ANOMIE, DEVIANT BEHAVIOR, AND THE OLYMPICS

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Abstract

Criminal and deviant behavior is known to occur in all places, settings, and times. The Olympics, both Summer and Winter, are not immune to deviant behavior. This paper focuses on the specific types of deviant and criminal acts arising out of the Olympic settings and the anomic factors that possibly lead to deviance in this particular arena. The way that athletes are conformists, innovators, ritualists, and retreatists is considered along with the way that norm confusion influences the Olympic event. Also considered is the role of norm saturation in confusing the way actors interpret appropriate behavior in this setting. Implications are provided.

INTRODUCTION

Every four years athletes gather together and compete for what is likely the pinnacle of a sport career—a gold medal in the Olympics. The Olympics have changed economically, politically, and socially since the original Olympics in ancient times (Mollins 1992, p. 58). Even so, accusations of deviance regarding various aspects of the Olympics are not a new phenomenon. In fact, the ancient Olympics were eliminated in 393 A.D. by the Roman Emperor Theodocus I because he believed they were a deviant Pagan ritual. Three years later, Theodocus II ordered Olympia destroyed “in an effort to eradicate anything non-Christian” (Poulakidas 1993, p. 37).

Sixteen hundred years later the Olympics and the participants in the Olympics are not immune to allegations of deviance. Indeed, accusations of misdeeds and inappropriate actions continue to be thrown at Olympic athletes as we enter the 21st century. A non-exhaustive list of the deviant acts Olympic athletes have been accused of committing includes: gender misrepresentation (Brown 1992; Lemonick 1992), professionals posing as amateurs (Lucas 1980; Benjamin 1992; Starr 1993; Gorman 1994), steroid use (Ludwig 1976; Blackwell 1991; Noden 1991; Noden 1992; Nemeth 1993; Connolly 1994), blood doping (Ludwig 1976; Testing Problems 1992; Williams 1996), violating event rules (Kanin 1981; Morris 1992), maintaining citizenship (Noden 1992), and attacking other athletes (Smolowe 1994).

Previous research has addressed various reasons why deviance is found in various types of sports. These reasons include political economy (Eitzen 1988), socialization, (Forsyth, Marckese 1993), flawed character traits, use of alcohol, peer pressure, and thrill seeking (Snyder 1994). Others suggest that a need to generate revenue combined with “the ideological commitment to winning” contribute to deviance in athletics (Frey 1994, p. 110). In this paper, this “ideological commitment to winning” is also viewed as an important factor leading to deviance by athletes. The notion of commitment clearly relates to the concept of anomie. The way that anomic conditions provide a setting for the illicit actions is addressed in this paper. Through this discussion we hope to provide some general understanding about deviance in the Olympics, and in other settings for that matter.

Anomie

Anomie is a concept from which different theoretical perspectives have evolved that potentially explains much of the deviance related to the Olympics. Derived from the Greek word ‘a nomos’ (meaning without norms or normlessness), anomie was first introduced by Emile Durkheim who originally used the term to refer to deregulation, and a weakening of social controls (Williams, McShane 1994). Since
then, the concept has been interpreted at least three different ways: 1) anomie as difficulty in achieving goals; 2) anomie as norm saturation; and, 3) anomie as confusion of particular norms. (Martin, Mutchnick, Austin 1990). The following describes how these interpretations may apply to deviance in the Olympics.

**Anomie in Achieving Goals**

Though Durkheim was the first to apply the concept of anomie to society, Merton broadened the concept to describe strain between a person's goals and the means to attain those goals. In particular, he "redefined anomie as a disjunction (or split) between those goals and means as a result of the way society is structured, for example, with class distinctions" (Williams, McShane 1994, p. 88). As well, Merton (1938) suggested that society prescribes both goals, and the means to attain the goals, to its members. If individuals are able to attain goals through legitimate means, then no problem exists. However, if individuals are not able to attain their goals, then strain (or anomie) develops between the goals and the means outlined in Table 1. The individual is forced to adapt to the "anomie" resulting from this contradiction. Merton's typology is useful in explaining many of the deviant acts that Olympians are accused of committing.

