

AWARENESS OF PHYSICAL EDUCATION AS AN ACADEMIC DISCIPLINE AND ITS IMPACT ON STUDENTS' ENROLMENT IN SENIOR SECONDARY SCHOOL CERTIFICATE EXAMINATION, NIGERIA

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Abstract

Awareness of Physical Education as an Academic Discipline and its impact on Students' enrolment in Senior Secondary School Certificate Examination, Nigeria. The research design for the study was Ex-post-facto survey research design. The population of this study consists of all Senior Secondary School Students with a total population of six million two hundred and fifty- thousand five hundred and eighteen (6,250,518) student. Three hundred and eighty-four (384) was the sample size for the study A self-structured questionnaire was used for data collection. A 5-point Likert-scale was used for the scoring of responses that were provided by respondents. The instrument was validated by five (5) experts from Ahmadu Bello University, Zaria, who vetted the instrument. A pilot test was conducted in four (4) secondary school across the six (6) geo-political Zones for the purpose of establishing the reliability of the instrument. The data collected during the pilot study was analyzed using Cronbach's Alpha statistics of which the value found was 0.815. Descriptive statistics of frequencies and percentages were used to analyze the demographic characteristics of the respondents. Mean (\bar{X}) and standard deviation (SD) were used to analyze responses to the research questions, while inferential statistics of Chi-square (χ^2) was used to test the formulated null hypotheses at 0.05 level of significance. From the study it was established that awareness of the academic nature of Physical Education, significantly determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria ($P= 0000$). Therefore, the null hypothesis formulated was rejected. Based on the finding of the study, the researchers recommends that the Ministry of Education should initiate a large-scale awareness campaign to educate students, Physical Education specialists, parents, and teachers about the academic significance of Physical Education and its role in fostering holistic development.

Key Words: Assessment, academic discipline, students' enrolment

Introduction

The basic concern of physical education as believed by the researchers was to educate human movement by describing their respective movement characteristics; the effects of the organized movement on individual wellness coupled with an aggregation of certain factors determining the enhancement or limits in man's capabilities to move. As a subject of study, enrolling students at different level of Physical Education gives room for school children to acquire skills, knowledge and attitude to lead a physically active lifestyle. Therefore, the need to study Physical Education at secondary school level becomes important

This area of study received the attention of various authors who have attempted to define it in the different ways it occurs to them. According to Zamani, (2013), Physical Education is an aspect of education which contributes to the accomplishment of the educational objectives. These objectives include; the development of neuromuscular skills, organic fitness, sportsmanship, fair play and cognitive skills. Akindutire and Olanipekun (2014) viewed physical education as an integral aspect of the process of education which aimed at achieving the goals of education through the medium of physical activity experiences. Ojo (2015) stated that physical education was seen as an instructional programme built around basic motor activities which help achieve the goal of physical, emotional and mental well-being for every pupil, student and student-teachers. Anam and Ahueansebhor (2017) opined that physical education is concerned basically, in developing the learners' basic skills, techniques, abilities and competencies that can produce an effective human being who will be able to withstand the change of time, be productive and promote uniqueness in pursuit of unity of human race.

Physical education plays a vital role in the academic curriculum as it helps students to maintain a healthy lifestyle and achieve their full potential in other areas of study. Regular physical activity has been shown to improve academic performance, reduce stress, and boost self-esteem (Teuber, Leyhr & Sudeck, 2024). Physical education classes provide students with the opportunity to engage in regular physical activities that can help to develop their motor skills, coordination, and cardiovascular fitness. This has a great benefit for children as they are in the developmental stage of life and regular physical activity can help to ensure they develop properly (Teuber *et al.*, 2024). Furthermore physical education classes teach children the importance of physical exercise and the benefits it has on their overall health and well-being. Physical education classes can also provide students with the opportunity to develop their social skills by interacting with their peers in a physical setting.

