

PERSONAL FACTORS AS PREDICTORS OF DRUG-USE INTENTION AMONG ATHLETES IN PRIVATE UNIVERSITIES, OSUN STATE

¹Adediran Atanda. Alao & ² Dr. A . Opeoluwa, Oyedele

^{1&2}Department of Kinesiology, Sports Science and Health Education
Lead City University, Ibadan, Oyo State, Nigeria

¹Email: diranalao71@gmail.com, Phone: +234-8058470797;

²Email: oyedele.akinsanmi@lcu.edu.ng, opeoyedele@gmail.com, Phone: +234 – 8033226794,

Abstract

The use of substances to enhance performance is becoming very common in sports. Using illegal drugs and techniques to artificially boost performance is therefore immoral; and goes against the idea of fair play, damage sports ideals, and puts the athletes' health at risk. In spite of this, previous studies focused mainly on enhancing drug-use, with little attention on drug-use intention and related factors, specifically among student athletes of private universities. This study therefore, examined personal factors as predictors of enhancing drug-use intention among athletes in private universities, Osun State. One hundred and sixty five (165) student athletes from four (4) private universities who have represented their respective institutions in one or more sport competitions were sampled in Osun State. A self-developed and validated questionnaire was used as instrument for data collection in the study. Pearson product moment correlation and multiple regression analysis were used to analyse the hypotheses at 0.05 level of significance. Result showed that experience ($r=0.750$) and athletes' attitude ($r=0.863$) had positive significant relationship with drug-use intentions among universities' athletes in Osun State. There was a significant joint prediction of personal factors (experience and athletes' attitude) on drug-use intention among private universities' athletes ($F_{(2,162)}=250.323$, $p<0.05$). There were significant relative predictions of experience ($\beta=0.177$, $t=2.775$, $p<0.05$) and athlete's attitude ($\beta=0.772$, $t=11.330$, $p<0.05$) on drug-use intention among the private universities' athletes. It was recommended among others that the authorities of private universities in Osun State should organize periodic sensitization programme on the adverse effect of drug-use on the body system; specifically for student athletes.

Keywords: Personal factors, Drug-use intention, Private universities

Introduction

The use of substances to enhance the performance is becoming very common in sports; and this often destroys the spirit of competition. As such, the regulatory bodies for sports have reported rates ranging from 5% to 31% for the use of performance-enhancing substances among athletes (Christopher, Latzka, Laker, De Luigi & Harrast, 2021). Using illegal drugs and techniques to artificially boost performance is immoral, goes against the idea of fair play, damage sports ideals, and puts the health of athletes at risk. Therefore, because drug usage is becoming a global societal issue, it is strictly prohibited for athletes of all levels to utilize drugs as a means of performance enhancement. To address these problems and publish a list of chemicals that are prohibited in athletics, the World Anti-Drug-use Agency (WADA) was established (Christopher et al., 2021).

The International Olympic Committee (IOC), International Sports Federations (ISF) and WADA forbid competitors from using performance-enhancing substances and methods, whether directly or indirectly. Despite continuous scientific efforts to detect drug use and the associated penalties for positive dope tests by the World Anti-Drug-use Agency (WADA), a significant number of athletes still opt to utilize performance-enhancing chemicals in an attempt to improve their performance (Theodoros, Van der Graaff, Deković, Meeus&Branje, 2020). Similarly, Theodoros, et al. (2020) athletes' degree of physical fitness, commitment to training, and healthy diet can eventually build a baseline for high performance during competition instead of using illegal drugs to enhance performance, which is primarily responsible for their success and remarkable accomplishments in sports.

Specifically, Federation of International Football Association (FIFA) contends that there is no systematic drug-use in soccer (Peter, Simone, Gilles & Peter, 2021). However, specific cases of former premier league players acknowledging the use of stimulant pills (called pep pills)

before matches and emphasized that use of drug-use was highly organized (Cole, Prassel, Keller & Carlson, 2021). It has been reported that there was high level of supplement use among footballers in Spain (Prasad & Sharlet, 2024). Similarly, a meta-analysis of studies on drug-use in Africa from 1970s to 2013 showed that there was a 2.4% prevalence use of performance enhancing substance by football athletes (João &Teixeira, 2020).

