

Students' Perception of Physical Education Component of Basic Science and Technology Curriculum in Junior Secondary Schools in Edo State, Nigeria

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ABSTRACT

This study investigated students' perception of the physical education (PE) component of the Basic Science and Technology (BST) curriculum in junior secondary schools in Edo State, Nigeria. Descriptive survey research design was adopted. The population of the study comprised 109,383 respondents across public junior secondary schools in Edo State. A sample of 900 students from the eighteen local areas in Edo State were selected through a simple random sampling technique. Data collected were analysed using descriptive statistics of frequency count, percentage, mean, and standard deviation. Findings revealed that students generally hold positive perceptions of PE, recognising its importance for fitness, skill development, and social interaction. However, some misconceptions and challenges persist, particularly relating to time allocation, inadequate facilities, and teacher shortages in some schools. The study concluded that although students' perception of PE is favourable, systemic issues in implementation hinder its optimal delivery. It was recommended that more resources, trained personnel, and adequate time allocation be provided to strengthen the visibility and impact of PE within the BST curriculum.

Keywords: Students' perception, physical education component, Basic Science and Technology, junior secondary schools

1. INTRODUCTION

Education serves as a fundamental pillar for the sustainable development of any nation, empowering individuals with knowledge, skills, values, and attitudes essential for personal growth and meaningful societal participation. In the Nigerian context, the National Policy on Education (Federal Republic of Nigeria, 2013) underscores the multi-dimensional purpose of education; not only as a tool for intellectual development but also as a mechanism for nurturing physical health, moral character, and emotional balance. Within this

broad educational framework, physical education (PE) has been recognised as a vital component that contributes to the holistic development of learners. PE in schools facilitates the development of motor skills, physical fitness, mental alertness, and social cooperation among students. Fernandes and Gopal (2024) emphasised the value of PE in promoting self-discipline, enhancing self-esteem, fostering leadership and teamwork, and encouraging lifelong engagement in health-promoting physical activity. Furthermore, the PE curriculum supports cross-



curricular learning, with potential links to subjects such as Science, Mathematics, and Social Studies (Cichy et al., 2020). Participation in structured physical activity during adolescence is associated with reduced risk of chronic diseases, improved mental health outcomes, and higher academic performance. In line with international best practices, organisations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Health Organization (WHO) have consistently advocated for the inclusion of PE at all levels of formal education. Nigeria has echoed these recommendations by incorporating PE as a mandatory component of the school curriculum. The 1977 National Policy on Education, revised in 1981 and subsequently updated in 2013, stipulated the inclusion of PE in primary and junior secondary education. However, despite this policy mandate, the subject has historically faced implementation challenges due to low prioritisation, limited funding, and a lack of properly trained instructors (Ogunode & Adah, 2020; Uko, 2024). Studies have also highlighted persistent infrastructural deficits that limit effective teaching of the PE component. For instance, Ovbiebo et al. (2024) reported that most schools in Edo State lack adequate facilities and equipment required for meaningful delivery of PE within the Basic Science and Technology (BST) curriculum. With the introduction of the BST curriculum by the Nigerian Educational Research and Development Council (Federal Republic of Nigeria, 2013), PE was integrated as one of four major components alongside Basic Science, Basic Technology, and Information Technology. The PE component, officially titled Physical and Health Education (PHE), covers key themes such as Basic Human Movement, Sports and Games, Health Education, Athletics, and Contact/Non-Contact Games. This integrated curricular design was intended to streamline the educational experience, reduce curriculum overload, and promote interdisciplinary learning. However, this reform has inadvertently marginalised the PE component, obscured its identity, and reduced its instructional time and visibility within schools (Zhong et al., 2025).

Students' perception of PE within the BST curriculum can be better understood through established behavioural and motivational theories. The Theory of Planned Behaviour posits that individuals' attitudes towards a behaviour, subjective norms, and perceived behavioural control jointly influence their intentions and actual behaviours (Bosnjak et al., 2020). Within the context of this study, students' perceptions of PE may shape their attitudes

