

Sport in Society



Cultures, Commerce, Media, Politics

ISSN: 1743-0437 (Print) 1743-0445 (Online) Journal homepage: https://www.tandfonline.com/loi/fcss20

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To cite this article: James M. Connor (2009) Towards a sociology of drugs in sport, Sport in Society, 12:3, 327-328, DOI: <u>10.1080/17430430802673676</u>

To link to this article: https://doi.org/10.1080/17430430802673676





Towards a sociology of drugs in sport

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A sociologically informed analysis of drugs in sport requires the researcher to focus upon social forces. It is a continuing flaw of the literature that the individual is prioritized over wider social forces. In this essay I aim to provide a representative sketch of how the discipline questions and critiques social problems like drugs in sport. This includes arguing for a critical challenge to the mythologies of sport and drugs, and why and how sport and play are different, and exposing the role nationalism and ideology play in encouraging doping. I conclude by suggesting four avenues of research: amalgamating sport theory with drug theory, the concept of the networked athlete, prevalence rates and public perceptions of performance-enhancing drug use. This essay is by necessity broad and introductory – highlighting the challenge faced by sociologists to engage with the issue and demonstrate the social forces at work.

Introduction

An elite athlete bolts the door to his room in a publicly funded sports training institute. The day has consisted of a range of training sessions and techniques devised by his coach, biomechanical scientists and fitness trainers. His body was timed, tested and observed - all to ensure peak performance. He was subjected to psychological examination and taught mental strategies to 'enable' winning. A nutritionist crafted his diet to achieve a perfect balance of carbohydrates, vitamins and minerals. He took six different supplements to ensure that his body had every necessary nutrient. A media appearance was carefully supervised by his manager, media liaison and sponsor representatives. Two hours of his day was consumed by physiotherapists and masseurs. His travel itinerary even factors in high altitude training before each competition. Every activity has been geared to enhancing his performance so that he can win. Yet some enhancements are banned. The question that any sociologist is compelled to ask is 'Why are some methods and drugs banned and not others?' Moreover, what reasons and common understandings justify why only some are banned? But not content with such 'answers', sociologists seek to explore the issue of drugs and sport by placing the analysis firmly into the social realm and away from individualistic explanations. We consider history, theory and evidence, and address the competing explanations to seek out a better way to understand sport and drugs and drugs in sport.

Sociologists have investigated the use and abuse of drugs for a long time, with landmark work being done in the 1940s. Conversely the critical attention paid to sports has occurred more recently (from the 1970s onwards) and been subject to much theoretical critique. Research that combines the two in any sustained theoretically and experimentally informed way is limited. If one was to employ a sports analogy, the current form of the team is patchy, unfocused and in need of some coaching. This is a failing on the part of sociologists as there is a very rich body of theory and experimental techniques that could be applied to sport *and* drugs. Further, it should

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be noted that sociologists have offered complex and nuanced explanations of sport that are well grounded in theory. However, there has been a failure to communicate these ideas and translate them for a wider audience.

The purpose of this essay is to sketch sociological approaches to drugs in sport. I start by explaining what sociologists do and why they can sometimes be perceived as being overly critical of society. This critical, questioning approach to the world allows sociologists to make some insightful comments upon sport in society by 'busting myths'. The first myth that I question is how and why sport has evolved from play to organized activity over the past 200 years. I then consider the profound impact the shift to professional, profit-driven sport has had. Sport is also intimately tied to nationalism and I explain how nation states have used sport and encouraged drug use to further national and ideological goals. The final myths that require questioning are the propositions that sport is healthy (it is not) and fair (far from it). This allows me to then point to four avenues of research required to further our understanding of sport: amalgamating sport theory with drug theory, the concept of the networked athlete, prevalence rates and public perception of performance-enhancing drug (PED) use. My overall aim, along with all good sociology, is to encourage us to challenge and improve the way we understand our world.

How sociologists see the world

Distilled to its essence, sociology seeks to question society. Sociologists do this by challenging the taken-for-granted assumptions (myths) that are made about how and why we live the way we do. We want to push through the boundaries, the edges, the beliefs in how things are and question them. A central assumption that underlies the discipline is the argument that the way we live is a social construction, which means that sociologists believe that, rather than the world existing as it does for any innate reason, it is human cultures, societies and values (to name just three components) that shape the way we perceive reality. The 'common sense' understandings of the world are not natural or bound up in objective fact, but socially mediated, or to return to the earlier point, the way we understand the world is socially constructed. This does not mean that things are not 'real' – we know that they are – but that how we make sense of them is a result of how we have come to perceive the world. As Newman argues:

The social construction of reality is a process by which human-created ideas become so firmly accepted that to deny them is to deny common sense. Of course, some features of reality are grounded in physical evidence – fire is hot, sharp things hurt. But ... reality is often based not on hard evidence but on such forces as culture and language, people's definition of the situation, self-fulfilling prophecies, and faith and incorrigible propositions.⁴

It is the role of sociologists to question these forces through theory building and testing.

Another way of looking at how we question the world is to consider what one of the great American sociologists, C. Wright Mills, said about the discipline. The *sociological imagination*⁵ is the term that Mills coined to encapsulate the questioning of society: 'the idea is to use a variety of viewpoints ... and in this way to let your mind become a moving prism catching light from as many angles as possible'.⁶ It is by using this variety of viewpoints that sociologists question society. Sociology starts with the idea that we all have differing perspectives. However a key strategy of the sociologist is to take advantage of these views as a way of illuminating the issue under enquiry; which, in our case, is the vexed issue of drugs and sport.

The use of a range of views, or to be more technical, theories, is both the strongest and weakest aspect of sociological thought. Our theories allow us to develop coherent understandings and explanations of social phenomena; however, because we have a variety of ways of seeing, or 'catching the light', sociology features contradictory theories and explanations. What I endeavour to do in this essay is identify the key contributions that certain

theoretical perspectives offer for an understanding of sport and drugs. I also indicate the weaknesses in some approaches and indicate what further research needs to be carried out to further explicate drugs and sport from a sociological perspective. This is by no means an exhaustive review of the literature; the purpose of this essay is to canvass the general approaches and understanding that sociology has of drugs and sport.

An analytic framework

To explain an issue like the use of performance enhancing drugs (PEDs) in sport, C. Wright Mills would ask a sociologist to do four things:

- 1. consider the personal issues or troubles that concern people in society;
- 2. connect this to social issues, problems and forces;
- 3. place the issue in its historical context;
- 4. apply sociological theories, models and understandings to illuminate the issue.⁷

To start with Mills' first point, the use of PEDs in sport is a personal issue or trouble that concerns people. Critically, it is not an issue that merely affects a lone individual, but it is an issue that concerns many. Thus, while the need for the athlete to win and their potential use of drugs is a private affair, it has become a public issue because the use of PEDs has been banned. (For a deeper discussion on the relationship between private actors and public interest, see Houlihan.⁸) This is the connection between the acts of the lone athlete and the wider concerns of society. There are other connections between the individual athlete and society in this respect also – if the athlete is competing for a team or a country they are wrapped in a social *milieu*, although still an individual.

