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## **Perceived incidence of drug use in Australian sport: A survey of public opinion**

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## **Abstract**

In the last few years a large number of cases have come to light in which celebrated individuals, and even whole teams, have been found to have used either banned performance enhancing or 'recreational' drugs. There are two very different perspectives on this issue. On the one hand, some see the use of banned drugs as a threat to sport whilst on the other hand the use of performance enhancing drugs is actually lauded as a way of energising flagging public interest in sport. This study is the first survey of Australian popular opinion on the incidence and seriousness of drug use in sport. Data were collected via telephone interviews featuring a nationally representative sample of 2520 participants. Results showed that the public believe that a quarter of athletes use banned performance enhancing drugs, and a third use banned recreational drugs. The sport most commonly identified as one where performance enhancing drug use is common was athletics (Australian Football League for recreational drugs). The public were strongly opposed to all forms of drug use in sport, yet opinion was divided as to whether anti-doping investigations should be handled by the police. Results are discussed in light of the efforts of anti-doping agencies to enforce rules and procedures that the public may not fully comprehend.

## **Acknowledgements**

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## **Introduction**

In 2004, shortly after two of Major League Baseball's biggest stars, Barry Bonds and Jason Giambi admitted using steroids, a Gallup Poll of 533 baseball fans in the USA was conducted.<sup>1</sup> In response to the question 'What percentage of Major League Baseball players do you think have used steroids or other performance enhancing drugs in the past five years?' the mean estimate was 33.4%. A follow-up question found that 61% were 'less enthusiastic' about baseball after the admissions by Major League Baseball players, and 86% believed that the players' union should agree to tougher new steroid testing standards. Should the union not agree, 59% favoured the introduction of new Congressional laws requiring extensive steroid testing.

Attempts to assess public perceptions of doping in sport are scarce. This is surprising as such perceptions are undoubtedly of major significance to the sports industry, particularly if there is a divergence between actual and perceived levels of doping. For example, if the perceived incidence of doping in sport is lower than the actual incidence, the public are unlikely to support efforts to eradicate doping. One immediate consequence of such a view would be that anti-doping agencies will receive reduced funding.<sup>2</sup> It would also be likely that when an athlete is found to have committed an anti-doping violation that their conduct will be attributed to their own personal greed or shortcomings, with little if any significance for the sport as a whole. That is, it is an individual rather than a systemic problem.<sup>3</sup>

On the other hand, if perceived levels exceed actual levels then a new set of problems arise that could threaten the continuing existence of some sporting teams, or in some cases even whole sports. For example, if the public perceives that doping is widespread in some sports, then junior registrations might dwindle, so too might audiences at competitions, and sponsorships will decline or vanish altogether.

In the above examples it is assumed that doping in sport is perceived as a negative event. However, this assumption is surprisingly contentious. The problems of steroid use by professional baseball players in the United States provide an important illustration of how public opinion has been divided by the drugs issue. While many supporters (and commentators) have lamented the destruction of a sport, once famously described by US President Herbert Hoover as second only to religious faith in providing moral training<sup>4</sup>, others have applauded the very same actions as having re-energised flagging public interest in the sport.

We are thus confronted by two inter-related questions relating to public opinion towards doping. First, ‘How many athletes are perceived as using banned substances?’ Second, ‘What is the impact of doping in sport?’, or more colloquially: ‘Does anyone care?’ Before considering these questions we first need to establish the perceived incidence of doping from within the sporting world itself, starting with the official data from laboratories conducting biological tests to detect drug use by athletes. Throughout the article we will concentrate our review on data from our home country, Australia, although as will become clear, this country is far from atypical.

### **Incidence of Drug Use Based on Data from Scientific Testing of Blood and Urine Samples**

In the reporting period for 2008-09, the Australian Sports Anti-doping Authority (ASADA), formerly known as the Australian Sports Drug Agency (ASDA), conducted 7,498 biological tests of athletes.<sup>5</sup> A total of 29 athletes or support personnel were subsequently entered into the Register of Findings of anti-doping rule violations. The incidence rate for doping violations in 2008-2009 was thus 0.39%.

