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Risk management strategy of doping in sports in Oyo state, Nigeria

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ABSTRACT

In Nigeria, doping remains a pervasive issue, posing a profound challenge to the integrity, fairness, and development of sport in the country. The absence of a well-structured risk management framework further compounds this problem, as it leaves sports organizations ill-equipped to anticipate, mitigate, or respond to the risks of athletes participating in doping. In light of this, this study investigated risk management strategy of doping in sports in Oyo State, Nigeria. The study employed a mixed-methods research design, combining descriptive and correlational survey approaches. It was discovered that there was a negative relationship between risk identification and doping in sports in Oyo State, Nigeria; (r= -0.07), which is similar to the relationship of risk mitigation and continuous evaluation and improvement with doping in sports; (r= -0.07) and (r= -0.04) respectively. However, Risk assessment had a negative but weak relationship with doping in sports; (r= -0.02). It was concluded that effective strategies for risk management, can reduce doping behaviors by discouraging unethical practices in sports. It was recommended that the National Sports Commission, sports organizations and other stakeholders adopt integrated anti-doping strategies to discourage doping practices.

Keywords: Risk Management, Doping, Nigeria

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1. INTRODUCTION:

Doping has long posed a threat to the integrity, justice, and well-being of athletes and to the development of sports in general throughout the world. Cases of doping diminish the reputations of athletes and organizations of respective sports by making it harder for them to legitimately represent their sports and serve in the best possible role of inspiring. The administration or use of any of the banned performance-enhancing drugs is termed as 'doping. It breeds deception and, most importantly, undermines the fundamental principles of honesty and fair competition, which are one of the pillars on which athletic activity flourishes and survives.

The prevalence of the use of doping substances among Nigerian athletes manifests greatly in areas of athletics, football, and powerlifting, where performance improvement is easily noticed and greatly appreciated. In any case, however, Nigerian sports continue facing the challenge of doping in their effort to effectively address the anti-doping stipulations that currently exist. This underscores the need for more effective risk management frameworks that can shield against various doping-related risks.

From 1985 to 2006, there was a total of 15 recorded cases of doping associated with Nigerian athletes, especially within weightlifting and athletics (Akindutire et al., 2012). In 2016, eight athletes from Nigeria faced bans for multiple doping violations, among whom four had reached the status of gold medalist at the African Games (Africanews, 2016). In 2021, for example, a Nigerian sprinter was provisionally suspended in the ongoing Tokyo Olympics after being caught using the human growth hormone (Athletics Integrity Unit, 2021). In 2022, again, a female champion in the 100m was suspended on preliminary examination findings for the discovery of prohibited substances, and a four-year ban was slapped on a notable quarter-miler (Pulse Sports Nigeria, 2023). The

problem is prevalent among the younger generation of sportsmen as well, which can be elaborated by the case when a teenage athlete was cut from the World U20 Championships in 2022 after a positive test for a prohibited substance was confirmed against her (Punch Nigeria, 2019). This illustrates that doping remains problematic at every level of competition among the athletes in the country.

At the very least, any risk management strategy for at least doping in sports should identify the risks. The identification of risks plays a crucial role in the proactive discovery of factors that may lead athletes to engage doping. Ruwuya et al. (2022) identified the factors that undermine anti-doping efforts in Africa, which include financial constraints, insufficient regulatory measures, and lack of educational resources. Prompt recognition of these risks empowers stakeholders to incorporate targeted interventions that can be both preventive and corrective.

Risk assessment is considered to be a crucial step within the extended risk management system of dealing with doping in sports. It encompasses all the recognized risks and evaluates them in a systematized manner with regard to the environmental impact phenomenon in sports, probability of its occurrence, and associated vulnerabilities. Upon doing risk assessment, risk priorities can be laid down for allocating scarce resources for intervention with regard to doping incidents on the part of the stakeholders, sports entities, regulatory bodies, and policymakers. Risk assessment starts with an understanding of the background and enabling factors leading to doping behavior. These might include such psychological factors as performance anxiety (Hodge et al., 2013), sociocultural pressures to succeed (Backhouse et al., 2007), and poor anti-doping education.

According to Engelberg and Skinner (2016), risk mitigation in sports is not just about compliance with anti-doping policies, but also definition or establishment of a culture of integrity in the context of sports and accountability on the side of athletes and other stakeholders. Preventive actions, regular observations, and adaptive strategies need to be compiled in a seamless fashion in order to address the evolving challenges that doping presents to sports. Risk Mitigation is a proactive practice applied within the risk management framework, aimed at minimizing the probability and magnitude of identified risks. In the domain of doping in sports, it encompasses making sure that policies and strategies of a kind are developed in order to mitigate the exposure of athletes to doping practices and their potential harmful consequences.