To continue utilizing Mills' approach, the sociologist then needs to consider the wider social forces, problems and issues that are part of drugs in sport. Thus, we would consider issues such as capitalism, the gendered nature of sport, the importance of national pride and the overriding need to win. The question that arises from this is how these issues impact on the decision of the individual athlete in relation to the use of PEDs.

The historical context is particularly important as it helps explain where we have been and how we got to the point we are now at. In terms of PEDs in sport, this means considering the origins of competitive sport and the development of the relationship between sport and society. It also entails considering the historical move from drug permission to drug prohibition and how the anti-drugs message in wider society has been replicated within sports.

Finally, to complete Mills' approach, a sociologist would seek to apply theories and models to understand the processes highlighted above; but more of these later.

The key assumption that has underpinned my discussion thus far is the sociological view that the individual is second to the social. That is, individualistic explanations of drug use in sport not only hide the real reasons for use but also continue to feed the view that sport is about the athlete alone. Sociologists reject any view that fails to acknowledge how the athlete is constituted in and by the society of which they are part. As Armour, Jones and Kerry point out, 'a social being cannot escape society in order to participate in sport, rather, society consists of structures and agents who constitute – and reconstitute – sport'. What this means is that to understand drugs in sport one cannot examine the athlete-user alone; one must also seek to explain the social reality around sport. This broad approach of sociologists to examining the social context rather than merely the actions of individuals is very long in its tradition, and perhaps best summed up by a founder of sociology, Karl Marx, in 1852:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. The tradition of all dead generations weighs like a nightmare on the brain of the living. ¹⁰

Marx's prosaic style aside, what his argument means for an issue like drugs in sport is that the decision of an individual athlete is not made alone, but within a set of circumstances already created for them. Those circumstances are of course part of the society that we inhabit.

To summarize the sociological approach to studying drugs in sport: sociologists argue that one cannot just focus on the actions of the individual athlete as these acts are made under the influence of a host of social forces and processes. As Armour *et al.* posit, the 'purpose of sports sociology is clear: it must study the sports/exercise person (at whatever level) as a social being in a particular social context; it must study social structures which endure and which have influence'. ¹¹ It is the study of social forces that is the particular strength of sociologists.

What sociology has done

To understand the use of drugs in sport we first need to turn our attention to the question of just what sport is and how is it used, portrayed and played in society. In line with the sociological mission of questioning taken-for-granted assumptions about the world, this section critiques sport and assume that how it 'appears' may not be how it really 'is'. Firstly, I explore the concept of 'sport' and what sociologists argue to be the origins of sport. I then examine the explanations of sport that have informed most studies, including the few that enquire into drugs and sport. The aim is to approach the examination of sport from the perspectives around the broad categories of capitalism, masculinity, nationalism and hegemony. By following this line of explanation, I hope to provide some clarification of these perspectives as we tour what has already been argued.

Before exploring the origins of sport it must be noted that sport is part of, and cannot be separated from society, much like the individual. To view it as different is to imbue it with a particular character that sport does not possess, as Frey and Eitzen point out:

to view sport as separate or different in this way may be problematic in light of the important part sport plays in our society. Sport is played at school, it dominates the media, it takes up our leisure time, sporting metaphors dominate our language and sports contests provide vehicles for the exhibition of national pride. ¹²

Thus, I begin by placing sport in society (i.e. in its social context) and explore why sociologists claim that sport today is different from the physical games that preceded it.

Historic play; modern sport

Modern sport is just that, *modern*. Horne argues that it is 'a *modernist* creation of the late 19th century, as opposed to the considerable number of physical game contests and play forms that have existed throughout the world over several centuries'. Miller, Lawrence, McKay and Rowe support this contention when they claim that 'sport of a regular and organized kind is the product of a social institution with its origins in Victorian England'. Obviously we have had 'sporting' contests for much of human history, the ancient Olympics being a prime example of the durability of sporting challenges in society. The case these authors are making is that the way we play, watch and engage with sport is significantly different today. This difference is a result of sport becoming 'mixed up with the development of industrialism and capitalism, the spread of liberal democracy and the growth of mass communications'. What this means is that sport is not something that is 'natural' human behaviour. The sporting contests we have today are a product of the forces that Horne identified, or, to phrase it differently, modern sport is played the way it is today because of the

changes that have occurred in how we manage, produce and consume in our society. Thus, sociology challenges the assumption (or myth) that sport is 'natural' or 'normal'. It is a cultural activity with a social context.

This shift in how we perceive physical activity, from play to sport, is central to understanding how and why sociologists claim that sport today is different. Frey and Eitzen make the distinction about a transformation from play, which is playful activity for its own sake (*ludic*), to sport, which has an intrinsic purpose. ¹⁶ They define play as being viewed:

as an activity where entry and exit are free and voluntary, rules are emergent and temporary, fantasy is permitted, utility of action is irrelevant, and the result is uncertain. Play has no formal history nor organization; motivation and satisfaction are intrinsic; and the outcome does not have serious impact beyond the context of the activity.¹⁷

Thus, play is profoundly different from the modern sporting contests we see and engage in. Just consider the focus on the scoreboard in modern sporting contests. Frey and Eitzen succinctly emphasize this point when they argue that modern

sport is hardly voluntary; rules are formal, generalizable, and enforced by formal regulatory bodies; the outcome is serious for individuals and organizations not actually participating in the physical activity, and winning (the outcome) is more important than participation (the process).¹⁸

The emergence of sport is part of the broader changes in society that processes of modernity have wrought (roughly starting from the eighteenth century). The changes can be summarized by considering how sport has become an activity beyond just exercise and has become a serious industry itself.

Industrial sport; sport as profit

Sport as an industry is significant on the global scale, including the sports themselves, sporting-goods manufacturers, sports marketing, sports tourism, sports apparel, sports drinks, sports gambling and, of course, sports media. Estimating the global value of this is mind-boggling. Using just two examples (Australia and England) demonstrates how much money is involved. In Australia, in 2001, the Australian Bureau of Statistics reported that sports generated A\$8.5 billion in income.¹⁹ In the 2001 census 1% (83,008) of the workforce was engaged in sport and physical recreation.²⁰ In England, it was estimated that, in 2000, sport value-added GB£9.8 billion and employed around 400,000 people, just under 2% of the workforce.²¹ It is undeniable that sport has become a global industry generating significant revenue.²² However, what is curious about sport is that it is a unique industry, as Horne argues:

where else would consumers (football fans) maintain high levels of consumption even if quality (success) declines and price rises? Indeed, continuing consumption (support) in the face of lack of success is seen as a true sign of commitment. Likewise, otherwise rational entrepreneurs will invest vast sums of money into commercial teams in pursuit of sports success without serious expectation of financial return ... Sport is clearly much more than simply another industry.²³

Sport is more than just a money-making endeavour, as will be discussed shortly, but one cannot discount the importance of money in sport. It is a common argument of sociologists that sport has been, and is being, increasingly commercialized.²⁴ This commercialization of sport means that profit becomes the overriding motivation, eclipsing ideals of fair play and sport for the sake of sport (though lip service is paid to these ideals). As Frey and Eitzen argue: 'we should not be surprised that high-level sport has been transformed into a commercialized, commodified, and massified phenomenon'.²⁵ The reason, simply, is that there is profit to be made in sport.

