

Gender consideration of doping behavior of athletes in Southwest, Nigeria.

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Abstract

Doping, an application of chemical substances with the deliberate intention of altering physical performance of athletes, is strongly opposed by the International Olympic Committee and its affiliate bodies on ethical and health grounds. It has been observed by the researchers that female athletes were in the habit of involving themselves in performance-enhancing drugs like their male counterparts. This has resulted in a noticeable increase in unhealthy and anti-social behaviours before, during and after sports competitions among sportsmen and women. However, the magnitude of this problem is not quite known. This study therefore, investigated gender considerations of doping behaviours of athletes in Southwest, Nigeria. Participants were 510 (255 males and females each) selected purposively using simple and stratified random sampling techniques. A descriptive research of the survey type was used. Data collected were analyzed using frequency counts, percentages, Chi-square and ANOVA statistics. Findings revealed that there was a significant influence of sex on the extent of the use of doping substances by the respondents. Male athletes were significantly involved in doping behaviours than their female counterparts. It was suggested that continuous drug education be provided athletes; and coaches and trainers should make responsible decisions concerning athletes' health and social status in the society.

Keywords: gender, doping behaviour, athletes, ergogenics, performance-enhancing substances, sports.

1. Introduction

The transformation of sports in the post- apartheid era in some countries cannot be separated from the broader social, economic and political framework¹ This frame work still prioritizes women and their participation in sports. However, in this situation, women have emerged as the most deprived social group.² Women athletes, unlike their male counterparts, had faced discrimination and limited opportunities as well as negative perceptions and stereotypes. Changes in international policy and societal views, especially in the past 30 years have spurred the growth of female participation in sports, particularly with increase in girls' participation in sports and growth in intercollegiate and professional athletics. Suffice to say that, sports participation is no more seen to be at the exclusive domain of men. This brings about greater gender equality, encourage female empowerment, exposure to information and procurement of doping substances.

Similarly, sports nowadays, go beyond measuring athletes' excellent performance. It has become big money-spinning industry and plays some desirable position roles in the world politics. However, the desire to win at –all – costs has seriously undermined the integrity of sports, because performance- enhancing substances and procedures are used to achieve this end by sportsmen and women. Athletes are exposed to the use of ergogenic, psychoactive and multiple substances to obtain prestigious results, attract sponsors, make money and gain power³

The prevalence of doping among athletes cannot be underestimated, especially in weight lifting, athletics and soccer worldwide⁴ However, in Nigeria, there were recorded cases of athletes who tested positive to performance - enhancing substances as reported by researchers and some health organizations.^{5,6,7,8,9}

Fatal casualties of doping in Nigeria have been on the increase. A few of them include the following:

- (i) In 1992, three Nigerian athletes were tested positive to doping substances
- (ii) In 1993, a Nigerian weight lifter was tested positive in an African Champion -ship
- (iii) In 1995, four Nigerian weight lifters and one (Athlete- Track) were tested positive and had their medals withdrawn for using banned substances. Another Nigerian runner was tested positive to Nandrolone decanoate during Mobil Tracks and Fields in Lagos in 1995.

(iv) In 1996 and 1997, two females and one male athlete were tested positive to doping substances and were sanctioned for a 3-month suspension.

(v) In 2009, three Nigerian athletes joined the list of Nigerian drug cheats in the 12th IAAF World Championship held in Berlin.

Researchers observed the act of doping among athletes in Southwest, Nigeria. The athletes had extra ordinary performance over their opponents, who wanted to win through their genuine physical efforts and hard work. It was been observed by the researchers that female athletes were in habit of taking performance- enhancing substances like their male counterparts. The researchers also observed that, there was a noticeable increase in unhealthy and anti-social behaviours before, during and after sports competition among sportsmen and women just, as there seems to be an increase in doping practice. However, the extent of this problem considering gender is not quite known. This study therefore, considered the influence of gender on the use of performance-enhancing substances by athletes. It is believed that this would provide a guide to assessing doping behavior among athletes. The study examined whether there is gender influence on the doping behaviour of athletes in Southwest, Nigeria. Furthermore, the study examined the extent to which gender of athletes influenced their doping behaviours.

2. Purpose of the study

The purpose of this study was to examine the influence of gender issue on doping habits among sportsmen and women in tertiary institutions in Southwest, Nigeria. The study also investigated the doping substances adopted by Nigerian sportsmen and women. The study investigated the extent to which types of sports used by the sportsmen and women influenced their doping behaviours.

3. Methods

A sample of 510 athletes (255 males and females respectively) was purposively selected using simple and stratified sampling techniques. Five states out of six states in Southwest in Nigeria were randomly selected. Data for the study were collected using an instrument titled “Gender Consideration of Doping Behaviour of Athletes Questionnaire” (GCDBAQ). The instrument consisted of two sections, A and B. Section A sought for the demographic information about the participants, such as sex and types of sports engaged in by the athletes while, Section B of the instrument, contained items on doping substances used by male and female athletes. The face and content validity of the instrument were ascertained by experts in Human Kinetics and Health Education and Measurement and Evaluation. A test –retest method was used to establish the reliability of the instrument. Using Pearson’s Product Moment Correlation method, a reliability coefficient of 0.78 was obtained. This was considered high enough for use in the study.

The instrument was administered by the researchers to the participants during sports training sessions at the stadia in the five states selected for the study. The researchers sought for the services of two research assistants in each of the state stadium visited for the administration of the instrument. All the 510 copies of the instrument administered were duly completed and returned to the researchers, thus making a 100% return rate. The data collected were analysed using descriptive statistics, Chi- square and ANOVA to test the hypotheses raised at 0.05 level of significance.