Continuous evaluation and improvement are central pillars of any substantial risk management framework for combating doping in sport. This approach involves the regular assessment of anti-doping measures, identification of gaps, and adaptation of strategies based on new research findings and evolving doping techniques (Hanstad and Houlihan, 2015). By implementing a cycle of assessment, feedback, and enhancement, sports organizations can develop proactive anti-doping frameworks that foster compliance, athlete education, and ethical sportsmanship (Hurst et al., 2020). Moreover, continuous improvement promotes collaboration between stakeholders, including government agencies, sports federations, and athletes, to reinforce a culture of clean sports and uphold the integrity of athletic competition (Morente-Sánchez and Zabala, 2013).

A significant number of studies have been conducted on doping in sports. For instance, Doping Knowledge and Attitudes Among Nigerian Athletes by Okon Effiong at the University of Calabar and The Influence of Coaching Ethics on Doping Tendencies in Nigerian Sports by Adeyemi Ogunleye and Funmilayo Adebayo have explored the awareness and ethical considerations surrounding

doping. However, there has been limited focus on risk management strategies specifically tailored to doping in sports. Hence, this study investigated the risk management strategy of doping in sports in Oyo State, Nigeria. By assessing existing anti-doping measures, identifying gaps, and proposing sustainable strategies, this study aims to contribute to the growing body of knowledge on doping prevention. Also, it seeks to educate athletes, coaches, and sports administrators on the consequences of doping, including reputational damage, and career setbacks. Ultimately, the findings from this research are expected to provide sports stakeholders with practical recommendations for strengthening anti-doping policies and fostering a culture of integrity in sports.

- **Objectives of the study**

The general objective of this study was to examine the risk management strategy of doping in sports in Oyo State, Nigeria.

- **Specific Objectives**

1. To examine the nature of the existing risk management strategy to combat doping in sports in Nigeria.
2. To establish the relationship between risk management strategy factors and doping in sports in Oyo State, Nigeria.

- **Research Question**

What is the nature of the existing risk management strategy to combat doping in sports in Nigeria?

- **Research Hypotheses**

The following hypotheses were tested:

1. There is a positive relationship between risk identification and doping in sports in Nigeria.
2. There is a positive relationship between risk assessment and doping in

sports in Nigeria.

3. There is a positive relationship between risk mitigation and doping in sports in Nigeria.
4. There is a positive relationship between continuous evaluation and improvement and doping in sports in Nigeria.

2. Methods

A descriptive correlational design was used to study the risk management strategy of doping in sports in Oyo State, Nigeria. The population was all athletes and sport administrators from Oyo State and the sample comprised of 235 respondents. The respondents were selected using purposive, simple random and stratified sampling techniques. The research instrument used was a self-developed questionnaire with four Likert-scales of strongly disagree, disagree, strongly agree, and agree. It also included demographic data. The instrument was validated by experts in the field and its reliability was tested using Cronbach Alpha which yielded a result of 0.76. Field testing was conducted in Osun State among 20 respondents who shared similar characteristics. Ethical considerations, including obtaining written consent and maintaining respondents' confidentiality were considered. The instrument was administered personally by the researcher and trained research assistants. The data analysis was conducted through descriptive and inferential analysis. A semi-structured interview (Key Informant Interview-KII) was used to answer the research question while Pearson's Product-Moment Correlation Coefficient (PPMC) was used to test hypotheses at the 0.05 level of significance.

3. Results

Socio-Demographic Characteristics of the Respondents

Table 1: Frequency Table showing Gender distribution of the athlete participants

Gender	Frequency	Percent (%)	Cumulative Percent
Male	170	72.3	72.3
Female	65	27.7	100.0
Total	235	100.0	

Source: Researchers' calculations using SPSS, 2024

Table 1 reveals that 170 (72.3%) of the participants were Male while 65 (27.7%) of the participants were Female. Majority of the participants were Males.

Table 2: Frequency Table showing Age distribution of the athlete participants

Age of Athletes	Frequency	Percent (%)	Cumulative Percent
Below 20 years	41	17.4	17.4
20-24 years	79	33.6	51.0
25-29 years	52	22.1	73.1
30-34 years	34	14.5	87.6
35 years and above	29	12.3	100.0
Total	235	100.0	

Source: Researchers' calculations using SPSS, 2024

Table 2 above shows that 41 (17.4%) of the participants are below 20 years, 79 (33.6%) are within the age group 20-24 years, 52 (22.1%) are between 25-29 years, 34 (14.5) are within the age group 30-34 years while the remaining 29 (12.3%) of the participants are 35 years and above. Most of the athlete participants are in their early twenties.