The profit motive: athletes

The profit motivation, as a result of the professionalization of sport and involvement of the media in sport, means that there is now a single, all-powerful motivator in sport – winning. Victory has become the ultimate goal of sporting clubs, coaches and athletes and the rewards for winning are considerable. Clubs and sporting bodies rely on payments by media interests for the broadcasting rights to their sport along with endorsements and sponsorship deals. The key determining factor with respect to the saleability of these rights and securing of endorsements is the ability to win, or the possibility of it, which will, in the language of current media parlance, 'sell' the sport to the consumer. Athletes themselves must win or they will not get the contracts, sponsorship or government support that will enable them to continue winning. For the miniscule minority of sports people who do 'win' the rewards can be astronomical. The overriding need to win is summed up neatly by one of Nike's slogans during the 1996 Atlanta Olympics – 'Second place is the first loser'.

The desire to win, and thus, by proxy, to achieve financial and other, less tangible, rewards, can override moral restrictions that might otherwise prevent a person engaging in dubious activities. Winning in sport is a zero-sum structure: if I win you must lose. ²⁸ This results in winning being the most important motivation, and, as Jones and McNamee argue, in sport

the goal is not to equalize relations. The competitive principle in sport is precisely to secure victory (within the rules) which necessarily precludes the opponents from doing the same ... Any kind of physical or mental advantage is pressed in order to secure victory.²⁹

If performance-enhancing drugs or methods can give one the competitive edge, with such rewards at stake, then it is not surprising that athletes will use them. I am not denying that there is still some reward in the 'sport for the sake of sport' position, but as Frey and Eitzen argue:

their significance [intrinsic rewards] seems to be devalued by the rising importance of monetary rewards (legal and illegal) for athletes, the exaggerated importance of winning that translates into treating athletes as interchangeable parts, the increase in the incidence of athletes using performance enhancing drugs, and the association of athletic success with outcome goals of profit, visibility, entertainment, and community/organization prestige. ³⁰

If sport is a modern industry with profit being a driving force, then it is inevitable that PEDs will be used in sport. This is the case as generating profit relies on selling sport – the product – to consumers. Sociologists have argued convincingly that increasing commercialization and commodification of sport has fundamentally changed sport. In the context of Australian sport we can see this with the professionalization of the major football codes and cricket. This process began in the 1970s and has advanced swiftly since. The rise of Twenty/20 cricket and the Super 14 Rugby Union are prime examples as these two innovations are designed for consumer, media-driven consumption, and therefore to make money. In the case of Super 14 (previously 12) it was invented to drive pay-television subscriptions, and Twenty/20 is set to become an advertising and gate attendance bonanza as a quickened and supposedly more exciting form of cricket. In this respect Twenty/20 follows from the World Series Cricket innovation introduced by Kerry Packer in the 1970s primarily as a way of driving television audiences for cricket.

This change in sport has resulted in two groups making considerably more money from sporting endeavours – the owners and administrators of codes and teams – as well as a small minority of elite sportspeople. Continuing with the example from Australian cricket, Stoddart explains that in 1975 Australian Cricketers would receive about \$2,000 each, plus minimal expenses, to tour England, while in 1984 they could earn up to \$40,000 a season.³³ By 2004 the captain of the Australian Cricket Team earned \$2.24 million.³⁴ This astounding increase in earnings for cricket is mirrored in all other sports. For example, elite professional football (soccer) players whose weekly income in the English League was capped at £20 in the 1960s can

now earn £20,000 - a 1,000 fold increase. ³⁵ While a case could be made that athletes have been very poorly rewarded in the past, the huge and growing financial rewards offered to the minority of successful athletes operates as a very powerful motivational force on all athletes, which can have only one impact on PED use. ³⁶

However, this focus on the few successful athletes (both in terms of money and success) obscures the legion of athletes who do not make it to the elite level. In reality, very few athletes will make it to the pinnacle of their sport and receive large monetary pay-offs. The half-life of top Australian Football League (AFL) players is three years, as highlighted by Riewoldt (a St Kilda player) who addressed draft inductees in 2005:

To make the point, the [AFL players] association enlisted the help of St Kilda's young star Nick Riewoldt to address the class of 2005 at this year's draftee induction camp, held last month. Riewoldt, who entered the league in 2001, could not have been blunter. 'Take a look around', he said to the latest batch of AFL hopefuls. 'More than half the players here won't be in the AFL in three years' time. Not long ago, I sat in the same place as you and now more than half of those blokes have one [an injury].'³⁷

The pressure on young hopefuls with such a short playing life can only encourage the use of anything that might give them an advantage and lengthen their career. Staying with AFL, most players have made a long-term commitment in trying to get into the senior ranks. This often involves sacrificing other career opportunities, education and life experience. The AFL Pathways programme is a system designed to train young players and eventually lead them into the AFL proper,³⁸ however, according to former players, 93% of players in the Pathway programme will never make it.³⁹ The key sociological point here is that the individual athlete in sport is expendable. There is a line of athletes ready to take their place at the top. This sort of pressure must encourage athletes to at least consider PEDs as a way of moving from being one of the 93% in the AFL pathway programme to one of only 7% playing top level Australian Rules.

The profit motive: institutions

The owners and administrators of sporting competitions, as the second key stakeholder, have a vested interest in maintaining the marketability of their sport to secure some of the increasing sponsorship and rights deals being offered. The English Premier League will earn GB£1.7 billion for the broadcasting rights of three seasons from 2007, compared with GB£1.02 billion for the previous three years. The wealth and income generation of sport as an industry cannot be denied. This means sporting codes need to maintain as marketable a product as possible with which to compete. On one hand this does offer an incentive to reduce PED use, as scandals may be seen to diminish the value of the sport. However, practical experience would suggest that scandals, while damaging in the short term, have no long term impact. For example, the Olympics (winter and summer), Tour de France and professional baseball in the United States have all had serious PED scandals yet continue to attract sponsorship, broadcasting and, crucially, fan support. Thus, as an administrator or team owner I might ask whether it is in my interests to ensure the best sporting spectacle that I can, and if this means enhancing performance, or turning a blind eye to the use of PEDs, then perhaps I will be tempted.

