



## PERSONAL VARIABLES AND SENIOR SECONDARY SCHOOL STUDENTS' PERFORMANCE IN PHYSICAL EDUCATION IN THE NORTH WEST SENATORIAL DISTRICT OF AKWA IBOM STATE

**Udeme John Bassey and Chibuzor chika**

Department of Physical and Health Education, University of Uyo

Department of Human Kinetics Health and Safety Studies, Ignatius Ajuru University of Education

**Abstract:** The aim of this study was to determine the influence of personal variables on students' academic performance in Physical Education in secondary schools in the North West Senatorial District of Akwa Ibom State. Three research question and three hypotheses were formulated to guide the study. The design of the study was ex-post facto. The population of the study was all 18453 SSI students in public secondary schools in the North West Senatorial District of Akwa Ibom State. Multi-stage sampling procedure was used in selecting a sample of 456 students to take part in the study. Two researcher's made instruments entitled: "Physical Education Achievement Test" (PEAT) and "Personal and Social Variable Questionnaire" (PSVQ) were used in collecting data for the study. The instruments were face validated by three experts. Internal consistency reliability was conducted for the two instruments and the reliability coefficients of PSVQ was computed with Cronbach Alpha to be .82, while Split-half method was used to determine the reliability of PEAT, which yielded 0.79. Data collected for the study were analyzed using mean to answer the research questions, while independent t-test was used to test the hypotheses. The findings of the study indicated that there is significant influence of personal variables on students' academic performance in Physical Education in secondary schools in the North West Senatorial District of Akwa Ibom State. It was recommended among others that teachers should introduce activities that make Physical Education interesting. With that, students would likely give more attention to the subject and improve their academic performance.

### Background of the Study

Physical Education is "education through the physical". It aims to develop students' physical competence and knowledge of movement and safety, and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle. It also develops students' confidence and generic skills, especially those of collaboration, communication, creativity, critical thinking and aesthetic appreciation. These, together with the nurturing of positive values and attitudes in physical education, provide a good foundation for students' lifelong and life-wide learning (Education Bureau, 2018). Parents and guardians are usually given feedback on their children's activities in the school in terms of examination results which indicates academic performance.

Academic performance is used in the school to refer to students' success in learning specified curriculum content as revealed by continuous assessment and

examination. According to Ali (2013), academic performance is a measure of the degree of success in performing specific tasks in a subject or area of study by students after a learning experience. It is the outcome of education that indicates how well a student or class of students is doing academically. Academic performance is a major issue to teachers, students, parents and guardians as well as other stakeholders in the education industry. This concern cuts across all school subjects and all levels in the education system including primary, secondary and tertiary. A high academic performance for any class of students is an indication of teaching/learning effectiveness while poor academic achievement, on the other hand, is an indication that the teaching/learning process is everything but effective. Aside from the classroom teaching, researchers have identified several factors such as gender, age, interest, peer pressure and parental support to influence academic performance of students in different subjects.

**British International Journal of Education and Social Sciences**

**Official Publication of Center for International Research Development**

Double Blind Peer and Editorial Review International Referred Journal; Globally index

Available <https://cirdjournal.com/index.php/bijess/>; E-mail: [journals@cird.online](mailto:journals@cird.online)



Gender is the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between the feminine and masculine (female and male) population. The importance of examining performance in relation to gender is based primarily on the socio-cultural differences between girls and boys. Some vocations and professions have been regarded as men's (engineering, arts and crafts, agriculture etc.) while others as women's (catering, typing, nursing etc.). In fact, parents assign task like car washing, grass cutting, bulbs fixing, climbing ladders to fix or remove things etc. to the boys. On the other hand, chores like dishes washing, cooking, cleaning and so on are assigned to the girls. In a nutshell, what are regarded as complex and difficult tasks are allocated to boys whereas girls are expected to handle the relatively easy and less demanding tasks. As a result of this way of thinking the larger society has tended to see girls as a weaker sex". Consequently, an average Nigerian girl goes to school with these fixed stereotypes. Aside from gender, age is also another factor that is believed to influence academic performance of students.