towards participation, thereby influencing their level of engagement in related activities. Similarly, the Expectancy-Value Theory provides a complementary lens by suggesting that students' motivation and engagement are determined by their expectations of success and the value they attach to a task (Shang et al., 2023). If students perceive PE as meaningful, enjoyable, or beneficial, they are more likely to actively engage in the curriculum. Conversely, negative perceptions may reduce motivation and participation. Several empirical studies and international reports (Ojedoyin et al., 2022; Ojeme & Eba-ko, 2021) have raised concerns about a growing gap between curriculum policy and practice in PE, especially in sub-Saharan African countries. In many Nigerian schools, PE is not delivered consistently or effectively due to a combination of factors such as lack of qualified teachers, insufficient training, inadequate facilities, and poor supervision. The subject is also perceived as non-academic or recreational by many stakeholders, and it is often the first to be sacrificed when school timetables are overcrowded. The integration of PE into the BST curriculum has further complicated these issues, leading to confusion among students and educators regarding its relevance, structure, and evaluation. An essential, yet underexplored dimension of this situation is the students' perception of PE within the integrated BST framework. Students' attitudes, beliefs, and experiences regarding PE significantly influence their level of participation, enthusiasm, and learning outcomes (Adebusoye et al., 2022). Research suggests that students are more likely to engage with a subject when they perceive it as relevant, enjoyable, and well-delivered (Calunsag & San Diego, 2022). Conversely, negative perceptions rooted in poor instructional quality, lack of resources, or unclear curricular goals can lead to disengagement and poor educational outcomes. Thus, understanding how students themselves view PE in its current integrated form is crucial for evaluating the effectiveness of the curriculum and for making informed decisions about future reforms.

In the specific context of Edo State, anecdotal and preliminary evidence suggests significant variation in how PE is taught and received across junior secondary schools. While some schools have supportive environments and dedicated PE instructors, others face chronic shortages of infrastructure, inadequate training opportunities for teachers, and limited time allocated to PE on the timetable (Eimuhi & Eimuhi, 2018). These disparities may directly influence students' perceptions of the PE component,

including their views on its importance, their satisfaction with instructional quality, and their willingness to participate. Against this backdrop, this study is designed to investigate students' perceptions of the PE component of the BST curriculum in junior secondary schools in Edo State, Nigeria.

The research aims to provide empirical insights into how students perceive the content, delivery, and value of PE, and to examine the extent to which these perceptions are influenced by school environment, teacher competence, and resource availability. The findings are expected to inform curriculum designers, education administrators, and policy-makers by highlighting areas for improvement and identifying strategies to enhance the delivery, visibility, and impact of PE within the Nigerian basic education system.

Research question

What is students' perception of PE component of BST curriculum in junior secondary schools in Edo State, Nigeria?

2. METHODS

Study design and ethical considerations

The descriptive survey research design was adopted for this study. This design was adopted because it allows for a systematic gathering of

information related to determining students' perception of the PE component in the BST curriculum in junior secondary schools. Given that the study involved human participants, particularly minors, appropriate ethical standards were strictly observed. Ethical approval for the study was obtained from the relevant institutional review authority, and permission was also secured from the Edo State Ministry of Education as well as participating school authorities prior to data collection.

Informed consent was obtained from school administrators and teachers, while parental/guardian consent and student assent were secured before participation. Participants were adequately informed about the purpose of the study, the voluntary nature of their involvement, and their right to withdraw at any stage without any consequences. To ensure confidentiality and data protection, no personally identifiable information was collected from the students. Responses were anonymised and handled with strict confidentiality, and the data collected were used solely for research purposes. All procedures were conducted in line with established ethical guidelines for research involving human participants.

Population of the study

The population of the study consists of 109,383 students, representing the 18 local government areas (LGA) in Edo State.

Table 1. Distribution of students and public schools in Edo State, Nigeria

S/N	Local Government Area	No. of Public Junior Secondary Schools	Students
1	Akoko-Edo	29	6,312
2	Egor	13	9,528
3	Esan Central	14	2,782
4	Esan North-East	12	3,589
5	Esan South-East	17	2,002
6	Esan West	16	4,135
7	Etsako Central	9	2,049
8	Etsako East	16	4,459
9	Etsako West	28	6,888
10	Igueben	10	1,149
11	Ikpoba-Okha	20	22,498
12	Oredo	14	18,157
13	Orhionmwon	28	3,848
14	Ovia North-East	29	6,413
15	Ovia South-West	15	2,882
16	Owan East	16	4,116
17	Owan West	10	3,210
18	Uhunmwonde	21	5,366
	TOTAL	317	109,383

Source: Post Primary Education Board, 2021.

Sample and sampling techniques

The sample size was 900 students in public junior secondary schools in Edo State. A multistage sampling technique was employed to obtain a representative sample of junior secondary school students in Edo State. The researcher used the existing stratification of Edo State into 18 local government areas spread across the three senatorial districts, namely: Akoko-Edo, Egor, Esan Central, Esan North-East, Esan South-East, Esan West, Etsako Central, Etsako East, Etsako West, Igueben, Ikpoba-Okha, Oredo, Orhionmwon, Ovia North-East, Ovia South-West, Owan East, Owan West, and Uhunmwonde. In the second stage, a simple random sampling technique was used to select students within each participating school. A simple random

sampling technique of balloting with replacement was used to select 90 public junior secondary schools in Edo State. This involved the use of pieces of paper, which were folded and put in bags from which the researcher selected schools based on their LGA; it was placed back in the bag, following re-selection. The procedure was used to select five public junior secondary schools in each LGA, thus giving a total of 90 out of 317. This combination of stratified and random sampling was considered appropriate for enhancing the representativeness of the sample while maintaining logistical feasibility. The procedure also minimised selection bias and improved the generalisability of the findings to the broader population of junior secondary school students in Edo State.