Between the reporting periods 2002-03 to 2008-09, the incidence rate for doping violations that resulted in athletes or support personnel being placed on either the

ASADA Register of Findings or its predecessor the ASDA Register of Notifiable Events, showed only minor fluctuations.<sup>6</sup> The lowest number of entries to the annual Register was 16 in 2004-05, the highest 29 in 2008-09. In terms of incidence rates, the lowest annual rate was 0.27% in 2003-04, the highest 0.44 in 2002-03.

Data from other countries reveal a similar incidence rate for detected doping violations. For example, in 2009 the United States Anti-Doping Agency (USADA) conducted 8,580 doping control tests, detecting 20 doping violations, an incidence rate of 0.23%.<sup>7</sup> In 2009 the Finnish Antidoping Agency (FINADA) conducted 2128 tests, detecting 9 doping violations, an incidence rate of 0.42%.<sup>8</sup> And in 2008-09 the Canadian Centre for Ethics in Sport (CCES) conducted 3,951 doping control tests, with 16 anti-doping rule violations detected, an incidence rate of 0.40%.<sup>9</sup>

The above data, all taken from World Anti-Doping Agency (WADA) accredited laboratories, suggest that doping is a relatively rare occurrence, perhaps as low as less than half of one per cent of athletes. However, few regard such statistics as a reliable measure of the true incidence of doping. Mottram<sup>10</sup> writes: 'These figures, which themselves may not be a true reflection of the truth, merely tell us how many athletes have tested positive, not how many are using drugs and avoiding detection'. There are many documented cases where athletes have used banned substances over prolonged periods, and successfully eluded detection (e.g., sprinter Marion Jones). In part this may be due to the problem that by the time that anti-doping testing laboratory have developed a test for a particular substance, users will have already moved onto another substance for which a test has not yet been developed. This has given rise to an often quoted maxim: 'The cheats are ahead of the testers.'<sup>11</sup>

## **Surveys of Athletes' Perceptions of the Incidence of Drug Use in Sport**

Given that measuring the actual incidence of anti-doping through biological testing is highly problematic, researchers have developed other methods to provide estimates of the incidence of drug use in sport. These research efforts are classified<sup>12</sup> into two broad categories: self-report surveys of drug use<sup>13</sup> and surveys of perceived drug use.<sup>14</sup> One study that combined both approaches was conducted in Australia.<sup>15</sup>

Researchers<sup>16</sup> surveyed 974 elite Australian athletes, with 21% reporting having used cannabis at some time in their lifetime (3.2% admitted 'recent' use), and 9.5% had used ecstasy (3.7% 'recent' use). The participants were also asked to provide estimates of illicit drug use for their own sport, and for 'athletes in general' (i.e., all sports combined). It was found that 12.6% of respondents estimated incidence in their own sport at '0%'; 28.2% said 'less than 2%'; 17.2% said '3-5%'; 13.3% said '6-10%'; 8.3% said '11-20%'; and 7.2% said '20+%'. The remaining participants did not answer the question. Interestingly, estimates of drug use for 'own sport' were consistently lower than those for 'all sports'. The problem of doping it seems is essentially 'somebody else's problem'.

In summary, surveys of athletes show that they both report their own use, and perceive drug use by others, to be far more prevalent than the incidence figures generated by anti-doping agencies would suggest. This has important implications, since if athletes believe that doping is more common than it actually is then they may be more likely to engage in such behaviour in the future.

## **Surveys of the Public's Perceptions of the Incidence of Drug Use in Sport**

To date, only Switzerland has seen any systematic research on public opinion towards doping, with representative samples of the population being surveyed four times between 1995 and 2004.<sup>17</sup> Unfortunately the number of questions asked varied

across the surveys and only the first study asked respondents to estimate the incidence of doping, which was assessed in three sporting categories: recreational sport; elite sport and bodybuilding. For elite sport nearly a quarter of respondents (23.8%) estimated the incidence level as less than 10%; 41.3% estimated usage between 10-39%; 12.1% estimated usage between 40-59%; 7.9% estimated 60-89%; and 2.9% estimated over 89%.

