

Elite Athletes' Perceptions of the Use and Regulation of Performance-enhancing Drugs in the United Kingdom

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Introduction

This paper analyses the perceptions of the United Kingdom's elite-level fencers on the issue of performance-enhancing drug use. It explores the extent to which interviewees' attitudes were influenced by the experiences of Diane Modahl, the British 800-metre runner who tested positive for testosterone at the European Championships in the summer of 1994. Originally banned from competing for four years, Modahl was subsequently exonerated after her legal advisers discovered fundamental flaws in the procedures used by the testing authorities. The paper reveals that most of the interviewees radically altered their views on performance-enhancing substances and the broader issues of the science and morality of drug testing in the wake of Modahl's case. The opinion that the science of drug testing is not as watertight as the governing bodies would have the media, the public and the athletes believe was widely held among those competing at the highest levels in this particular sport.

The paper also shows how Modahl's case precipitated changes to the United Kingdom's laws on the possession and supply of anabolic steroids, even though Modahl never tested positive for these substances. This research substantiates the opinion of health care professionals

that these new laws will have little effect on drug-using athletes but are likely to undermine attempts to educate members of certain cultural communities in which excessive use of anabolic steroids is *de rigeur*.

The Diane Modahl Story

On 18 June 1994, the then Commonwealth Games 800m Champion Diane Modahl was selected to give a urine sample under the International Amateur Athletic Federation's (IAAF) in-competition testing programme after finishing second at a prestigious European Championship meeting in Lisbon, Portugal. In accordance with IAAF procedure, her sample was transported to an accredited laboratory in Lisbon where it was split into two vials, labelled the 'A sample' and the 'B sample' respectively.

The 'A sample' was tested for the presence of those substances that have been banned by the IAAF because they are deemed to have performance-enhancing properties. In mid-August 1994 (over two months after the sample was taken), it was announced that Modahl's 'A sample' had tested positive for the 'male hormone', testosterone. On 30 August her 'B sample' was opened and tested in the presence of her coach (and husband) Vincente Modahl and drug experts from the International Olympic Committee (IOC), the British Athletic Fed-

eration (BAF) and the IAAF. The 'B sample' also tested positive. Forty-eight hours later, the IAAF announced that in accordance with their normal procedures Modahl would be suspended pending the outcome of any appeal.

The phrase 'male hormone', although widely used, is a misnomer. Testosterone is produced naturally by both sexes, the norm being for the body to produce one part testosterone to one part of another naturally occurring hormone, epitestosterone. The IOC believes a doping offence may have been committed if the ratio of testosterone to epitestosterone rises above 4:1 (Sports Council, 1993). Ben Johnson's ratio was 10:1 when he tested positive at the Seoul Olympics in 1988 (Dubin, 1990). Diane Modahl's ratio was an incredible and unprecedented 42:1. Medical opinion at the time was that either she had injected herself with testosterone almost immediately before racing, or she was gravely ill. A rare form of ovarian cancer could possibly cause the body to secrete such high levels of the hormone, it was suggested. Medical experts also believed two other, less serious, medical conditions (namely, 5-Alpha Reductase and polycystic ovary syndrome) could have had the same effect on her testosterone levels (On the line, 1996). Extensive medical tests found nothing untoward, however. It appeared to be a case of an ill-advised athlete taking a big risk by using a banned substance just before a competition and gambling on not being tested.

But disquiet was expressed as soon as the result of the 'A sample' test had been made public. Many athletes and commentators simply refused to countenance the possibility that Modahl, a person of deep religious convictions, would ever contemplate using performance-enhancing substances. More pertinently, a spokesman from the BAF was quoted as saying "there is something odd about the whole business of Diane's test, but no-one seems to know what it is" (On the line, op cit). The possibility of illness had been discounted, though, and at this stage there were no grounds for suggesting the sample may have been switched or tampered with.

