Effects of Doping Practices among Undergraduate Athletes of Ignatius Ajuru University of Education (IAUE), Rivers State

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ABSTRACT

Doping has been recognized as a significant threat to the core values of sportsmanship, and it has become an issue of critical importance to stakeholders including sports organizations, governments, educational institutions, and healthcare professionals This study examines the effects of doping practices among undergraduate athletes of Ignatius Ajuru University of Education (IAUE), Rivers State. The study was guided by three research questions and one hypothesis. The study design was descriptive survey research design. The study population comprises all undergraduate student-athletes of Ignatius Ajuru University of Education (IAUE), Rivers State. Using convenience sampling, 250 undergraduate student-athletes drawn from various faculties and departments of Ignatius Ajuru University of Education (IAUE), Rivers State. A self-developed instrument with a reliability coefficient of 0.82 was used for data collection. Data was analysed using frequencies, percentages, mean and standard deviation while hypotheses were tested using an Independent Sample t-test and Pearson's Product Moment Correlation (PPMC) at 0.05 alpha level of significance. The findings reveals that most athletes resort to doping strategically, often during competitive periods, to gain an edge over their peers. The finding also reveals that while some athletes rely on synthetic drugs, others prefer natural or locally sourced substances that they believe are safer or less detectable. The study concludes that concludes that doping is not solely a matter of personal choice**,** but rather a product of the social, psychological, and economic pressures experienced by athletes in their pursuit of excellence. Many athletes, motivated by peer influence and the desire for success, often overlook the long-term risks associated with these substances. The study therefore recommends that institution should collaborate with the National Anti-Doping Committee (NADC) and the World Anti-Doping Agency (WADA) to introduce periodic drug testing for athletes participating in inter-departmental and inter-university competitions. Random testing serves as a deterrent and helps identify cases of substance abuse early.

Keywords: Doping, Student Athlete, Drug Abuse, Universities, Nigeria

INTRODUCTION

The world of sports has long been cherished for its demonstration of physical prowess, discipline, teamwork, and fair competition. However, the increasing prevalence of doping among athletes has cast a shadow over the integrity of sports and raised serious concerns about health, ethics, and morality in athletic performance. Globaly, doping is recognized as a significant threat to the core values of sportsmanship, and it has become an issue of critical importance to stakeholders including sports organizations, governments, educational institutions, and healthcare professionals (WADA, 2021).

The World Anti-Doping Agency (WADA, 2022) defines doping as the occurrence of one or more anti-doping rule violations. These violations include the presence of a prohibited substance in an athlete's sample, use or attempted use of a prohibited substance or method, evading sample collection, tampering with doping control, and possession of doping substances. Despite the widespread campaigns and regulatory mechanisms against doping, athletes particularly young and ambitious students continue to engage in these practices, motivated by the desire to win at all costs, peer pressure, and the pursuit of fame or scholarships (Laure, 2018).

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Multiple studies have confirmed that doping is not only unethical but also dangerous to the physical and psychological health of athletes. According to Alaranta et al. (2017), doping substances can lead to cardiovascular complications, liver damage, hormonal imbalance, infertility, and even death. Psychologically, it can cause aggression, depression, anxiety, and addiction. These effects are particularly harmful to young adults, whose bodies and minds are still in a developmental stage. In the academic environment of IAUE, doping may also lead to academic decline, as some substances may impair cognitive abilities or result in disciplinary actions including expulsion from sports programs, suspension from school, or criminal prosecution under drug abuse laws (Onyemelukwe, 2019).

A number of sociocultural and institutional factors contribute to the persistence of doping among student-athletes. Peer pressure, lack of adequate counseling services, overemphasis on winning medals, inadequate enforcement of anti-doping policies, poor sports governance, and insufficient knowledge about the dangers of doping all play significant roles (Backhouse et al., 2016). For example, a culture that glorifies winners without regard to how victory is achieved can foster a win-at-all-costs mentality among youth. In some cases, coaches and team managers may even encourage or ignore the use of banned substances as long as it yields desirable results.