The Swiss Laboratory for Doping Analyses is the agency that conducts anti-doping testing in Switzerland. Data on the scientific testing of athletes from 1998 is not available, but the latest data from 2008 reveals that 2.5% of 6000 samples tested showed adverse analytical and atypical findings.<sup>18</sup> It is thus highly likely that the public perception of doping incidence in Switzerland greatly exceeded the detected doping incidence levels at that time.

### **Do Public Perceptions Matter?**

In the latest Swiss survey<sup>19</sup> two-thirds of the sample (66%) saw the problem of doping in sport as 'very serious', with another 30% describing it as 'serious'. The vast majority (86%) of the sample were in favour of strict prohibition of doping, with the remainder favouring some form of liberalization (12% supported 'moderate liberalization' that places responsibility with medical doctors).

In each of the four Swiss surveys the vast majority of respondents agreed that doping was 'damaging to sport's image' (e.g., 97.8% agreed in 2004); that doping produced bad role models (96.1% in 2004); and contradicted the principle of fair play (95.2% in 2004). Additionally, the public blamed not only the athletes concerned, but also those in their entourage, such as coaches, and sport federations.

Across the surveys there were some consistent links between the age and gender of the respondent and opinions, with for example, the younger respondents showing



greatest support for liberalization<sup>20</sup> and women were more likely to recognise that doping might bring mental health problems.<sup>21</sup> There were also some regional variations. For example, French speaking respondents judged the impact of doping as less important than German speakers.<sup>22</sup>

The research literature offers several studies to support the notion that people who use drugs in sport are perceived more negatively than those who do not engage in such behaviour. For example, researchers<sup>23</sup> found that when compared to non-users, steroid and illicit drug users were perceived as less intelligent, less interesting, less happy, less confident, and less relaxed. Schwerin and Corcoran's work was extended<sup>24</sup> by targeting participants who were anabolic steroid users, as well as participants from the general population. Unlike Schwerin and Corcoran,<sup>25</sup> non-anabolic steroid users perceived a user and a non-user similarly.

Another public perception study was conducted<sup>26</sup> which examined the "Tall Poppy Syndrome". This term refers to the ordinary public's close scrutiny of high profile stars behaviour in order to "cut them to size".<sup>27</sup> A sample of university students were presented with two lists of names of four prominent athletes each. The first list consisted of athletes who had received negative media coverage due to, for example, having tested positive for HIV (Magic Johnson), or having tested positive for drug use (Ben Johnson). The second list consisted of the names of other prominent athletes who had received no negative publicity. As expected, participants rated the athletes in the first list less favourably than those in the second list. Researchers<sup>28</sup> conclude that the evaluations of the 'Tall Poppies' in sport may be influenced by public expectations about how high-profile athletes are 'supposed' to behave. Specifically, it is argued<sup>29</sup> that conservative values present in sport institutions may predispose sports consumers to be judgmental of athletes who are seen to 'violate' institutional norms.

In sum, these studies generally found that drug users are viewed negatively on various personal and social dimensions than non-users, although the limited number and specific methodological approaches of such studies makes generalization difficult.

### **The Present Study**

Studies in Switzerland<sup>30</sup> have shown that public perception of the incidence of doping massively exceeds observed incidence levels from anti-doping laboratories and reported incidence from surveys of athletes. Further, the majority of the Swiss population saw the problem as ‘serious’ or ‘very serious, and nearly all respondents were in favour of the prohibition of doping.

The current study is the first national survey of Australian public opinion on the topic of drugs in sport. The broad aim is to determine the extent and degree of concern over the use of drugs in sport, including both performance enhancing and recreational drugs. The study is important as poor public perceptions about performance enhancing and recreational drug use by athletes, coupled with anti-doping policy that does not reflect general community opinion about how to reduce, eradicate or educate athletes about the consequences of partaking in such behaviours, could undoubtedly cause significant damage to the sports industry. This view is explicitly recognised in our home country (Australia), where the Anti-Doping Research Program Panel, which coordinates the allocation of research funding in the area of anti-doping research, specifically requested research proposals to assess public perceptions, with a view towards using information from such a survey to guide the development of deterrence strategies. This paper is thus based on the study “Public Perceptions of anti-doping” which was supported by the Australian Government Department of Health and Ageing through the Anti-Doping Research Program.

