

Influence of Doping on Behavioural Dispositions of Athletes in Tertiary Institutions in Southwest, Nigeria

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Abstract

The utilization of banned substances by the athletes is a cheating approach and criminal act to sports practice. It increases unhealthy and anti-social behaviours in sports. It is against this background that this paper examined the behavioural dispositions of athletes within sport setting. A descriptive research design was used for the study. A sample of 510 elite athletes drawn from nine tertiary institutions in three states in Nigeria- Lagos, Ogun and Osun was selected using purposive, sample and stratified random sampling techniques. The researchers constructed A 21 – item questionnaire to gather relevant information for the study. The instrument was validated and had a reliability coefficient of 0.79. Frequency counts, percentages, means scores, standard deviation and t-test were used to analyze the data collected. Findings of the study revealed that most athletes who were involved in doping felt uncomfortable when defeated in sports contest, afraid to approach their coaches and exhibited various anti-social behaviours after sports competitions. However, there was no significant difference between the athletes who used doping substances and those who did not use in their behavioural dispositions. The behaviours exhibited were recognized by the coaches and rebuked accordingly. It was therefore recommended that sports handlers should educate their athletes on the psychological problems of doping to achieve competitive advantage.

Keywords: performance – enhancing substances, behavioural dispositions, elite athletes, doping, coaches.

Introduction

The use of chemical substances which stimulate the higher centre of the nervous system could be traced back to early history of man (Klafis & Arhneim, 1981). From the earliest time, man had searched in his environment for plants and other substances for curing all manners of illnesses, preventing diseases, getting the body in a state of readiness for the performance of motor skills and for maintaining good health and well-being. It becomes obvious that there can be acceptable drugs for the treatment of diseases and relief of symptoms. These drugs are only safe when prescribed by medical doctors and competent health practitioners and when obtained from legitimate sources like health clinics, hospitals, licensed chemists and so on. However, as a result of the characteristics and physiological effects of some of these drugs, they have found wide patronage amongst athletes.

The illegal use of doping substances to enhance performance by elite athletes is currently an international social problem. This is because sports have become a big time business with national and international champions making millions of money, enjoying self-esteem coupled with recognitions and various rewards such as cash gifts, houses, cars and scholarship awards to high performers.

The use of doping substances represents a major threat to the existence, principles and practice of modern competitive sports. Doping in sports is an issue of concern which poses great threat to the development of sports ideals in the twenty-first century Africa and indeed the world. Athletes who dope create an uneven playing field for other team-mates who compete free of performance – enhancing compounds or methods. Doping has become a topical issue in international sports that, it is no longer possible to mention sports competitions without mentioning drugs (Woolley, 2000).

Doping is viewed as the administering or use of substances in any form alien to the body of physiological in abnormal method with the exclusive aim or attaining an artificial and unfair increase of performance in competition (International Olympic Medical commission, 1993; 2006). In the same vein, Wadler (2012) asserted that doping involves the administration of or use of by a competing athlete of any substance taken by abnormal route of entry into the body with the sole intention to increase in an artificial and unfair manner his/her performance in competition.

Sportsmen and women may experience doping in form of surgical doping, nerve doping and blood doping (Gledhill, 1982 & Dubin, 1990). According to the authors, surgical doping involves the surgical repositioning of tendons to bio-chemically more advantages positions. Nerve doping involves the use of electrical stimulating techniques by the sports physicians to alter the vascular, enzymes and characteristics of muscle fibres. Blood doping is the infusion of blood into an athlete. It may be his blood, which has been withdrawn 5 – 6 weeks earlier or other cross-matches blood which is stored in a frozen state. The stored blood is then re-infused into the athlete a few days (1 – 7 days) to the important target competition.

In the last few decades international sports has been threatened by a litany of doping scandals. For instance, doping was widely spread as a social problem during the 1984 Olympic Games in Los Angeles, the 1996 Atlanta Olympic Games and re-enforced in 1988 Seoul Olympics (Oshodin & Egor, 1999). In 1992, 69 athletes tested positive in 56 sports Federations (Laure, 1999). The percentage of athletes involving in doping habit as revealed by Laker (2005) varied from 10% to 90% considering some demographic factors such as age, sex, types of sports engaged in and educational institutions attended. Also, synthetic Reports (2007) revealed that 37 champions from two Federations were tested for doping and 12 (32%) out of the sample taken tested positive.