The reasons which prompt football athletes to dope include desire to win, psychological motivation, and desired self-experience, gaining favours from coaches, social status, improving performance, self-confidence, imitating other athletes, peer pressure and to fulfill contractual conditions by sponsors Shamsaei & Ahmadian, 2020; Kun, Xu, Zhang, Wang & Sun, 2020). Sport is an important variable that influences athletes attitude about drug-use. In a study of the athletes attitude of 446 athletes representing four groups of sports: team sports, strength and speed sports, endurance sports, and sports that required a high level of motor skills, the results showed that athletes from strength and speed sports have the strongest tendency to involve in drug-use, while those from sports that required a high level of motor skills have the lowest tendency (Graeme, Kasper, Walsh & Maughan, 2022).

In Nigeria, there are recorded cases of sportsmen and women of different experience brackets who are tested positive to drug-use substances especially in weight lifting, boxing and athletics, Magalhães, Tostes, Ferreira, Gazzola de Oliveira, Possetti, Silva Jr, Vicente, Guimarães, Alckmin-Carvalho & Lucchetti, 2024. Furthermore, the Weight Lifting Federation of Nigeria reported that virtually all weight lifters of various experience and weight categories were found with drug-use substances (Harish, Gavaravarapu, Ramesh &Yagnambhatt,2024).This resulted in suspension of the drug cheaters such as Samson Akpan, Ibik- biki, Lawal Rilwan, Moji Oluwa, and Sunday Ndubusi in 1995. This menace can be traced to so many causes among

which are personal and administrative factors, which are; athletes attitude, competition experience, coaches competence and sports facility.

Experience of athletes and coaches in sports is one of the important personal determinants of sporting behaviours including drug-use. It was observed that older athletes and coaches and sponsors are more knowledgeable than the younger ones. It was also argued that sports achievements at senior levels are highly safeguarded against the use of performance enhancing drugs (Andrea , Gutiérrez & Ceballo, 2024). It was found that in Italy, young athletes in sports were likely to be open to using performance enhancing substances (Nicholas, Chadwick, Widdop & Bond, 2024). Similarly, in Kenya, it was found that experience played a role in the level of drug-use knowledge among athletes with young athletes having less knowledge on the issues than older ones (Donald, Berrin, Dilip & Cheryl, 2022). This indicated that, the use of performance enhancing substances is not peculiar to Nigeria.

The unsporting behaviour of drug-use has been associated with the Nigerian sports industry over time, spanning from professional players to young and amateur athletes. There have been reported examples of Nigerian athletes testing positive for prohibited drugs, particularly in weight lifting, boxing, and athletics (Kellen, Schantell, Horne, John, Ryan, Hannah & Okelberry, 2024). The usage of drugs by university athletes in Nigeria may be widespread, as around 40% of the athletes representing Nigeria at international championships are from higher institutions (Joseph, 2012).

As a consequence of their interactions with other athletes in international championships, athletes from Nigerian higher institutions may not be completely free of drug-use. Personal factors such as experience, gender, and positive athlete attitude toward drug-use, as well as some administrative factors such as coaches' competence, infrastructures (obsolete training facilities and equipment), and athlete support personnel, among others, may all contribute to the use of

these banned substances. In spite of this, previous studies focused mainly on enhancing drug-use, with little concentration on enhancing drug-use intention and related factors, specifically among athletes in private universities. This study therefore, examined personal factors as predictors of enhancing drug-use intention among athletes in private universities, Osun State.

Aim and Objectives of the Study

The aim of this study was to examine personal factors as predictors of drug-use intention among athletes in private universities, Osun State.

The objectives of the study are to:

1. establish the relationship between personal factors of experience, athletes' attitude and enhancing drug-use intentions among private universities' athletes in Osun State.
2. examine the joint prediction of personal factors (experience and athletes' attitude) on enhancing drug-use intention among private universities' athletes in Osun State.
3. examine the relative prediction of experience and athletes' attitude on enhancing drug-use intention among private universities' athletes in Osun State.

Research Question

1. What is the relationship between personal factors of experience, athletes' attitude and enhancing drug-use intentions among private universities' athletes in Osun State?

Hypotheses

The following hypotheses were formulated and tested at 0.05 significance level.

1. There is no significant joint prediction of personal factors (experience and athletes' attitude) on drug-use intention among private universities' athletes in Osun State.
2. There is no significant relative prediction of experience and athletes' attitude on drug-use intention among private universities' athletes in Osun State.