On the day after the 'B sample' test result was announced, a statement from Modahl's law-

yers said it was "apparent that there had been material changes to the characteristics of the sample between 18 June and 30 August. This raises serious questions as to the compliance with IAAF guidelines in relation to the storage and treatment of samples pending analysis" (The Guardian, 1 September 1994, p 21). In response to this statement, an IAAF spokesman admitted that one of the doping experts present at the testing of the 'B sample' had noted changes to the composition of the urine as soon as the vial was opened. The IAAF said these changes could be ascribed to the passage of time. So far as Modahl's lawyers were concerned, the changes indicated the sample had actually degraded while in storage. In any event (said the lawyers), the IAAF could not use a degraded sample as evidence that an athlete had taken testosterone in order to enhance her performance and expect that a subsequent ban would be upheld. If necessary, they would take the governing bodies to court and argue that they had breached their own procedures regarding sample storage. They would also invite the court to hold that the enormous amount of testosterone in the sample could have been a consequence of the laboratory's failure to store the sample properly rather than the result of a doping offence.

In December 1994, Modahl exercised her right to appeal against her suspension before a panel convened under the auspices of the BAF, the governing body for track and field athletics in the United Kingdom. In accordance with her lawyers' earlier statement, the basis of her appeal was that improper storage of her sample by the testing laboratory in Lisbon had caused her urine sample to degrade, resulting in the unprecedentedly high testosterone reading. Personnel from the testing laboratory admitted that, far from the sample being refrigerated for the whole period between collection and testing as required under the IAAF's own regulations, it had been stored for the first 48 hours in direct sunlight at temperatures of up to 80 degrees Fahrenheit.

Despite being presented with this evidence, the BAF panel rejected Modahl's appeal. After hearing from five independent endocrinologists the panel accepted there had been serious flaws

in the testing procedure at the Lisbon laboratory. But under the IAAF's regulations the burden of proof fell on Modahl to provide a satisfactory explanation for the extraordinarily high level of testosterone in her sample. That burden had not been satisfactorily discharged, they said. A four-year ban (the mandatory penalty under IAAF rules for a first offence of testing positive for testosterone) was imposed.

However, the BAF's regulations gave Modahl another right of appeal. In July 1995, she exercised that right before a specially constituted BAF appeal panel, which to widespread surprise found in her favour after a two-day hearing. The appeal panel decided the unsuitable conditions in which the sample had been stored probably caused bacterial infection in the urine. This infection could have caused the sample to degrade, which may in turn have given rise to a false result. Worse, the incompetence of the Lisbon testing laboratory in failing to store the sample correctly had been compounded because the documents that would have proved if the sample had been kept securely were missing. The panel decided Modahl had no case to answer and her four-year ban was overturned.

The IAAF expressed its 'surprise' at the appeal panel's decision and emphasized that the final decision on Modahl's eligibility to compete rested with it, as the world governing body, rather than with a domestic federation. The IAAF announced it would appeal against the appeal panel's decision before the IAAF's own arbitration panel. But in March 1996, the 27-member IAAF Council decided to drop the case on the advice of its doping commission chairman, Professor Arne Ljungqvist. Like the BAF appeal panel, Ljungqvist felt the manifest failures in the testing procedure regarding sample storage and the loss of paperwork had effectively relieved Modahl of any obligation to provide an explanation for her testosterone levels. The athlete immediately launched legal proceedings against the BAF (ironically, the body that was effectively responsible for exonerating her), claiming a total of £960,000 in damages, legal fees and loss of earnings as a result of the four year ban the BAF had imposed on her in December 1994. In June 1996, the BAF launched a High Court bid to

prevent the case going ahead on the ground that it was vexatious and an abuse of process. The BAF succeeded in part: six heads of the statement of claim (those primarily concerned with whether the Lisbon laboratory had been properly accredited) were struck out, the result being that the BAF was only required to answer allegations of bias.

The case was set down for hearing in late 1998 and although many sports lawyers in the United Kingdom predicted Modahl would be unsuccessful, an out-of-court settlement for an undisclosed sum was agreed. The BAF was in such dire financial straits at the time that it was unwilling to risk losing a complex and expensive court battle and decided to cut its losses. Indeed, the BAF was subsequently declared bankrupt, partly as a result of the costs incurred in the case, and Modahl may have to return to the High Court to enforce that settlement.