Age is considered one of the variables that may likely affect the academic performance of student in various subjects. Cognitive development and maturity (which are associated with age) are necessary for a worthwhile performance of students. Age of the individual, as it increases, usually affects the various developmental changes. It also affects every area of human performance (Ukueze 2007). Therefore, it is necessary to examine the extent to which age affects the academic performance of students in Physical Education. Other than one's age, interest can also influence one's performance in various life endeavour.

Interest basically refers to the motivating force of an individual which impels him to attend a person, a thing, an object or an activity. Interest and attention are inseparable and interest is treated as latent attention and attention is considered as interest in action (Disha, 2018). Considering this definition of interest, students are likely going to pay more attention to subjects they have interest in and might appear less serious with the ones they have little or no interest about. Interest has long been thought to be a powerful motivator in schooling. It can be observed in numerous occasions that a child is persistent in practicing a skill just taught, playing a sport tirelessly, or engaging enthusiastically in an activity never

experienced before. However, ones' interest can be influence by peer pressure.

For some years now, the researcher who is a Physical Education teacher in secondary school has noticed disparities in students' academic performance in the subject in the North West Senatorial District. Many students have recorded poor performance in the subject regardless on the use of various teaching methods that is believed could improve their performance. Considering the perceived influence of various personal variables discussed in this study on students' academic performance and the disparities witnessed among students' academic performance in physical Education, the researcher was motivated to conduct this study on personal variables and senior secondary school students' performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

#### **Statement of Problem**

Physical education is an important subject that can help in the general development of the body and mind. The practice of physical education can help people to live healthy life free from some sickness and challenges. Aside from helping one health-wise, sporting activities in physical education can serve as a mean of entertainment, which can draw and unite individuals from various locations and life endeavours. The subject also has various career opportunities for people of all ages and situations. However, it appears that very few students offer the subject in secondary schools. Many who offer the subject in secondary schools tend to perform poorly in the subject regardless of how interesting the subject appears to be when compared to other subjects. On the other hand, some students perform excellently in the subject and make a career out of it in the various opportunities offered by the subject. The most surprising thing is that most of these students are taught in the same or similar school environment by qualified teachers in the subject.

Considering that students have similar experience in Physical Education since they are taught using the same curriculum and by qualified teachers as employed by the State Secondary Education Board, one could wonder if personal variables of the students is responsible for the disparities in students' academic performance in the subject. This study is determine the influence of personal variables on academic performance of students in physical education in Akwa Ibom North West Senatorial District.



### 1.3 Purpose of the Study

The main purpose of the study is to determine the influence of personal variables on senior secondary school student's academic performance in Physical Education in Akwa Ibom North West Senatorial District. Specifically, the study sought to determine;

1. the influence of gender on academic performance of senior secondary school students in Physical Education in Akwa Ibom North West Senatorial District.
2. the influence of age on academic performance of senior secondary school students in Physical Education in Akwa Ibom North West Senatorial District.
3. the influence of interest on academic performance of senior secondary school students in Physical Education in Akwa Ibom North West Senatorial District.

### 1.4 Significance of the Study

The findings of this study on personal-social variables and academic performance of students in physical education will be significant to teachers, students, parents and future researchers in physical education.

To the teachers, the findings of the study would help them to see how various personal and social variables can affect their effort in the classroom, especially in terms of students' performance in Physical Education. With such knowledge, teachers would look for effective ways of managing these variables in order to enhance effective academic performance among the students. This would go a long way to motivating many students to offer the subject and make a career from it.

To the students, the finding of the study would help them to realize how their personal and social variables can affect their academic performance in Physical Education. With such knowledge, students would be properly guided on the needed adjustment they have to make in order to improve their academic performance in the subject. Such guided adjustment can help many students to explore the various opportunities offered by the subject and earned a living or make a career from them.

The findings of this study would also be of significance to parents. The findings from this study is expected to help parents appreciate the effect various personal and social variables can have on their children's academic performance, especially in Physical Education. With such knowledge, parents would be in good positions to

help their children make the needed adjustment that can help them better their performance in the subject. Also, parents would also excuse teachers of blame on poor academic performance of their children and think of practical ways of helping their children to make the necessary changes that would help improve their academic performance.