Methodology

Descriptive survey research design was used for this research. The population of this study comprised all student-athletes in private universities in Osun State who have represented their respective institutions in one or more local, national or international sport competitions. The purposive, simple random and proportionate sampling technique was used to select One hundred and sixty five (165) respondents from the selected 4 institutions. The student athletes were selected from the four (4) private universities in Osun State; Adeleke University, Ede, Fountain University, Oke Osun, Osogbo, Bowen University, Iwo, and Redeemers University, Ede. The researcher obtained approval for the study from the authorities of the four private universities involved. Also, consent of the respondents was sought for before the administration of the questionnaire. The questionnaire was subjected to reliability test; which yielded coefficient value of 0.85. The researcher used field assistants to gather the data. Pearson product moment correlation was used to analyse the research question. Multiple Regression analysis was used to test the hypotheses at 0.05 level of significance.

Results

The results and discussion of findings are stated as follows:

Socio-Demographic Characteristics of the Participants:

Table 1: Distribution of the Respondents by Gender

Gender	Frequency	Percent
Male	71	43.0
Female	94	57.0
Total	165	100.0

Table 1 reveals that 71 (43.0%) respondents were male, while 94 (57.0%) were female. This means that, over half of the respondents were female.

Table 2: Distribution of the Respondents by Level

Level	Frequency	Percent
100 level	84	50.9
200 level	43	26.1
300 level	29	17.6
400 level	9	5.5
Total	165	100.0

Table 2 reveals that 84 (50.9%) respondents were in 100 level, 43 (26.1%) were in 200 level, 29 (17.6%) were in 300 level, while 9 (5.5%) were in 400 level. This means that, a bit over half of the respondents were in 100 level, while few were in 400 level.

Research Question

The below research question was answered.

1. What is the relationship between personal factors of experience, athletes' attitude and enhancing drug-use intentions among private universities' athletes in Osun State?

Table 3: Correlation Analysis on Relationship between Personal Factors and Drug-Use Intentions

Variables	Mean	Std. Dev.	Drug-use intentions	Experience	Athletes' attitude
Drug-use intentions	25.68	6.37	1		
Experience	13.43	3.71	0.750	1	
Athletes' attitude	27.17	7.66	0.863	0.793	1

N=165

Sig. (2-tailed):

Experience =0.000

Athletes' attitude=0.000

Correlation is significant at 0.05 alpha level ($p < 0.05$)

Table 3 reveals that experience ($r=0.750$, $p<0.05$) and athletes' attitude ($r=0.863$, $p<0.05$) were tested significant on drug-use intentions among universities' athletes in Osun State. It was further established that experience and athletes' attitude had positive correlation with drug-use intentions among universities' athletes in Osun State, while correlation coefficient's magnitude was strong. The positive relationship of experience and athletes' attitude implied that, a positive experience and improvement in athletes' attitude would positively influence enhancing drug-use intentions among universities' athletes in Osun State.

Hypotheses Testing

The following hypotheses were tested in this study.

H₀₁: There is no significant joint prediction of personal factors (experience and athletes' attitude) on drug-use intention among private universities' athletes in Osun State.

Table 4: Regression Analysis of Joint Prediction of Personal Factors on Drug-Use Intentions

R=0.869							
R ² =0.756							
Adj. R ² =0.753							
Std. Error=3.170318							
Model	Sum of Squares	df	Mean Square	F	Sig. (p value)	Remark	
Regression	5031.509	2	2515.754	250.323	0.000	Significant	
Residual	1628.103	162	10.050				
Total	6659.612	164					

Table 4 reveals that the linear combination of personal factors (experience and athletes' attitude) was tested significant on drug-use intention among private universities' athletes in Osun State ($F_{(2,162)}=250.323, p<0.05$). The result yielded a coefficient of multiple regression of $R=0.869$ and multiple R-square of 0.756. The result also revealed that adjusted $R^2=0.753$; indicating that about 75.3% of variance was accounted for by the independent variables. This means that, there was a significant joint prediction of personal factors of experience and athletes' attitudes on drug-use intention among private universities' athletes in Osun State. The null hypothesis was therefore rejected.

H₀₂: There is no significant relative contribution of personal factors (experience and athletes' attitude) on drug-use intention among private universities' athletes in Osun State.