Drug Use, Subcultures and Moral Panics

Modahl had failed a test for testosterone, but the whole question of drug use in sport was already being widely debated when the story broke. The use of anabolic steroids was particularly high on the agenda, and those in favour of tougher penalties for their possession were lobbying for amendments to the Misuse of Drugs Act, 1971. This empowers Parliament to proscribe the possession of substances designated as 'controlled drugs'. The penalties for unlawful possession of a controlled drug include fines and/or imprisonment, depending upon the relative harmfulness of the drug in question. Class A' drugs (for example, heroin and cocaine) can attract unlimited fines, seizure of assets and \ or life imprisonment. The possession of Class B or Class C substances now attracts maximum penalties of fines of £2500 and £1000 respectively (the penalties were amended by the Criminal Justice and Public Order Act 1994). In 1996, the government reclassified anabolic steroids as a Class C drug under the 1971 Act through the Misuse of Drugs Act 1971 (Amendment) Order 1996, Statutory Instrument number 1996/1300. This came into force in early 1997 and makes the unlawful possession of anabolic steroids pun-

ishable by a fine of up to £1000.

Drug use generally was a high-profile issue in 1995, following the death of Leah Betts, a 17-year old who died after using the dance drug, Ecstasy. The newspapers' acknowledged tendency to adopt a sensationalist approach to drug issues by taking worst-case scenarios such as drug-induced death or violent behaviour and portraying them as the norm (Redhead, 1995) was much to the fore in the days and weeks after Leah Betts died. This approach was also evident in the news media's reporting of the Zoe Warwick case (see below), her illness and subsequent death being portrayed as a situation that could befall any anabolic steroid user rather than as an isolated and avoidable tragedy.

In the light of the Diane Modahl case, a number of interviews with various competitors from other sports - undertaken as part of a separate research project at that time - invariably turned to the topic of drug use. In the course of those conversations it became apparent that most of those athletes believed anabolic steroids were usually taken in measured doses and under medical supervision rather than in uncontrolled quantities by athletes acting of their own volition, as Zoe Warwick had done. Those athletes also felt that the damaging side effects the media associated with such substances, such as high blood pressure, testicular cancer, liver damage and uncontrollable aggression were short-term and reversible - assuming their occurrence could be ascribed to the use of those drugs at all. A definitive link remained unproven, they thought.

It would probably be unwise to attach too much credence to those conversations, which had arisen from interviews on an entirely different subject. The best that can be said of them is that they provided a modicum of anecdotal evidence that a small group of international competitors (at least) had a standpoint on drugs which was at odds with the one being peddled by the newspapers and sports governing bodies at that time. But whereas the media's anti-drug stance in particular proved to be instrumental in securing changes to the laws on anabolic steroids, nobody seemed too interested in what the athletes had to say about it.

This state of affairs provoked consideration of the effect of media representations of drug matters. The media's role and Parliament's response to it appeared to be a classic case of moral panic (Cohen, 1980), in which 'deviant behaviour' (in this context, cheating in sport by using performance enhancing substances) eventually resulted in the application of rules and sanctions against the 'offenders'. The media and other 'moral agents' successfully influenced the public's and the government's attitudes towards the issue to such an extent that it precipitated changes to the law. A moral crusade had created moral panic, where "a condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests" (Cohen, *op cit*: 9). The Modahl saga leant itself easily to the cause of those who wanted to 'do something' about drugs in sport. Her exoneration came too late to influence the debate, for her case had been cited as the latest in a series of inglorious episodes that necessitated the introduction of stricter laws. By the time her ban was lifted, the machinery of justice had already ground into motion. Accordingly, a direct link can be made between her positive, but worthless, test for one banned substance and the hue and cry that eventually led to a change in the legal status of a different one.