Today, physical education does not have the same prominence as other subjects, in fact the subject is not taught in most primary and secondary schools in Nigeria. Where it is taught, it was either made optional or combined with other science-based subjects such as basic science former integrated science computer studies and Intro-tech at the basic level of the 9-3-4 system of education. Enrolment of students into the subject at secondary school is optional. As an examinable subject in West African Senior Secondary School Certificate Examination (WASSSCE), Physical Education is facing serious setbacks. This was obtainable from the previous record of students' enrollment in 2008 where nine thousand two hundred and sixteen (9,216) candidates sat for the examination as against nine thousand seven hundred and eighty (9,780) recorded in 2007. The number keep declining leading to what the researcher feels to call under-registration. Ten years later in 2018, the enrolment was still static at seven thousand two hundred and ninety-one (7,291). In the year 2020 the total candidates of 7,396 was recorded (WAEC, 2022). This implied that on the average, no more than 8,421 sit for the examination yearly in the last two (2) decades compared with other subjects offered. The pain of this stagnation in students' enrolment into physical education as an examinable subject must be determined by the interaction of certain indices that pushed the researchers to undertake this study. This study therefore assessed the awareness of the academic nature of Physical Education as a determinant of Under-registration for Physical Education as an examinable subject in Senior Secondary School Certificate Examination (SSCE) in Nigeria.

Purpose of the Study

Examine the impact of awareness on Physical Education as an academic discipline on students' enrolment in Senior Secondary School Certificate Examination in Nigeria

Research Questions

Based on the purpose of this study, the following research questions was raised:

To what extent does awareness about Physical Education as an academic discipline influence students' decision to enroll in Senior Secondary School Certificate Examination in Physical Education?

Hypotheses

The following sub-hypothesis was formulated to guide the study:

There is no significant influence between the awareness of physical education and the decision to the enrolment of students in Senior Secondary School Certificate Examination in Physical Education.

Methodology

The research design used in this study was ex-post-facto research design. The use of this design was due to the fact that there was no experimentation in which manipulation and control group was involved Sharma (2015). He continued by stating that Ex-post facto research design seeks to find out factors that are associated with certain occurrences, outcomes, conditions and types of behaviour by analyzing past events or already existing conditions. This design was found suitable for this study since it attempts to assess the determinants of under-registration for Physical Education as an examinable subject in Senior Secondary Schools Certificate Examination (SSCE) in Nigeria

The population of this study comprised of all the Senior Secondary School Students in the Six (6) Geo-Political Zones of Nigeria. It also consists of all Senior Secondary School Students in Nigeria. Six Million , two hundred and fifty thousand five hundred and eighteen (6,250,518) Students. Source (NBS, 2023).

Three hundred and eighty four (384) students were used as sample size for this study. The sample of the study was in line with by Adam (2020) who opined that for a population above two million, three hundred and eighty-four (384) is adequate based on the confidence level of 95% with a marginal error of 0.05. The researcher employed a multi-stage sampling procedure in drawing the sample for this study. The procedure for drawing the sample was described as follows:

Stratified sampling technique was used to establish the six (6) Geo-political zones as strata to give room for selecting the selection of the states used for the study. Simple random sampling technique was used to select three (3) states from each of the Geo-political zones making a total of eighteen (18) states. This was done using lucky dip method by picking from 37 folded papers containing 36 states and FCT Abuja. See table 1. Purposive sampling technique was used to select two public Senior Secondary Schools in the metropolitan city of the state capital, giving rise to 36 schools. This was to ensure feasibility of the study.

Table 1: Sample Size of Study

S/n.	Geo-Political Zones	States	Secondary Schools	Students' Population	Sample
1.	North West	Kaduna	-Capital College Kaduna	93,785	17
			-Government College, Kaduna	95,781	18
2.	North East	Kebbi	-Government College Birnin Kebbi, Nagari	59,835	11
			-Govt. Girls College Birnin Kebbi	55,221	10
		Jigawa	-Govt Sci. Secodary School Dutse	52,139	10
			-Govt.Girls Secondary School Dutse	58,138	11
		Adamawa	-Government College, Yola	41,849	8
			-Fed. Govt. Girls Colege, Yola	34,543	6
		Bauchi	Govt. Day Secondary School Bauchi	52,323	10
			Govt.Girls Secondary School Bauchi	53,003	10
Yobe	Govt Sci. Secodary School, Damaturu	24,143	5		
	Govt. Girls Secondary School Damaturu	20,142	4		
3.	North Central	Niger	Government College Minna	77,997	14
			Govt.Girls Secondary School Minna	97,676	17
		Plateau	Government College Jos	20,002	4
			Govt. Girls Secondary School Jos	22,252	4
		Nasarawa	Government College Lafia	39,986	7
			Govt Secondary School Lafia	34,125	6
4.	South West	Osun	Government College Osogbo	26,401	5
			Govt Secondary School Osogbo	43,001	8
		Ogun	Government College Abeokuta	97,482	17
			Govt. Secondary School Abeokuta	104,321	19
Ekiti	Government College Ado-Ekiti	21,127	4		
	Govt Secondary School Ado-Ekiti	24,876	5		
5.	South South	Edo	Government College Benin	30,406	6
			Govt. Girls Secondary School Benin	23,213	4
		Delta	Government College Asaba	64,909	13
			Govt. Girls Secondary School Asaba	51,654	9