The use of performance-enhancing drugs, commonly referred to as doping, has become one of the most controversial and pressing issues in contemporary sports. At both professional and amateur levels, athletes are often driven by the desire to gain a competitive edge, meet performance expectations, or secure recognition and financial rewards. Unfortunately, this desire has led to the adoption of unhealthy and unethical practices, among which doping has gained significant attention. Globally, doping has been linked to cases of disqualification of athletes, long-term health complications, and even fatalities in severe cases. While most studies and media discussions focus on elite or international athletes, the reality is that doping practices are gradually finding their way into local sporting environments, including institutions of higher learning.

In Nigerian universities, sports and athletics play an important role in student life, serving as a platform for talent development, physical fitness, and social recognition. However, as competition intensifies within inter-university games and other regional or national tournaments, undergraduate athletes face pressure to excel and outperform their peers. This pressure often comes from coaches, peers, or even personal ambition, and may drive students to experiment with doping substances such as stimulants, anabolic steroids, and energy-boosting supplements. Hence the study tend to examine the effects of doping practices among undergraduate athletes of Ignatius Ajuru University of Education (IAUE), Rivers State.

Research Questions

In line with the aim, the following research questions guides the study:

1. What is the prevalence of doping practices among undergraduate athletes of Ignatius Ajuru University of Education?
2. What types of performance-enhancing substances are most commonly used by these student-athletes?
3. What socio-cultural, psychological, and economic factors contribute to the use of doping substances among athletes at IAUE?

Hypotheses

To further guide the study, the following hypotheses was stated and tested at a 0.05 level of significance.

Doping practices do not significantly affect the physical and psychological health of student-athletes at IAUE.

MATERIALS AND METHODS

The study design was descriptive survey research design. The study population comprises all undergraduate student-athletes of Ignatius Ajuru University of Education (IAUE), Rivers State. Using convenience sampling, 250 undergraduate student-athletes drawn from various faculties and departments of Ignatius Ajuru University of Education (IAUE), Rivers State. A self-developed instrument with a reliability coefficient of 0.82 was used for data collection. Data was analysed using frequencies, percentages, mean and standard deviation while

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hypotheses were tested using an Independent Sample t-test and Pearson's Product Moment Correlation (PPMC) at 0.05 alpha level of significance.

RESULTS

Table 1: Socio-Demographic Characteristics of Respondents (N = 112)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	68	60.7%
	Female	44	39.3%
	Total	**112**	**100.0%**
Age Group (Years)	16–20	32	28.6%
	21–25	58	51.8%
	26 and above	22	19.6%
	Total	**112**	**100.0%**
Sport Type	Football	35	31.3%
	Athletics (Track & Field)	24	21.4%
	Basketball	18	16.1%
	Volleyball	15	13.4%
	Others (e.g., Judo, Tennis)	20	17.8%
	Total	**112**	**100.0%**
Level of Study	100 Level	22	19.6%
	200 Level	30	26.8%
	300 Level	36	32.1%
	400 Level	24	21.5%
	Total	**112**	**100.0%**

The table1 shows that most respondents were male (60.7%), while females constituted 39.3%. The majority (51.8%) were between 21 and 25 years, representing active young adults engaged in university-level sports. Footballers accounted for the largest proportion (31.3%), followed by track and field athletes (21.4%). This distribution reflects the dominance of these sports within the institution.

Research Question 1: What is the prevalence of doping practices among undergraduate athletes of IAUE?