The Olympics has been converted from a celebration of amateur sporting success to a multibillion dollar global brand. This has had a profound effect on the way sport is governed and how rules for drug use are created, tested and enforced. The influx of money has led to evidence of corruption, graft and greed within the IOC. ⁴² As Miller *et al.* argue: 'it is a sorry tale of greed and corruption' by the IOC. ⁴³ The question that must be asked by sociologists then is how can an international body (the IOC) with no regulation by nation states be allowed to create and enforce a drug testing regime? It is akin to the foxes being placed in charge of the hen house. We must

even question if the IOC, as embodied by WADA, is fit to oversee anti-doping. 44 Simply put, from a sociological point of view, there is far too much money at stake for bodies like the IOC to ever effectively and fairly enforce bans on PEDs. It is not in their interests to have continuing scandals plaguing sport, which is what the likely result would be if there was a proper system of enforcement. Further, the Olympics (like all sport) need records and milestones to be broken, as they make the sport more marketable and thus profitable. Given that there are undoubtedly a number of records set by athletes utilizing drugs, including many in track and field which have stood since the height of drug use amongst Eastern Bloc countries during the 1980s, without drugs the number of Olympic records broken would decline each games. 45

Consequences of the profit motive

The source of this large increase in money in sport is primarily advertising. Marketers know that sport is a wonderful vehicle with which to contact consumers, especially harder-to-reach men under 35. This profit motive neatly leads us back to where we began this section, namely, that sport is now a commodified, commercialized form of entertainment that is sold to consumers. This argument about sport, if correct, leads us as sport sociologists to a number of profound conclusions. Firstly, while capitalism (and the profit motive) is the driving force behind sport it is inevitable that PEDs will be used by athletes and encouraged by coaches, administrators and owners. As Hemphill points out, 'as the commercial value of sporting success increases so too are the temptations for players, coaches and promoters to employ dubious means'. 46 This is because the overriding need for victory, for winning, for overcoming the other, is a central tenet of both sport and capitalism. The two very conveniently mesh. Secondly, athletes will be strongly encouraged by two aspects of the reward/punishment system inherent in capitalism. They will be pressured to use PEDs because the rewards on offer for winning the gold, coming first or being the 'best of the best' will outweigh any possible sanction that could be applied. Athletes will also know from long years of competition that there is a reserve army of others waiting behind them, and it does not matter to the public which athlete becomes the next world record holder, just that one does. This means that as an individual one is interchangeable and unnecessary for sport.

Sport is the nation; nationalised sport

Nation States have a long history of using sport as politics by another means. The twentieth century is marked by this particular combination, be it Hitler's Nazi Regime glorifying Aryans at the 1936 Berlin Olympics or the boycotts of the 1980 Moscow and 1984 Los Angeles Olympics. ⁴⁷ Norbert Elias, a classical sociologist, made this very point as long ago as 1939 when he argued that, 'the competitive bodily exertions of people in the highly regulated form that we call "sport" have come to serve as symbolic representations of a non-violent, non-military form of competition between states'. 48 Sport is a central aspect of nation building and prestige creation.⁴⁹ The Australian Institute of Sport (AIS) is a prime example of the role the state plays in propagating sport for national identity. The AIS was set up partly in response to Australia's medal haul in the 1976 Montreal Olympics (one silver and four bronze medals), which was acknowledged as a poor showing for a supposedly sports-driven country like Australia. 50 Hogan and Norton estimate that each Olympic gold medal won between 1980 and 1996 cost the Australian taxpayer \$37 million.⁵¹ The significance of this government involvement is that the purpose of sport is not for the joy of physical activity (as articulated in the 'Spirit of Sport' statement of the WADC), it is about competition between nations and, at times, competition between competing political ideologies (fascism, communism and capitalism).

The involvement of governments in sporting endeavours leads to sport becoming a means to an end, be it prestige, wealth or national pride. ⁵² Sociologists question the use of sport to encourage nationalism because of the social problems this can lead to. As Hughson, Inglis and Free point out, 'mass media has repeatedly whipped up nationalist enmity amongst sport fans'. ⁵³ The problem with nationalism is that it encourages an 'us *versus* them' attitude which, at its worst, leads to violence (witness football hooliganism), racism, war and genocide. ⁵⁴

Governments have also had a long history of encouraging the use of performance-enhancing drugs and methods so that their country can be successful.⁵⁵ The East German Communist Government is renowned for doping their athletes in the 1970s and 1980s.⁵⁶ More recently there has been continuing questions regarding Chinese athletes and claims of systematic, government-supported doping.⁵⁷ The significant point is that when sporting success is tied to national success there is always a risk of governments becoming involved in performance enhancing, both legal (training institutes) and illegal (doping). This offers further evidence that drug testing and punishment regimes focused on the individual are not going to prevent PED use when a government supports the use.

Healthy sport; fair play

The mythology of sport implies that sport is healthy and natural, something that is inherently good for the body and very often the soul. UNESCO proclaims that:

Physical education and sport form an important part of educational systems and are key contributors to social, human and intellectual development. Both public authorities and private sector are thus united in their efforts to stimulate the general interest in sport and physical education, as they are clearly a powerful influence in:

- promoting human values, fair play, ethics, well-being and healthy-lifestyle;
- bringing together persons from different social, cultural and geographic background regardless of religion and ideology;
- contributing to peace and human development.⁵⁸

This view of sport, as somehow inherently a moral good, is a particularly virulent myth. Hargreaves points out that the common sense view of sport is 'that sport helps individuals to develop stable personalities and contributes to their well-being and all-round development, thus functioning to benefit society as a whole'. However, sociologists argue quite convincingly that sport is neither healthy nor inherently moral. Consider this picture of training:

Athletes subject their bodies to inordinate levels of pain and injury and often over-train in distinctly unhealthy ways. Moreover, in the quest to improve performance, elite athletes from virtually all countries engage in blood doping; consume diuretics, hormones, steroids and stimulants; adhere to ascetic dietary regimes; and use aquadynamic and aerodynamic clothing and equipment. Many high level athletes train in national sports institutes that simulate climates and altitudes, elevating red-blood-cell counts. The Australian Institute of Sport even has a special facility known as Altitude House, where athletes sleep in chambers that stimulate a high-altitude atmosphere. Far from being 'natural,' elite sporting bodies are akin to docile cyborgs.