Table 5: Regression Analysis of Relative Prediction of Personal Factors on Drug-Use Intentions

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Remark
	B	Std. Error	Beta	t		
(Constant)	5.278	0.969		5.447	0.000	
Experience	0.303	0.109	0.177	2.775	0.006	Significant
Athlete's attitude	0.601	0.053	0.722	11.330	0.000	Significant

Table 5 shows the experience, athlete's attitude, the unstandardised regression weight (β), the standardized error of estimate ($SE\beta$), the standardized coefficient, the t-ratio and the level at which the t-ratio was significant. As indicated in the table, experience ($\beta=0.177$, $t=2.775$, $p<0.05$) and athlete's attitude ($\beta=0.772$, $t=11.330$, $p<0.05$) was independently tested significant on drug-use intention among private universities' athletes in Osun State. This means that there was a significant relative contribution of personal factors of experience and athletes' attitudes to drug-use intention among private universities' athletes in Osun State. The null hypothesis was therefore rejected.

Discussion of Findings

The findings of this study on socio-demographic characteristics of the respondents revealed that over half of the respondents were female, while male were below half of the sampled respondents. Regarding the level, it was established that a bit over half of the respondents were in 100 level, while few were in 400 level. It implied that female respondents were mostly sampled; of which majority of such students were newly admitted students (100 level students). The finding of this study on research question revealed that experience and athletes' attitude were tested significant on drug-use intentions among universities' athletes in

Osun State. It was further established that experience and athletes' attitude had positive correlation with drug-use intentions among universities' athletes in Osun State, while correlation coefficient's magnitude was strong. The positive relationship of experience and athletes' attitude implied that, a positive experience and improvement in athletes' attitude would positively influence drug-use intentions among universities' athletes in Osun State.

Regarding the hypotheses, the finding on joint prediction of personal factors (experience and athletes' attitudes) on drug-use intention revealed that the linear combination of personal factors (experience and athletes' attitudes) was tested significant on enhancing drug-use intention among private universities' athletes in Osun State. This means that, there was a significant joint prediction of personal factors of experience and athletes' attitude on enhancing drug-use intention among private universities' athletes in Osun State. It implied that, the combination of personal experience of the respondents and attitude of each of them had significant impact on enhancing drug-use intention among the respondents. The finding of this study of joint prediction of personal factors on drug-use intentions was in line with the study of Henry & Daut (2021) conducted on awareness, attitude and experience of young athletes towards banned usage of illegal drugs in Selangor. In this present study, it was revealed that the combination of personal experience of the respondents and attitude of respondents had strong impact on drug-use intention. This is therefore similar to the finding of the previous study which established that use of illegal drugs is significantly influenced by their attitude and experience.

The outcome of this study revealed further that experience and athlete's attitude independently tested significant on drug-use intention among private universities' athletes in Osun State. This means that there were significant relative predictions of personal factors of experience and athletes' attitude on enhancing drug-use intention among private universities' athletes in Osun State. The finding of this study of regarding relative predictions of experience

and athletes' attitude was in congruence with the outcome of the study carried out by Miskulin, Grbic & Miskulin, (2021) on drug-use attitude, beliefs, and practices among young, amateur Croatian athletes. In the present study, it was established that experience and athletes' attitude independently had strong influence on drug-use intention among private universities' athletes in Osun State. Similarly, the previous study established that athletes' and coaches' perceptions influenced drug-use. On the other hand, it was established in the study conducted by Miskulin, Grbic & Miskulin (2021) that most athletes had a staunch anti-drug-use stance but was unable to explain their reasoning for it.

Conclusion

It was concluded in this study that experience and athletes' attitude had positive relationship with drug-use intentions among universities' athletes in Osun State. This study established that there was a significant joint prediction of personal factors of experience and athletes' attitude on drug-use intention among private universities' athletes in Osun State. It was confirmed further that, there was a significant relative prediction of personal factors of experience and athletes' attitude on drug-use intention among private universities' athletes in Osun State.

Recommendations

Based on the findings of the study, the following recommendations were made.

1. The authorities of private universities in Osun State should organise periodic sensitisation programme on the adverse effects of drug-use on the body system; specifically for student athletes.
2. The sports council unit of private universities in Osun State should make drug test compulsory at all levels for sport athletes and students generally.

