

Risk Behaviours and Innovative Strategies in Sports Management for Tertiary Institution Athletes in Cross River State, Nigeria

¹Grace Adeshi Mbadi-Oli, ²Emmanuel Ogar Ekawu & ³Veronica Adinya Akpana

^{1,2,3}Department of Human Kinetics and Health Education, University of Cross River State (UNICROSS), Calabar.

*²Princeemmy77@yahoo.com. <https://orcid.org/0000-0001-6474-8649>. 07031231205

Abstract

This study was on risk behaviours and innovative strategies in sports management for tertiary institution athletes in Cross River State, Nigeria. The descriptive survey research design was used in the study. The population for this study comprised 773 respondents: 20 experts (Academics in the Department of Human Kinetics and Health Education, UNN) and all 753 student-athletes in public tertiary institutions in the state. The entire population of 773 respondents was used for the study. Completed copies of the questionnaire (PRBSQ) were checked for completeness of information, and from the 753 copies distributed to the student-athletes, 16 copies were not properly completed; therefore, 737 copies were analyzed. All statistical analyses were done using the Statistical Package for Social Sciences (SPSS) version 23. The results show that most of the tertiary institution athletes engaged in excessive alcohol consumption and tobacco use in the school premises or campus (40.2%) and places of residence/ hostels (31.9%). The Chi-Square test that was conducted examined the difference in the spatial pattern of risk behaviours among tertiary institution athletes based on age. There was a significant difference in the spatial pattern of tobacco consumption among students- athletes by age. Based on the findings of the study, it is recommended that school authorities should assist student-athletes to keep away from risky behaviours such as excessive tobacco consumption and drug abuse by ensuring that these substances are not sold within the school premises.

Keywords: *Risk behaviours, Sports, Mitigating strategies, and Tobacco consumption*

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Introduction

Risk behaviours have become a global problem among youths, including athletes. In Europe and other developed countries, alcohol and tobacco account for a much larger proportion (>21%) of disease and disability than illicit drugs (<21%) (Chen et al, 2020). In Greece, tobacco and alcohol are widespread and socially accepted; however, educational institutions rather than entertainment venues were the main places adolescents (students, which includes athletes) initially encounter smoking (Koutra et al, 2022). A recent Australian study estimated that over 5500 Australian deaths were attributed to alcohol, and among females, the highest proportion of alcohol-attributable deaths were from cardiovascular disease (34%), followed by cancers (31%) and injuries (12%) (Gao, Ogeil & Lloyd, 2014). Ansari et al (2016) reported that overall, 28% of the students in Majmaah University, Saudi Arabia, were smokers and involved in drifting and fast driving (60.9%), while 66.4% were physically inactive; thus, the authors conclude that the prevalence of risky behaviours among the students was high. Student athletes are not excluded from the above conclusion.

In Nigeria, risk behaviours are equally evident. According to Sekoni and Soyannwo (2014), in Southwest Nigeria, 20.8% of the young people (athletes inclusive) had early sexual debut while 40.8% had multiple sexual partners, 23.3% had sex under the influence of alcohol and 34.2% did not use condoms. Similarly, Oye-Adeniran, Aina, Gbadegesin and Ekanem (2014) reported that alcoholic drinks of palm wine, alcoholic wine and beer (22,7%) were the most common substances used by female Nigerian university students (university athletes not excluded), followed by tobacco (2%) and cannabis (1%). Also, alcoholic use was indicated to trigger sexual activity. Furthermore, in Enugu State, 44.5% of the students had taken alcohol, while 13.5% and 40.8% had smoked cigarettes and had early sex (Omotowo et al, 2017). In addition, 59.8% had experienced one form of violence, while 37.6% of the population preferred fast food junk to food prepared at home (Omotowo et al, 2017). In a study, it was found that student athletes are involved in risky behaviours such as tobacco smoking, alcohol consumption, poor feeding and risky sexual behaviours, though it was found that tobacco smoking does not affect their sports performance (Chukwurah, Anazonwu and Nwokoji, 2017).

Risk behaviours are practices that negatively affect the wellbeing of individuals. In sports, risk behaviours are considered potential threats to the health or even life of athletes (Orit &

Skvirsky, 2019). Tariq and Gupta (2022) explained that risk behaviours are those acts that increase the risk of disease or injury, which can subsequently lead to disability, death, or social problems. From the definitions, risk behaviours in sports are those behaviours that can lead to injury or death of athletes at any level. In this study, therefore, risk behaviours in sports are those behaviours capable of impacting negatively on the wellbeing of tertiary institution athletes in Cross River State.