To future researchers, the findings of this study when publish would help them identify areas in which further research is needed on the improvement of students' performance in Physical Education. With such information, more variables that could contribute to students' improvement in academic performance in Physical Education would be studies. The findings of the current study would also provide literature for future researchers in Physical Education.

### 1.5 Research Questions

The following research questions were raised to guide the study;

1. How do gender influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?
2. How do age influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?
3. How does interest influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?

### 1.6 Hypotheses

The following hypotheses were tested at .05 levels of significant;

1. There is no significant influence of gender on senior secondary school students' academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.
2. There is no significant influence of age on senior secondary school students' academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.
3. There is no significant influence of interest on senior secondary school students' academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

### 1.7 Scope of the Study



The study on personal social variables and senior secondary school students' academic performance is delimited to Physical Education. The personal variables considered in the study are gender, age, and interest. The study would be delimited to SSI students in public secondary schools in the North West Senatorial District of Akwa Ibom State for the 2021/2022 academic session.

### Research Method

Ex-post facto research design was adopted for the study. The study was carried out in Akwa Ibom North West Senatorial District of Nigeria. The senatorial district is made up of ten local government areas and there are 6,189 secondary school students in Akwa Ibom North West Senatorial District of Nigeria. The population of the study was made up of all the 18453 SSI students in all the 86 public secondary schools in Akwa Ibom North West Senatorial District for the 2021/2022 academic session. The sample for this study comprised a total of 456 students in public secondary schools in the study area. Simple random sampling technique was used to select the sample for the study. Two researcher's made instruments entitled: "Physical Education Achievement Test" (PEAT) and "Personal and Social Variable Questionnaire" (PSVQ) were used in collecting data for the study. The PEAT was made up of 20 items on topics already taught to the students by their teachers. The items were multiple choice with five options lettered A to E. The five options were made up of one correct option and four distracters. The correct option was assigned a score of one, while the distracters were assigned zero. The items were written base on a test blue print in Physical Education. Also, PSVQ was made up of two Sections, A and B. Section A contained items on demographic variables of the respondents, while Section B contained items on three variables; interest, peer pressure and parental support. The items were score on a four-point

**Table 4.1: Mean Academic Performance of Students in Physical Education Based on Gender**

Gender	N	Mean
Male	198	14.71
Female	258	13.41

The result in Table 4.1 indicates the mean performance of male and female students in Physical Education among senior secondary school students in the North West Senatorial District of Akwa Ibom State. As shown

scale of strongly agree, agree, disagree and strongly disagree. Content validation was conducted for the PEAT. This was carried out by writing the items based on the test blue print develop for the test. Also, face validation was conducted for the two instruments by three experts. Internal consistency reliability was conducted for the instruments. To achieve this, the instruments were trial tested on a sample of 30 students in public secondary schools in Akwa Ibom North West Senatorial District who were not part of the study sample. Cronbach Alpha Statistics was used to determine the reliability coefficient of PSVQ, while split-half method was used to determine the reliability of PEAT. The reliability coefficient of the instruments was .82 and 0.79 for the PSVQ and PEAT respectively. According to Nachmias and Nachmias (2009) positive coefficient of over 0.7 is considered to be reliable, and the higher the coefficient the more reliable the instruments. Therefore, the instruments were considered reliable for use in collecting data for the study. The researcher with the help of two trained research assistants collected data for the study. Data collected for the study were analyzed using mean to answer the research questions, while independent t-test was used to test the hypotheses. All the five null hypotheses were tested at 0.05 level of significance. Students who scored below 12.5 were considered as exhibiting low possession of the variable considered, while those that score from 12.5 and above were considered as exhibiting high possession of the variable considered.

### Result

#### Research Question 1

How do gender influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?

in the table, the mean performance of male students was 14.71, while that of female students was 13.41. The mean difference between the two groups is 1.30 in favour of male students. Therefore, there is a positive influence



of male gender on students’ performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

**4.1.2 Research Question 2**

**Table 4.2: Mean Academic Performance of Students in Physical Education Based on Age**

Age	N	Mean
Below 15 years	177	14.16
15 years and above	279	13.86

The result in Table 4.2 indicates the mean performance of students in Physical Education among senior secondary school students in the North West Senatorial District of Akwa Ibom State based on age. As shown in the table, the mean performance of students below 15years was 14.16, while that of students from 15 years and above was 13.86. The mean difference between the two groups is 0.30 in favour of students below 15 years.