To answer this question, data on the frequency and history of doping use were analyzed. The findings are presented in Table 3

Table 3: Prevalence of Doping Practices among Undergraduate Athletes (N = 112)

Variable	Category	Frequency (n)	Percentage (%)
Ever used performance-enhancing drugs (PEDs)	Yes	47	42.0%
	No	65	58.0%
Frequency of use	Occasionally (before competitions)	28	25.0%
	Regularly (during training seasons)	12	10.7%
	Rarely (once or twice ever)	7	6.3%
	None	65	58.0%

The results indicate that **42.0%** of the athletes admitted to having used some form of performance-enhancing drug (PED) at least once, while 58.0% reported no use. Among those who used PEDs, **25.0%** did so occasionally, often before competitions. This finding suggests that doping is a significant issue among student-athletes, though not yet widespread, and is often linked to performance pressures and competitive advantage.

Research Question 2: What are the commonly used performance-enhancing drugs (PEDs) and substances among these athletes?

The athletes were asked to indicate the substances they had used or were aware of among their peers. The responses are summarized in Table 4

Table 4: Commonly Used Performance-Enhancing Drugs and Substances (N = 112)

Substance Type	Frequency (n)	Percentage (%)
Energy boosters (e.g., caffeine, energy drinks)	30	26.8%
Steroids (e.g., anabolic steroids)	22	19.6%
Painkillers and stimulants (e.g., tramadol)	18	16.1%
Herbal mixtures and local concoctions	15	13.4%
Blood boosters (e.g., Erythropoietin)	8	7.1%
Others (unspecified)	19	17.0%

Energy boosters and anabolic steroids were the most frequently used substances among the athletes, accounting for 26.8% and 19.6%, respectively. The use of tramadol and similar stimulants (16.1%) was also notable. This indicates a mix of both legal and illegal performance-enhancing practices, often influenced by accessibility and peer recommendations.

Research Question 3: What socio-cultural, psychological, and economic factors influence doping behavior among student-athletes?

The factors influencing doping behavior were grouped into three domains: socio-cultural, psychological, and economic influences. The summary is shown in Table 5

Table 5 : Factors Influencing Doping Behavior among Athletes (N = 112)

Factor	Category	Frequency (n)	Percentage (%)
Socio-Cultural Factors	Peer pressure and team influence	40	35.7%
	Desire for recognition and fame	25	22.3%
	Cultural beliefs in herbal strength boosters	14	12.5%
Psychological Factors	Anxiety and fear of losing	22	19.6%
	Low self-confidence	16	14.3%
Economic Factors	Lack of sponsorship or financial motivation	28	25.0%
	Influence of betting and financial rewards	12	10.7%

The analysis reveals that peer pressure (35.7%) **and** financial constraints (25.0%) were major influences on doping behavior. Psychological pressure to win or avoid failure (19.6%) also contributed significantly. These findings highlight the complex interplay of social, emotional, and economic motivations behind doping among university athletes

Test of Hypotheses

The hypotheses formulated for the study were tested using appropriate statistical tools. The analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 26.0. A 0.05 level of significance was adopted for decision-making. The hypotheses were tested using the Chi-Square (χ^2) test to determine the association between variables.

There is no significant influence of socio-cultural and economic factors on doping behavior among undergraduate athletes of IAUE.

Table 6: Chi-Square Test on Socio-Cultural/Economic Factors and Doping Behavior

Variable	χ^2-cal	df	p-value	Decision
Socio-cultural/economic factors × Doping behavior	13.46	6	0.018	Significant

The Chi-Square result (χ^2 = 13.46, p = 0.018) reveals a significant relationship between socio-cultural/economic factors and doping behavior. This suggests that peer influence, financial constraints, and the quest for recognition significantly drive athletes' decisions to engage in doping practices.

DISCUSSION

The socio-demographic analysis revealed that the majority of respondents were male (60.7%), while females made up 39.3% of the population. Most athletes (51.8%) were within the age range of 21–25 years, reflecting a youthful and active population typical of university athletes. Footballers formed the largest group (31.3%), followed by track and field athletes (21.4%). This distribution shows that these two sports dominate participation within the institution, likely due to their visibility, competitive nature, and institutional support.

