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RISKY BEHAVIOURS IN SPORTS AND MITIGATING STRATEGIES FOR TERTIARY INSTITUTION ATHLETES IN CROSS RIVER STATE, NIGERIA

By

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Abstract

This study was on risky behaviours in sports and mitigating strategies for tertiary institution athletes in cross river state. The research question state that What is the spatial pattern of excessive alcohol consumption among tertiary institution athletes in Cross River State? The descriptive survey research design was used in the study. The population for this study comprised of 773 respondents; 20 experts (Academics in the Department of Human Kinetics and Health Education, UNN) and all the 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 result shows 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 Chi Square test that was conducted to examine the difference in the spatial pattern of risk behaviours among tertiary institutions athletes based on age. There was a significant difference in the spatial pattern of alcohol consumption among students- athletes by age, $X^2(3) = 8.791$; $p=0.032$. Based on the findings of the study, it recommends that, school authorities should assist the student-athletes keep away from risk behaviours such as, excessive alcohol consumption and drug abuse, by ensuring that these substances are not sold within the school premises.

Keywords: Risk behaviours, Sports, Mitigating strategies, and Alcohol consumption.

Introduction

Risky 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, 2024). Ansari et al (2016) reported that overall, 28% of the students in Majmaah University Saudi Arabia were smokers and involved in drifting, fast driving (60.9%) while 66.4% were physical inactive, thus, the authors conclude that the prevalence of risky behaviours among the students was high. Student-athletes are not excluded in the above conclusion.

In Africa, there is an increase in risk behaviours among youths, including student-athletes. In a study of total population of 4,597 youths, of which student-athletes may be inclusive; 2,112 had medium risk sexual behaviour while 278 had high risk sexual behaviour (Molefe, 2013). In the Arab Teens Lifestyle survey conducted by Hamrani, et al (2015) a high prevalence of sedentary behaviours and physical inactivity was reported among Moroccan youths in Kenitra City public schools with 45percent participants viewing television for more than 2hours per day and 38percent engaged in computer use for a similar period. Also, most adolescents reported unhealthy dietary habits including skipping breakfast, little consumption of fruits and vegetables and approximately 50percent consumed sugary drinks more than three times per week. Zarroug, et al (2016) reported smoking prevalence of 16.1percent in adolescents. Also, the prevalence of 8.1 percent and 4.3 percent were reported for cannabis and alcohol use. In Ghana, sexual activity is the most prevalent risky behaviour among adolescents, (including student-athletes) ranging up to 56 percent (Ansong & Adusei, 2019). Regarding student-athletes, Ringtaugu, Ringtaugu, Ngetich and Kamade (2022) reported male student athletes consumed more alcohol for relaxation (82.2%) and overcoming boredom (66.4%). In addition, consequences of alcohol use include behaviour offending other (32.6%); damaged friendships (29.6%); and poor academic performance (26%) among male student athletes.

In Nigeria, risk behaviours are equally evident. According to Sekoni and Soyannwo (2014), in South West 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 cigarette 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 junks to food prepared at home (Omotowo, et al, 2017). In a study, it was found that student athletes involve in risk 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).

Risky behaviours are practices that negatively affect wellbeing of individuals, in sports, risky behaviours are behaviours considered potential threats to 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, death of athletes at any level, in this study therefore, risky behaviours in sports are those behaviours capable of impacting negatively on the wellbeing of tertiary institution athletes in Cross River State.

Risky 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 substances 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 risk 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 risky behaviour in sports that may be found among tertiary institution athletes. American Psychiatric Association (2024) described alcohol as the primary ethyl (ethanol), the predominant in alcohol beverages, and produced by fermenting sugar or yeast. Collins and Kirouac (2023) described ethanol as one of several types of alcohol, but 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 (2024) 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 risking behaviour in sports among athletes.

Alcohol consumption can impact on individuals. Brust (2025) stated that alcohol consumption induces feelings of euphoria and talkativeness, but drinking too much alcohol at one session can lead to drowsiness, respiratory depression (where breathing becomes slow, shallow or stops entirely), coma or even death. Bruha, Dvorak and Petrtyl (2022) opined that alcohol has a variety of short-term and long-term adverse effects. Short-term effects include generalized impairment of neuro-cognitive function, dizziness, nausea, vomiting, and hangover-like symptoms. On long term, alcohol can have a variety of adverse effects on health, for instance liver damage, brain damage, and its consumption is the fifth leading cause of cancer. Alcohol consumption is associated with several physical, psychological and social consequences like trauma or injuries, gastrointestinal disorders like hepatitis, steatosis, and pancreatitis, cardinal problem like cardiomyopathy, and cardiac dysrhythmias, hematological issues like bone marrow suppression and macrocytosis and fetal alcohol syndrome in babies of women who drink alcohol during pregnancy (Schuckit, 2014). In addition, excess alcohol consumption increases the risk of anxiety, depression, suicidality, as well as other substance abuse disorders and domestic violence.