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<th><strong>TABLE ONE</strong></th>
<th><strong>Merton’s Modes of Adaptation</strong></th>
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**Conformist.** Based on media reports, most Olympians are conformists who accept the goals, and means by which they can attain the goals. Their goals are to do their best, win a gold medal, but to do it by working hard and training for the Olympic event. Indeed, very few will experience strain between their goals and means. Those who do may be seen as reflecting one of the other modes of adaptation described by Merton.

**Innovator.** Athletes who commit illegal acts to enhance performance and come closer to victory can be regarded as innovators in Merton's typology. Innovators are those who accept the goals of society but reject the legitimate means to attain the goals. Innovators want to become a part of history at the Olympics but do not want to do so by playing by the rules. Such aspirations and practices often start at an early age. Skolnick (1996) notes that grade school children have been encouraged "to take prescription diuretics such as furosemide (Lasix) prior to weigh-ins to enable them to compete against children in a lower weight class" (p. 348).

For athletes, the problem that arises is that the orientation to "win" can be described as representing a "strain towards anomie" (Merton 1938) and effected by one's "life chances" (e.g., the possibility of being born a natural athlete with amazing physical and athletic abilities, or into a family where even minor talent can be trained—expensively—into something more). Further, one can argue that many of the misdeeds committed by athletes arise as a result of the emphasis placed on winning and subsequently being "the best." Recall Frey's (1994, p. 110) notion that "the ideological commitment to winning" contributes to deviance by athletes. As one author notes, "Olympic athletes are driven by many things: a lust for fame, the hunger for money, or just the elemental desire to be the best" (Phillips 1992, p. 51).

Those athletes who use prohibited substances can be described as innovators. Prohibited substances include stimulants, narcotics, anabolic agents, peptides, diuretics, and glycoprotein hormones (Catlin, Murray 1996). Reasons the substances are used vary. Some Olympic athletes use steroids to increase their mass, strength, and durability. Some reports indicate that steroid use may increase the mus-
cle mass of weightlifters 16% (Ludwig 1976). Although scientific reports do not substantiate such claims, users nonetheless tend to view the potential impact of steroids in a positive light. Such perceptions undoubtedly impact many athletes’ decisions to partake in steroid use, using illegitimate means to attain their goals. Phillips (1992) describes one athlete’s battle with steroids:

In 1985, when Hannamann was 17, his trainer gave him tiny blue pills containing a daily dose of five milligrams of oral turinabol, a steroid. “I knew it was illegal, but everybody was taking them,” says Hannamann, now 24 and a sports reporter...” I was terrifically motivated—I was 17 and I wanted to be a world star. The trainers said you needed the pills for that five-percent edge that makes you a champion (p. 51).

Ben Johnson, perhaps the most well known Olympic athlete who tested positive for steroid use at the 1988 Olympic games, most likely perceived the benefits of steroid use and gave little attention to the negative aspects associated with the drug. Because of the positive test results, Johnson was banned for life from track meets. He, of course, is not alone. Recently, East German swim coaches admitted that they gave steroids to world-class swimmers in the 1970s and 1980s (Noden 1992).

Again, the desire to become a champion (and win) is set forth as the reason for using the drug. The “Olympic innovator” is also described by Catlin and Murray (1996) who write:

It is partly a function of the sport, but chances are that the athlete began his or her climb to elite status while young. It is likely that he or she has had to forsake many other aspects such as the development of other talents, a rich social life, and education to perfect their athletic abilities. At some point along this arduous climb, perhaps after many years of effort, the athlete may discover that his or her competitors hold an advantage based on their willingness to use performance-enhancing drugs...[some] find themselves feeling compelled to use performance-enhancing drugs to level the playing field (Catlin, Murray 1996, p. 235).