The authors are making a very strong argument that sport is not a healthy activity, nor a fair, moral or natural one. Doping control agencies claim that health of the athlete is a key reason why drugs in sport need to be banned, with athlete health being one of the three criteria used to determine if a substance or method should be banned. However, if the health of athletes is a concern then drugs are a miniscule part of their health 'problems'. To actually make elite sport healthy we do not need anti-doping codes, we need anti-training codes limiting the type and amount of training an athlete can do. We also need anti-competition codes restricting the number of games/meets/competitions in which an athlete can engage. Further, taking this argument to its

conclusion means that any sport with a high risk of injury (in effect any contact or near contact sports; all football codes for example) should be banned. ⁶³

Perhaps even more telling in this debate is the sociological idea that 'health' itself is a social construction: there is no accepted definition of 'health'.⁶⁴ This argument asks us to consider how we discern between drugs for enhancement (i.e. doping) and drugs for recuperation? What sociologists have consistently and persuasively argued is that the health discourse of 'drugs being bad' is a socially constructed argument used to further the interests of particular interest groups in society and that there is no logical basis to the claim that sport is healthy (it is not) and that drugs are bad – it is too complex an issue for such a simplistic response.⁶⁵

Medicalisation of sport

A sociological discussion of health and sport would not be complete without highlighting the concept of medicalisation. ⁶⁶ The term medicalisation is used 'to explain the way in which the apparently scientific knowledge of medicine is applied to a range of behaviours that are not self-evidently biological, or even medical, but over which medicine has control'. ⁶⁷ Medicine is gaining increasing control over aspects of our existence that it previously had no control over (for instance, child birth is often cited by feminist-inspired sociologists). In the realm of sport a physiotherapist, nutritionist and doctor have become fixtures in any elite team. This was not always the case; for example the Australian cricket team's renowned physiotherapist, Errol Alcott, first joined the team in 1984. ⁶⁸ This process is important because it points to how and why medical doctors (the Madrid cycling investigation) and medical researchers (BALCO) have become involved in doping scandals. This is because medicine has become a key component of sporting success, thus it is inevitable that the practitioners are drawn into the culture of winning at all costs.

The myth of fairness

The last myth of sport that sociologists debunk is the idea of fairness. Sport is not remotely a 'fair' social activity and claims that it is the epitome of egalitarian, open and level competition are patently false. Sport is not fair at the outset because sport mirrors wider social inequalities, both at the individual and global level. For the individual, gender, ethnicity, class and spatial location (to name just a few dimensions of inequality) will determine a person's chance of being a successful athlete.⁶⁹ At a global level there is a simple reason why African athletes perform well at track events, but not field events or swimming – it is because running requires very little in the way of material resources. Conversely, a single Olympic-quality pole for pole vaulting costs at least US\$500 (typically a vaulter would have a dozen poles and they break or wear out quickly), to say nothing of the bar, uprights, pit, bags and run up track. Similarly, the capital investment and maintenance cost of an Olympic standard 50-metre pool is beyond the means of many countries. Rich, developed countries can support athletes with institutes, scholarships, training support, facilities and equipment.

These cross-national differences are mirrored for the individual as well. If we start with gender, you are likely to be more successful and better rewarded if you are a male athlete. It is a truism that male sport is favoured over female sport. Further, there are still sports where women are excluded on the basis of their sex (for example, boxing only started allowing women in the ring in the closing stages of the twentieth century). Part of this can be explained by acknowledging the dominance of patriarchal societies which systematically favour men over women. Even when women's sport receives media coverage it is often sexualised or trivialised as Miller *et al.* point out:

between 1948 and 1996, women won 40% of Australia's gold medals at the Olympic Games despite comprising just 24% of Australia's representatives. Similarly, between 1911 and 1990 women won 35% of Australia's gold medals at the Commonwealth games in a period when they were allowed to participate in only 31% of the sports available and constituted 27% of all Australian athletes. Yet despite this astonishing performance, women's sport generally receives about 2% of Australian media sports coverage, and much of it is stereotypical, trivializing, and sexually objectifying. To

Perhaps a telling commentary on gender relationships within sport is the criticism of 'playing like a girl'.

Gender has been extensively studied in the context of sport and we understand how and why women are systematically marginalized and excluded. This skewed playing field results in different pressures being placed on women athletes, particularly in terms of appearance and sexuality. Women, for example, are often expected to wear skimpy, tight-fitting outfits in sports where men wear baggy clothing (see both basketball and beach volleyball for example). The interaction with doping is also specific and peculiar because some performance-enhancing drugs (like testosterone and human growth hormone) can result in women becoming more like men, at least to cursory observation. This creates particular pressure on female athletes to maintain an idealized femininity (for example Florence Griffith Joyner and her spectacular fingernails). However, the female specific patterns and reasons for use of PEDs has had very little study, with the assumption being that they are the same as male use, despite the evidence we have of the very different experiences a male and a female athlete will have.

The question that sociologists ask then is this: if sport is not actually healthy or moral, why is the discourse around sport so focused upon these aspects? Sociologists answer this by arguing that sport serves other purposes in society. I have already shown how sport is about making money in a capitalist, global market. But sport and the ideas of fair play, health and morality all reinforce a particular world view.

Sport as a social value

The view of the world, how society should work, what people should do, is encapsulated by the concepts of ideology and hegemony. At their simplest these theories seek to explain how we understand our world. However, in explaining this understanding of the world, ideology and hegemony demonstrate this understanding is not neutral or natural, but shaped by social forces. Sport is thus imbued with particular values (healthy, fair and competitive) because it is important that these values continue to be propagated. Because these values are essential to the maintenance of a particular social structure – in this case capitalism – they need to be reinforced as natural and normal constantly. Sport offers a wonderful means by which to continue promulgating certain myths about society. These myths are all the more persuasive because we do not often question them or consider their validity. The attachment of these values to sport as part of a greater capitalist hegemony is also reinforced by the fact that the belief that sport embodies these ideas increases its saleability as a commodity, particularly in a period when there is an enormous focus on health and health-related issues such as childhood obesity. Because sport is seen as 'good' for the consumer, the consumer is more likely to encourage or reinforce participation, spectatorship and purchase of related goods. Thus the hegemonic understanding of sport as healthy and moral reinforces both the underlying values of capitalist society and increases the value of sport as part of consumer culture.

The fact that sport is commonly understood to be a healthy/moral activity places further emphasis on the manner in which the discourse about PEDs is constructed. If sport is understood to be healthy and moral, in common sense discourse drugs, and particularly illicitly-used drugs, are considered to be unhealthy and immoral. By overlaying these two ideas the notion of PEDs

becomes a much harsher concept than it would if the common sense understanding of elite sport was closer to its reality – a highly medicalised, regime-driven activity where athletes exist in a tightly managed extreme environment.

This section has canvassed some of the key insights that sociologists offer on sports and drugs. Distilled to its essence, sociologists do not consider sport to be natural, fair or healthy. Sport is a specific activity that has arisen with the nation state and is used to further nationalist and ideological agendas. The profit motive, mediated through winning, is a central and powerful motivator in sporting competition. Sport cannot be separated from society; it is not a stand-alone institution. Finally, sport serves other purposes – that of maintaining a particular view of the world and that competition is good, inevitable and winners deserve the spoils.

What sociology needs to know

Despite the preceding discussion of sociology, which offered a complex and nuanced picture of drugs and sport, there are still further questions that need to be addressed.