The irony is that the people at whom the legislation was primarily aimed - the athletes - are probably the group of potential users to whom steroid use poses the least risk of long-term damage. There is evidence to support the contention that drug use by athletes usually occurs in a controlled environment. This means the damaging side effects associated with prolonged and unregulated use is delayed or prevented in athletes (Cashmore, 1986). Other subcultures had far more to lose than the athletes did. The main users of steroids (and whose use of them is less likely to be controlled by coaches or physicians) are bodybuilders and gay men who subscribe to a particular gym-and-clubbing culture. Increased use among straight adolescent males who want to look the part in pubs and clubs has also been documented (Lowther, 1998). Health care professionals feared these individuals were particularly prone to the health

risks associated with steroid use. And these were the groups whose unregulated use of anabolic steroids was likely to increase as a result of the 'panic laws' (Redhead, op cit) which the Diane Modahl affair precipitated. The fear was that their use would be pushed underground, beyond the reach of education programmes.

Drug Use and Elite-level Fencers

This research with elite fencers was motivated in part by a desire to find out whether those other athletes' views were shared by competitors who were not household names and who, far from making money from their sport, incurred a great deal of expense for the privilege of competing internationally. The media usually paid them no heed and during the Great Steroid Debate their views were not solicited.

Fencing is perceived as the antithesis of the commercialized, over-hyped, money-oriented jamboree that many sports practices have now become. It is very much an 'amateur sport'. It receives hardly any television coverage in the United Kingdom, there is no money to be made from it and there is precious little assistance by way of sponsorship. Even the very best are obliged to pay for their own transport and accommodation when competing in major events. Its status as an Olympic sport is under threat because of its lack of televisual appeal, the IOC earmarking it as one of the disciplines that might be axed in favour of beach volleyball, tennis and mountain biking. It has had its share of scandalous incidents over the years, usually involving tampering with one's clothing or equipment in an attempt to make sure 'on-target' hits do not register. But it does not have a reputation as a drug-user's sport. A number of those interviewed said this was because fencers had yet to discover a drug that actually improved their performance. However, there was anecdotal evidence that some fencers had used anabolic steroids to assist recovery from injury.

This research was carried out between December 1995 and March 1996. It involved face-to-face semi-structured 'snowball' interviews with twelve international fencers (six men, six women) who were, at that time, competing internationally in one of the three fencing disci-

plines (foil, epee, sabre). They had all competed in either the Olympic games, the Commonwealth Games or the World Championships. Several had competed in two of those tournaments and one had competed in all three.

The interviews lasted for between 45 minutes and one hour and covered various issues that had become pertinent in the wake of the Diane Modahl case and the attendant moral panic surrounding drug use. They concentrated initially on the athletes' knowledge of which substances were banned and the reasons for them being banned, but moved on to their perceptions of the science behind drug testing, the banning of recreational drugs and the role of the governing bodies. Questions were also asked about their confidence in the accuracy of drug tests and the sources of information that had been influential in shaping their opinions. Some of those interviewed sought guarantees of anonymity in the event of the results being published, hence the absence in what follows of the use of codes or initials which could conceivably result in an athlete being identified by their peers or members of the governing body.

The research had its roots in Fuller and La Fountain's (1987) survey of anabolic steroid use amongst 50 male College students, all of whom were admitted steroid users and who participated in (grid-iron) football, weightlifting, bodybuilding or wrestling. Fuller and La Fountain concentrated on whether those athletes regarded the use of steroids as 'cheating' the ramifications of breaking the law by buying steroids on the black market and the health risks associated with their use.

Most of those surveyed by Fuller and LaFountain were unconcerned about the 'criminality' of their activities. They thought of it as a 'victimless crime', believed serious athletes had to use them in order to be competitive nationally or internationally and said the success of other athletes was usually attributable to drug use. They were unconcerned about the health risks, were remarkably ill informed about the possible side effects of anabolic steroid use and regarded their bodies as machines that had to be manipulated to achieve the desired results. Any concerns they may have had were dismissed

as secondary to the commitment required of a dedicated athlete. It was just another form of sacrifice:

I get a lot of fun and enjoyment from powerlifting. It gives me a chance to achieve for myself and I do all I can to make my body stronger. I don't use (recreational) drugs or drink or smoke and if my coach says steroids will make me stronger I will use them (op cit).

