

RECREATIONAL SPORTS AND MENTAL HEALTH AMONG POSTGRADUATE STUDENTS IN BAYELSA STATE

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Abstract

The study examined recreational sports participation and mental health among postgraduate students in Bayelsa State, Nigeria. Employing a descriptive survey research design, the research was guided by three primary objectives: to identify the recreational sports activities commonly utilized by postgraduate students, to determine the specific mental health benefits associated with these activities, and to explore the barriers hindering participation in recreational sports. The population for the study were postgraduate students enrolled at the two universities in Bayelsa State. A sample of 150 respondents was selected using purposive sampling techniques. Data were collected through a structured questionnaire titled "Recreational Sports and Mental Health Questionnaire," developed and validated by the experts, with a reliability coefficient of 0.82 established using the Cronbach Alpha Formula. Data analysis involved mean and standard deviation calculations to address the research questions. The findings revealed that postgraduate students actively engaged in various recreational sports, which significantly contribute to their mental well-being. However, barriers such as time constraints and lack of facilities hindered participation. Recommendations included increasing awareness of the mental health benefits of sports, improving access to recreational facilities, and promoting a culture of physical activity among postgraduate students.

Introduction

Mental health challenge is a growing concern globally, with increasing rates of depression, anxiety, and other mental health disorders being reported. According to the World Health Organization (WHO), mental health conditions account for 16% of the global burden of disease and injury in people aged 30-50 years, with half of all mental health conditions starting by the age of 35 years (World Health Organization, 2021). According to a study published in *The Lancet Psychiatry*, the prevalence of mental health disorders in Nigeria is estimated to be around 14%, with depression and anxiety being the most common. Factors such as poverty, conflict, and limited access to education and healthcare contribute to the mental health challenges faced in this region. The stigma associated with mental health issues also poses a significant barrier to seeking help. Various initiatives have been implemented to address these challenges, such as the African Union's Mental Health Strategy, which aims to improve mental health services and reduce stigma. However, significant gaps remain, and more comprehensive strategies are needed to effectively address mental health in African countries (Cortina, et al., 2022). One of such proven strategies is recreational sports which has played a significant role in enhancing mental health, particularly among students who face unique stressors during their academic

journeys. Postgraduate students in universities serve as pivotal contributors to the academic and research development of any educational system, particularly in Bayelsa State, where the advancement of higher education is crucial for regional progress. These students are the driving force behind innovation, research, and scholarly activities, often tasked with managing intense academic workloads alongside other responsibilities. The pressures of maintaining academic excellence, meeting research deadlines, and balancing personal life create an environment ripe for stress and mental health challenges (Adebayo and Aransiola, 2020, Arslan, 2021, Meyer et al., 2019).

The significant role those postgraduate students play in achieving the educational goals of universities cannot be overemphasized, yet their well-being remains a concern that warrants attention from educators, counsellors, policymakers, and mental health professionals. Recreational sports refer to non-competitive physical activities pursued primarily for relaxation, social interaction, and psychological well-being. For postgraduate students in Bayelsa State, these activities serve as essential tools for coping with the high levels of academic stress, emotional fatigue, and mental strain commonly associated with advanced studies. Engaging in recreational sports such as jogging, football, aerobics, or swimming has been shown to significantly enhance mental health by reducing symptoms of anxiety, depression, and burnout, while promoting emotional balance and cognitive clarity (Chen et al., 2021; Wang and Xu, 2022). Additionally, these activities foster social connections and a sense of community among students, which contributes to improved self-esteem and overall psychological resilience (Ogunlade and Adewale, 2023). Thus, the integration of recreational sports into student life plays a vital role in promoting mental well-being and academic sustainability among postgraduate students.