Instances of blood doping are also related to the innovator. Blood doping involves “taking an athlete’s blood out of her or his veins, keeping it refrigerated while the body replaces the missing blood, and... injecting the blood back into the system so that the athlete has a reserve of strength and oxygen” (Ludwig 1976, p. 21-22). These actions increase red blood cell mass and increase the amount of oxygen given to the muscle (Catlin, Murray 1996). Practices started in the military during WWII and moved to the Olympic arena in the seventies (Williams 1996). In past Olympic events, athletes were accused of injecting their own blood into their bodies and today they are accused of injecting engineered blood. Blood doping became an issue when ten Dutch and Belgian cyclists died of sudden heart attacks when they were supposedly at their best physical level (Testing Problems 1992, p. 32). No one knows whether blood doping caused their premature deaths, but many suspect it played a role. It was not until several U.S. cyclists admitted to blood doping during the 1984 Olympics that blood doping was actually listed as a banned substance (Catlin, Murray 1996). The reason the cyclists doped their blood was to gain an edge in attaining their goals. Clearly, blood doping is an example of the innovator mode.

Cases where the athletes’ coaches or parents engage in illegitimate means in order to win are also examples of the innovator mode. In particular, it has been argued by some commentators that the strict regimentation and discipline coaches provide—especially among female gymnasts—is a form of child abuse (Press 1992). The training athletes undertake exceeds that which the average person’s exercise routine requires. Tofler et al (1996) note that the training of female gymnasts starts at a very early age (5 to 7) and “most are usually injured during training and performance and many are encour-
aged to continue performing with the injury” (p. 281). Tofler et al (1996) go on to suggest that many athletes develop eating disorders in an attempt to remain as small as possible.

When investigative reporters or researchers learn about training programs, they sound nearly torturous. For instance, during the 1992 Olympic games many allegations of child abuse filtered through the media. These charges of abuses against young female gymnasts never got further than the media. Interestingly, conceptualizations of child abuse rarely consider potential abuses inflicted on young people who are employed in ‘adult occupations’ (i.e. athletics and the film industry). Indeed, there seems barely any concern about gymnasts who practice or exercise to states of exhaustion, or who develop life threatening eating disorders in an effort to maintain small size of their weight.

As another example of the innovator mode, one might additionally consider the financial crimes perpetrated against Olympians when financial managers and/or parents (frequently one in the same) misuse or misappropriate earnings from appearances or endorsements. Consider as an example, Dominique Moceanu, who claimed that her parents (as financial managers) squandered $4 million of her money, effectively everything in her trust fund earned after her gold medal at the 1996 Olympics (Becker 1998). In this case, her parents used illegitimate means to attain their financial goals.

Ritualists are those who do not accept the goals but continue to abide by the legitimate means. This mode of adaptation does not easily apply to Olympic athletes because the very nature of their socialization involves the development of goals toward which they make every effort to attain (Catlin, Murray 1996). Ritualists do not necessarily reject the goals, but are unable to attain their goals while stubbornly holding on to using the means. Note that the goals of athlete are not the goals of society but are specific to athletes (winning). In the context of the Olympics, ritualism applies to those athletes who still work out, keep practicing, invest time, energy, and money (e.g., the legitimate means) despite the fact that they fail to reach the goal of winning (or even competing in the Olympics). According to Merton, ritualists are deviant but not criminal.

Retreatist. Retreatists are those who reject the goals and reject the means. Applying this mode to Olympic athletes requires that we look at the athletes’ emotions after participating in the Olympics. In particular, one author has described to “post-Olympic blues” to capture the feelings of depression that some athletes experience after the Olympics (Plummer 1996). These feelings of depression are not always caused by the inability to attain one’s goals. In fact, there have been cases where winning leads to depression. In these cases, it is believed that the fact that the athlete did not get what he or she expected as a result of winning leads to depression (Gallahan 1996; Springer, Starr 1996). One athlete describes his retreating in the following way: “You train so hard for a medal, you get it, then you wake up and things haven’t changed dramatically. You achieve that lofty goal, and then what?” (Goldberg 1996, p. 42).