Of course, the fundamental differences between this group and the fencers were that the fencers were not admitted drug users and they would not have been expected to mount a strong defence of drug use in their (ostensibly drug-free) sport. In fact, the only notable similarity was both groups' alarmingly confused views about the physical effects associated with anabolic steroid use. The fencers were able to speak vaguely about 'assisting recovery from injury' and 'helping you to train longer'. Only one of them was able to give information about the side effects which reflected that provided by bodies like the Sports Council and the sport's governing body in the United Kingdom, the Amateur Fencing Association (AFA):

Steroids are bad for you. They can be killers if you over-use them, can give you terrible liver and heart problems. They really do damage your mind and body - and not enough people know that.

This research was carried out long before Florence Griffith-Joyner's second heart attack in September 1998 and the debates about the alleged role of performance-enhancing substances in her death. But in the months preceding these interviews, the British newspapers had reported the plight of Zoe Warwick, a former champion shot putter and javelin thrower whose body had been wrecked by prolonged and excessive steroid abuse and who subsequently committed suicide at the age of 34. A Coroner's inquest held after her death had found that an inability to deal with the consequences of prolonged and excessive anabolic steroid use had contributed to the breakdown of her mental health and to the decision to take her own life. Warwick had suffered major liver and pancreatic problems, stomach haemorrhages, hearing impairment,

skin rashes and hair and teeth loss as a result of her steroid abuse (Jones, 1994). But the fencers were unaware of Zoe Warwick and several other high-profile steroid cases of the time and knew very little about the side effects associated with steroid over-use. Typical responses were:

Anything I know about anabolic steroids comes from the newspapers. They promote muscle bulk and allow quicker recovery from injury, but I don't know what they do to you.

Well, the information document from the Sports Council says 'in women they deepen the voice and cause facial hair!' I know they're supposed to have much more serious side effects (than that), but I don't really know what.

One might think that if an athlete is not exposed to steroids and has no intention of using them there is no reason why she should be aware of the risks, and that merely knowing they can be dangerously harmful is the only knowledge an athlete needs. But the United Kingdom Sports Council, as the body responsible for informing athletes about drugs, has devoted a lot of resources to drug education and ought to be concerned if its awareness-raising campaigns have little effect.

The fencers displayed a similar lack of knowledge about banned substances that they would be far more likely to come into contact with, such as codeine and caffeine. Again, this suggested that either the Sports Council and the AFA had failed to provide sufficient information, or that the athletes were not paying attention to the information that was available. They accepted that the responsibility of knowing what was banned fell on the athletes and that they were responsible for their shortcomings in this regard. But their lack of knowledge on side effects was compounded by the fact that none of them could say correctly what the penalties were for testing positive for five different banned substances (steroids, beta blockers, codeine, caffeine and alcohol).

Moreover, they seemed to lack faith in the 'official' sources of information and preferred to seek another athlete's, doctor's or pharmacist's advice if necessary. Their primary source of in-

formation on drugs was the newspaper reports, although as a group they were sceptical about the veracity of such information:

I want to see more information about what drug use actually means in terms of the health risks and what their effects are. I don't want to read ... ill-informed sensationalism.

The layman's perception of drugs - and I'm very much a layman because I only know about fencing - is clouded and shaped by what is said in the press.

Significantly, only one of the twelve interviewees said her opinions had been formed by sources other than media reports, and she was also dismissive of the information offered by the Sports Council and the sport's governing body. She had given a lot of thought to media coverage and had changed her views as a result of a personal cynicism that pre-dated the Modahl affair. Other fencers' lack of awareness was similarly compounded by a distinct distrust of their national governing body, its members being regarded as arrogant and incompetent:

Until a few years ago I took the official line and was influenced by what the newspapers said about it just being a few rotten apples, or about a few sports having a really big problem. Then I started using a new gym where a lot of the (track) athletes go, and where people do and say a lot of things. My change of heart stemmed from talking to other athletes and actually seeing what goes on.

I don't ever try to get information from AFA. They're a bunch of amateurs who have been there far too long and don't respond to change. They've got an attitude problem and they aren't receptive to new ideas. Do you want me to go on...?