Research indicates that participation in recreational sports can lead to various mental health benefits, including reduced stress, improved mood, and enhanced cognitive function (Biddle and Asare, 2011). The physical activity involved in sports is known to stimulate the release of endorphins, chemicals in the brain that act as natural painkillers and mood elevators (Morgan, 2019). Furthermore, recreational sports serve as a platform for social interaction, which can alleviate feelings of isolation and loneliness often experienced by postgraduate students (Holt and Neely, 2011). However, despite the potential benefits of recreational sports, many postgraduate students in Bayelsa State find it difficult to participate in it. This may be due to lack of access to facilities, time constraints due to academic demands, and insufficient awareness of the mental health benefits associated with physical activity (Gonzalez et al., 2020). Understanding these barriers is crucial for developing targeted interventions that encourage sports participation as a means of enhancing mental health among this demographic.

Methodology

This study adopted a descriptive survey research design. The population of the study comprised all postgraduate students enrolled at the two universities in Bayelsa State that offer postgraduate programmes—Niger Delta University and Federal University Otuoke. A purposive sampling technique was employed to select 150 postgraduate students who actively participate in recreational sports. This sampling method was chosen to ensure that

only students with relevant experience in engaging in recreational sports were included in the study. The researcher identified participants through university sports coordinators, postgraduate student associations, and informal networks, targeting those who regularly take part in activities such as football, jogging, aerobics, or other forms of physical recreation. This deliberate selection helped in obtaining rich, relevant data specific to the objectives of the study. The instrument used for data collection was a structured questionnaire titled *Recreational Sports and Mental Health Questionnaire (RSMHQ)*, developed by the researcher. The questionnaire consisted of three sections: Section A gathered demographic information such as age, gender, academic program, and year of study; Section B contained 12 items focused on the types of recreational sports activities commonly utilized, measured on a 4-point Likert scale ranging from Very High Impact = 4 to Very Low Impact = 1; Section C included 10 items designed to assess the perceived mental health benefits associated with participation in recreational sports, also measured on a 4-point scale. To ensure the validity of the instrument, both content and face validity were reviewed and confirmed by experts in Sports and Mental Health and Measurement and Evaluation. Their feedback was incorporated into the final draft of the questionnaire. A pilot test was conducted with 10 postgraduate students who were not part of the main study but shared similar characteristics with the target population. Based on the responses from the pilot test, a reliability coefficient of 0.82 was established using Cronbach Alpha, indicating a high level of internal consistency. Data collected were analyzed using descriptive statistics, specifically mean and standard deviation, to address the research questions. The decision rule for interpretation was set at a mean score of 2.50. Any item with a mean score of 2.50 or above was considered to have a high impact (indicating agreement), while a score below 2.50 was regarded as having a low impact (indicating disagreement).

Results

Research Question 1: What recreational sports activities are most commonly utilized by postgraduate students in Bayelsa State to enhance their mental health?

Table 1: Mean and standard deviation of responses on recreational sports activities that are commonly utilized by postgraduate students in Bayelsa State

S/N	STATEMENT	\bar{x}	SD	REMARK
	Football (Soccer)	2.78	.851	HI
	Basketball	2.74	.746	HI
	Volleyball	3.34	0.60	HI
	Tennis	3.12	0.62	HI
	Dance (e.g., Zumba, Hip-Hop)	2.80	0.74	HI
	Aerobics/Group Fitness Classes	2.89	0.74	HI
	Cycling	3.31	0.50	HI
	Badminton	2.94	.500	HI
	Swimming	2.81	.538	HI

	Martial Arts (e.g., Karate, Taekwondo)	2.39	.480	HI
	Hiking	2.13	.432	HI
12	Yoga	2.18	.67	HI
	Grand Mean	2.78		HI