Retreatism might better explain adaptations at other sport levels. For instance, retreatism could apply to recreational sports. Consider the high school athletes who are successful when they are young but do not compete as much once they enter college. Later in life they drop out of organized sports to become “beer-belly” softball players who eventually give up on competitive sports altogether. Thus, they reject the goals and the means.

Rebellion. This adaptation involves instances where individuals “reject and replace” the goals and the means to attain the goals and is related to some deviant acts by Olympic athletes. The U.S. hockey team’s acts of vandalism against the hotel room after their unexpected defeat seem to relate to this adaptation. Briefly, the transgressors felt anger at their loss (or anomie)
and took out their feelings on the hotel room. Or, they rebelled against the rules.

Rebellion also applies to athletes who not only give up on the goals and means of the Olympics but do something else in hope of revolutionizing the way we think about sports. Some would argue that the Xtreme sports athletes and underground cultures of hardcore skateboarders and surfers fit this category. Indeed, they are rejecting typical sports events and replacing the events with their own activities.

Acts of terrorism against athletes can also be seen as relating to the retreatist mode. Until the recent bombing of Centennial Park in Atlanta, discussing crime and the Olympics, the 1972 Olympics was perhaps the example cited most often. After holding eleven members of the Israeli Olympic team hostage, the Palestine Liberation Organization shot and killed each hostage (Doctorow 1994, p. 60). Doctorow (1994) writes: “International games are a precise gauge of international relations” (p. 65). On a related level, Krantz (1996) notes that the Atlanta attack destroyed “whatever innocence remained of the Olympic games” (p. 25). The political nature of these crimes is clear. The Olympics provide a setting where terrorists are able to accomplish their perceived goals and gain worldwide attention.

Anomie as Confusion of Norms and Anomie as Norm Saturation

Martin et al. (1990) suggest that too many rules leads to confusion among members of a society or culture. Specifically, they write: “[T]he problem is not so much with an absence of norms as it is with the difficulty in assimilating a multitude of rules or norms” (p. 56-57.) That there is likelihood that too many norms might cause confusion is related to deviant acts committed by Olympic athletes.

The exact number of rule violations at the Olympics is unknown. It seems clear, however, that the majority of the athletes are aware of the rules guiding their events. It might appear, on the surface, unlikely that an abundance of norms could cause norm confusion. However, when faced with a large volume of rules one is likely to become somewhat daunted if not confused. As a graphic example, consider the complexity of instructions that frequently accompany “do-it-yourself” office equipment such as desks, bookcases, and the like. Many people experience considerable confusion in the anomic situation of trying to figure out the pages of instructions—usually depicted as pictures, rather than written instructions in language. The remedy for many people experiencing such anomic situations is simply to ignore the instructions and sequence, and fabricate the item on their own—in short, violate the rules.

At the Olympics, if there are too many rules confronting the athletes, and some of these rules seem to exist simply for the sake of having rules, they may be taken less seriously than desired by the governing committee. Because some of the rules may be seen as futile, the athlete may be unsure as to which rules will be enforced and which will not. Thus, too many rules might lead to rule breaking on the part of the athlete, as he or she becomes daunted and confused by the volume of trivial or confusing rules. For instance, Morris (1992) notes that among other rules, there are rules describing how golfers can swing the putter, that polo players must be right handed, that table tennis players cannot wear white shirts, and that yellow balls cannot be used in indoor volleyball. Though some of these rules may be warranted given the nature of the specific competition, the fact is that too many rules may be more problematic than helpful.

As another example of norm confusion, consider the case of Ross Rebagliati. After winning the gold for snowboarding in 1996, Rebagliati tested positive for marijuana and lost the gold medal. He claimed that he had not used marijuana in months and that the amount found in his system was the result of second hand smoke from his friends sulking over the death of a
friend. Experts claimed that there was no way that second hand smoke would lead to the amount found in Rebagliati’s blood. Eventually, the IOC returned the gold medal and the victory to him. However, the IOC’s decision was not overturned because they believed his argument about second hand smoke. Instead, “Under Olympic rules, marijuana is banned only if the sport’s governing body says it” (Chidley, Hunter 1998, p. 42). Since the Federation of International Du Ski never banned marijuana, the substance could not be banned from snowboarders. Snowboard supporters were pessimistic about the IOC’s norm confusion. One said, “Thanks to an idiotic mistake made by the IOC, snowboarding’s debut is going to be remembered as the year those wacky pot smokers invaded the Olympics, not as the year snowboarding athletes showed the world an amazing new sport” (Galbraith 1998).