Risk behaviours have different categories. Bovard (2018) identified risk behaviours in sports to include violence, alcohol, illicit drug and tobacco use, sexual misadventure, unhealthy dietary habits, physical inactivity and obesity. Orit and Skvirsky (2019) categorized risk behaviours in sports as substance abuse, heavy alcohol consumption, unprotected sexual intercourse, reckless driving or extreme sports. This study focused on alcohol consumption, tobacco use, substance/drug abuse, and violence as risky behaviours in sports. This is because these behaviours are more peculiar to athletes and capable of affecting the totality of tertiary institution athletes.

Alcohol consumption is a risk behaviour in sports that may be found among tertiary institution athletes. American Psychiatric Association (2014) described alcohol as the primary ethyl (ethanol), the predominant alcohol in alcoholic beverages, and produced by fermenting sugar or yeast. Collins and Kirouac (2023) described ethanol as one of several types of alcohol, but it is the only type found in alcoholic beverages or commonly used for recreational purposes; other alcohols such as methanol and isopropyl alcohol are significantly more toxic. WHO (2014) reported that harmful consumption of alcohol has been ranked among the top five factors for non-communicable disease, disability and death globally, and has been causally linked to over 200 health conditions including cancer. On athletic performance, the active use of alcohol influences motor skills, hydration status, aerobic performance, as well as aspects of the recovery process (Siekaniec, 2017). Contextually, alcohol consumption is the act of taking beverages that contain ethanol, which is capable of hindering optimal performance by tertiary institution athletes when taken excessively. Tobacco use is also a risk behaviour in sports among athletes.

In sport organizations, competitive advantages are often created through innovation. In this way, strategy and innovation are inherently linked within sports. Examples of strategic innovations in modern sport include the development of the race runner bike and the introduction of the berglass

pole in Olympic high jumping (Balmer, Pleasence & Nevill, 2022). Other examples of strategic innovation include the increasing use of new technologies in sport, such as sensor monitoring in martial arts refereeing (Chi & Res, 2015; Mukhopadhyay, 2014) or performance monitoring (Liebermann, Katz, Hughes, Bartlett, McClements & Franks, 2022).

The need to foster innovation and strategy within sports itself may be greater than ever. Today, sport is confronted by long-term challenges such as practices of social exclusion, and discrimination is based on factors such as gender, sexual orientation, race and ethnicity. A pressing challenge in elite and Olympic sport is the stagnation of athletic performance and world records, which have peaked in many sports during the last couple of years (Nevill & Whyte, 2015; Nevill, Whyte, Holder & Peyerbrune, 2017). Here, both strategy and innovation might be the solution needed for new record-breaking performances to take place (Balmer, Pleasence & Nevill, 2022). To confront and solve challenges like these, sport organizations and federations need to develop strategies for innovation and implement strategic management of innovation processes. While innovation might be the solution to long-term challenges in modern sport, strategy and strategic management refers to the managerial process of formulating the pattern of actions needed for sport innovation to succeed (Sanderson & Siegfried, 2023; Shilbury, 2021)

Tobacco use, especially cigarette smoking, is associated with numerous diseases. According to Rhoda (2017), tobacco can be smoked in a cigarette, pipe, or cigar, and can be chewed (called smokeless tobacco or chewing tobacco) or snuffed through the nose. Nicotine is one of the more than 4,000 chemicals in cigarettes, which makes tobacco addictive. The Centers for Disease Control and Prevention (2023) reported that smoking has a range of adverse effects on the body of athletes during exercise, which include reduction of endurance, increased strain on the heart, prevention of fat burning, prevention of muscle gain, and restriction of the airways leading to shortness of breath. Papathansiou, Mamali, Papfloratos and Zerva (2014) asserted that one of the adverse health outcomes of smoking is blood vessel constriction due to the imbalance of vasodilator and vasoconstrictive actions originating from the endothelium. The reduced vessel size makes it difficult to pump enough blood to the working muscles, which in turn can affect athletic performance, increased sympathetic activation and heart rate, along with coronary and peripheral vessel constriction, leading to increased myocardial workload, placing greater stress on the heart. In addition, Jang, Kim, Kim, Jung and Kim (2017) reported that among universities, taekwondo athletes who are non-smokers had significantly better cardiopulmonary functions during and after

exercise than smoking athletes. In this study, tobacco use is the act of smoking cigarettes or cigars among athletes in tertiary institutions. Substance/drug abuse is another factor classified as a risk behaviour in sports among athletes.

Athletes in tertiary institutions are expected to be the healthiest group of students because they are aware of the effect of positive or negative lifestyle on academic and general wellbeing. Tertiary institution athletes who do not indulge in risk behaviours in sports stand better chances of excelling in their academic pursuit, performing better in sports competitions, maintaining sound health, and being better prepared for life after school. Ideally, youths, especially tertiary institution athletes, are not supposed to engage in behaviours or activities that are capable of jeopardizing their education, health, and sports performance in order to achieve the end goal of successful graduation (Shilbury, 2021).