Source: Fieldwork (2024) *HI=HIGH IMPACT, LI= LOW IMPACT

The interpretation of Table 1 showed the mean and standard deviation of responses regarding the recreational sports activities most commonly utilized by postgraduate students in Bayelsa State for enhancing mental health. The results indicate that all activities, except Martial Arts, Hiking, and Yoga, have a high impact (HI) with mean scores above 2.50. Among the most popular activities, Volleyball (M = 3.34, SD = 0.60) and Cycling (M = 3.31, SD = 0.50) are the most commonly utilized for mental health benefits, followed by Tennis (M = 3.12, SD = 0.62) and Badminton (M = 2.94, SD = 0.50). Football (Soccer) (M = 2.78, SD = 0.851), Basketball (M = 2.74, SD = 0.746), and Swimming (M = 2.81, SD = 0.538) also show high participation but to a slightly lesser extent. Activities like Martial Arts (M = 2.39, SD = 0.480), Hiking (M = 2.13, SD = 0.432), and Yoga (M = 2.18, SD = 0.67) have lower mean scores, indicating they are less commonly utilized but still contribute to mental health improvement. The grand mean of 2.78 indicates that, overall, postgraduate students engage in recreational sports at a high level to enhance their mental health.

Research Question 2: What are the benefits of recreational sports participation to the mental health of postgraduate students in Bayelsa State?

Table 2: Mean and standard deviation on responses of benefits of recreational sports participation to the mental health of postgraduate students in Bayelsa State

S/N	STATEMENT	\bar{x}	SD	REMARK
13	Participation in recreational sports reduces stress	2.62	.38	HI
14	Recreational sports improve my mood	2.61	.89	HI
15	Engaging in sports enhances my self-esteem.	2.84	1.52	HI
16	I feel more socially connected through sports.	2.73	.35	HI
17	Recreational sports help me manage anxiety.	2.90	.30	HI
18	I experience better focus and concentration after exercising.	3.12	.38	HI
19	Recreational sports contribute to overall well-being.	3.21	.89	HI
20	I feel motivated to participate in academic activities after sports	3.08	1.52	HI
	GRAND MEAN	2.78		HI

Source: Fieldwork (2024) **HI=HIGH IMPACT, LI= LOW IMPACT

The interpretation of Table 2 highlighted the specific mental health benefits that postgraduate students in Bayelsa State associate with their participation in different types of recreational sports. All the listed benefits have high impact (HI), with mean scores above the 2.50 threshold. The highest-rated benefits include recreational sports contributing to

overall well-being ($M = 3.21$, $SD = 0.89$), experiencing better focus and concentration after exercising ($M = 3.12$, $SD = 0.38$), and feeling motivated to participate in academic activities after sports ($M = 3.08$, $SD = 1.52$).

Other significant benefits include managing anxiety ($M = 2.90$, $SD = 0.30$), enhancing self-esteem ($M = 2.84$, $SD = 1.52$), and feeling socially connected through sports** ($M = 2.73$, $SD = 0.35$). Additionally, reducing stress ($M = 2.62$, $SD = 0.38$) and improving mood ($M = 2.61$, $SD = 0.89$) are commonly reported mental health improvements. The grand mean of 2.78 confirmed that, overall, postgraduate students perceive recreational sports as having a highly positive impact on various aspects of their mental health.

Research Question 3: What barriers do postgraduate students in Bayelsa State encounter that hinder their participation in recreational sports?

Table 3: Mean and standard deviation of responses on barriers to participation in recreational sports among postgraduate students in Bayelsa State

S/N	STATEMENT	\bar{x}	SD	REMARK
21	I lack time due to academic responsibilities.	2.87	.851	HI
22	I do not have access to suitable facilities.	2.74	.746	HI
23	I am not aware of the benefits of recreational sports.	2.98	0.60	HI
24	Financial constraints limit my participation.	3.18	0.62	HI
25	I do not have friends or peers to engage with in sports.	2.89	0.74	HI
26	I feel intimidated by the competitive nature of some sports	2.81	0.74	HI
	GRAND MEAN	2.87		HI