At the international level, top sportsmen and women such as Marian Jones, Lance Armstrong, Ben Johnson, Vivian Chukwuemeka, Damola Osayomi were found to have used doping substances to gain competitive advantages over their opponents (Eno-Obasi, 2013). Doping involves excessive doses which are more likely to produce toxic side effects and considered as poisoning (Oshodin, 2004). In fact, deaths have been reportedly associated with the use of doping substances as stimulants, diuretic and anabolic steroids. This is ironically contrary to the basic principle of sports, which is to promote health and healthy living.

Several doping substances used by athletes are considered by psychiatrists as addictive, leading to drug dependence with psychological effects and impact on behaviour (American Psychiatric Association, 1995). Behaviour according to Kirkpatrick, Abercrombie & Kemp (2001) is a way of conducting oneself, action or reaction of individual under a given circumstance. Also, UNAIDS (2002) described behaviour as the aggregation of voluntary or involuntary activities, conditioned reflexes, acquired responses and adaptation to change. Behavioural potential such as tendency to argue, be nervous, organized, conservative or possibly to over react is assumed to set the limit within which the disposition can vary. It is assumed that the use of doping substances could aggravate any or some of these tendencies. For instance, Rummel (1976) related behavioural dispositions to temperaments, abilities, moods and states believing that any of these traits could determine the style and nature of behavioural dispositions to issues.

Substance users according to Yakassai (2010) are more rebellious, impulsive, accepting illegal behaviours to and oriented towards sensation seeking and tend to be less conforming. The use of doping substances can influence the behaviour an athlete exhibits within sports setting. For instance, Perkins (2002); Feldstein Miller (2006); Takiei, et. Al (2008) linked the use of psychoactive substances most especially, alcohol, tobacco and other illicit substances by students of tertiary institutions with involvement in unexpected behaviour such as unintended and unprotected sexual intercourse or behaviour which may increase the risk of road traffic accidents. Also, Ibiwoye & Adeleke (2011) associated anti-social activities such as cultism, violence and mental disorder with the effect of substance use.

It is not out of place, therefore to suggest that the use of doping substances to enhance sports performance may have psychological and behavioural effects in some athletes. In general, the evidence to support this claim at present is limited and much additional studies will be necessary. It is against this background that this study is designed to determine empirically the influence of doping on behavioural dispositions of athletes in tertiary institutions in Southwest, Nigeria.

2. Objectives of the Study

The specific objectives are to:

- 2.1 identify the behavioural dispositions of athletes as influenced by the use of doping substances;
- 2.2 compare the behavioural dispositions of athletes who engaged in doping and those who did not; and
- 2.3 compare the extent to which athletes who engaged in doping and those who did not were rebuked by their coaches for different infractions

3. Research Question

- 3.1 What are the behavioural dispositions of athletes in tertiary institutions within sports setting?

4. Research Hypotheses

- 4.1 There is no significant difference in the behavioural dispositions of athletes who used doping substances and those who did not use.
- 4.2 There is no significant difference between athletes who used doping substances and those who did not use in the extent to which they were rebuked by their coaches.

5. Methodology

A descriptive survey research design was used for the study. The study sample consisted of 510 active elite athletes (255males and 255females) selected using multistage random sampling techniques. Three States out of six States in Southwest, Nigeria were selected using simple random sampling technique. Three (3) tertiary institutions that were regularly participating in national and international sports competition at Nigerian Colleges

of Education Games Association (NICEGA); Nigerian Polytechnics Games Association (NIPOGA); Nigerian Universities Games Association (NUGA) and West African Universities Games (WAUG) levels were randomly selected from each of the three States. A minimum of 57 active athletes were selected from each of the institutions in each State used. The athletes were stratified by their sex and types of sports they participated in.

The researchers employed literature relating to drug use in sports in constructing the instrument. The instrument consisted of two sessions. Section A dealt with bio-data of the participants while section B contained items developed to ascertain the degree of proneness to behaviour maladjustment or likelihood of occurrence of the problem. The validity of the instrument was ascertained by experts in two Nigerian Universities and a reliability coefficient of 0.79 was established using Pearson Product Moment Correlation Analysis. The copies of questionnaire were administered to 510 elite athletes while in training programmes at their training venues for various sports competitions at NIPOGA, NICEGA, NUGA and WAUG. 510 copies of administered questionnaire were duly completed and returned (representing 100% return rate). The data collected were analyzed using frequency counts, percentages, means, standard deviation and t-test analysis. The hypotheses generated for the study was tested at 0.05 level of significance.