I started by declaring that the sociological approach to drugs and sport consists of questioning the myths that surround sporting activity. When it comes to sport, this means considering how modern sporting competition has evolved out of play activity, and why. I then looked at how sport and capitalism have become intimately tied together, with the pursuit of victory for profit becoming a key purpose of sport. The nation state has also taken a keen role in enhancing performance to further national pride and political agendas. Two key myths were questioned, namely the ideas of fairness and health when it comes to sporting endeavours. Sport is not fair and it is not healthy – the evidence is overwhelming on these two counts.

What this questioning then led us to was an exploration of just why sport is construed the way it is today. I offered one explanation, being that sport for competition is important in maintaining capitalist, competitive ways of interacting as the only means of having a functioning society. These sociological insights point towards several focused questions that could be usefully investigated to further our understanding of sports and drugs. These questions form the basis for the research agenda outlined below.

A research agenda for sociology

Based on the argument and evidence outlined above, I have selected the following as critical to furthering our understanding of drugs *and* sport, and its cousin, drugs *in* sport:

- 1. amalgamating sport theory with drug theory,
- 2. the concept of the networked athlete,
- 3. prevalence rates, and
- 4. public perception of PED use.

In my view, knowing more about these ideas is central to informing policy responses to sport and drugs, as well as furthering our understanding of sport and the role drugs and performance-enhancing methods play.

From drugs and sport to drugs in sport

The first research priority for sociology with sport and drugs is broad and will require thoughtful, critical and carefully crafted studies. Sociologists must start to link our abundance of theory about sport and drugs together and test these theories in quantitative and qualitative studies of sport *and* drugs and drugs *in* sport. For instance, if an overriding motivation of athletes today

is to win for the subsequent benefits of status and money, then sociologists need to show this. If our claims of the medicalisation of sport are to be proven, we need to get into the training rooms and observe and report upon the interactions that occur between medical staff and athletes. To support the claim that capitalism has colonised sport for the pursuit of profit, we need to demonstrate the ongoing pervasive (and possibly perverse) interaction.

The networked athlete

One avenue of research that sociologists need to pursue is the concept of the networked athlete. By that I mean that an athlete does not ever make it to elite level competition without the assistance of a host of support staff; be it coaches, doctors, nutritionists, managers, marketers, physiotherapists, acupuncturists and/or bio-mechanics to name just a few. ⁷² By looking at how the athlete is part of a social web we can achieve two goals. The first is a refutation of the 'lone athlete' concept in doping that seeks to test and punish just the end user. The second is that we can start to understand the micro-sociological interactions in this peculiar social world; that of the elite athlete. Waddington's argument regarding the plethora of support staff attached to athletes lends weight to this particular research agenda:

There is now an abundance of evidence to indicate that, at least at the elite level, the drug-using athlete is normally part of a network of relationships with others, who may include team members, coaches, doctors, masseurs, trainers, managers or promoters, who are involved in supplying or administering doping substances, or in concealing their use. The highly individualistic perspective which continues to underpin the anti-doping policies adopted by organizations such as the IOC is not only based on a misunderstanding of the social relations involved in the doping process, but it also – quite wrongly – focuses exclusively on the wrongdoing of one individual while ignoring the wrongdoing of others who are heavily implicated in the use of performance-enhancing drugs.⁷³

It is worth noting that Waddington was making this argument before the major Tour de France scandals and the BALCO and Madrid investigations showed that there are indeed networks of 'doping'. Further, these investigations indicate that a lone athlete model to prevention is inappropriate, inaccurate and highly unlikely to reduce doping. Social network research could also be a timely addition to the scholarship on doping issues as the National Anti-Doping Organisations (NADOs) shift function from primarily being testing, enforcement and education to investigations and rule violations. For example, ASADA points out:

We have progressed to Anti-Doping Rule Violations which includes trafficking, investigations, failure to comply with requests for testing, positive analytical results, admission of use, not providing accurate whereabouts information, evasion, tampering. There are also much harsher rules in place for sanctioning of athlete support personnel under the rules. Athletes can now be investigated and prosecuted on information gathered.⁷⁴

There is no doubt that testing agencies would benefit from robust social network theory research that explains how doping networks come into being, how they are maintained and by and for whom.

Prevalence

The second avenue of research that requires attention from sociologists is actual prevalence and use. We have no reliable figures on the use of PEDs, with estimates for example ranging from around 0.4% (the official FIFA incidence of positive tests in Football) to 95% (anecdotal evidence). More disturbingly, these figures (both the testing agency claims and other studies) focus almost exclusively on elite athletes. What is required to further our understanding on use and prevalence is studies of elite athletes that measure use more accurately than testing. While there would be a host of ethical and methodological problems to overcome, these are not

insurmountable. The second avenue of prevalence research is the use of substances at the subelite level. Do athletes use PEDs in under-18 (and below) competitions? What is the prevalence of use at the club level of sport amongst over-18 participants? This research would be particularly valuable as it will illuminate who is using and when – which may point to better deterrence and education methods.

Public opinion about drugs in sport

The fourth broad area of inquiry does not concern the athlete at all. While we are told by certain vested interests (testing agencies, laboratories and anti-drugs campaigners more generally) that drugs in sport are a serious problem, we do not know what the consuming public actually think of the issue. Perhaps sports consumers would not care if the Olympic 100-metre sprint was a race between the fastest men and women *and* their drug lab. The anecdotal evidence certainly points to this conclusion if we consider that fans still watch the sports most heavily mired in drug controversy (US Major League Baseball and the Tour de France for example). The policy implications from such research may well be quite profound if we discover that the sport consuming public do not care or wish to know what enhancements are being used as long as they still get to enjoy the spectacle of sport.

Some final thoughts

If economics is the dismal science then sociology may be construed as the negative, critical science. It is the role of sociologists to question the way our society functions. Sport does not need more hagiography from sociology, it receives that everyday in popular discourse. Sport sociology questions what we play, how we play it and under what conditions. Critically, and perhaps the strongest contribution my discipline makes to the study of sport and drugs, is our focus on social forces and processes, not the lone drug-using athlete. All activity by the individual is construed in society, if we ignore this fact we cannot understand why an athlete will do *anything* to win.