## **Method**

### **Sample**

There were 2520 participants, sampled from all Australian states and territories. Recruitment was in proportion to the population of each state, with additional quotas on age and sex. Households for inclusion in the survey were randomly selected from the latest version of the Electronic White Pages.

Of the 2520 respondents, 1246 (49%) were male and 1274 (51%) were female. Participants were aged between 18 and 95 years of age with a mean age of 46 years. Most of the participants had previously (or currently) played competitive sport, with only 429 (18 %) of the respondents never having played competitive sport. Nearly half (1111 respondents, or 46%) had played for a local club only, 363 (15%) for a regional team, 376 (16%) for a state team, and 121 (5%) for a national team. 120 respondents declined to provide this information.

### **Instrument**

Throughout the survey a distinction was made between attitudes towards performance enhancing drugs (such as anabolic steroids) and recreational drugs (such as cannabis). Respondents were told:

‘First of all, this survey is looking at what people know and think about drug testing in sport. The questions are about use of drugs such as performance enhancing substances like anabolic steroids and recreational drugs like cannabis. We are not asking about things such as caffeine, alcohol or prescribed medications.’

The questions were then organised into the following main sections:

### *1. Perceptions of drug use in sport*

Respondents were asked to estimate the percentage of elite athletes using both performance enhancing and recreational drugs respectively. They were also asked to identify sports (with open questions, no prompts given) in which the use of each category of drugs was perceived to be commonly and rarely used. Respondents were asked to name one sport only for each category (performance enhancing - commonly used; performance enhancing drug - rarely used; recreational drug - commonly used; and recreational drug - rarely used).

### *2. Seriousness of drug use in sport*

Respondents were prompted to rate on a five point Likert-type scale (ranging from “Strongly Agree” to “Strongly Disagree”) the seriousness of drug use in sport. The order of presentation of the scale was counterbalanced, so that half of the respondents were given the options starting with “Strongly agree” and the other half were started with “Strongly disagree”.

### *3. Responsibility for drug use in sport*

Respondents were asked to identify (“Yes” or “No”) whether athletes, coaches, clubs and sporting bodies should take responsibility for both performance enhancing and recreational drug use.

### *4. Australia’s Anti-Doping Strategy.*

Respondents were asked three questions concerning public policy concerning performance enhancing drug use in sport (requiring “Yes” or “No” responses), including the perceived effectiveness of Australia’s anti-doping regime, the possible criminalisation of drug use, and whether drug tests should be made public.

### *5. Respondent demographics*

The following respondent demographics were obtained: gender, age, state of residence, and involvement in competitive sport.

#### **Procedure**

Interviews were conducted using the Roy Morgan Research Computer Assisted Telephone Interview (CATI) system. Interviews were conducted between 9.30am and 8.00pm during weekdays and from 10am to 6pm on weekends. Participation in the study was voluntary and respondents were informed that their responses would not be individually identifiable. The CATI interviewing process was audited, with 10% of interviews observed or listened to by supervisors. Interviews were conducted during July 2009 and each interview took between 8-10 minutes to be completed.

#### **Results**

##### **Data analysis**

The relationship between the demographics of (a) sex of respondent, (b) previous playing history, (c) state of residence and (d) age, on responses to the survey items, were examined using a 2 x 5 x 6 analysis of covariance (SPSS computer software was used for the analysis). The independent variables were gender (2: male, female) and level of competitive sport played (5: never played, local club, regional team, played state team, national team), and state (6: Queensland, New South Wales/Australian Capital Territory, Victoria, Tasmania, Western Australia, South Australia/Northern Territory), with age of respondent as a covariate.