Table 2. Distribution of students in Edo State, Nigeria

S/N	Local Government Area	No. of Schools Considered From Each LGA	No. of Students Selected From Each LGA
1	Akoko-Edo	5	50
2	Egor	5	50
3	Esan Central	5	50
4	Esan North-East	5	50
5	Esan South-East	5	50
6	Esan West	5	50
7	Etsako Central	5	50
8	Etsako East	5	50
9	Etsako West	5	50
10	Igueben	5	50
11	Ikpoba-Okha	5	50
12	Oredo	5	50
13	Orhionmwon	5	50
14	Ovia North-East	5	50
15	Ovia South-West	5	50
16	Owan East	5	50
17	Owan West	5	50
18	Uhunmwonde	5	50
	TOTAL	90	900

Research instrument

The instrument for this study, titled “students’ perception of PE component of BST curriculum in junior secondary schools” was self-constructed and consists of Sections A and B. Section A contained items on socio-demographic profile of students in terms of age, name of school, local government area, and gender. Section B was designed to assess

the students’ perception of PE component of the BST curriculum in junior secondary schools. The scale was rated as: *Strongly agree* (4), *Agree* (3), *Disagree* (2), and *Strongly disagree* (1).

Validity of the instrument

To establish face and content validity, the questionnaire was reviewed by experts in PE, curriculum

studies, and educational measurement, who evaluated the relevance, clarity, and adequacy of the items in measuring students' perceptions of the PE component of the curriculum. Their feedback informed minor revisions to improve item wording and structure. The instrument was validated by two experts from the department of Human Kinetics and Sports Science in the University of Benin. This was carried out to ascertain the face and content validity of the instrument.

Reliability of the instrument

Cronbach's alpha was used to measure the reliability. A reliability coefficient of 0.72 was obtained for students' perception of PE component of the BST curriculum, which was considered a good reliability coefficient for the study. A pilot study was conducted among junior secondary school students outside the selected study area but with similar characteristics to the target population. This was done to assess the clarity, comprehensibility, and overall suitability of the instrument. Feedback from the pilot testing led to further refinement of ambiguous

items. Construct validity was examined through item analysis, ensuring that all items aligned with the underlying construct of students' perception. Items that did not perform adequately were revised or removed.

Method of data collection

The instrument was administered by the researcher, with the assistance of three trained research assistants and the principals or head teachers in each school sampled for the study. The research assistants helped to administer, monitor, and retrieve completed instruments, and this lasted for four weeks.

Method of data analysis

The data collected were analysed using the descriptive statistics of frequency count, percentage, mean, and standard deviation to answer the research questions. The Statistical Package for Social Sciences (SPSS) version 28 was employed in carrying out the analyses.

Table 3. Mean responses on students' attitude towards PE component of Basic Science and Technology curriculum

Statements	Mean	Std. Deviation	Decision
Studying PE is exciting	3.58	0.667	Agree
I always enjoy PE lessons	3.41	0.785	Agree
I don't have interest in PE	1.81	1.069	Agree
Studying PE has helped me to develop scientific attitude and life-saving skills	3.21	0.932	Agree
PE lessons are not fascinating to me	1.91	0.986	Disagree
No benefit comes from participating in PE activities	1.71	0.986	Disagree
I would like to take more PE lessons in the future	3.05	0.964	Agree
I don't like studying PE in my spare time	2.20	1.014	Disagree
Taking part in PE activities can be fun	3.59	0.712	Agree
PE and sports as taught in school can be boring	1.88	1.030	Disagree
Knowledge gained in PE is useful for daily living	3.49	0.737	Agree
Job opportunities in PE are few	2.53	1.023	Agree
Teaching is the only occupation open to PE graduates	2.18	1.066	Disagree
I don't like engaging in PE & sports because they result in injuries	1.97	0.988	Disagree
PE is not a waste of time	3.37	0.966	Agree