The AFA is run by lawyers, and you just can't deal with them.

Of course, it does not necessarily follow that this group's troubled relationship with their governing body is replicated in other sports. And the officials at the Amateur Fencing Association would probably have their own explanations for this apparent antagonism. A concern that may be replicated elsewhere was the fencers' marked

lack of faith in the drug-testing regime in general and especially in the scientific rationale that underpinned it. None of those interviewed expressed confidence in the testing procedure, and without prompting they all mentioned Modahl as the main reason for their lack of confidence. Some of those interviewed had scientific backgrounds, and their views were particularly illuminating:

I don't have confidence in the biology of it. Storage, identifying the elements present and making sure they don't degrade all present problems. The more hands it goes through, the more problems there are.

The technology is there but it's still in its infancy, and if things have gone wrong I doubt the testers would back down because they don't want to be seen to have made a mistake. That would destroy any credibility the testing procedure still has.

Those who did not have scientific backgrounds also had reservations about the testing procedures, although their concerns were not to do with the scientific basis so much as with more general concerns about sample security:

The Diane Modahl case didn't make me feel confident about the procedure. There were a lot of questions unanswered about her case: the levels of security over her sample - you can't say for certain that it was her sample. Until you can be confident that the sample you give is properly looked after and the system is foolproof, people will always be sceptical.

It's not necessarily the testers' fault but there are so many hands through which samples pass. I think corruption is rife in sport. There have been cases of tampering with samples and I think swapping a negative sample for a positive one could conceivably happen.

One of the most striking issues to emerge from this research was the extent to which those interviewed had real fears about testing positive for what might be regarded as 'peripheral' banned substances. Failing tests for testosterone or anabolic steroids was accepted as something that could possibly happen, but it was regarded as so remote a possibility that (with one excep-

tion) it was not a major cause for concern among the group. Their fears about being tested positive for caffeine and codeine were far greater. Although most (but not all) of the interviewees were aware that these substances were banned, they were not happy with that state of affairs. They resented the banning of over-the-counter cold remedies that contained codeine. The reasons for them being banned as potential performance-enhancers were regarded as unconvincing and unnecessary:

I think there should be more of a balance between sports regulations and the law of the land. Over-the-counter drugs should be allowed. If the law doesn't say 'it's dangerous and you can't take it', why should sport be different?

In order to be taken seriously (the testing authorities) need to be able to distinguish between accidentally overdosing on coffee, say, and taking caffeine tablets to boost your performance. If they can't make that distinction why should the athletes suffer?

Similar concerns were expressed about cannabis being banned. Four of those interviewed supported testing for cannabis on the grounds that it was an illegal drug. The others believed that unless a substance had performance-enhancing qualities it was neither the responsibility of the testing authorities to look for it, nor the governing body to penalize athletes for using it.

With recreational drugs there may be peer pressure to take them or whatever, but there's no question of 'succeeding' or 'not succeeding' as a result of that choice. The analogy with performance-enhancers just doesn't arise. The two are very different. I don't agree with testing for cannabis, because it's not as if it improves your performance. I don't see why sport should be concerned with things that aren't performance-enhancers. It's just an example of sporting morality, setting the right example to the kids.

The group's attitudes to drug use and drug testing were underpinned by a profound cynicism of the commercialism and financial imperatives of modern sport, and especially the extent

to which money dominated the Olympics and other major events.

Once you have an activity that brings in money it's not just about sport any more and it's in everyone's interests for the players to look good. They won't cut their own throats by accusing their elite performers of taking drugs.

Because financially (catching drug users) isn't in the organizers' interests they turn a blind eye in most cases.

But despite cynicism and distrust over drug testing, the consensus was that giving athletes the freedom to take performance-enhancing substances if they chose to was something that ought to be resisted, especially if those substances could be proved to have damaging side effects. The fencers were of the opinion that a rational, coherent and scientifically valid testing policy had yet to be developed, and the system that did exist had been undermined by the perceived corruption of international sport. They appeared to favour a regime which reflected the original ideals of drug testing - protecting the health of athletes (Cashmore, 1986):

Some people don't want to ruin their internal organs for the sake of knocking 0.1 seconds off their time, and they shouldn't feel forced into doing so in order to be able to compete with others.

