
 725 coaches assumed that involvement in doping would result in a coach being dismissed from
 726 their coaching position at the very least. Indeed, several participants felt that coaches involved
 727 in doping would be unable to work in sport again. Noah remarked *‘I would imagine I’d be*
 728 *black balled, wouldn’t I? Do you know what I mean? Helping kids on drugs. If I applied for a*
 729 *job, I wouldn’t get the job, would I?’* Notably, none of the coaches had been made aware of
 730 official procedures for dealing with doping-related situations within their club or sport.

731 In fact, coaches had never been told what was expected from them in relation to anti-
 732 doping roles or responsibilities at a club level, nor had they been made aware of the global anti-
 733 doping policy (i.e., the WADC) that applied to them as coaches. Hugo said *‘I don’t ever*
 734 *remember...ever being told...this is the rules, this is the policy, this is how things are done’*.
 735 Lucas also commented that the policy *‘doesn’t particularly get purveyed to coaches’* and
 736 explained that he had *‘never been guided and directed down what we should be doing’* because
 737 *‘it’s always been directed at the player’*. Therefore, the existence of the policy was not a key
 738 influence in coaches’ anti-doping opinions and behaviours.

739

740 *‘I wouldn’t change what I’m doing’*

741 Coaches commented that seeing the policy in the second interview raised their
 742 awareness of what is expected of them and *‘where I stand on it all’* (William). William said *‘I*
 743 *think they’re pretty fine...you’re not asking anyone to do anything out of the ordinary anyway*
 744 *are you. Everything there is pretty morally correct’*. The conversation that took place during
 745 the second interview appeared to encourage some of the coaches to self-reflect on the
 746 importance of the matter and conclude that they could be ‘looking into it’ more. Yet, in most

cases coaches reported that seeing the policy would not change how they behave in their practice and they did not think they would become more proactive in promoting anti-doping messages. Whilst there was a consensus across the coaches that the responsibilities outlined in policy were reasonable, several coaches raised concerns about how realistic they were due to several of the factors outlined in Theme 2, including perceived relevance and self-efficacy to act:

It makes me think that I should know more information and be in a better position that if this scenario did come up that I'd be able to deal with that. But it wouldn't make me change my opinion that like I wouldn't change what I'm doing, I wouldn't start going around and saying to players "have you been taking drugs this weekend?" or "don't be taking drugs". I'd carry on as normal and don't make it an issue if I don't think it's an issue. (Hugo)

I think it's do-able, maybe just needs a little bit more support so that everyone is comfortable with that...at the minute, I'd sort of say, with all of them (the responsibilities listed in the WADC) "yeah, I think I can do it", but I'm maybe not as confident about it as what I should be (Ben).

This theme is likely to raise concerns amongst global anti-doping leaders who routinely espouse the importance of athlete support personnel adopting an anti-doping stance. In order to fulfil their policy-prescribed roles and responsibilities, coaches called for greater clarity on policy-outlined expectations and a simplified language.

4. Discussion

The purpose of the study was to explore coaches' anti-doping roles, including what coaches do and why they do it. Within this purpose, a specific aim was to investigate coaches' awareness and fulfilment of policy-prescribed anti-doping responsibilities. The findings reveal that coaches are supportive of anti-doping efforts and undertake a number of indirect or reactive anti-doping behaviours. Yet, they are reluctant to fully commit to anti-doping efforts. A range of individual, social and environmental factors influenced coaches' anti-doping roles, namely their focus on performance, a reliance on others, a lack of self-efficacy in providing accurate information and a perception of anti-doping efforts as being irrelevant. Critically, coaches' behaviours did not fully align with the expectations of current anti-doping policy, with some coaches proposing actions that would equate to an ADRV. Furthermore, coaches challenged the rubric of the Code and brought into sharp focus the gulf between anti-doping policy and coaching practice.

Adding further weight to previous research (e.g., Allen et al., 2017; Fjeldheim, 1992; Judge et al., 2010; Nicholls et al., 2015), coaches acknowledged their position of influence in players' lives and expressed prototypical anti-doping attitudes. Indeed, coaches reinforced the dominant 'doping as cheating' narrative (D'Angelo & Tamburrini, 2010; Engelberg & Moston, 2016). In keeping with previous research, coaches acknowledged that they may respond to queries/requests for (anti)doping information (Judge et al., 2010; Engelberg & Moston, 2016; Engelberg et al., 2017), particularly in relation to inadvertent doping through the use of nutritional supplements and medications (Allen et al., 2017). Thus, coaches appear cognisant of the threat of inadvertent doping; an important finding in light of the number of claims of inadvertent doping presented each year (UKAD, 2017). Consequently, it is important to ensure that coaches working in this context are kept up-to-date with these two key areas of anti-doping.