References

- Andrea, S. M., Gutiérrez, M. L. & Ceballo, R. R. (2024). The Role of Parent–Adolescent Communication among Youth Exposed to Neighborhood Violence in Rural Mexico." *Families in Society*.
- Christopher, W. M., Latzka, E.W., Laker, R.S., De Luigi, J. A. & Harrast, M. (2021). In Braddom's Physical Medicine and Rehabilitation, Elsevier, 2021, 789-819
- Cole, H. A., Prassel, H. B., Keller, P. S. & Carlson, C. R. (2021). Religious Beliefs and Behaviors as Predictors of Substance Use Among College Students. *Psychology of Religion and Spirituality*, 12 (1), 2021, 101–115.
- Donald, E. G., Berrin, E. L., Dilip, R. P. & Cheryl, A. D. (2022). *Psychosocial Aspects of Sports Medicine in Pediatric Athletes*. *Clinical Journal of Sport Medicine*, 13, 2022, 33-40.
- Graeme, L. C., Kasper, M. A., Walsh, P. E. & Maughan, J. R. (2022). *Food First But Not Always Food Only": Recommendations for Using Dietary Supplements in Sport*." *International Journal of sport nutrition and exercise metabolism*. 32 (5), 2022, 371-386.
- Harish, K.T., Gavaravarapu, M. S., Ramesh, S. B. & Yagnambhatt, R.(2024).*Sports Nutrition Knowledge, Attitude, and Practice Questionnaire for Indian Adolescent Athletes—an Exploratory Sequential Mixed-Method Study*." *Sport Sciences for Health* .2024, 1-11.
- Henry, E. & Daut, A. Z. (2021). Examining Awareness, Attitude, and Experience of Young Athletes towards Banned Usage of Illegal Drugs in Selangor. 2021, 12-27.
- João, R. & Teixeira, V. H. (2020). *Prevalence of Dietary Supplement Use by Gym Members in Portugal and Associated Factors*." *Journal of the International Society of Sports Nutrition* .17(1), 2020, 11.
- Joseph, J. E. (2012). *Standard Sports Facilities as Predictor for Elite Sports Performance by Nigerian University Students*. *Journal of Physical Education and Sport*. (JPES). 12(1), 2012, 44 – 47.
- Kellen, M., Schantell, K. M., Horne, K. L., John, A. J., Ryan, M. R., Hannah, G. & Okelberry, J. (2024).*The Neural Oscillations Serving Task Switching are Altered in Cannabis Users*." *Journal of Psychopharmacology*.
- Kun, W., Xu, L., Zhang, j., Wang, D. & Sun, K. (2020).*Relationship between Perfectionism and Attitude Toward Drug-use in Young Athletes: The Mediating Role of Autonomous and Controlled Motivation*." *Substance abuse treatment, prevention, and policy* .15, 2020, 1-8.
- Magalhães, V. L., Tostes, J. G., Ferreira, J.C.L, Gazzola de Oliveira, L. A., Possetti, J. B., Silva Jr, M. T., Vicente, M., Guimarães, F., Alckmin-Carvalho, F. & Lucchetti, G. (2024).

- Association between Religiosity/Spirituality and Substance Use Among Homeless Individuals." *International Journal of Social Psychiatry* .70(2), 2024, 330-339.
- Miskulin, I., Grbic, D.S. & Miskulin, A. (2021). Drug-use Attitude, Beliefs, and Practices among Young, Amateur Croatian Athletes. *J.Sports*, 9(25), 2021, 2-10.
- Muralinath, E. M., Prasad, G. & Sharlet, S. (2024). *Clinical Review Articles InPhysio Pharmacology*. Laxmi Book Publication, 2024.
- Nicholas, B., Chadwick, S., Widdop, P. & Bond, A. (2024).The Geopolitical Economy Of Major Sporting Events–Where Business and Management Meets Politics and Geography." Edward Elgar Publishing. 2024, 60-73.
- Peter, H. K., Simone, E., Gilles, C. D. & Peter, V. E. (2021). Drug-use Control Analysis of Small Peptides: A Decade of Progress. *The Journal of Chromatography B*, 2021, 265: 441-445.
- Shamsaei, N. & Ahmadian, N. (2020).Investigation of Psychological Relationship between the Level of Religiosity and Drug-use Susceptibility among Bodybuilding Athletes." *Journal Health Spring Summer*. 8,2020,30-38.
- Theodoros, M., Van der Graaff, S. J., Deković, M., Meeus, H. J. W & Branje, S. (2020). "Parent–Adolescent Conflict Across Adolescence: Trajectories of Informant Discrepancies and Associations with Personality Types." *Journal of youth and Adolescence*. 49 .2020,119-135.