Similarly, the fencers felt that drug-use was not something that was carried out secretly, in isolation. Influence from coaches and physicians, the peer pressure of the 'locker room culture' and (in particular) the financial rewards available in some sports could conspire to make drug use an attractive proposition.

I'm not saying I feel sorry for athletes who get caught, but it's become such a ridiculous situation. Really what you are saying is 'take this and you might make the team. If you don't, it's bye-bye'.

The opportunities are certainly there, for anyone with talent who is trying to make a breakthrough. If your coach or someone says 'you should take this', that's a great incentive.

Conclusion

Those who support the drug-testing policies as presently constituted might take heart from surveys like these. One can argue that the views of these athletes are evidence of an unnecessary cynicism and stem from a fundamental lack of knowledge that can be rectified by the more effective use of educational programmes. That may well be the case, especially if one agrees that it is ultimately the athlete's responsibility to find out which substances are proscribed and to know what side effects, if any, those substances may have. But this survey indicated far more than a mere lack of awareness of banned substances. The fencers' scepticism about the science of drug testing, their perception of hypocrisy and incompetence among the governing bodies and their cynicism about the way in which testing programmes are couched in terms of 'cheating' rather than addressing legitimate health concerns are unlikely to be eased by more drug-awareness campaigns.

The effect of the Diane Modahl case on these athletes cannot be overstated. For some it had heralded a fundamental shift in perceptions, while for others it merely reinforced a pre-existing lack of faith in the whole testing procedure. Not one of those interviewed expressed much faith in the testing regime. Until the athletes' fears of double standards, dodgy science and flawed reasoning are adequately addressed, questions such as how many athletes are actually using drugs, whether sports should test for recreational drugs and what penalties should be imposed on users are rendered irrelevant. The fencers thought the governing bodies and the testing authorities needed to provide definitive scientific evidence as to the efficacy of their procedures to the athletes' satisfaction (as opposed to the satisfaction of the media and other moral agents) if drug testing was to regain any vestige of credibility.

If exhortations of fair play mean little to elite-level performers, it would be pointless to use such arguments to justify banning the possession and supply of anabolic steroids under the Misuse of Drugs Act, 1971. So far as the fenc-

ers were concerned, the only possible justifications for bans would be on health protection grounds. Banning substances because their use was 'unfair' seemed indefensible. Banning them if they were shown to be harmful had more merit, but this had to be backed up by more effective education and health awareness programmes that have moved away from reliance on the 'cheating' argument. So far as this sport was concerned, those at the sharp end - the individuals who compete internationally and who are likely to be tested - lacked confidence in the procedure and science of drugs testing and in the organizations who carried it out.

Many of the fencers' comments might be wrong or ill-conceived, but if their perceptions are replicated in other sports, rebuilding British athletes' trust and confidence in the wake of the Diane Modahl affair is likely to be a very long process indeed. It appears that the main consequence of Modahl's experience is the creation of a fundamentally flawed regulatory framework, ostensibly designed to tackle the 'drug cheats' in sport but which will actually serve to make other steroid users even more susceptible to any long-term side effects that those substances may have.

Bibliography

- Cashmore, E (1986) *Making sense of sport*. Routledge.
Cohen, S (1980). *Folk devils and moral panics*. Robertson.
Dubin, C *Commission of enquiry into the use of drugs*. Canadian Government Publishing Centre, 1990.
Fuller, R and LaFountain, J (1987) 'Performance-enhancing drug use in college athletics'. *Adolescence* 115-130.
Jones, S (1994). When dying to win can mean precisely that. *Observer Sport*. 25 September, p 9.
Lowther, J (1998). *Anabolic steroid use*. Paper presented at the Socio-legal Studies Association Annual Conference, Manchester, UK.
Redhead, S (1995). *Unpopular Cultures*. Manchester University Press.
On the line (1996). *The Modahl affair*. BBC2 Television, 3 February.
Sports Council (1993). *Doping Control*. Sports Council Publications.

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