Overall, coaches described behaviours that we interpreted as reactive or indirect. Specifically, they suggested they monitored players and emphasised the importance of

797 creating, and embodying, a culture where individuals come to know that doping is not accepted
798 because they are encouraged to be ‘good’ people first and foremost and do things ‘the right
799 way’ (i.e., positive work ethic, respect and honesty). Corroborating recent research with
800 Scottish high-performance coaches (Allen et al., 2017), anti-doping was described as an
801 implicit part of coaching and programme philosophy. Notably, our findings shed light on the
802 passivity that defines the coaches’ actions towards other issues beyond doping that are not
803 performance-focused. For example, a passive and indirect approach was also present when
804 coaches discussed other ‘off-field’ behaviours, such as racism, gambling and bullying. It
805 appears that coaches are under the assumption that telling players what they expect of them
806 and being a good role model is sufficient to develop a sportsperson’s values and life skills
807 (McCallister, Blinde & Weiss, 2000).

808 In order to become more active and explicit in anti-doping efforts, coaches’ perceived
809 lack of self-efficacy to work with players on doping-related issues – due to poor knowledge
810 and understanding – urgently needs to be addressed. Indeed, the current study underscores
811 earlier assertions that poor anti-doping knowledge renders coaches ‘ill-equipped’ to undertake
812 anti-doping actions (Allen et al., 2017; Engelberg & Moston, 2016; Laure et al., 2001). While
813 a well-rehearsed argument might be for coaches to increase their knowledge of anti-doping,
814 our findings indicate that coaches have little desire to develop doping-related knowledge and
815 are unlikely to ‘do more’ in the future because doping is typically not recognised as a problem
816 in their coaching context (i.e., sport, country, level of competition, stage of athlete
817 development) (e.g., Fung & Yuan, 2006; Mandic, Peric, Krzelj, Stankovic & Zenic, 2013;
818 Moston, Engelberg & Skinner, 2015). Moreover, they have the opportunity to seek support or
819 transfer responsibility to individuals around them (e.g., medical staff, managers) (Allen et al.,
820 2017).

The challenge of coaches diffusing responsibility for doping prevention to others, whether internal or external to their environment, is that it undermines the potential of a collective effort to address the omnipresent threat of doping in sport. Engelberg and Moston (2016) commented that coaches can ‘circumvent’ their anti-doping responsibilities if they have the tendency to defer to ‘other professionals’ and the current study provides further evidence that coaches ‘pass the buck’, and possibly turn a blind-eye. Yet, if the ‘buck’ stops with no-one (i.e., everybody disengages from their anti-doping responsibilities and no anti-doping action is taken) an athlete’s right to doping-free sport will be difficult to protect. Therefore, it is vital that collective responsibility is encouraged (Whitaker, Backhouse & Long, 2014), where all individuals involved in sport take ownership for bringing about change within their ‘community’ and the importance of doping-free sport is emphasized across ‘whole systems’ (i.e., at individual, social and structural levels of influence) (Backhouse et al., 2017).

Encouraging all parties to play an active role in doping prevention is particularly important considering many coaches in the present study would be reluctant to report doping to anyone external to their club and would instead prefer to address the matter *in-house* (resulting in them potentially committing ADRVs). A reticence to report – and therefore a tendency to ‘ignore’ – doping-related behaviours has previously been found in coaches (Vankhaldo & Planida, 2013) and a broader sample of Australian ASP (Mazanov et al., 2014). Mazanov et al. (2014) suggested that this was possibly due to the individuals’ lack of knowledge regarding their obligations as ASP. Similarly, Allen et al. (2017) found that there was a lack of clarity regarding anti-doping responsibilities – and only two (out of 23) coaches were clear that there were consequences for coaches of athletes caught doping. These findings are supported in the current study as coaches considered their proposed behaviours to be fulfilling their (assumed) obligations and they were unaware of the personal consequences of complicity. However, the current study revealed that in addition to a lack of

knowledge/guidance regarding responsibilities and consequences coaches may be exhibiting ‘wilful blindness’ (Heffernan, 2012) due to their need to protect the player, themselves, their club and/or their sport more broadly. As such, the coaches did not anticipate acting differently in the future once they had been made aware of the expectations and consequences that current anti-doping policy laid out for them as ASP. This signals a clear misalignment between policy and practice that must be investigated further to ensure that anti-doping policy is realistic and effective in reflecting and affecting behaviours on the frontline.

Coaches’ singular focus on performance must be taken into account when attempting to actively engage coaches in future anti-doping efforts. The way the performance narrative shaped their player development priorities offers further explanation of coaches’ passivity, or ‘complacency’, and corroborates the belief that coaches are ‘stuck between a rock and a hard place’, balancing development of the whole person with the whole player. This context was recently acknowledged by those responsible for engaging coaches with anti-doping education (Patterson, Backhouse & Duffy, 2016). Having recognised this difficulty, policy-makers, programme developers/deliverers, and coach employers might work with coaches to find ways of accommodating these competing demands to increase the likelihood that coaches will integrate doping preventive actions into their practice.