Statements	Mean	Std. Deviation	Decision
If for any reason, a few subjects must be dropped from the school programme, PE should be one of the subjects to be dropped	1.83	1.066	Disagree
I would take PE only if it were required	2.65	1.067	Agree
Participation in PE makes no contribution to the development of poise	2.29	1.087	Disagree
Skill in active games or sports leads to the development of desirable physical attributes	3.15	0.987	Agree
There is no sufficient value coming from PE to justify the time spent in participation	2.13	1.075	Disagree
PE contributes a lot to the improvement of emotional and social behaviour	3.41	0.858	Agree
Participating in PE activities cannot help in the development of rational thinking	2.05	1.075	Disagree
PE has no place in modern education	1.81	1.016	Disagree
The time spent getting ready for and engaging in a PE class is worth the while	3.09	1.029	Agree
The time devoted to PE in schools could be more profitably used in studying other relevant subjects	2.33	1.127	Disagree
PE classes are poor in opportunities for worthwhile social experiences	2.23	1.049	Disagree
A person will be off emotionally if he does not participate in PE	2.57	1.110	Agree
PE class provides nothing which will be of value outside the class	1.77	1.001	Disagree
Cluster	2.56	0.99	Agree

3. RESULTS

Table 3 reveals a cluster mean of 2.56 which shows students tend to agree with most statements posed regarding their attitude towards PE. However, most students disagree with the claims that: PE lessons are not fascinating; no benefit comes from participating in PE activities; they do not like studying PE in their spare time; PE and sports as taught in school can be boring; teaching is the only occupation open to PE graduates; they do not like engaging in PE & sports because such activities result in injuries; if for any reason, a few subjects have to be dropped from the school programme, PE should be one of the subjects to be dropped; participation in PE makes no contribution to the development of poise; there is no sufficient value coming from PE to justify the time spent in participation; participating in PE activities cannot help in the development of rational thinking; PE has no place in modern

education; the time devoted to PE in schools could be more profitably used in studying other relevant subjects; PE classes are poor in opportunities for worthwhile social experiences; PE class provides nothing which will be of value outside the class.

4. DISCUSSION

The findings of this study can be interpreted through the lens of the Planned Behaviour and Expectancy-Value Theory. Positive student perceptions observed in this study may reflect favourable attitudes and higher task value, which are known to enhance behavioural engagement. This supports the notion that improving how PE is perceived within the curriculum could lead to increased participation and more effective curriculum delivery. The positive perception of the PE component observed in this study extends beyond a mere descriptive outcome and warrants deeper interpretation. One plausible

explanation lies in the structured integration of PE within the BST curriculum, which may enhance its perceived relevance among students. When PE is presented not merely as a recreational activity but as an educational component linked to health and wellbeing, students may be more inclined to value and engage with it.

The results of this study revealed that students had a good attitude towards PE component of BST. This finding agrees with that by Glyniss (2015), who revealed that PE was perceived by pupils to be an easy subject that would promote physical fitness and personal enjoyment, even though some views showed that PE was a less interesting subject in class than when done from outside. This finding also agrees with that of Mercier et al. (2023), who concluded that students have a positive attitude towards physical activity and PE. They further asserted that students are aware of the importance of physical activity and they also have positive attitude towards the importance of physical activity for quality of life and wellbeing. This disagrees with the study by Orunaboka (2011), who revealed that most students exhibit negative attitudes towards PE. This position seems not to be different from that by Akindutire and Olanipekun (2014) as well as Anam and Ahueansebhor (2017), who found that PE in educational institutions in Nigeria, like other subjects in the school curriculum, is faced with many problems which affect students' participation in the programmes and activities.

From a policy perspective, these results underscore the need for sustained investment in teacher training, provision of adequate facilities, and reinforcement of PE as a core component of holistic education. Strengthening these areas may not only maintain positive student perceptions but also translate them into sustained engagement and improved learning outcomes.

5. CONCLUSION

It is concluded that students generally have a positive attitude towards PE, recognising its role in promoting physical fitness, emotional wellbeing, social interaction, and the development of scientific and life skills. Students agreed that PE lessons are exciting, enjoyable, and useful for daily living, while rejecting negative views that PE is boring, irrelevant, or a waste of time. However, challenges persist that may hinder the full realisation of PE's benefits. These include inadequate teaching personnel in some LGAs, limited facilities, marginalisation

of PE within the integrated BST framework, and lingering misconceptions that restrict its recognition as an academic subject. The results affirm that while students value PE, systemic barriers in curriculum delivery, teacher supply, and policy implementation remain critical issues. Strengthening PE within the school curriculum is therefore essential to ensure that learners not only develop physical competence but also acquire the life-long skills necessary for health, discipline, and social development.

Recommendations

The Ministry of Education should enforce strict compliance with the policy mandating PE in junior secondary schools to prevent marginalisation under the BST curriculum. Furthermore, awareness campaigns should be carried out to change negative perceptions of PE among parents, students, and even some educators, highlighting its role in holistic education and career opportunities beyond teaching.

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