Mitigation is all about prevention. Mitigation refers to a sustained action taken to reduce or eliminate risk to people and property from hazards and their effects (Bullock, Haddow and Damon, 2022). It is defined as the measures taken to reduce the harmful effects of hazards that remain a potential; or to manage harmful incidents that may have already occurred (Merrian-Webster, 2020). Generally, mitigation deals with elimination or reduction of harmful effects of hazards on individuals which may be university athletes.

Statistics Canada (2021) defined age to be the length of time of an individual ranging from 0 (less than one year) to the maximum number. Age as found by researchers to influence the indulging in risk behaviours. Govender, Courden, Asante, George and Reardon (2019) reported that socio-demographic variables of male and increasing age of adolescents were risk factors associated with involving in early sexual debut and sexual activity. Also, Osuafor, Okoli and Phateng (2023) reported that increasing age emerged as a risk factor for all the risk behaviours; alcohol consumption, smoking cannabis and having sex among high school students. The above studies show that age is a variable in the engagement in behaviours detrimental to health. This study ascertained if age of tertiary institution athletes in Cross River State influences their pattern of risk behaviour in sports.

Gender is a social construct that describes the roles of males and females in the society, however, gender was used in this study as biological features of males and females. According to Masood (2019), gender is the range of characteristics pertaining to, and differentiating between masculinity and femininity. Studies have shown that gender influences adolescents' engagement in risky behaviour; for instance, Siegel, Welsh and Senna (2016) found that males are more likely to do drugs, consume more alcohol and fight more than females. Kritostukis, Psarrou, Vassilaki, Androulaki and Philalithis (2016) found that only 0.3% of the students had one risk behaviour and 21.3% (male: 31.5%; female: 12.6%), thus, male students had higher risks index score. In a study that involved 5 countries (Hungary, Slovakia, Ukraine, Romania and Serbia), it was found that engaging in risky behaviours (smoking, excessive use of alcohol and drugs) are more characteristic of male student athletes than female (Kovacs-Nagy, 2018). From the above studies, gender plays a role in the behavioural patterns, therefore, the present study ascertained if gender of tertiary institution athletes in Cross River State influences their pattern of risk behaviour in sports.

Sports is categorized in different forms; however, this study will categorize type of sports as individual and team sports. Individual sports refer to sports in which participants compete as individuals (an opponent) such as badminton, athletics, boxing, squash, cycling, tennis, judo, among others, while team sports involve a group of individuals in same team working together to accomplish an ultimate goal of winning ((Salen and Eric, 2023: Tomlinson, 2024). Being that team sports involves group of individuals coming together to attain a common goal of winning, it leads to constant interactions and practices among team members which encompasses positive or negative influence. Akindutire, Adegboyega and Olanipekun (2022), found that type of sports participated by athletes influence their doping behaviours. Therefore, the present study ascertained if type of sports influences pattern of risk behaviour in sports among tertiary institution athletes in Cross Rivers State.

Class level is another variable that was investigated in the study. Class level defined as the institutionally determined undergraduate freshman (first year), Sophomore (second year), junior (third year) and senior (fourth year and above) classifications which typically, but not always transition at 30 credits hour interval per class level (Law Insider, 2021). Clearly, class level could determine the knowledge a student attains in risk behaviours in sports. National Drug Law Enforcement Agency (NDLEA (2019) reported that students who are not knowledgeable (based on class) adapted to negative attitudes and beliefs on psychoactive drugs. However, Omotowo, Ndu, Agwu-Umahi, Ezeoke, Idoko and Umeobieri (2017) reported that class level did not significantly influence participants that had taken alcohol and have sex. This study therefore ascertained if class

level of tertiary institution athletes influences their pattern of risk behaviour in sports in Cross River State. Generally, engaging in risk behaviours in sports may affect sports performances among tertiary institution athletes, hence the need to formulate strategies to mitigate such behaviours. This study will be formulating strategies to mitigate the engagement of tertiary institution athletes in risk behaviours in sports.