## **Perceived Incidence of Drug Use**

### *Performance enhancing drugs*

Participants were asked to give their opinion as to the percentage of elite and professional athletes who take performance enhancing drugs. The mean was 26.1% of athletes (SD=22.65). The median perceived incidence rate was 20%.

There was a significant effect of gender  $F(1,2358) = 12.71, p < .001$ , with a mean incidence estimate for males ( $n=1200$ ) of 22.52 (s.d. = 21.90) and a mean for females ( $n=1237$ ) of 29.57 (s.d. = 22.83). There was also a significant effect for the covariate of age,  $F(1,2358) = 27.82, p < .001$ , with estimates generally increasing with age. There was no significant effect for level of competitive sport played or state.

### *Recreational drugs*

Participants were also asked to give their opinion as to the percentage of elite and professional athletes who take recreational drugs. The mean was 33.0% (SD=22.88), the median was 30%.

As with the estimated incidence of performance enhancing drugs, there was a significant effect of gender  $F(1,2372) = 13.90, p < .001$ , with a mean incidence estimate for males ( $n=1212$ ) of 30.26 (s.d. = 22.53) and a mean for females ( $n=1239$ ) of 35.73 (s.d. = 22.92). There was also a significant effect for age  $F(1,2372) = 4.30, p < .05$ . There was no significant effect for level of competitive sport or state.

## **Identification of Sports in Which Drug Use is Common**

### *Performance enhancing drugs*

The sport that most participants perceived as having athletes who commonly use performance enhancing drugs was athletics (selected by 20.3% of respondents). Other sports where performance enhancing drug use was perceived to be common were

weight lifting, cycling, rugby league, Australian Football League (AFL) and swimming. Other sports were selected by less than 5% of respondents each. Table 1 shows the main sports in which performance enhancing drugs were perceived to be commonly used.

INSERT TABLE 1

#### *Recreational drugs*

The sport that most participants perceived as having athletes who commonly use recreational drugs was AFL (selected by 35.3% of respondents). The one other sport where recreational drugs were perceived to be commonly used was rugby league (selected by 31.6% of respondents). Other sports were selected by less than 5% of respondents each. Table 2 shows the sports in which recreational drugs were perceived to be commonly used.

INSERT TABLE 2

### **Identification of Sports in Which Drug Use is Rare**

#### *Performance enhancing drugs*

The sport that most participants perceived as having athletes who rarely use performance enhancing drugs (see Table 3) was swimming (selected by 14.2% of respondents). Other sports where performance enhancing drugs were perceived to be rarely used included tennis, golf, netball and cricket.

INSERT TABLE 3

#### *Recreational drugs*

The sport that most participants perceived as having athletes who rarely used recreational drugs was also swimming (13.1%). In a similar vein to perceptions of performance enhancing drug use, the other sports in which recreational drug use was perceived to be rare were tennis, golf and netball (see Table 4).

INSERT TABLE 4

## **Seriousness of Drug Use in Sport**

### *Performance enhancing drugs*

Respondents were asked whether they thought the problem of performance enhancing drug use was 'serious'. For both of the questions in this section, response options ranged from 'Strongly agree' (scored as '1') through to 'Strongly disagree' (scored as '5'). Higher means scores are therefore indicative of a lower perceived seriousness.

Table 5 shows that 90.5 per cent of respondents believed that the problem of performance enhancing drug use in sport is serious (agreed or strongly agreed with the statement).

INSERT TABLE 5

There was a significant effect of gender  $F(1,2489) = 5.74, p < .05$ , with a mean incidence estimate for males ( $n=1243$ ) of 1.78 (s.d. = 0.87) and a mean for females ( $n=1259$ ) of 1.6 (s.d. = 0.70). That is, males saw the issue as more serious than females. There was also a significant effect for the covariate of age,  $F(1,2489) = 28.41, p < .001$ , with estimates of severity increasing with age. There was no significant effect for level of competitive sport played or state.

### *Recreational drugs*

Respondents were asked whether they thought the problem of recreational drug use was serious. Table 6 shows that over three quarters of respondents (77.6%) believed that the problem of recreational drug use in sport is serious (agreed or strongly agreed with the statement). Slightly over 13% (more males than females) disagreed with the statement.