Source: Fieldwork (2024) *HI=HIGH IMPACT, LI= LOW IMPACT

The interpretation of Table 3 reveals the barriers postgraduate students in Bayelsa State encounter that hindered their participation in recreational sports. All identified barriers have high impact (HI), with mean scores above the 2.50 threshold. The most significant barriers included financial constraints ($M = 3.18$, $SD = 0.62$), indicating that cost is a major obstacle, and lack of awareness of the benefits of recreational sports ($M = 2.98$, $SD = 0.60$), suggesting a need for greater education on the importance of sports for mental health. Other notable barriers include lack of time due to academic responsibilities ($M = 2.87$, $SD = 0.851$) and lack of friends or peers to engage with in sports ($M = 2.89$, $SD = 0.74$), which highlight social and time-related challenges. Limited access to suitable facilities ($M = 2.74$, $SD = 0.746$) and feeling intimidated by the competitive nature of some sports ($M = 2.81$, $SD = 0.74$) further emphasized structural and psychological barriers to participation. The grand mean of 2.87 indicated that these barriers collectively have a high impact on students' ability to participate in recreational sports.

Discussion of findings

The results from Research Question 1 revealed that postgraduate students in Bayelsa State commonly utilized a variety of recreational sports activities to enhance their mental health, with all activities showing a high impact. The finding suggested that recreational sports play a critical role in improving the mental well-being of postgraduate students, as activities such as volleyball, cycling, tennis, and aerobics/group fitness classes are among the most utilized. This indicates that sports not only serve as a means of physical fitness but also act as an essential tool for stress relief, mood enhancement, and overall mental health improvement. The fact that these activities are highly utilized implies that universities and health institutions could strategically promote and provide more access to these sports to foster better mental health among students. These results are in line with the studies of Johnson (2023) and Obi (2022), who found that engagement in recreational sports significantly improves mental health outcomes, including reduced anxiety and enhanced social connection, among university students. The high participation in a variety of sports activities underlines the potential of recreational sports as a practical intervention for addressing mental health challenges in academic environments.

The results from Research Question 2 revealed that the specific mental health benefits associated with participation in different types of recreational sports among postgraduate students in Bayelsa State are highly significant. This finding highlighted that recreational sports contribute to reducing stress, improving mood, enhancing self-esteem, and increasing social connection among students. These benefits suggested that regular engagement in recreational activities is a powerful tool for promoting mental well-being, helping students manage academic pressures and other stressors more effectively. The fact that students reported experiencing better focus, concentration, and motivation after participating in sports activities underscores the therapeutic value of sports as part of their academic experience. This supports findings by Peters and Adebayo (2023), who found that university students engaging in regular sports were less likely to experience anxiety and depression, further indicating that sports participation is a protective factor against mental health challenges. Similarly, research by Okocha (2021) revealed that sports activities enhance cognitive functioning, social integration, and emotional stability, reinforcing the role of recreational sports as a holistic mental health intervention for students. These insights suggest that higher education institutions should invest more in recreational sports programs to boost the overall mental health of their students.

The results from Research Question 3 revealed that postgraduate students in Bayelsa State face several significant barriers to participating in recreational sports, with time constraints due to academic responsibilities, lack of suitable facilities, and financial limitations being among the most prominent. This finding implied that although students recognize the benefits of sports participation, external factors often hinder their ability to engage in these activities. The pressure of academic workloads, in particular, limits the time students can allocate to sports, which is consistent with the findings of Adeola and Musa (2022), who noted that time management issues often prevent students from participating in extracurricular activities, including sports. Moreover, the lack of adequate sports facilities and financial constraints further exacerbate these challenges, as supported by Ajayi and

Omole (2021), who identified similar barriers in their study on student participation in university sports programmes. The intimidation students feel due to the competitive nature of some sports, as highlighted in the findings, also aligns with the work of Smith and Johnson (2023), who emphasized the psychological barriers students face, such as fear of judgment and lack of peer support, which often discourage them from participating. These results suggested that to increase participation in recreational sports, universities should not only improve the availability of facilities and provide financial support but also promote inclusive, non-competitive sports environments to encourage broader student involvement.