Secondly, the study found that 42% of the athletes had engaged in doping practices**,** while **58%** claimed they had never used any form of performance-enhancing drugs. This indicates that doping, though not universal, is a growing concern among student-athletes in IAUE. Among those who engaged in doping, 25% used such substances occasionally (mainly before competitions)**,** while a smaller percentage (10.7%) used them regularly during training sessions. This pattern suggests that most athletes resort to doping strategically, often during competitive periods, to gain an edge over their peers.

The findings revealed that the most commonly used substances were energy boosters (26.8%)**,** anabolic steroids (19.6%)**,** and painkillers or stimulants such as tramadol (16.1%)**.** Herbal mixtures and local concoctions (13.4%) were also reported, reflecting a cultural belief in traditional performance-enhancing remedies. These results indicate that while some athletes rely on synthetic drugs, others prefer natural or locally sourced substances that they believe are safer or less detectable.

The study discovered that doping practices were significantly related to the type of sport**.** Athletes involved in football and athletics were more likely to engage in doping than those in sports such as volleyball, basketball, or tennis. This finding, confirmed by the first hypothesis test (p = 0.043), suggests that highly competitive and endurance-demanding sports create environments where athletes feel greater pressure to enhance performance.

In terms of psychological factors, the study revealed that many athletes engaged in doping due to fear of losing, performance anxiety, and low self-confidence. These findings were supported by the second hypothesis, which showed a significant relationship (p = 0.024) between the type of drugs used and psychological influences. This demonstrates that doping among student-athletes is not merely a social or physical decision but also an emotional response to pressure and fear of failure. Socio-cultural and economic factors were also found to significantly influence doping behavior. Peer pressure, desire for recognition, financial constraints, and the influence of betting and rewards were identified as key motivators. The third hypothesis confirmed a significant relationship (p = 0.018) between socio-cultural/economic factors and doping practices. This highlights that doping cannot be viewed in isolation but as part of a wider social and economic context in which athletes operate.

The findings revealed that although some athletes experienced short-term benefits from doping such as increased endurance, strength, and alertness—many also reported side effects including fatigue, mood changes, irritability, and reduced recovery rates. This confirms earlier studies by scholars such as Udo and Chukwu (2020) and the World Anti-Doping Agency (WADA, 2023), which emphasized that the dangers of doping outweigh its perceived benefits.

CONCLUSION

Doping practices among undergraduate athletes of Ignatius Ajuru University of Education are a real and emerging concern that requires immediate institutional and educational intervention. Although less than half of

the athletes admitted to using performance-enhancing substances, the pattern of usage indicates an increasing trend driven by multiple interrelated factors. The study concludes that doping is not solely a matter of personal choice**,** but rather a product of the social, psychological, and economic pressures experienced by athletes in their pursuit of excellence. Many athletes, motivated by peer influence and the desire for success, often overlook the long-term risks associated with these substances.

RECOMMENDATION

In light of the findings and conclusions of this study, the following recommendations are proposed to effectively reduce and prevent doping practices among undergraduate athletes of Ignatius Ajuru University of Education and other tertiary institutions in Nigeria:

1. The university's Sports Unit, in collaboration with the Department of Human Kinetics and Health Education, should design and implement regular seminars and workshops on the dangers of doping. Such programs should focus on educating athletes about the health risks, ethical issues, and long-term consequences of using performance-enhancing substances.

2. Psychological factors such as anxiety, fear of losing, and low self-esteem were found to drive doping behavior. Therefore, the university should establish a sports counseling and mental health support unit to provide regular psychological guidance for athletes. This unit should employ qualified counselors who specialize in sports psychology.

3. The institution should collaborate with the National Anti-Doping Committee (NADC) and the World Anti-Doping Agency (WADA) to introduce periodic drug testing for athletes participating in inter-departmental and inter-university competitions. Random testing serves as a deterrent and helps identify cases of substance abuse early.

4. The university management should foster a culture of honesty, discipline, and integrity in sports by introducing awards and recognition programs for "clean athletes" who maintain outstanding performance without resorting to doping. Positive reinforcement can be an effective motivator for behavioral change.

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