INSERT TABLE 6



There was a significant effect of gender  $F(1,2481) = 48.78, p < .001$ , with a mean incidence estimate for males ( $n=1240$ ) of 2.30 (s.d. = 1.08) and a mean for females ( $n=1254$ ) of 1.86 (s.d. = 0.85). Once again, males saw the issue as more serious than females. There was also a significant effect for the covariate of age,  $F(1,2481) = 8.51, p < .005$ , with estimates of severity increasing with age. There was no significant effect for level of competitive sport played or state.

## **Responsibility for drug use in Sport**

### *Performance enhancing drugs*

Almost all respondents (99.2%) believed that the athletes should take responsibility for performance enhancing drug use. About two thirds believed the coaches (66.7 %), the club (65.2%), the governing body (61.6%) should also take some responsibility.

### *Recreational drugs*

For recreational drugs, once again almost all respondents (98.8%) believed that the athletes should take responsibility. However, with this drug type only half believed that the coaches (49.2%) and the club (50.2%) should also take responsibility, and a minority (41.9%) believed that the governing body should take responsibility.

## **Australia's Anti-Doping Strategy**

Respondents were asked whether they thought Australia's anti-doping regime (which includes education, investigation and testing) is effective in deterring athletes from taking performance enhancing drugs. Over half of the respondents (54.5%) said yes and 40.4% said no.

Respondents were asked whether they thought that the use of performance enhancing drugs should be criminalised, with investigations conducted by police

officers instead of sporting bodies. Over half of the respondents (53%) agreed and 45% disagreed (with 2% unsure).

## **Discussion**

Doping is a violation of the ‘spirit of sport’<sup>31</sup> and as such it must be expected to change the way in which sport is both played and perceived (by players, coaches, officials, and the public). The present study shows that the Australian public believe that a quarter of athletes use performance enhancing drugs and a third use recreational drugs. Both behaviours are seen as serious problems, directly echoing the findings of Swiss research.<sup>32</sup> The public also perceive doping as prevalent in a relatively discrete number of sports and that problem is systemic, rather than one that can be attributed to the misconduct of a handful of cheating athletes. A slight majority are satisfied with Australia’s anti-doping initiatives and would like to see the use of performance enhancing drugs criminalised, with investigations handled by the police rather than anti-doping authorities.

Anti-doping opinions were often linked to gender and age. Women generally held more negative attitudes than men, and saw the incidence of doping as higher. In addition, younger respondents were generally less negative in their opinions than older respondents, also seeing the incidence of doping in sport as lower.

The perception that doping in sport is common is perhaps not surprising. However, the extent to which it is seen as occurring is interesting. Doping in sport is generally portrayed in the local media as ‘somebody else’s problem’. The detection of drug use in the Chinese swimming team brought swift condemnation, but the discovery of doping equipment at the Australian Institute of Sport (AIS), resulted only in the demonization of a handful of young cyclists, with one subsequently committing suicide.<sup>33</sup> In short, the discovery was seen as an aberration by a handful of athletes and

not an indictment of either Australian cycling or the AIS. The present findings show that the public are aware that individual athletes are to blame for doping, but so too are their coaches, clubs and sporting bodies. The public perceive a systemic problem, yet coaches, clubs and sporting bodies prefer to shift the blame onto individuals.

The scale of the perceived problem is a particularly worrying finding for Australian sport. There is a clear discrepancy between perceived incidence and detected incidence suggesting that media reports of doping are exerting an unduly strong influence on public opinion (it is unlikely that an alternative possibility such as personal contact with doping athletes, could explain the high perceived incidence estimates).

The present results largely echo those of similar studies overseas.<sup>34</sup> The finding that the estimated incidence of performance enhancing drug use is approximately a quarter of all athletes, represents a major challenge for ASADA and WADA. The public see a widespread problem, yet the anti-doping agencies continue to assert that their efforts are working to deter doping. It is not possible for both beliefs to be correct, and so it seems fair to conclude that the anti-doping campaigners have lost the public relations war on doping. We will return to this theme in the conclusion of this article.