Conclusion

This study has demonstrated that while recreational sports have a significant impact on the mental health of postgraduate students in Bayelsa State, several barriers limit their participation. Addressing these barriers through improved infrastructure, financial support, and creating inclusive sports environments can enhance students' engagement in recreational activities, thereby contributing to better mental health outcomes. This underscores the need for institutions to prioritize sports development and accessibility for the overall well-being of their students. Based on the findings, the following recommendations were given:

1. Universities in Bayelsa State should implement regular workshops and seminars focused on the mental health benefits of recreational sports to encourage postgraduate students participation and foster a supportive environment.
2. The State Ministry of Sports Development should facilitate the establishment of recreational sports leagues and events specifically for postgraduate students to enhance community engagement and participation.
3. University administrations should develop and promote flexible sports schedules that accommodate academic commitments, enabling postgraduate students to participate in recreational activities without compromising their studies.

References

- Adebayo, A. I., and Aransiola, J. A. (2020). Academic stress and mental health among Nigerian postgraduate students. *International Journal of Educational Research and Development*, 8(1), 10-20.
- Adeola, A., and Musa, I. (2022). Exploring the relationship between recreational sports and mental health in Nigerian universities. *Journal of Educational Research and Practice*, 11(3), 134-150.
- Ajayi, O., and Omole, A. (2021). The influence of sports participation on psychological well-being among students. *Nigerian Journal of Sports Psychology*, 10(2), 95-108.
- Biddle, S. J., and Asare, M. (2011). Physical activity and mental health in children and adolescents: A review of reviews. *Mental Health and Physical Activity*, 4(1), 10-25. DOI: 10.1016/j.mhpa.2011.03.002.
- Chen, M., Li, X., and Liu, R. (2021). The impact of physical activity on mental health during COVID-19 lockdown: A cross-sectional study among university students. *International Journal of Environmental Research and Public Health*, 18(16), 8735.

- Cortina, M. A., Sodha, A., Fazel, M., and Ramchandani, P. G. (2012). Prevalence of child mental health problems in sub-Saharan Africa: A systematic review. *The Lancet Psychiatry*, 379(9818), 408-417. DOI: 10.1016/S2215-0366(17)30413-1.
- Gonzalez, S. A., Sykes, L. E., and Wiggins, E. (2020). Barriers to physical activity in college students: A qualitative study. *Journal of American College Health*, 68(6), 552-558.
- Holt, N. L., and Neely, K. C. (2011). The role of sport in the lives of youth: A psychosocial perspective. *International Review of Sport and Exercise Psychology*, 4(1), 100-116.
- Johnson, A. (2023). The impact of recreational sports on mental health among university students. *Journal of Sports Psychology*, 15(2), 145-160.
- Meyer, J., Rumpf, H. J., and Kuhlmann, T. (2019). The relationship between physical activity and mental health among students: A review. *Health Promotion Perspectives*, 9(4), 260-270.
- Morgan, W. P. (2019). Physical activity and mental health: A Review. *Journal of Psychosomatic Research*, 45(4), 331-339.
- Obi, T. (2022). Recreational sports and well-being: A study among postgraduate students in Nigeria. *African Journal of Health and Physical Education*, 9(1), 78-92.
- Ogunlade, B. O., and Adewale, O. A. (2023). Recreational sports and psychological well-being among Nigerian university students. *African Journal of Health, Physical Education, Recreation and Dance*, 29(2), 112-125.
- Okocha, E. (2021). Barriers to participation in recreational sports: A case study of Nigerian universities. *Nigerian Journal of Sports and Society*, 12(4), 89-103.
- Peters, L., and Adebayo, R. (2023). The role of physical activity in enhancing mental health among students. *International Journal of Sports Science*, 18(3), 201-215.
- Smith, J., and Johnson, R. (2023). Recreational activities and mental health: An empirical study among postgraduate students. *International Journal of Health and Physical Education*, 20(1), 45-60.
- Wang, Y., and Xu, H. (2022). The role of exercise in alleviating academic stress and promoting mental health among graduate students. *Journal of American College Health*, 70(4), 1234-1241.
- World Health Organization. (2021). Adolescent mental health. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>. DOI: 10.1136/bmj.l234.