Tied into this rule making process is the rationale for a governing body’s development of specific rules. In particular, if a governing body fears it is losing control, it will implement and enforce laws in an attempt to prevent chaos (e.g. anomie). The result, however, is that the implementation and enforcement of the rules leads to, rather than prevents, chaos. Consider the example of gender misrepresentation, which entails males posing as females in order to gain a competitive edge over competitors.

Concerns about gender misrepresentation can be traced to Dora Ratien who finished fourth place in the women’s high jump in the 1936 Olympics held in Berlin. Two decades later, the world learned that Dora Ratien was actually Herman Ratien. Ratien indicated that he was ordered by his superiors to participate as a female (Ultimate Olympic Test 1992, p. 16). As one might expect, most cases of gender misrepresentation involve males posing as females in hopes of exercising biological superiority and increasing chances of victory.

To combat the potential problems stemming from gender misrepresentation and to prevent men from masquerading as female athletes, the International Olympic Committee started gender tests in 1966. The first tests involved the female athletes standing nude in front of a group of gynecologists who would certify the athletes as female. This demeaning and controversial method changed in 1968 to a theoretically “more scientific chromosome test” (Lemonick 1992, p. 65).

Polymerase Chromosome Reaction (PCR) gender verification tests are currently given to the female Olympic athletes. Although chromosome tests have been used to determine an athlete’s gender for nearly three decades, the actual purpose and effectiveness of the tests is questionable (Grady 1992, p. 78). Proponents of chromosome tests include Bernard Dingeon, the individual in charge of gender verification at the Albertville Winter Olympic Games. He praises PCR as opposed to medical examinations, suggesting that the medical examinations would be too costly (Dingeon 1993).

In contrast, Simpson et al (1993) point out that the chromosome tests have an inherent potential for an insufficient false-positive rate. They point out that an error rate of 1% (as indicated by supporters of PCR gender verification) would potentially eliminate 6 female athletes each time the test were administered to all of the female Olympic athletes (1993, p. 358).

Maria Jose Martinez Patino, a Spanish hurdler, was one such false positive at the World University Games held in Kobe, Japan, in 1985. Patino is but one of a handful of women who fail the chromosome test each year due to chromosome anomalies. After being certified as female, they are given certificates they can present to officials at the games and avoid subsequent tests. Patino forgot her certificate and was eliminated from the competition (Lemonick 1992, p. 65). Part of the error rate includes a bias that is built into PCR gender verification. Specifically, the test
excludes females who have Turner’s Syndrome—a condition describing women who have a single X chromosome (rather than two) (Brown 1992, p. 13).

An International Amateur Athletic Foundation (IAAF) panel has stated that the false positive can “wreck a woman’s mental health” and destroy an athlete’s emotional stability (Ultimate Olympic Test 1992, p. 16). Stephenson (1996) notes that the tests “have the potential for causing great psychological harm for women who, sometimes unknowingly, have certain disorders of sexual differentiation” (p. 177).

Negative treatment towards females in sports has been linked to a desire to prevent their participation in athletics (Kunesh, Hasbrook, Lewthwaite 1992). Because of this, the IAAF now uses a version of the original method in that a doctor takes a quick look at the athletes’ genitals during a routine physical (Lemonick 1992, p. 65). Through this technique, the false positives will be eliminated and only those who are obviously misrepresenting their gender will be eliminated from events sponsored by the IAAF (Brown 1992). It is interesting to note that while the tests have been in effect since 1966, there have not been any substantiated documented cases of men masquerading as women (Ultimate Olympic Test 1992, p. 16). Because of this, some say that the tests are basically useless (Stephenson 1996). The high rate of false positives combined with the negligible success rate brings into question the usefulness of the chromosome tests. Or, it seems that confusion has arisen from the development of additional rules. Nonetheless, the IOC still uses the chromosome tests.