Table 3: Frequency Table showing the Highest level of competitions of the participants

Highest Level of Competition	Frequency	Percent (%)	Cumulative Percent
Institutional Games	74	31.5	31.5
National Youth Games	94	40.0	71.5
International Games	67	28.5	100.0
Total	235	100.0	

Source: Researchers' calculations using SPSS, 2024

Table 3 above reveals that 74 (31.5%) of the athlete participants have Institutional games as the highest level of competition they have engaged in, 94 (40.0%) have participated in National Youth Games as their highest level of competition, while 67 (28.5%) have participated in International games. Majority of the athlete participants are athletes who have engaged in National Youth games as their highest level of competition.

Table 4: Frequency Table showing the Number of competitions attended by participants

Number of Competitions Attended	Frequency	Percent	Cumulative Percent
1-4	56	23.8	23.8
5-9	66	28.1	51.9
10 and above	113	48.1	100.0
Total	235	100.0	

Source: Researchers' calculations using SPSS, 2024

Table 4 above shows that 56 (23.8%) of the athlete participants have attended between 1-4 competitions, 66 (28.1) of the athlete participants have attended 5- 9 competitions, while 113 (48.1) of the athlete participants have attended 10 and above competitions. Majority of the athlete participants have attended 10 and above competitions.

- **Research Question**

Semi-structured Interview with participants explaining the nature of the existing risk management strategy to combat doping in sports in Nigeria based on risk identification, prevention and continuous evaluation:

Risk Identification

The coaches and sports administrators said hyperactivity is the leading indicator in identifying an athlete engaged in doping. They also explained that they are always careful not to confront the suspected athletes directly in the presence of others so that it will not lead to another psychological problem.

Respondent: "I just have one on one with the athletes, ask them about their drug history and so on. So, if they are involved, we will know how to guide them.

And if they are not, it may be due to one reason or the other which might not be the drug. But naturally, to identify we see that the athletes may be hyperactive."

Prevention

Besides training athletes, coaches engage in talk, encouraging athletes not to participate in doping. They are encouraged not to participate in activities that could put them under pressure to engage in doping.

Respondent: "So, we regularly talk to them on what to do and not to do. You know, we also put it to them that it is better to perform averagely without the use of drugs than to perform marginally with the help of drug because as time goes on, the drugs will pose health implications on them."

- **Continuous evaluation**

Based on experience, the coaches indicated that they know so much about athletes apart from doping. They claimed that they detect if the athlete had sex even before the game. They noted that since they have good relationships with the athletes, they can easily read them. They always punish them so that others will not inculcate their doping habits. They indicated that continuous evaluation should not be the primary approach to mitigate doping; rather instilling discipline in the athletes.

Respondent: "I always try to punish that athlete, which will serve as deterrent for others because when they know that okay fine, coach is punishing this athlete because he or she in engaging in drug use, they will not want to involve themselves in it. So, we try to study them and if we discover that they are involved, then we have to play without them. You know, sport is more than winning. Fine you win some, you lose some. But the truth is, that ability to impart the right teaching in the athletes is the major thing. For instance, when all the teams are into drugs, definitely the team will not last which will definitely cause challenges in the future. So, whenever I discover that an athlete is involved

in doping, then we just have to do without including that athlete in the game plan."

- **Test of Hypotheses**

Table 5: Pearson Correlation Coefficients of Risk Management Strategy of Doping in Sports in Oyo State, Nigeria.

Independent Variables	Doping in Sports (r-value)
Risk Identification	-0.07
Risk Assessment	-0.02
Risk Mitigation	-0.07
Continuous Evaluation and Improvement	-0.04

Source: Researchers' calculations using SPSS, 2024

- **H_a1: There is a positive relationship between risk identification and doping in sports in Nigeria.**

Table 5 presents the findings on the relationship between risk identification and participation in doping in sports. The data reveals a weak negative correlation (r=-0.07) between these two variables. Therefore, hypothesis one is rejected because the relationship is negative. This suggests that as the mechanisms of identifying athletes' risk of participation in doping increases, their likelihood of engaging in such practices decreases correspondingly.

- **H_a2: There is a positive relationship between risk assessment and doping in sports in Nigeria.**

The analysis of the relationship between risk assessment and doping participation reveals a weak and negative correlation, with a coefficient of r = -0.02. As a result, we reject hypothesis two. This finding suggests that as the effectiveness of risk assessment measures increases, the likelihood of doping in sports decreases. In other words, by systematically identifying, analyzing, and managing the various risks associated with doping, sports organizations can significantly reduce the incidence of doping among athletes.

- **H_a3: There is a positive relationship between risk mitigation and doping in sports in Nigeria.**

The relationship between effective participation in anti-doping initiatives and risk mitigation strategies is characterized by a negative correlation (r=-0.07). Consequently, this leads to the rejection of Hypothesis 3. This finding indicates that as risk mitigation efforts increase, instances of doping among athletes tend to decrease. In essence, enhancing risk management practices appears to contribute to a reduction in doping behaviour, suggesting that a stronger focus on risk mitigation not only fosters a cleaner competitive environment but also promotes the overall integrity of sports. Thus, addressing potential risks can effectively lead to a decline in doping activities among athletes.