6. Results

6.1 Behavioural dispositions of athletes within sports setting.

6.2 Research Question: What are the behavioural dispositions of elite athletes in tertiary institutions?

The respondents were asked to indicate the behaviour they usually exhibit before, during and after competitions. The responses are reported in Table I

Table 1: Percentage analysis on behavioural disposition of respondents

Behavioural dispositions measured	Most of the time		Some of the time		Never	
	No	%	No	%	No	%
I feel nervous before my event	73	14.3	175	34.3	262	51.4
Training is difficult for me	74	14.5	190	37.3	246	48.2
I feel uncomfortable when I lose in my event	126	24.7	192	37.6	192	37.6
I am afraid of my coach	61	12.0	247	24.4	202	39.6
I assume my coach thinks that I am a difficult athlete	34	6.7	105	20.6	371	42.7
Coming late to sport training programme	48	9.4	204	40.0	258	50.6
Absenting from sports training programme	52	10.2	285	55.9	173	33.9
Leaving training camp without permission	54	10.6	334	65.5	122	23.9
Stealing sport materials	60	11.8	256	50.2	193	37.8
Fighting with coaches/other teammates and athletes	50	9.8	272	53.3	188	36.9
Talking rudely to coaches or other athletes	57	11.2	259	50.8	194	38.0
Quarrelling with other athletes	49	9.6	88	17.3	373	73.1
Raping female athletes	54	10.5	51	10.0	404	79.2
Taking alcohol/ cigarette	51	10.00	58	11.4	400	78.4
Welcoming girlfriends into camp	59	11.6	85	16.7	366	71.6
My coach thinks I take drug	32	6.3	319	62.5	159	31.2
I feel my coach is the cause of my trouble in sports	42	8.2	284	55.7	184	36.1

Table 1 revealed that athletes who used doping substances often exhibit various anti-social behaviours. Nearly half of the total respondents in this study reported that they were more nervous before going for their events and more than half of the respondents often find it difficult to attend training sessions. Only 126 (24.7%) of the total respondents indicated that most of the time, they felt uncomfortable when they lost in their events while 192 (37.6%) respondents indicated some of the time perhaps, as a result of their involvement in doping habit. It was also revealed that 74 (14.5%) of the respondents found sports training programme difficult most of the time and 190 (37.3%) respondents indicated some of the time. 285 (55.9%) respondents revealed that they have been absent from sports training programme, some of the time. Similarly, as high as 334 (65.5%) of the respondents indicated that they left sport training camp without permission. The finding revealed that 284 (55.7%) respondents indicated that coaches were the cause of their problems. As high as 319 (62.5%) of the total respondents indicated that they assumed that their coaches usually think they (athletes) take drugs to enhance their (athletes) performances.

6.3 Research Hypotheses

6.3.1 Hypothesis 1: There is no significant difference in the behavioural dispositions of athletes who used doping substances and those who did not use.

T-test analysis was computed to compare the behavioural dispositions of athletes who used doping

substances and those who did not use with respect to each aspect of behavioural dispositions observed in this study. The results of the t-test are presented in table 2

Table 2: Comparison (by t-test) on doping substance users with non-users on behavioural dispositions of athletes

Aspects of behaviour measured	Doping substance users N=389		Non-users N=121		t_{cal} N=508
	\bar{X}	SD	\bar{X}	SD	
Pre-sports nervousness	1.62	.72	1.64	.72	-.27
Sports training is difficult	1.66	.77	1.69	.75	-.41
I feel uncomfortable when defeated	1.90	.79	1.76	.75	1.79
I am afraid to approach the athlete	1.73	.66	1.71	.66	.24
Coach thinks I am a difficult athlete	1.35	.61	1.30	.54	.88
Coach is the cause of my problem in sports	1.71	.62	1.76	.56	.81
Coach think I take drug	1.75	.58	1.74	.51	.16

Table 2 shows differences in the mean scores of doping substance users and non-users in the areas of behavioural dispositions identified in this study. In all the seven areas listed, substance users consistently had a higher means scores than non-users except in only three of the areas. For instance, behaviours such as feeling uncomfortable when defeated, afraid to approach the coach, being a difficult athlete and attitude of drug taking were rated higher by substance users than non-users. However, the difference of the means scores in all the seven aspects of behavioural dispositions measured were not statistically significant. Thus, the hypothesis was not rejected.

6.3.2 Hypothesis 2: There is no significant difference between athletes who used doping substances and those who did not use in the extent to which they were rebuked by their coaches.