The results also suggest that there are several sports that need to act swiftly to address poor public perception. Athletics, weightlifting and cycling were the three sports that were most commonly identified as having a doping problem. The inclusion of weightlifting in this grouping is not a surprise. It has long been acknowledged that this sport has a particularly serious problem with drug use and several anti-doping studies have specifically targeted this sport.<sup>35</sup> Athletics and cycling have also provided many of the most prominent examples of doping in sport, so their inclusion is similarly not a surprise.

For recreational drugs the prominence given to both AFL and rugby league may well have been influenced by several high profile cases in the Australian media in which players from these sports were caught, typically by police, using recreational drugs.

### **Limitations**

The relatively low number of respondents who did not play competitive sport was a surprise, particularly in relation to Australian Bureau of Statistics (ABS) data suggesting that only 29% of Australians play sport or exercise regularly.<sup>36</sup> This apparent discrepancy may be attributed to two factors.

First, the question about involvement in competitive sport was as follows: ‘What is the highest level of competition at which you have played sport?’ Five possible response options (‘never played’ through to ‘national team’) were read out. The current question is thus far broader than that employed in other surveys, which often centre on current participation or activity rates.

Second, there was almost certainly a participation bias amongst respondents, with those not interested in sport being unlikely to agree to participate in a study on a sporting issue.

This first limitation could be overcome by altering the survey wording; however, as there were no obvious links between involvement in sport and opinions on doping, there is little immediate justification for revisiting this issue. The second limitation could probably be avoided by including questions on doping in part of a larger survey covering a wide range of social issues. This might result in more respondents who had not played sport, but conversely the survey length might deter some of the people of most relevance to such a study: namely, those with an interest in sport.

## **Conclusion**

The present study shows that the Australian public believe that doping in sport is commonplace and that there is strong opposition to such behaviour. However, support for anti-doping activities may be fragile. In the past few years there have been a number of opinion piece articles in sports magazines and websites, national newspapers and other media, attacking the anti-doping campaign. This view is premised on two beliefs.

First, that the war against doping is unwinnable. It should be noted here that even WADA publicly acknowledges that some athletes will always cheat.<sup>37</sup> However, to extend that argument and to suggest that anti-doping testing should end is a quite bizarre and incomprehensible leap in logic. It is sometimes argued that doping should be legalised and doping administered under the control of medical doctors.<sup>38</sup> In this new world, all athletes will have equal opportunity to dope, so when all athletes are doping, then no one is actually cheating. The obvious problem here is that it assumes that all athletes will be satisfied with the legally prescribed doping doses. Instead, it will almost certainly be assumed that if having the allowed dose of a drug or treatment improves performance, then further gains might be achieved by illegally taking additional doses. The desire to win will mean that some athletes will simply illegally increase their intake of doping substances and a new anti-doping campaign will be needed, one that is far harder to win given that almost all athletes will have some of the banned substances in their body.

Second, there is a presumption that public support for anti-doping is waning because of the extreme controls placed on athletes (such as the athlete whereabouts notification system) and lack of forgiveness for athletes who have accidentally breached anti-doping rules. This is a somewhat more plausible argument, and it is a view that is constantly being reinforced by the draconian (sometimes procrustean) actions of anti-

doping agencies. This can best be illustrated with the example of Belgian cyclist Kevin van Impe, who was asked to provide a sample whilst attending the cremation of his baby son Jayden. This case made headlines around the world and provided a focal point for those opposed to doping controls, researchers<sup>39</sup> argued for a ‘harm reduction’ approach whereby doping is legalised and administered under the control of medical doctors.

The clear existence of public support for anti-doping has now been benchmarked in this study. However, the current campaign against doping in sport is currently in danger of splintering public opinion. The public need to see that the anti-doping campaign, which aims to uphold the sanctity and ethical values of sport, adheres to those very same values.