However, this study has shown that risk behaviours in sports occur among tertiary institution athletes. It has been observed that in Calabar tertiary institutions, during sports competitions and camping engage in behaviours such as excessive alcohol consumption and drug abuse that can endanger their health, academics, and sports. If this situation is allowed without mitigation, more tertiary institution athletes in Cross River State and Nigeria as a whole might not only contract different sexually transmitted infections, but may also experience addiction to alcohol and substances, and subsequently academic and sports failure, as they engage in risk behaviours in sports.

Study Objectives

The purpose of the study was to determine the risk behaviours and innovative strategies in sports management for tertiary institution athletes in Cross River State, Nigeria. Specifically:

1. This study investigated the spatial patterns and distribution of tobacco use among athletes competing in tertiary institutions in Cross River State.
2. To determine the spatial variations and patterns of alcohol consumption among athletes in Cross River State tertiary institutions.

Research questions

1. What is the spatial pattern of tobacco use among tertiary institution athletes in Cross River State?
2. What is the spatial pattern of alcohol consumption among tertiary institution athletes in Cross River State?

Methods and Material

The descriptive survey research design was used in the study. Shields and Rangarjon (2023) defined descriptive survey research design as a design that is used to describe the characteristics of a population or phenomenon being studied. The population for this study comprised 773 respondents: 20 experts (Academics in the Department of Human Kinetics and Health Education, UNN) and all 753 student-athletes in public tertiary institutions in the state. The entire population of 773 respondents was used for the study. For the baseline data, 753 student-athletes were used; therefore, there will be no sampling. This is because the population is of a manageable size, which is in line with Israel (2022), where the number in a target population is small; it is preferable to utilize all subjects in order to ensure representativeness and generalizability of the study findings. Two sets of instruments were used for data collection in the study. The first questionnaire will be an adapted version of the Youth Risk Behaviour Survey (YRBS, 2021). This was developed by the Centers for Disease Control and Prevention (2021) for the measurement of health risk behaviours of students. For the adaptation of the instrument, specific items that concern the study focus on risk behaviours were selected for use in the study. The adapted version that was used in this study is titled Patterns of Risk Behaviour in Sports Questionnaire (PRBSQ). The questionnaire was divided into sections A, B, and C. Section A will consist of items that will elicit information on demographic patterns such as age, gender, class level, and type of sports of the respondents. Section B will consist of items that elicit information on where (spatial patterns) the student-athletes engage in risk behaviours, with multiple response options of: In school, Place of residence, Competition venues, Off-school, and Eateries. Section C will contain items that will elicit information on when (temporal pattern) the student-athletes engage in health risk behaviours, with multiple response options of: During sports competition, After school hours, Weekends, and During holidays/festivities.

The second questionnaire was the Risk Behaviour in Sports Mitigation Strategies Questionnaire (RBSMSQ). The strategies were formulated after establishing the patterns of risk behaviours in sports among the university athletes, which served as the baseline data. This questionnaire contained items that elicited information on the appropriateness of the formulated strategies from experts with response options of Very Appropriate (4), Appropriate (3), Inappropriate (2), and Very Inappropriate (1). To gain access to the respondents, a letter of introduction was obtained from the Head, Department of Human Kinetics and Health Education, University of Cross River State, Calabar. The letter was presented to the Director of Sports of tertiary institutions in Cross River State (UNICAL, UNICROSS AND FCE AKAMKPA), who introduced the researcher to the coaches to allow the researcher access to the athletes during their training or practice sessions. Copies of the questionnaire were distributed and collected on the spot to ensure a high return rate. For those who may not complete their questionnaire on the spot, the researcher returned during the subsequent week to collect the questionnaire.

After establishing the baseline data, copies of the formulated mitigating strategies were given to the experts in their various offices and at their convenience. The copies of the questionnaire were collected on the spot and on another agreed day or date. All statistical analyses were done using the Statistical Package for Social Sciences (SPSS) version 24. All research questions were answered using frequencies and percentages.

Results and Discussion

Research Question One

What is the spatial pattern of tobacco smoking among tertiary institution athletes in Cross River State? Data answering the question is contained in Table 1.