Concluding Remarks

The preceding discussion focused on deviance in the Olympics. Of central concern was whether anomie theory can be used to address Olympic deviance. On the one hand, it seems as if few athletes engage in these acts and some of the control exerted over the athletes by the IOC might border on the extreme. On the other hand, it is possible that some of the acts are more common than some may think. Voy (1991) for example has accused the IAAF of covering up positive drug tests. In particular, he writes: “[I]f by chance, my drug testing crew were able to detect an elite athlete’s drug use, there still seemed to be enough loopholes in the protective testing program to allow the athlete to get off the hook with little problem” (p. 106). Based on his views about the flaws of testing Olympic athletes for drugs, Voy (1991) makes a number of recommendations that would reduce the amount of drug use by athletes and increase the efficiency of the testing programs. We contend that similar recommendations would be useful to deal with all of the deviant acts of which athletes have been accused. The model Voy (1991) advocated included the following: 1) Lay down the law; 2) Improve research; 3) Change attitudes; 4) Initiate better testing procedures; 5) Involve the right people; 6) Change authority; and, 7) Implement the plan. Each of these elements seem to imply that Olympic athletes are rational actors and that awareness about laws, practices, and changes in policies will reduce the likelihood of deviance by these athletes. Based on this, it seems important that the role of education as it relates to anomie and deviant acts by the Olympiad becomes of significant import.

Indeed, if anomie contributes to deviance, then increased understanding on various levels should be a useful tool to minimize the likelihood of deviant acts. In other words, educating various actors about the rules and risks of criminal or deviant behavior should help alleviate the problem. Education efforts should be directed toward athletes, fans, potential offenders, and policy makers. Educating the athlete should include efforts of coaches, family members, and trainers. At the same time though, the “educators” must be made aware of the consequences of the illicit actions. Skolnick (1996) quotes one athletic trainer who said that he helps par-
ents obtain prescription diuretics for their children "and defended the practice as safer than vomiting or enemas to 'make weight'" (p. 348). Clearly, not all parents and coaches would encourage this behavior. That some do, however, is troublesome.

Athletes must also come to realize that expectations placed on them are typically too high, and that strain (e.g. anomie) will occur should they focus too much on those expectations. Past Olympic skating champion Scott Hamilton stated: "Olympic athletes are expected to live up to a higher ideal, to remain pure" (Smolowe 1994, p. 61). Interestingly, based upon reports in the media, deviance by Olympic athletes seemed to be lower than deviance by other athletes. This suggests that understanding why most Olympic athletes do not commit deviant acts may help explain why other athletes do engage in such behavior.

Our purpose in this paper was not to suggest that anomie theory is the only theory that explains deviance in the Olympics. Indeed, several other theoretical approaches might be just as useful to serve as a guide in understanding these sort of acts. However, given the nature and breadth of anomie theory, we believe it is a good point at which social scientists can begin their approach to building a better understanding about deviance and the Olympic athlete.

Relatively speaking, empirical social science research on crime and deviance and the Olympics is noticeably scarce. However, the role that athletics and the Olympics play in our social arena cannot be overlooked. In fact, there are six practical reasons why social scientists should continue to examine deviance in this arena. First, Olympic athletes are in the public eye and information on their misdeeds are generally available to the social scientist. Second, because such examinations are retrospective, there is no reason to expect that scientific observation impacts the athlete's actions. That is, problems associated with the Hawthorne effect are negligent.

Third, increased understanding about deviance in the Olympics equates to increased understanding about deviance in general. Fourth, understanding why crimes are committed against athletes and fans will provide the boundaries to minimize future risk. Fifth, since criminal and deviant acts by Olympic athletes are relatively rare as compared to the illicit acts of other athletes (i.e. professionals), finding out what it is about the Olympian that decreases likelihood of malfeasance could shed some light on ways to decrease illicit actions in other groups as well. Finally, through examinations of such phenomena, a more in-depth understanding of the dynamic relationship existing between the different systems in society (i.e. political, social, educational, economic, and legal) and the Olympics will be provided.