4. Results

Research Question: To what extent do athletes use performance enhancing substances?

Table 1: Percentages on influence of gender of athletes in the use of performance- enhancing substances

Gender (Sex)	Performance -Enhancing Substances						
	Ergogenic Substances (a)		Psychoactive Substances (b)		Multiple Substances (a & b)		Total
	N	%	N	%	N	%	
Male	173	67.8	39	15.3	43	16.9	255 (100%)
Female	201	78.8	35	13.7	19	7.5	255 (100%)

Table 1 showed that irrespective of gender, more athletes used ergogenic substances than psychoactive substances. Less number of athletes used multiple substances. However, while more female athletes 201(78.8%) than male athletes 173 (67.8%) used ergogenic substances, more males 39(15.3%) than females (35(13.7%) used psychoactive substances. While 43 (16.9%) male athletes used multiple substances, only 19(7.5%) female athletes used multiple substances.

Generally, more females (92.5%) were involved in the use of ergogenic and psychoactive substances than their male counterparts (83.1%). On the other hand, male athletes (16.9%) consumed multiple substances more than their female counterparts (7.5%). It is therefore, revealed that gender remarkably influenced the use of sports performance-enhancing substances by athletes.

Hypothesis: There is no significant gender influence on the doping behaviour of athletes

Table 2: Chi- square analysis on the use of doping substances by gender of athletes

Gender	Ergogenic Substances user	Psychoactive Substances user	Multiple Substances users	X^2 -cal	x^2 . tab	df	R
Male	173	39	43	11.60	5.99	2	
Female	201	35	19				

p<0.05 Level of significance

Table 2 revealed that x^2 cal of 11.60 was greater than the x^2 tab of 5.99 at df = 2 and p<0.05 level of significance. Therefore, the hypothesis was rejected. Thus, there was an influence of sex on the extent of the use of doping substances by the respondents. Generally, sportsmen are more exposed to various doping substances than their female counterparts considering variations in their socio-cultural backgrounds.

In order to examine the influence of gender of athletes on the relationship between the use of doping substances and types of sports (**Individual sports** – athletics, weight lifting and gymnastics, **Dual sports** – Table Tennis, boxing, wrestling, Tennis; and **Team sports** - basketball, football handball, hockey and volleyball), an ANOVA was used to analysed the responses of the athletes. The results are presented in Table 3.

Table 3: ANOVA on the use of doping substances by gender and types of sports.

Source of Variation	SS	Df	Ms	f-cal	f-tab	R
Sex (A)	2273.68	1	2273.68	10.70	3.84	
Types of sports (B)	3415.68	2	1707.84	8.04	2.99	
Two-Way interaction (A & B)	2822.12	2	1411.06	6.64	2.99	S
Error Term	107126.46	504	212.56			
Total	1246112.0	510				
Corrected Total	116700.24	509				

p< 0.05 level of significance.

Table 3 revealed the effects of sex of respondents (Factor A) (f-cal 10.70 > f-tab 3.84, df=1) and types of sports (Factor B) (f-cal 8.04 > f-tab 2.99, df =2) all at p< 0.05 level of significance, which were statistically significant. However, sex by types of sports (A and B) interaction effects also were statistically significant (df = 2; 504; f-cal 6.64 > f-tab 2.99, p< 0.05). Therefore, the hypothesis was rejected. Thus, there was a significant gender influence on the use of doping substances by types of sports engaged.

Generally, male athletes in team sports and individual sports use performance- enhancing substances significantly more than their female athletes.

5. Discussion

The study revealed that there was a significant difference in the proportion of male athletes who used ergogenic substances than those that used psychoactive substances. This could be traced to the fact that male athletes are fond of showing their superiority over female counterparts. More females had tried ergogenic substances than their male counterparts while males had tried psychoactive substances than their female counterparts. Similarly more male athletes used multiple substances than their female counterparts. These findings were consistent with the findings of some researchers, who reported that male athletes were more involved in the use of doping substances earlier than female counterparts.^{10,11,12,13}

However, the findings of this study contradicted that of another researcher, who reported that athletes including soccer players had negative attitudes to drug use in sports.¹⁴ However, these researchers did not consider sex of participants as a factor of drug use in their studies.

Findings in his study revealed that sex would significantly influence doping behaviour. From time immemorial, male athletes were exposed earlier to various sporting activities and experienced the use of chemical substances that could enhance physical performances towards winning a contest, while their female counterparts were always engaged in daily endeavour that demand expending less energy.¹⁵

However, findings in this study revealed that there was a significant main effect of sex by types of sports (individual, dual and team) considering psychological and sociological reasons of athletes on the use of doping substances. Generally, both male and female athletes in team and individual sports used performance – enhancing substances (ergogenics) more than athletes in dual sports.

6. Conclusion

It could be drawn that male athletes involved in the use of performance – enhancing substances more than their female counterparts; considering their early period of entry into sports scene and their awareness through social interaction with sports handlers, co-athletes, friends who are not athletes and not in advertisement (mass media).

7. Recommendations

Based on the findings of this study, the following recommendations were made:

1. The National Sports Commission should intensify continuous drug education programme to educate and re-train the athletes and sports handlers on health, psychological and sociological consequences of doping. Such enlightenment programme should involve the representatives of the Sports Associations in each State.
2. There should be an integration of comprehensive drug education into the school curriculum at all levels and the sports training programme.
3. Athletes should be constantly tested for doping to prevent international disgrace.
4. Stiffer penalties beyond 2 years ban should be meted out to those who are tested positives to any of the doping substances. Offenders should also undergo counseling therapy.

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