Table 1

Frequencies and Percentage of Spatial Pattern of Tobacco Smoking among Tertiary Institution Athletes in Cross River State (n=737)

		Tobacco smoking
S/N	Spatial pattern	f(%)
Where do you usually engage in tobacco smoking?		
1.	Place of residence	202 (27.4)
2.	In the school	227 (30.8)
3.	At the competition	138 (18.7)
4.	Eateries/Restaurant	170 (23.1)

Results in Table 2 show that most of the athletes engaged in tobacco smoking in the school premises (30.8%) and their places of residence/hostels (27.4%). The results suggest that tertiary institution athletes engaged in tobacco smoking in the school premises and their places of residence/hotels.

Research Question Two

What is the spatial pattern of excessive alcohol consumption among tertiary institution athletes in Cross River State? Data answering the question is contained in Table 2.

Table 2

Frequencies and Percentages of Spatial Pattern of Excessive Alcohol Consumption among Tertiary Institution Athletes in Cross River State (n=737)

S/N	Spatial Pattern	Alcohol Consumption
	Where do you usually engage in alcohol consumption in the past month?	
1.	Place of residence/hotels (Campus)	235 (31.9)
2.	School (Campus)	296(40.2)
3.	At competition venue	104 (14.1)
4.	Eateries/Restaurant	102(13.8)

Results in Table 2 show that most of the tertiary institution athletes engaged in excessive alcohol consumption in the school premises or campus (40.2%) and places of residence/ hostels (31.9%). The results suggest that tertiary institution athletes consumed excessive alcohol in the school premises and hotels.

The results in the table showed that the school premises and places of residence/hostels are where the student-athletes smoke their tobacco freely. Tobacco smoking is a risky behaviour in sports, capable of negatively affecting the performance of athletes, including those in tertiary institutions in Cross River State. To this end, Itanyi et al (2018) reported that student-athletes in open and developed places with such outfits as eateries use tobacco products more than others. This contradicts the finding of the present study. Ibrahim et al (2021) also reported that the commonest locations of tobacco smoking among undergraduates are off-campus accommodation, bars, and social centers. It is expected that the student athletes would freely engage in tobacco smoking, which is a risk behaviour in sports, in places where they feel safer and freer, like in their places of residence and school premises, as found in the present study.

Data contained in the table show that tertiary institution athletes in Cross River State engage in excessive alcohol consumption in school premises and places of residence. From the above, it is clear that the student-athletes freely consume alcohol excessively in their places of residence and the school environment. The finding is expected because these are placing the student-athletes to feel very free and safe to exhibit their true behaviour, such as excessive alcohol consumption.

Supporting the present findings, Marzell, Morrison, Mair, Moynihan and Gruenewald (2015) found that intercollegiate and intramural athletes participate in high-risk drinking outdoors, on and off-campus parties, and fraternity parties. Naturally, people engage in behaviours where they are among a safe crowd, and student-athletes are not exempt, as seen in the findings.

Conclusion

Based on the findings of the study, it could be concluded that tertiary institution athletes in the study area most often engage in risk behaviours such as excessive alcohol consumption, tobacco use, and drug abuse in their places of residence. This shows that these athletes, instead of engaging in acceptable behaviours after school hours and sports training, prefer to engage in behaviours detrimental to their health, academic and school participation.

Also, from the findings, younger student-athletes between the ages of 16-20years consume excess alcohol, engage in tobacco use and violent behaviours usually in their place of residence, and mostly in the morning and during sports competitions. These imply that younger student-athletes in tertiary institutions are more prone to engage in risk behaviours in sports, probably because of their age, which falls within the age range of exhibition of youthful exuberance. This places huge responsibilities on the sports coaches to pay closer attention to their younger athletes to fore-stall their getting involved in behaviours that could hinder their academic and sports performances.

The significant differences that were found in the spatial tournament patterns of risk behaviours in sports among the student-athletes show that the age, gender, year of study, and type of sports the student-athletes participate in influenced their engagement in such negative behaviours in sports. It could be concluded that these athletes usually seek their comfort zone to engage in these negative behaviours, even when they are at risk of losing academically and in sports.

Recommendations

Based on the findings of the study, the following recommendations are proffered.

1. School authorities should assist the student-athletes to keep away from risk behaviours such as tobacco use, excessive alcohol consumption, and drug abuse by ensuring that these substances are not sold on the school premises.
2. Sports competition venues should be such that they are secured and less vulnerable to perpetuating violence, thus discouraging the engagement in such behaviours among

tertiary institution athletes. Student athletes should also be severely punished by suspension if found guilty of being violent during sports competitions.

3. Tertiary institution coaches should periodically organize sessions/workshops to educate the student-athletes on the ills of risky behaviours in sports, to dissuade the athletes from engaging in such negative behaviours.
4. The formulated strategies in this study should be efficiently put in use to ensure effective mitigation of risk behaviours in sports among tertiary institution athletes.

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