**Table 4.3: Mean Academic Performance of Students in Physical Education Based on Interest**

Interest	N	Mean
High Interest	191	14.79
Low Interest	265	13.39

The result in Table 4.3 indicates the mean performance of students in Physical Education among senior secondary school students in the North West Senatorial District of Akwa Ibom State based on interest. As shown in the table, the mean performance of students with high interest was 14.79, while that of students with low interest was 13.39. The mean difference between the two groups is 1.40 in favour of students with high interest. Therefore, high interest has positive influence on

**Table 4.6: Independent t-test Analysis of Students’ Academic Performance in Physical Education Based on Gender**

Gender	N	Mean	SD	t-cal.	df	p-value
Male	198	14.71	2.18	6.26	454	.000
Female	258	13.41	2.22			

The result in Table 4.6 indicates that the calculated t-value of 6.26 is significant since the p-value of .000 at 454 degrees of freedom is less than .05 levels of significance. Therefore, the null hypothesis which stated that there is no significant influence of gender on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District

How do age influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?

Therefore, age have no influence on students’ performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

**4.1.3 Research Question 3**

How does interest influence academic performance of senior secondary school students in Physical Education in the North West Senatorial District of Akwa Ibom State?

students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

**4.1.6 Hypothesis 1**

There is no significant influence of gender on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

of Akwa Ibom State is rejected. Hence, there is significant influence of gender on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

**4.1.7 Hypothesis 2**



There is no significant influence of age on senior secondary school students’ academic performance in

Physical Education in the North West Senatorial District of Akwa Ibom State.

**Table 4.7: Independent t-test Analysis of Students’ Academic Performance in Physical Education Based on Age**

Age	N	Mean	SD	t-cal.	df	p-value
Below 15 years	177	14.16	2.24	1.36	454	.176
15 years and above	279	13.86	2.31			

The result in Table 4.7 indicates that the calculated t-value of 1.36 is not significant since the p-value of .176 at 454 degrees of freedom is greater than .05 levels of significance. Therefore, the null hypothesis which stated that there is no significant influence of age on senior secondary school students’ academic performance in

Physical Education in the North West Senatorial District of Akwa Ibom State is accepted.

**4.1.8 Hypothesis 3**

There is no significant influence of interest on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

**Table 4.8: Independent t-test Analysis of Students’ Academic Performance in Physical Education Based on Interest**

Interest	N	Mean	SD	t-cal.	Df	p-value
High	191	14.79	2.06	6.76	454	.000
Low	265	13.39	2.27			

The result in Table 4.8 indicates that the calculated t-value of 6.76 is significant since the p-value of .000 at 454 degrees of freedom is less than the .05 levels of significance. Therefore, the null hypothesis which stated that there is no significant influence of interest on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State is rejected. Hence, there is significant influence of interest on senior secondary school students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State.

have more time for physical activities and follow updates on it than female students which could also reflect on their performance. The finding of this study is similar to that of Parajuli and Thapa (2020) who conducted a study to examine gender differences in the academic performance of students and reported that there is significant gender difference in the academic performance of students. It is also similar to that of Wangu (2014) who carried out a study to find out the impact of gender difference on the students’ academic performance in Ndumberi Division, Kiambu County and reported that male students performed much better as compared to their female counterparts.

**Discussion of Findings**

**Gender and Students’ Academic Performance in Physical Education**

The finding of testing the hypothesis on gender and students’ academic performance in physical education indicated a significant influence of gender on the academic performance of students in physical Education with the male gender scoring higher than the female gender. The reason for the finding could be that many people regards physical education as a subject for the male gender, hence, many female students might feel reluctant to do more. It could also be that male students

**Age and Students’ Academic Performance in Physical Education**

The finding of testing the hypothesis on the influence of age on students’ academic performance indicated that there is no significant influence of age on students’ academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State. The reason for the finding could be that physical education is for people of all ages who wish to take part in it. It could also be as a result of the teachers’ effective methods of teaching that carries all age groups along in the teaching.