The initial step towards curbing this negative trend is to understand the patterns of which tertiary institution athletes engage in risk behaviours in sports. This would provide the road map for formulating mitigation strategies. Studies abound on risk behaviours among athletes; however, no known study has reported on the patterns of risk behaviours in sports and formulated mitigation strategies for tertiary institution athletes in Cross River state, hence, the need for the present study.

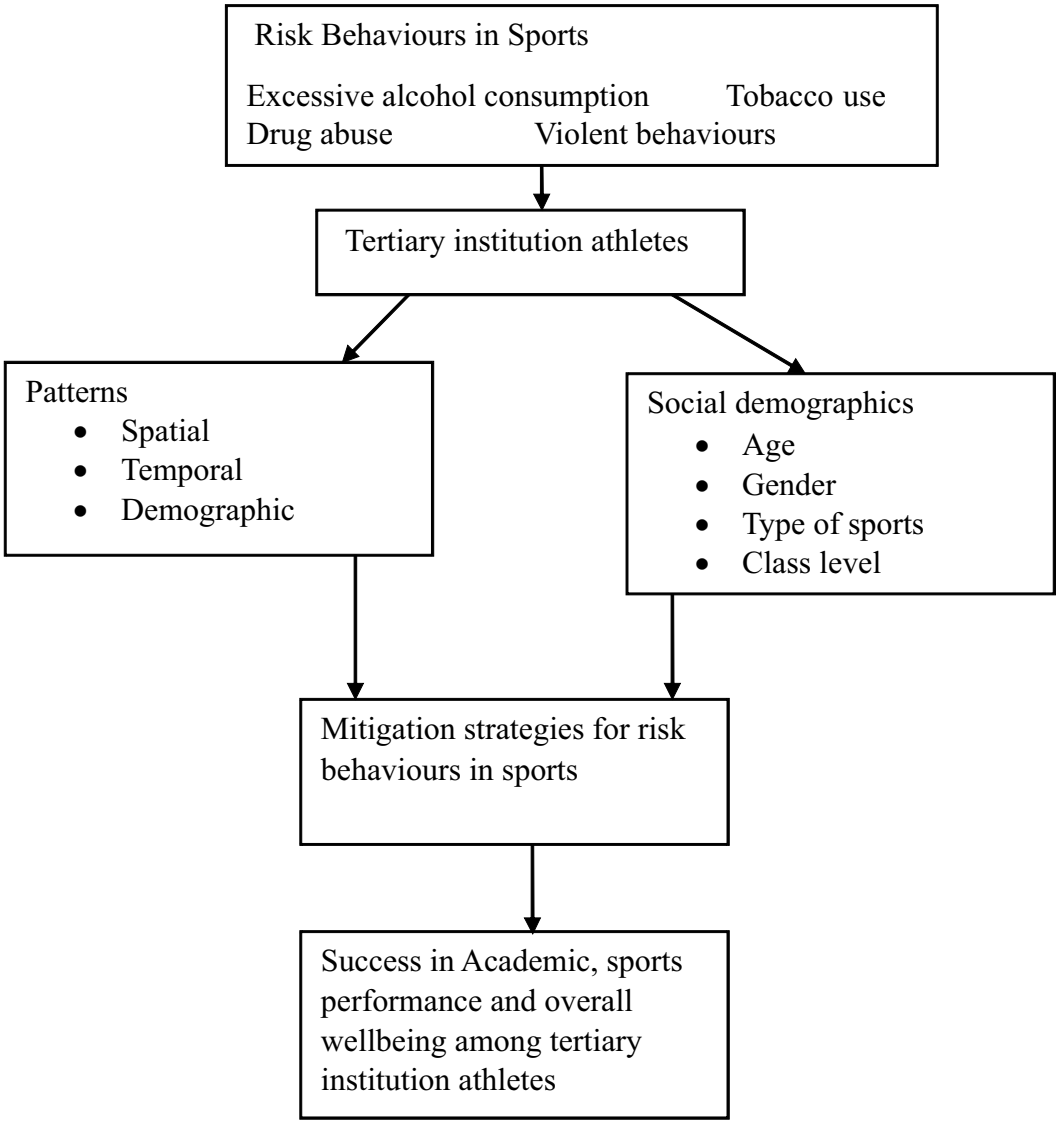


Figure 1: Schematic Representation of the Conceptual Framework

Methods

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 phenomena being used. Descriptive survey research design is used to obtain information concerning the current status of the phenomena to describe "what exist" with respect to variables or situations (Shields & Rangarjon, 2023). The population for this study comprised of 773 respondents; 20 experts (Academics in the Department of Human Kinetics and Health Education, UNN) and all the 753 student-athletes in public tertiary institutions in the state. The experts rated the formulated strategies. For the athletes, they must be registered with their coaches in the institution's sports councils. The distributions of the student-athletes are as follows: University of Calabar (252), Cross River State University of Technology (291), Federal College of Education, Obudu (125), and State College of Education, Akamkpa (85) (Sports Councils of the Tertiary Institutions, 2023).