Notes

- ¹ Becker, 'Becoming a Marihuana User'.
- ² Hargreaves, Sporting Females: Critical Issues in the History and Sociology of Women's Sport.
- ³ Dunning, 'Sociology of Sport in the Balance: Critical Reflections on Some Recent and More Enduring Trends'; Frey and Eitzen, 'Sport and Society', 504; Rowe and Lawrence, 'Framing a Critical Sports Sociology in the Age of Globalisation', 159.
- ⁴ Newman, Sociology: Exploring the Architecture of Everyday Life, 51.
- ⁵ C. Wright Mills, *The Sociological Imagination*.
- ⁶ Ibid., 235–6.
- ⁷ Ibid.
- ⁸ Houlihan, Dying to Win.
- ⁹ Armour, Jones and Kerry, 'Sport Sociology 2000', 1.
- ¹⁰ Marx, The 18th Brumaire of Louis Bonaparte, 7.
- ¹¹ Armour, Jones and Kerry, 'Sport Sociology 2000', 1.
- 12 Frey and Eitzen, 'Sport and Society', 5.
- Horne, Sport in Consumer Culture, 3; emphasis in original.
- ¹⁴ Miller et al., Globalization and Sport: Playing the World, 132.
- ¹⁵ Horne, Sport in Consumer Culture, 3.
- ¹⁶ Frey and Eitzen, 'Sport and Society', 507.
- ¹⁷ Ibid., 508.
- 18 Ibid.
- ABS 8686.0, Sports Industries, Australia, 2000–01.

- ²⁰ ABS 4148.0, Employment in Sport and Recreation, Australia, Aug 2001.
- ²¹ Sport England, 'The Value of the Sports Economy in England', iii.
- ²² Horne, Sport in Consumer Culture, 3.
- ²³ Ibid., drawing on Whannel, 'Book Review of Sandvoss', 481–2.
- 24 Horne, Sport in Consumer Culture; Miller et al., Globalization and Sport: Playing the World; Hargreaves, Sport, Power and Culture.
- ²⁵ Frey and Eitzen, 'Sport and Society', 508.
- ²⁶ Waddington, 'Doping in Sport: Sociological Aspects'.
- Horne, Sport in Consumer Culture, 71–94.
- ²⁸ Jones and McNamee, 'Moral Reasoning, Moral Action, and the Moral Atmosphere of Sport'.
- ²⁹ Ibid., 4.
- ³⁰ Frey and Eitzen, 'Sport and Society', 509.
- ³¹ Horne, Sport in Consumer Culture.
- ³² Stoddart, Saturday Afternoon Fever: Sport in Australian Culture.
- ³³ Ibid., 113.
- 34 smh.com.au, 'Chad Races in Among the Wealthy Superstars', 16 December 2004. http://www.smh.com.au/articles/2004/12/15/1102787148210.html.
- ³⁵ Dart, 'Playing in a Different League'.
- ³⁶ Morgan, 'Fair is Fair, Or Is It?: A Moral Consideration of the Doping Wars in American Sport'.
- ³⁷ Injuryupdate.com.au, http://www.injuryupdate.com.au/forum/archive/index.php/t-568.html.
- ³⁸ afl.com.au, the home page of the Australian Football League.
- ³⁹ aflxmen.com. A lobby group formed to promote the plight of former AFL players, especially in regards to ongoing injury treatment.
- Amanda Andrews, 'Branson Left Out as TV Football Rights Sell for Record'. *The Times*, May 6, 2006, http://business.timesonline.co.uk/article/0,11472-2167439,00.html.
- ⁴¹ Lincoln Allison, 'Faster, Stronger, Higher'. Guardian, August 9, 2004; Schneider, 'Cultural Nuances: Doping, Cycling and the Tour de France'.
- ⁴² Simon Longstaff, 'Hypocrisy in Gold Medal Class'. *The Australian*, January 13, 1999, http://www.ethics.org.au/things_to_read/articles_to_read/sport/article_0271.shtm.
- ⁴³ Miller et al., Globalization and Sport: Playing the World, 24.
- ⁴⁴ Ibid., 26.
- ⁴⁵ Hoberman, Mortal Engines: The Science of Performance and the Dehumanisation of Sport.
- 46 Hemphill, 'For the Goods of the Game: A Normative Framework for Professional Sport Management', 202
- Hughson, Inglis and Free, *The Uses of Sport: A Critical Study*, 125; Horne, *Sport in Consumer Culture*, 97.
- ⁴⁸ Elias, The Civilizing Process, 23.
- ⁴⁹ Hargreaves, Sport, Power and Culture.
- Adair and Vamplew, Sport in Australian History, 93; ais.org.au, 'History of the AIS', http://www.ais.org.au/overview/history.asp; Stoddart, Saturday Afternoon Fever: Sport in Australian Culture, 185–92.
- ⁵¹ Hogan and Norton, 'The "Price" of Olympic Gold'.
- ⁵² Miller et al., Globalization and Sport: Playing the World, 2–3.
- Hughson, Inglis and Free, *The Uses of Sport: A Critical Study*, 124.
- 54 Ibid., 123–6; Stoddart, Saturday Afternoon Fever: Sport in Australian Culture, 158–82.
- 55 See Riordan, 'Sports Medicine in the Soviet Union and German Democratic Republic', for an uncritical review of East German and Soviet systems.
- ⁵⁶ Hargreaves, Sporting Females: Critical Issues in the History and Sociology of Women's Sport, 225.
- ⁵⁷ 7:30 Report, 'China Moves to Clean Up its Act, but Drug-free Olympics Still in Doubt'. ABC Television, September 6, 2000, transcript available from http://www.abc.net.au/7.30/stories/s172822.htm; Mike Hurst, 'China Syndrome'. *The Daily Telegraph*, August 8, 2006; for a differing view see Hong, 'Doping and Anti-doping in Sport in China: An Analysis of Recent and Present Attitudes and Actions'.
- UNESCO, 'Sport for Social and Human Development', http://portal.unesco.org/shs/en/ev.php-URL_ID=9534&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- ⁵⁹ Hargreaves, Sporting Females, 9.
- 60 Waddington, Sport, Health, and Drugs: A Critical Sociological Perspective.
- 61 Miller et al., Globalization and Sport: Playing the World, 41.
- World Anti-Doping Agency, World Anti-Doping Code, version 3. http://www.wada-ama.org/rtecontent/document/code_v3.pdf.
- 63 Houlihan, Dying to Win, 133–4.

- ⁶⁴ Conrad and Potter, 'Human Growth Hormone and the Temptations of Biomedical Enhancement', 185.
- ⁶⁵ Dingelstad *et al.*, 'The Social Construction of Drug Debates', 1832–3.
- ⁶⁶ Waddington and Murphy, 'Drugs, Sport and Ideologies', 49–53.
- White, 'Sick Bodies and Inequality: Class, Mortality and Morbidity', 42.
- ⁶⁸ Cricket Australia, 'Men's Team Management', http://www.cricket.com.au/default.aspx?s = managementmens.
- ⁶⁹ Kell, Good Sports: Australian Sport and the Myth of the Fair Go; or McKay, No Pain, No Gain?
- Miller et al., Globalization and Sport: Playing the World, 2.
- ⁷¹ Hargreaves, Sporting Females.
- Waddington and Murphy, 'Drugs, Sport and Ideologies'.
- Waddington, 'Doping in Sport: Some Issues for Medical Practitioners', 21.
- ⁷⁴ ASADA (Australian Sport Anti-Doping Authority), personal communication, 2006.
- Dvorak, McCrory and D'Hooghe, 'FIFA's Future Activities in the Fight Against Doping'; Morgan, 'Fair is Fair, Or Is It?: A Moral Consideration of the Doping Wars in American Sport'.
- Allison, 'Faster, Stronger, Higher'; Schneider, 'Cultural Nuances: Doping, Cycling and the Tour de France'.