The finding of this study is similar to that of Ebebuwa-Okoh (2010) who carried out a study to examine the influence of age, financial status and gender on Academic Performance among undergraduates and reported no significant influence of age on academic performance of students. On the other hand, the finding of the study is contrary to the findings of Momanyi et al. (2015) who conducted a study to investigate the effect of students' age on academic motivation and academic performance among secondary school students attending day schools within Nakuru municipality and reported that age has significant influence on students' academic performance. The reason for the contrary report could be based on the subject studies, which could have required high maturity from the students for proper understanding.

#### **Interest and Students' Academic Performance in Physical Education**

The finding of testing the hypothesis on the influence of interest on students' academic performance in physical education indicated that there is a significant influence of interest on student's academic performance in Physical Education in the North West Senatorial District of Akwa Ibom State. The result indicated that students with high interest in Physical Education had a mean score higher than students with low interest. The reason for the finding could be that people tend to spend much time and energy on what they are interested in. It could also be that students with high interest are likely to pay more attention in the class and take part in all activities in Physical Education, which likely improve their understanding of the subject. Such better understanding of the subject can likely result in improved academic performance. The finding of this study is similar to that of Ekpenyong, et al. (2015) who conducted a research to examine students' interest in social studies and academic achievement in tertiary institutions in Cross River State and reported that students' interest in social studies significantly influence their academic achievement in the subject. It is also similar to Omotade, et al. (2016) who carried out a study to examine the relationship in the students' attitude to Biology and students' interest and academic performance of student in Biology in Ekiti State and reported that there is significant relationship in the students' interest in Biology and students' academic performance in Biology.

#### **Conclusion**

Based on the findings of this study on personal-social variables and students' academic performance in Physical Education in secondary schools in the North West Senatorial District of Akwa Ibom State, it was concluded that the male gender and students with high interest performed better than the female gender and students with low interest respectively in Physical Education.

#### **Recommendations**

The following recommendations were made based on the findings of the study;

- i. Teachers should closely monitor the activities of female students in Physical Education in order to help them improve in their performance.
- ii. Students should continue giving Physical Education the needed attention regardless of their age.
- iii. Teachers should introduce activities that make Physical Education interesting. With that, students would likely give more attention to the subject and improve their academic performance.

#### **References**

- Ali, S. (2013). Factors affecting academic achievement of students. *American Journal of Educational Research*, 2(8): 283-289.
- Disha, N. (2018). Interest: Definition, Types and Measurement Statistics. <https://www.yourarticlelibrary.com/statistics-2/interest-definition-types-and-measurement-statistics/92639> (Retrieved 30th September, 2021).
- Ebebuwa-Okoh, E. E. (2010). Influence of Age, Financial Status, and Gender on Academic Performance among Undergraduates.
- Education Bureau (2018). Physical Education. <https://www.edb.gov.hk/en/curriculum-development/kla/physical-education/index.html> (Retrieved on 30th September, 2021).
- Momanyi, J. M., Too, J., and Simiyu, C. (2015). Effect of Students' Age on Academic Motivation and Academic Performance among High School



Students in Kenya. *Asian Journal of Education and e-Learning*, 3(5): 337-342.

Nachmias, F. C and Nachmias, D (2009) *Research methods in the social sciences*. London: St. Martin's press, Inc.

Omotade, A. A., Funke, A. R., and Oyewumi, F.K. (2016). Students' Attitude and Interest as Correlates of Students' Academic Performance in Biology in Senior Secondary School. *International Journal for Innovation Education and Research*, 4(3), 40–45.

Parajuli, M., and Thapa, A. (2020). Gender Differences in the Academic Performance of Students. *Journal of Development and Social Engineering*, 3(1): 39-47.

Ukueze, A. C.(2007). Learner variable of academic performance and Adjustment of Junior Secondary Student. *The Counsellor*, 23(2): 172-183.

Wangu, M. J. (2014).The impact of gender differences on student's academic performance in secondary schools in Ndumberi Division, Kiambu County, Kenya in Science Subjects and Languages.