Limitations

It is possible that social desirability influenced the coaches’ accounts, in that coaches may have believed that they had to report strong anti-doping views and behaviours. This is regularly identified as a concern in anti-doping research, where the truthfulness of self-reported attitudes and behaviours is often challenged (Moston et al., 2015). While this is a possibility, a number of coaches were not afraid to discuss their opinions openly, such as some coaches stating that they do not have a role, would leave some anti-doping matters to other individuals

and would not report doping behaviours. Furthermore, coaches revealed details of their personal experiences not only in relation to doping, but also in relation to other somewhat sensitive topics (such as the recent death of a loved one, mental health of a family member and other work-related issues they faced). This willingness to share personal stories suggests a good level of trust and rapport was established during the interview process. Moreover, it may relate to the fact that the researcher 1) explicitly stated that they were not judging them in all correspondence to participants, 2) informed participants that the study was independent, with no affiliations to sporting or anti-doping organisations, and 3) reassured participants that their comments would remain confidential, including consistent reiteration that the coaches' comments would not be linked to their sport in any presentation of the findings.

The use of a specific sample of coaches from two sports and one coaching domain could be seen as a limitation, as the degree to which findings can be extrapolated to other sports and domains might be questioned. However, the authors, as qualitative researchers, do not view generalizability through this 'statistical-probabilistic' lens (Smith, 2018). They propose that the study provides an in-depth, contextualised insight into the awareness, fulfilment and opinions of a specific group of coaches in relation to anti-doping policy directives, whereby returning to the same sample of participants for a second time, rather than recruiting a new sample of coaches, allowed the emerging behaviours and influential factors relating to coaches' anti-doping roles to be challenged (and confirmed) – further enhancing our understanding of this complex issue and informing policy- and programme-related actions in this context going forward. To facilitate naturalistic generalizability or transferability, the authors encourage the reader to consider if the findings 'reverberate' with them and/or if they recognize similarities and differences between the findings presented here and situations that they have experienced, witnessed or are familiar with (Smith, 2018). Furthermore, rather than seeking to generalise findings through inference, the current research might be expanded by replicating the methods

within other contexts (i.e., with coaches working at other levels of competition, in other sports, or in other countries). In particular, researchers are encouraged to engage with coaches working in sports with less (if any) ADRVs to investigate the anti-doping behaviours undertaken by these individuals. This might involve an exploratory study with these coaches on possible adaptive influences. This is important given that the coaches participating in this research - whose sports are in the top ten for ADRVs - perceived there to be no doping-related issues related to their players and this attenuated their engagement in anti-doping activities. Recognizing the importance of evidence-informed anti-doping policy and practice, it would be useful to consider whether coaches working in sports with few or no ADRVs would report the same views. Additionally, researchers are encouraged to give further consideration to other factors (beyond context) that may have the potential to influence coaches' role perceptions and behaviours, such as the coaches' age, experience and employment status (e.g., part-time/full-time, paid/volunteer).

5. Conclusions

Coaches acknowledge that they have a role to play in doping prevention and appreciate the significant influence they exert on their players. In this sense, their inclusion in global anti-doping policy and program efforts is obvious. Yet, this study has offered a more nuanced understanding of what coaches 'do' (or do not do) in practice when it comes to anti-doping, and the factors that influence their (in)action in this context. Specifically, novel insights have been gleaned through the exploration of coaches' awareness and fulfillment of global anti-doping policy directives, leading us to identify instances where coaches were in breach of the global policy-prescribed anti-doping roles and responsibilities. Indeed, coaches did not actively work to prevent doping in their sport and several individuals proposed behaviours that would constitute ADRVs. Moreover, coaches had no intention to change their behaviours having been

informed of their policy-prescribed responsibilities. This is important, as many previous authors have concluded that informing coaches of their responsibilities is an avenue to improving coach engagement with anti-doping. Yet, this is futile if coaches do not value the pursuit of doping-free sport and recognise fostering clean sport as a central aspect of their professional identity.

Adding further novel insights, and contrasting existing evidence and policy, the current study showed that coaches are not motivated to actively prevent doping in sport. Instead, coaches portrayed a performance narrative through the prioritization of performance above all else. Consequently, addressing coach role conflict and ambivalence towards anti-doping will require a more radical rethink in order to better understand the dynamic context within which coaches are situated so that tailored and targeted interventions can be implemented. For example, without institutional support and reinforcement for proactive doping prevention from the highest level, coaches will likely remain passive actors in the prevention efforts. Indeed, at the same time as increasing coaches' self-efficacy to prevent doping through enhanced knowledge and understanding, it is imperative that the sporting community raises the profile and status of doping prevention and removes the stigma of talking about doping in sport so that it is at least on a par with detection-deterrence. It is only through co-ordinated and collective action across the sporting landscape that we will foster accepted cultural norms for doping prevention, and generate the will to protect the rights of athletes, and coaches, to participate in doping free sport.

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