References

- Adair, Daryl, and Wray Vamplew. Sport in Australian History. South Melbourne: Oxford University Press, 1997
- Armour, K., R. Jones, and D. Kerry. 'Sport Sociology 2000'. Sociology of Sport Online, 2000. http://physed.otago.ac.nz/sosol/home.html.
- Becker, Howard S. 'Becoming a Marihuana User'. *The American Journal of Sociology* 59, no. 3 (1953): 235–42.
- Conrad, Peter, and Deborah Potter. 'Human Growth Hormone and the Temptations of Biomedical Enhancement'. *Sociology of Health Illness* 26, no. 2 (2004): 184–215.
- Dart, Tony. 'Playing in a Different League'. In *Football in the Digital Age: Whose Game is it Anyway?* edited by Sean Hamil, Jonathan Michie, Christine Oughton, and Steven Warby, 144–50. Edinburgh: Mainstream, 2000.
- Dingelstad, David, Richard Gosden, Brian Martin, and Nickolas Vakas. 'The Social Construction of Drug Debates'. *Social Science and Medicine* 43, no. 12 (1996): 1829–38.
- Dunning, Eric. 'Sociology of Sport in the Balance: Critical Reflections on Some Recent and More Enduring Trends'. Paper presented at the 28th Annual Conference of the Social History Society, Leicester, 2003.
- Dvorak, J., P. McCrory, and M. D'Hooghe. 'FIFA's Future Activities in the Fight Against Doping'. *British Journal of Sports Medicine* 40, Supp. 1 (2006): 158–59.
- Elias, Norbert. The Civilizing Process. Oxford: Blackwell, 1986.
- Frey, James H., and Stanley D. Eitzen. 'Sport and Society'. *Annual Review of Sociology* 17 (1991): 503-22.
- Hargreaves, Jennifer. Sporting Females: Critical Issues in the History and Sociology of Women's Sport. London: Routledge, 1994.
- Hargreaves, John. Sport, Power and Culture. Cambridge: Polity Press, 1986.
- Hemphill, Dennis. (1997) 'For the Goods of the Game: A Normative Framework for Professional Sport Management'. In *Advances in the Management of Australian and New Zealand Sport*, 192–207. Proceedings of the 2nd Annual Sport Management Association of Australia and New Zealand Conference, 192–207. Burwood: Sport Management Association of Australia and New Zealand, 1996.
- Hoberman, John. Mortal Engines: The Science of Performance and the Dehumanisation of Sport. New York: The Blackburn Press, 1992.
- Hogan, K., and K. Norton. 'The "Price" of Olympic Gold'. *Journal of Science and Medicine in Sport* 3, no. 2 (June 2000): 203–18.
- Hong, Fan. 'Doping and Anti-doping in Sport in China: An Analysis of Recent and Present Attitudes and Actions'. *Sport in Society* 9, no. 2 (2006): 314–33.
- Horne, John. Sport in Consumer Culture. Houndmills: Palgrave, 2006.
- Houlihan, Barrie. Dying to Win, 2nd ed. Strasbourg: Council of Europe Publishing, 2002.
- Hughson, J., D. Inglis, and M. Free. The Uses of Sport: A Critical Study. New York: Routledge, 2005.
- Jones, C., and Mike McNamee. 'Moral Reasoning, Moral Action, and the Moral Atmosphere of Sport'. *Sport, Education and Society* 5, no. 2 (2000): 131–47.
- Kell, Peter. Good Sports: Australian Sport and the Myth of the Fair Go. Annandale: Pluto, 2000.
- Marx, Karl. The 18th Brumaire of Louis Bonaparte. London: The Electric Book Company, 2001 [1852].

- McKay, Jim. No Pain, No Gain? Sydney: Prentice Hall, 1991.
- Miller, T., G. Lawrence, J. McKay, and D. Rowe. *Globalization and Sport: Playing the World*. London: Sage, 2001.
- Mills, C. Wright. The Sociological Imagination. Harmondsworth: Penguin, 1973.
- Morgan, William J. 'Fair is Fair, Or Is It?: A Moral Consideration of the Doping Wars in American Sport'. *Sport and Society* 9, no. 2 (2006): 177–98.
- Newman, David M. Sociology: Exploring the Architecture of Everyday Life, 3rd ed. Thousand Oaks, CA: Pine Forge Press, 1995.
- Riordan, Jim. 'Sports Medicine in the Soviet Union and German Democratic Republic'. *Social Science and Medicine* 25, no. 1 (1987): 19–26.
- Rowe, David, and Geoffrey Lawrence. 'Framing a Critical Sports Sociology in the Age of Globalisation'. In *Tourism, Leisure, Sport: Critical Perspectives*, edited by David Rowe and Geoffrey Lawrence, 159–69. Rydalmere, NSW: Hodder, 1998.
- Schneider, Angela J. 'Cultural Nuances: Doping, Cycling and the Tour de France'. *Sport in Society* 9, no. 2 (2006): 212–26.
- Sport England. 'The Value of the Sports Economy in England'. Final Report, June 2003. Cambridge: Cambridge Econometrics.
- Stoddart, Brian. Saturday Afternoon Fever: Sport in Australian Culture. North Ryde, NSW: Angus and Robertson, 1986.
- Waddington, Ivan. 'Doping in Sport: Sociological Aspects'. Paper presented to a special meeting of the European Commission called to investigate doping in sport, Brussels, 1999. http://www.chester.ac.uk/ccrss/research.html#ivan.
- Waddington, Ivan. Sport, Health, and Drugs: A Critical Sociological Perspective. London: E & FN Spon, 2000.
- Waddington, Ivan. 'Doping in Sport: Some Issues for Medical Practitioners'. Lecture at the Leiden International Medical Students Congress, University of Leiden Medical School, Netherlands, March, 2001. www.ucd.ie/css/papers/leiden%20paper.pdf.
- Waddington, Ivan, and Patrick Murphy. 'Drugs, Sport and Ideologies'. In *Sport and Leisure in the Civilizing Process*, edited by Eric Dunning and Chris Rojek, 36–64. London: MacMillan, 1992.
- Whannel, G. 'Book Review of Sandvoss'. British Journal of Sociology 55, no. 3 (2004): 481-2.
- White, Kevin. 'Sick Bodies and Inequality: Class, Mortality and Morbidity'. In *Inequality in Australia*, edited by A. Greig, F. Lewins and K. White, 39–56. Melbourne: Cambridge, 2003.