## Notes

- <sup>1</sup> USA, 'Poll: Baseball fans back tougher drug policy'
- <sup>2</sup> Stamm et al., 'The public perception of doping in sport in Switzerland'
- <sup>3</sup> Stamm et al., 'The public perception of doping in sport in Switzerland'
- <sup>4</sup> Baseball Almanac, 'President Herbert Hoover Baseball Related Quotations'
- <sup>5</sup> ASADA, 'Australian Sports Anti-doping Authority 2008:09 Annual Report'
- <sup>6</sup> ASADA, 'Australian Sports Anti-doping Authority 2008:09 Annual Report'
- <sup>7</sup> USADA, U.S. Anti-Doping Agency 2010 Annual Report
- <sup>8</sup> FINADA, 'Doping test statistics 2009'
- <sup>9</sup> CCES, Media Release
- <sup>10</sup> Cited in Mottram, Prevalence of drug misuse in sport, 357
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- <sup>12</sup> Mottram, Prevalence of drug misuse in sport
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- <sup>24</sup> Van Raalte, Perceptions of anabolic steroid users
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## **Tables**

### Table 1

Sports in Which Performance Enhancing Drugs are perceived to be Commonly Used  
("In which sport, do you think that performance enhancing drugs are commonly used?  
Please provide one sport only.")

### Table 2

Sports in Which Recreational Drugs are perceived to be Commonly Used ("In which  
sport, do you think that recreational drugs are commonly used? Please provide one sport  
only.")

### Table 3

Sports in Which Performance Enhancing Drugs are Perceived to be Rarely Used ("In  
which sport, do you think that performance enhancing drugs are rarely used? Please  
provide one sport only.")

### Table 4

Sports in Which Recreational Drugs are perceived to be Rarely Used ("In which sport,  
do you think that recreational drugs are rarely used? Please provide one sport only.")

### Table 5

Extent of agreement or disagreement with the statement "The problem of performance  
enhancing drug use in sport is serious"

### Table 6

Extent of Agreement or Disagreement with the Statement "The problem of recreational  
drug use in sport is serious"

Table 1

Sports in Which Performance Enhancing Drugs are perceived to be Commonly Used

(“In which sport, do you think that performance enhancing drugs are commonly used?

Please provide one sport only.”)

Sports	Number of respondents	Percentage of respondents
Athletics	511	20.3
Weightlifting	488	19.4
Cycling	449	17.8
Rugby League	296	11.7
AFL	264	10.5
Swimming	189	7.5

Table 2

Sports in Which Recreational Drugs are perceived to be Commonly Used (“In which sport, do you think that recreational drugs are commonly used? Please provide one sport only.”)

Sport	Number of respondents	Percentage of respondents
AFL	890	35.3
Rugby League	797	31.6

Table 3

Sports in Which Performance Enhancing Drugs are Perceived to be Rarely Used (“In which sport, do you think that performance enhancing drugs are rarely used? Please provide one sport only.”)

Sport	Number of respondents	Percentage of Respondents
Swimming	359	14.2
Tennis	335	13.3
Golf	206	8.2
Netball	187	7.4
Cricket	135	5.0

Table 4

Sports in Which Recreational Drugs are perceived to be Rarely Used (“In which sport, do you think that recreational drugs are rarely used? Please provide one sport only.”)

Sport	Number of respondents	Percentage of respondents
Swimming	329	13.1
Tennis	264	10.5
Golf	204	8.1
Netball	184	7.3
Lawn bowls	179	7.1

Table 5

Extent of agreement or disagreement with the statement “The problem of performance enhancing drug use in sport is serious”

Response	Number of respondents	Percentage of respondents
Strongly agree	1059	42.0
Agree	1223	48.5
Neutral	96	3.8
Disagree	127	5.0
Strongly disagree	12	0.5
TOTAL	2520	100.0



Table 6

Extent of Agreement or Disagreement with the Statement “The problem of recreational drug use in sport is serious”

Respondent	Number of respondents	Percentage of respondents
Strongly agree	734	29.1
Agree	1221	48.5
Neutral	222	8.8
Disagree	289	11.4
Strongly disagree	42	1.7
Can't say/don't know	12	0.5
TOTAL	2520	100.0