The entire population of 773 respondents was used for the study. For the baseline data, 753 students-athletes were used; therefore, there was no sampling. This is because the population is of a manageable size which is in line with Isreal (2022) that where the number in a target population is small, it is preferable to utilize the entire subjects in order to ensure representativeness and generalizability of the study findings. A structured questionnaire was used for data collection.

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.

Results

Research question

What is the spatial pattern of excessive alcohol consumption among tertiary institution athletes in Cross River State? Data answering the question are contained in Table 1.

Table 1

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

S/N	Spatial Pattern Where do you usually engage in alcohol consumption in the past month?	Alcohol Consumption
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 1 showed 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 alcohol in the school premises and hotels.

Hypothesis

There is no significance difference in the spatial pattern of risk in sports among tertiary institution athletes based on Age. Data testing this hypothesis are contained in Table 2.

Table 2

Summary of Chi-square test showing Difference in the Spatial Pattern of Risk Behaviour in Sports among Tertiary Institution Athletes based on Age (=737)

		Spatial Pattern	Place of Residence	The school Premises	Completion Venues	Restaurant	
Variable	N	Risk Behaviour	O(E)	O(E)	O(E)	O(E)	X^2 df P
Age		**Alcohol Consumption**					
16-20 years	386		138(123.1)	155(155.0)	44(55.5)	49(53.4)	8.7913.032
≥20 years	351		97(111.9)	141(141.0)	60(49.5)	53(48.6)	
Age		**Tobacco Smoking**					
16-20 years	386		100(105.8)	130(118.9)	64(72.3)	92(89.0)	5.0443.169
≥20 years	351		102(96.2)	97(108.1)	74(65.7)	78(81.0)	
Age		**Drug Abuse**					
16-20 years	386		98(97.9)	120(118.9)	103(104.2)	65(64.9)	0.0523.997
≥20 years	351		89(89.1)	107(108.1)	96(94.8)	59(59.1)	
Age		**Violent Behaviour**					
16-20 years	386		98(92.7)	140(131.5)	96(107.4)	52(54.5)	4.5633.207
≥20 years	351		79(84.3)	111(119.5)	109(97.6)	52(49.5)	

***Note**: O=Observed frequencies; E=Expected frequencies; df=Degree of freedom; X^2=Chi Square test; P=p-value. Significant at P≤ 0.05*

Table 2 above shows the Chi Square test that were conducted to examine the difference in the spatial pattern of risk behaviours among tertiary institutions athletes based on age. Therefore, the null hypothesis was rejected. The alternate hypothesis was retained at 0.05 level of significance. The hypothesis which state that, there is no significant difference in the proportion of tertiary institution athletes that engage in excessive alcohol use in Cross River State based on socio-demographic factors of age, gender, year of study and type of sports.

Discussion

Data contained in table 1 show that tertiary institution athletes in Cross River state engage in alcohol consumption in school premises and places of residence. From the above, it is clear that the student-athletes freely consume alcohol in their places of residence and the school environment. The finding is expected because these are places the student-athletes feel very free and safe to exhibit their true behaviour, such as excessive alcohol consumption. Supporting the present finding, Marzell, Morrison, Mair, Moynihan and Gruenewald (2015) found that intercollegiate and intramural athletes participate in high-risk drinking in outdoors, on and off campus parties and fraternity parties. Naturally, people engage in behaviours where they are among safe crowd, and student-athletes are not exempted 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. This shows that these athletes, instead of engaging in acceptable behaviours after school hours and sports trainings, they prefer to engage in behaviours detrimental to their health, academic and school participation.

Also, from the findings, younger student-athletes between ages of 16-20years consume excess alcohol. 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 fall 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.

Recommendations

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

1. School authorities should assist the student-athletes keep away from risk behaviours such as, excessive alcohol consumption and drug abuse, by ensuring that these substances are not sold within the school premises.
2. Sports competitions venues should be such that are secured and less viable to perpetuate violence, thus, discouraging the engagement in such behaviours among tertiary institutions athletes. Student-athletes should as well be severally punished

by suspension if found guilty of being violent during sports competition.

3. Tertiary institution coaches should periodically organize sessions/workshops to educate the student-athletes on the ills of risky behaviours in sports, with the aim 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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