WORKS CITED
Becker, D 1998 Olympian flees parents, sues to become adult USA Today Oct 22, 1,11C
Benjamin, D 1992 Pro v amateur Time July 27, 140(4) 64-5
Brown, W 1992 Sex-test confusion could create havoc at Olympics New Scientist Jan 18, 133(1804) 14
Callahan, G 1996 Don't look now Sport's Illustrated July 1, 85(1):44-7
Catlin, DH, TH Murray 1996 Performance-enhancing drugs, fair competition, and Olympic sport Journal of the American Medical Association 276 231-38
Chidley, J, J Hunter 1998 Counterculture hero Maclean's Feb 23, 111(8) 42-3
Connolly, P 1994 Removing the essence of man from women's athletics New York Times Oct 2, 144(8) 13
Dingeon, B 1993 Gender verification and the next Olympic games Journal of the American Medical Association 269 357-58
Doctorow, EL 1994 After the nightmare Sports Illustrated July 25, 81(4) 60-7

Durkheim, E 1897 Suicide New York: Free Press

Eitzen, S 1988 Conflict theory and deviance in sport International Review for the Sociology of Sport 23 193-204

Forsyth, CJ, TA Marckese 1993 Thrills and skills: A sociological analysis of Poaching Deviant Behavior 14 157-72


Galbraith, J. 1998 Dazed and confused Time Feb 23, 151(7) 78-79

Goldberg, K 1996 Olympian dives in defense of 92 gold Insight on News July 17, 12(23) 42-43


Krantz, M 1996 The fire last time Time August 5, 148(7) 25

Kunesh, MA, CA Hasbrook, R Lewthwaite 1992 Physical activity socialization: Peer Interactions and affective responses among a sample of sixth grade girls Sociology of Sport Journal 9 385-396

Lemonick, M 1992 Gender test comes under fire Time Feb 24, 139(8) 65


Merton, R 1938 Social Structure and Anomie American Sociological Review 3 672-82


Morris, S 1992 Be a Sport Omni 14(10): 30

Nemeth, M 1993 Ben Johnson faces a lifetime ban from track Maclean's March 15, 106 (11) 18-9

Noden, M 1992 Nowhere to run Sports Illustrated April 13, 76(14) 14

——— 1991 Setting the records straight Sports Illustrated December 16, 75(26): 138

Phillips, Andrew 1992 A haunted past Maclean's 105(30) 51-3

Plummer, W 1996 Degrees of difficulty People Weekly July 22, 46(4) 61-2


Simpson, JL, A Ljungqvist, A de la Chapelle, MA Ferguson-Smith, M Genel, AS Carlson, AA Ehhardt, and E Ferris 1993 Reply to gender verification and the next Olympic games Journal of the American Medical Association 269 357-58

Skolnick, AA 1996 Tougher drug tests for centennial Olympic games Journal of the American Medical Association 275 348-49

Smolowe, J 1994 The slippery saga of Tonya Harding Time Feb 14, 143(7) 60-1

Snyder, EE 1994 Interpretations and explanations of deviance among college athletes: A case study Sociology of Sport Journal 11 231-48


Starr, M 1993 Dear pros Newsweek Jan 25, 121(4) 54

Stephenson, J 1996 Female Olympians’ sex tests outmoded Journal of the American Medical Association 276 177-8

Testing problems raise fears about blood doping at Olympics 1992 Medical World News 33(7) 32-33

The Ultimate Olympic test 1992 US News and World Report February 24, 112(7) 16
Tofler, IR, BK Stryer, LJ Micheli, LR Herman 1996 Physical and emotional problems of elite female gymnasts The New England Journal of Medicine 35 281-284

Voy, R 1991 Drugs, Sport, and Politics Champaign, IL: Leisure


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