Respondents were asked to indicate how often they had been rebuked by their coaches for different infractions. The results of the t-test analysis in aspect of each behaviour is presented in table 3.

Table 3: Comparison (by t-test) of doping substance users with non-users on athletes' punishment by coach.

Aspect of behaviour measured	Doping substance users=389		Non-users N=121		t_{cab}
	X	SD	X	SD	
Coming late for training	1.54	.60	1.60	.67	-1.77
Absenting from training	1.67	.64	1.79	.61	-1.69
Leaving training camp without permission	1.85	.58	1.88	.59	-.38
Stealing sport materials	1.64	.60	1.76	.67	-1.65
Fighting with coach or athletes	1.65	.58	1.75	.64	-1.45
Taking rudely to coaches	1.65	.60	1.75	.64	-1.44
Quarrelling with other athletes	1.32	.57	1.37	.67	-.70
Raping female athletes	1.27	.59	1.32	.67	.65
Taking alcohol or cigarette	1.26	.60	1.32	.66	.86
Welcoming girl friends into sport training camp	1.34	.63	1.41	.07	.86
Eating too much during sports training	1.45	.72	1.72	.82	-3.01

Table 3 shows the mean scores for the users of doping substances and non-users in each of the eleven behaviours measured. Generally, the mean scores of non-users of doping substances in this study were consistently higher than that of the users in the eleven areas measured. However, the t-calculated values of all the behaviours measured ranging from 0.38 to -3.01 were less than the t-table value of 1.96 at df 508 and $p < 0.05$ level of significance. Therefore, the differences observed were not statistically significant in the eleven areas of behaviour measured. Thus, the hypothesis was not rejected.

7. Discussion

In this study, the behavioural dispositions of doping substance users and non-users were compared using t-test analysis. Most doping substance users claimed that they felt uncomfortable when defeated in sports competition with a mean score of 1.90. This is similar to the findings of Oshodin (2004) and Synthetic Report (2007) that athletes using doping substances would be uncomfortable when defeated in their sports. Similarly, most of the doping substance users confessed that they experienced fear to approach their coaches, difficulty in attending sports training and pre-sports nervousness (Lovella, 2012).

Some of the respondents revealed that they had been punished for negative behaviour exhibited such as

leaving the sports training camp without permission, absence from training programme, fighting with athletes or coaches, talking rudely to coaches and coming late to sports training. This finding supported that of Fricker (2007) and Baselt (2008) who reported that athletes exhibited anti-social acts after injecting banned drugs to enhance their performances.

When compare these behaviours or trends with non-users of doping substances, the non-users who exhibited abnormal behaviours such as leaving sports training camp without permission, absencing from sports training programme, fighting with coaches or athletes and talking rudely to coaches were more under punishment than doping substance users. This finding is unexpected because athletes who did not use doping substance confessed that they had been punished by their coaches in all the eleven areas of behaviour measured more than the athletes who used doping substances. Generally, athletes may exhibit unexpected negative behaviours considering many variables such as physiological, psychological and sociological backgrounds as a result of exposure to doping substances through peers, desire to win-at -all-cost, influence of other athletes support personnel, material rewards, knowledge through textbooks, journals and others (Ansher, 1997, Ojeikere, 2009 and Jenkins, 2010). As relevant as this aspect of drug use in sports is previous researchers like Atolagbe (1988); Boroffice (1991) and Onifade & Adeniran (1991) did not relate their findings to this important aspect.

8. Conclusions

Based on the findings of this study, it was concluded that athletes in tertiary institutions often felt nervous after using doping substances and exhibited negative behaviours within sports arena. The negative behaviours reported ranges from difficulty in attending sports training sessions, afraid to approach their coaches and other athletes support personnel, leaving the sports training camp without permission and urge to commit sexual abuse (raping). However, there was no statistical mean difference between the doping substance users and non-users in their negative behavioural dispositions. The negative behaviours exhibited by respondents in this study were recognized by the coaches and rebuked accordingly.

Recommendations

The study recommended that coaches and other athletes' support personnel should purposefully and closely monitor their athletes during sports training sessions and competitions, to safe them from embarrassment and disgrace being meted out to athletes who employed doping substances. Sports administrators should focus on the concept of cognitive and behavioural strategies in combating negative behavioural dispositions of athletes who used doping substances to enhance their performances. It is also recommended that there should be effective psychological skill training, counseling and activities to counter negative behavioural dispositions usually exhibited under the influence of performance enhancing substances

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