6. South East	Rivers	Government College Port-Harcourt	99,437	18	
		Govt. Girls Secondary Port-Harcourt	75,432	13	
	Imo	Government College Port-Owerri	187,391	34	
		Govt. Girls Secondary Owerri	193,262	36	
	Abia	Government College Port- Umuahia	29,060	5	
		Govt. Girls Secondary Umuahia	21,765	4	
	Enugu	Government College Enugu	33,268	6	
		Govt. Girls Secondary Port-Enugu	31,897	6	
	TOTAL	18 States		2,091,842	384

The instrument used for data collection was self-developed questionnaire. This questionnaire contains two (2) sections A & B with a total of fifteen items (15) items. Section 'A' solicited for information on demographic information of the respondents, Section 'B' seek for information on awareness of the academic nature of Physical Education. To score the responses of the respondents, five (5) point modified Likert's rating scale was used on each statement. The ratings are Strongly Agreed (SA)=(5) points, Agreed (A) =4points, Undecided (3) points, Disagreed (D) =2points, and Strongly Disagreed (SD) =1point. Hence for the analysis of the research questions, the decision mean of 3.5 was be used in taking decisions.

To determine the face and content validity of the instrument, a copy of the questionnaire was distributed to some experts in the Department of Human Kinetics and Health Education, Ahmadu Bello University, Zaria who served as respondents who filled the questionnaire. Their comments and suggestions were incorporated after which a final copy of the questionnaire was produced for the study. A pilot study was conducted using four (4) secondary schools from the non-selected states in the six geo-political zones. Forty (40) copies of the questionnaire were administered to these four (4) schools each having 10 questionnaire each. The data obtained from the pilot study was analyzed using Cronbach Alpha test. The result of the pilot study indicated a reliability coefficient of 0.815 which render the instrument reliable. This for the fact that reliability coefficient lies between 0 and 1, and that the closer the reliability coefficient is to zero, the less reliable it is, while the closer the reliability coefficient is to 1, the more reliable it is.

A total of three hundred and Eighty-four (384) copies of the questionnaire were administered to SSS II students in the secondary schools selected. The researchers and six (6) research assistants who were instructed on how to fill in the instrument administered the questionnaire to the respondents. This exercise lasted for two weeks. The data collected was analyzed using the Statistical Package for Social Science (SPSS) version 23. Descriptive statistics of frequencies and percentages was used to analyze the demographic characteristics of the respondents. Mean and standard deviation was used to analyze the responses to the research questions, while Chi-Square Statistics was used to test all the hypothesis at 0.05 level of significance.

Result

A total of three hundred and Eighty-four (384) copies of the questionnaire were administered to SSS II students in the secondary schools selected but three hundred and eighty-two (382) were retrieved upon which the data analysis was conducted.

Table 2: Analysis of the student’s Demographic characteristics

Variable	Variable options	Frequency	Percent
Gender	Male	270	70.7
	Female	112	29.3
	Total	382	100.0
Age	16-18years	183	47.9
	19-21years	142	37.2
	22 years and above	57	14.9
	Total	382	100.0
Offering of Physical Education	No	265	69.3
	Yes	117	30.7
	Total	382	100.0

The demographic analysis presented in Table 2 provides insights into the characteristics of the surveyed student population. The gender distribution indicates a significant imbalance, with male respondents comprising 270 (70.7%) of the sample, compared to female respondents at 112(29.3%). In terms of age, the largest group of respondents falls within the 16-18 years category, representing 183 (47.9%) of the sample. The next largest group is aged 19-21 years, accounting for 142 (37.2%), while those aged 22 years and above make up only 57(14.9). Regarding the offering of Physical Education, the data reveals that a majority of respondents 265(69.3%) do not participate in such classes, while only 117 (30.7%) are involved. This high percentage of non-participation indicate barriers to accessing physical education or a lack of emphasis on such programs within the institution.

Research Question: Will awareness of the academic nature of Physical Education determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate examination (SSCE) in Nigeria?