- **H_a4: There is a positive relationship between continuous evaluation and improvement and doping in sports in Nigeria**.

The study's findings reveal a weak negative correlation between continuous evaluation and the incidence of doping in sports, indicated by a correlation coefficient of r = -0.04. This suggests that as continuous evaluation becomes more prevalent, there is a corresponding reduction in the likelihood of athletes engaging in doping practices. Consequently, hypothesis 4 is rejected, reinforcing the idea that enhancing continuous evaluation can effectively contribute to decreasing doping behaviors among athletes.

4. Discussion

The findings of the study suggested that the relationship between risk identification and doping in sports in Oyo State, Nigeria is negative (r=-0.07). The negative relationship suggests that if athletes become aware that their risk of doping can be identified, they will not engage in such behaviors. This sends out a clear message as to the importance of proactive measures to prevent doping practices. This corresponds to Petróczi and Aidman's (2008) study, which notes that athletes are less likely to dope when they perceive that there is an active

system of supervision in place, along with punitive measures believed to be certain and severe. By recognizing the risks at an early stage, sports organizations, coaches, and policymakers can incorporate tailored, targeted interventions intended to address the root causes of doping behaviors, thus work towards a culture that rewards integrity and adherence to ethical standards.

There was a negative relationship between doping in sports and risk assessment in Oyo State, Nigeria (r=-0.02). This reinforces how an organized assessment process can be effective in curbing doping activities. This negative relationship implies that with the improvement of monitoring and testing protocols in risk assessment measures, the chances of athletes doping decrease. This goes on with the study by Overbye and Wagner (2013), where they asserted that well-designed risk assessment measures help in predicting potential doping risks and then implementing specific intervention approaches that would dissuade athletes from engaging in incriminatory practices. This piece of evidence also follows Engelberg and Moston (2016), who remarked that extreme comprehensive risk assessments do not serve only to unearth potential doping activities but also add a level of deterrence through augmenting the perceived probabilities of being caught.

The research indicates a negative relationship between risk mitigation strategies and doping in sports (r=-0.07). This means that effective risk mitigation measures significantly reduce the probability that an athlete will engage in doping, and it serves to pinpoint important areas of concern, which are vital for keeping doping behaviors away from athletes. Efverström et al. (2016) observed that anti-doping programs focusing on education and prevention greatly reduce doping by cultivating a culture of compliance and integrity in sports. In similarity to this, Huybers and Mazanov (2012) reiterated that risk mitigation strategies, carried out properly, make the consequences of doping a reality to the athlete and bid them to strive for fairer sporting. Incorporating increased

education on the dangers of doping, strict enforcement, and clean sports initiatives has contributed to this decline.

As the findings of this study indicate, continuous evaluation in athletes negatively bounds the incidence of doping in sports (r=-0.04). It means regular assessment and monitoring could greatly lower the chances of the sport fraternity going about doping. Through continuous assessment on performance, adherence to training programs, and considering physiologic health, a framework for sports organizations to prevent performance-enhancing drug use can thus be created. Correspondingly, Woolway et al. (2020) concluded that athletes' trust in fair and well-run anti-doping systems is central to cultivating a culture of "clean sport," in which one is less likely to take a chance with performance-enhancing drugs. Continuous monitoring, together with imposing strict rules and regulations, may serve to dissuade doping. This commensurate with the fact that when athletes know that they will be leading such an assessment once in a while, they will prefer to stick to ethical standards and keep away from demanding doping practices when it is known that penalties and detection would become the most enforceable.

5. Conclusion

The findings of this study reveal that effective risk management strategies play a crucial role in combating doping in sports in Oyo State, Nigeria. The negative correlation between risk identification, risk assessment, and doping suggests that when athletes are aware of structured monitoring and detection systems, they are less likely to engage in doping. Similarly, risk mitigation measures and continuous evaluation were found to significantly reduce doping behaviors, reinforcing the need for proactive interventions in sports governance. To strengthen anti-doping efforts in Nigeria, sports organizations, policymakers, and coaches should implement more rigorous risk assessment frameworks, improve monitoring protocols, and enhance educational programs on the

dangers of doping. Stricter enforcement, coupled with regular evaluations, will help foster a culture of accountability and integrity among athletes. Investing in awareness campaigns and mentorship programs can also guide athletes toward ethical sporting values, reducing their susceptibility to performance-enhancing substances. A well-structured risk management strategy can transform the sporting landscape, promoting fairness and safeguarding the health and careers of athletes. By continuously refining these strategies and adapting to emerging threats, sports administrators can create a doping-free environment where talent, hard work, and discipline remain the pillars of success.

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