Table 3: Mean Score Analysis on Awareness of the Academic Nature of Physical Education as a determinants of under-registration for Physical Education as an examinable subject in Senior Secondary Certificate examination (SSCE) in Nigeria.

S/n	Items	Mean	Std. Dev.
1.	Secondary schools are not aware of the academic nature of Physical Education.	4.17	1.072

2.	Students in secondary schools are not aware that there is element of Biology in Physical Education	4.29	0.868
3.	Students in secondary schools are not aware that there is element of Chemistry in Physical Education	4.48	0.793
4.	Students in secondary schools are not aware that there is element of History in Physical Education	4.41	0.779
5.	Students in secondary schools are not aware that there is element of Geography in Physical Education	4.41	0.763
6.	Students in secondary schools are not aware that there is element of Mathematics in Physical Education	4.17	1.072
7.	Students in secondary schools are not aware that there is element of Art in Physical Education	4.29	0.868
8.	Students in secondary schools are not aware that there is element of Marketing in Physical Education	4.29	1.022
9.	Students in secondary schools are not aware that there is element of Government/leadership in Physical Education	4.18	0.783
10.	Students in secondary schools are not aware that there is element of Management in Physical Education	4.32	0.985
	Aggregate mean	4.30	0.880

(Benchmark = 3.50)

Table 3 above shows the analysis of the mean scores of the respondents on awareness of the academic nature of Physical Education determinants of under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria. The analysis reveals a mean aggregate of 4.30 which is greater than the benchmark of 3.50 ($4.30 > 3.50$) the result of the analysis. Inplies that the respondents were of the opinion that awareness of the academic nature of Physical Education determines under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria.

Hypothesis

Awareness of the importance of the academic nature of Physical Education will not significantly determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria.

Table 4: Chi-square Analysis on Awareness of the academic nature of Physical Education as the determinants of under-registration for Physical Education as an examinable subject in Senior Secondary Certificate examination (SSCE) in Nigeria

Variable	N	χ^2 Cal	Df	P value	Decision
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Awareness of the academic nature of Physical Education	382	143.12	36	0.000	Rejected
X² Crit (50.98)		P < 0.05			

Results from table above showed that awareness of the importance of the academic nature of Physical Education significantly determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria. Reasons being that the P-value of 0.000 is less than 0.05 alpha level of significance while the chi square (χ^2) Cal. value of 143.12 is greater than the chi square critical value of 50.98 (X^2 Cal (143.12) > X^2 Crit (50.98), at df 36. Therefore, the null hypothesis which states that awareness of the importance of the academic nature of Physical Education will not significantly determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria is hereby rejected. The result revealed that awareness of the importance of the academic nature of Physical Education significantly determine under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria.

Discussion

This study was carried to assess whether awareness of the academic nature of Physical Education significantly determines under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria. Finding from the study revealed that awareness of the academic nature of Physical Education significantly determines under-registration for Physical Education as an examinable subject in Senior Secondary Certificate Examination (SSCE) in Nigeria as χ^2 -critical = 143.12, $p < 0.05$, $p = 0.000$. This finding is consistent with Olusola's (2021) who assessed the psycho-administrative determinants for the choice of physical education among senior secondary school students found a significant influence of psycho-administrative variables, which likely includes awareness of the subject's academic nature, on students' choice of physical education at external examination bodies. Revealed that increasing awareness of Physical Education's academic importance could positively impact registration rates. Similarly, Anam and Ahueanbebher's (2017) investigation into factors influencing enrolment in Physical Education supports this finding. The study emphasized the importance of instructional materials and qualified personnel, both of which contribute to the perception of PE as a serious academic subject. Improved awareness of these academic aspects could potentially increase student enrolment and, by extension, SSCE registration. The significance of awareness is further corroborated by Osei and Ampofo's (2022) research on determinants of under-registration in WAEC examinations. They identified low levels of student motivation and awareness about the significance of the examinations as key factors. This parallels the current finding, suggesting that lack of awareness about Physical Education's academic importance could contribute to its under-registration.

Conclusion

Based on the findings from this study, it was concluded that under-registration for Physical Education in Senior Secondary Certificate Examination (SSCE) in Nigeria was significantly determined by level awareness of the academic nature of Physical Education, in the Nigerian education system.

Recommendations

Based on the findings of the study, the researcher recommended that the Ministry of Education should initiate a large-scale awareness campaign to educate students, parents, and teachers about the academic significance of Physical Education and its role in fostering holistic development.

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