

Influence of Learning Environment on Achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria

Iyaoromi, C. N., Yakubu, Y. S., and Longkat, J. G.

University of Jos, Nigeria

Available online: July 31, 2026.

To cite this article:

Iyaoromi, C. N., Yakubu, Y. S., and Longkat, J. G. (2026). Influence of Learning Environment on Achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria. *International Journal of Applied Research and Technology*. 15(7): 20 – 28.

PLEASE SCROLL DOWN FOR ARTICLE

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan, sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contexts will be complete or accurate or up to date. The accuracy of any instruction, formulae and analysis should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material

Influence of Learning Environment on Achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria

Iyaoromi, C. N., Yakubu, Y. S., and Longkat, J. G.

University of Jos, Nigeria

(Received: 07 July 2026 / Accepted: 12 July 2026 / Published: 31 July 2026).

Abstract

This study investigated the Influence of Learning Environment on achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria. Three research questions and three hypotheses guided the study. The research designs adopted for this study were cross-sectional survey and correlational research designs. The population of the study comprised 268 SS2 students offering History in Public Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. The sample consisted of 32 SS2 students offering History in two Public Senior Secondary Schools sampled using purposive sampling technique. School Physical Environment Questionnaire, Learning Environment Questionnaire and History Achievement Test were instruments used for data collection and were validated by four experts in the field of Education with content validity index of 0.84, 0.89 and 0.91. Cronbach Alpha reliability coefficient index were: School Physical Environment 0.651, Psychological Learning Environment 0.852, Social Learning Environment 0.785 and History Achievement Test (HAT) 0.728 Kuder-Richardson coefficient. Descriptive statistics of mean, standard deviation and percentages and inferential statistics of t-test of independent samples and Pearson Product Moment Correlation were used to test the hypotheses at 0.05 level of significance. The findings indicated that the physical learning environment had a moderate influence on students' achievement in History, as students in both adequate and inadequate environments recorded mostly moderate achievement levels. However, the t-test of independent samples showed no significant difference in achievement between students in schools with adequate and schools with inadequate physical learning environments ($t = 1.14, p > 0.05$). Similarly, the psychological learning environment revealed a moderate influence on achievement, but the correlation analysis indicated no significant relationship between psychological environment and students' achievement ($r = 0.054, p > 0.05$). Furthermore, the social learning environment showed a moderate influence on students' achievement. However, the relationship was weak and not statistically significant ($r = -0.032, p > 0.05$). The study recommended that the government should improve and maintain students school infrastructure to provide a more conducive physical learning environment.

Keywords: History, Achievement, Students, Learning Environment and Influence

For corresponding author:

E-mail: info@esxpublishers.com

Subject: 0726-0213.

© 2026 **Esxon Publishers**. All rights reserve

Introduction

History is one of the arts subjects taught in senior secondary schools. It involves the study of past events, particularly human experiences and the interpretation and analysis of these events. Adjepong (2020) defines History as a subject that studies past events and human activities in order to understand the present and improve the future society. In the school context, History goes beyond memorising dates and facts, but rather engages students in critical thinking, analysis of sources and understanding how past events have shaped present realities and may influence future development. The researchers support this assertion by defining History as a discipline that studies past and present human events, while also providing insights that can inform future actions and help to address societal problems.

Students' achievement is closely linked to the quality of the learning environment. In this study, achievement refers to students' scores in History Achievement Test, indicating the extent to which students have accomplished learning task. It is a key indicator of educational success. A supportive learning environment can significantly enhance students' ability to understand and apply knowledge. Factors such as lighting, ventilation, seating arrangement, classroom space, teacher-student relationships and availability of learning materials directly influence students' concentration, comfort and readiness to learn. These conditions create a foundation for effective instruction and active engagement. When students feel comfortable, safe and encouraged, they are more likely to participate actively in classroom activities and achieve better academic outcomes (Barrett, Zhang, Moffat, and Kobbacy, 2018).

Learning environment is the physical, psychological and social conditions that influence learning process. It can equally be seen as knowledge, assessment and community-centred environments important for students' development. When the learning environment is supportive and conducive, it can positively influence students' achievement. Physical comfort and safety encourage active participation and engagement in learning, thereby improving achievement. Psychologically safe and stimulating environment enhances intrinsic motivation and promotes deeper cognitive processing, which contributes to higher achievement. Students who feel socially connected are likely to enjoy learning, stay engaged and achieve better academically. When the physical, psychological and social aspects of the learning environment are well optimised, students are more likely to experience a balanced, engaging and supportive learning atmosphere. This can lead to improved learning outcomes and higher achievement.

Physical learning environment in this context refers to classroom buildings, class furniture and instructional materials. Students tend to feel more secure and comfortable in classrooms with proper lighting, proper ventilation and sufficient space for the teacher to move freely and attend to each student's needs. Such classroom conditions support effective instruction and promotes smooth teaching and learning processes. A well-structured classroom creates a conducive atmosphere for learning and engagement, making the study of History and other subjects more supportive of students' academic success and achievement. Class furniture is an important component of the physical learning environment which plays a fundamental role in improving students' achievement in schools. It includes tables, chairs and desks used during learning activities. Proper and adequate furniture contributes to effective and successful teaching and learning. This aligns with Giami and Alete-Omoni (2023), who asserted that the general appearance of school facilities constitutes the basis upon which the public judge academic activities within the school. The availability of relevant instructional materials such as textbooks, pictures and technological resources is also crucial in the learning environment. For example, Adepoju and Akinola (2020), reported that secondary schools with adequate instructional materials recorded higher levels of student motivation and achievement compared to those with insufficient materials. Access to these materials supports student's deeper understanding of historical concepts by promoting hands-on learning, exploration and critical thinking. Therefore, the availability of historical resources within the school environment can greatly improve the teaching and learning of History, making the subject more tangible, relatable and engaging for students.

Psychological learning environment on the other hand refers to the emotion and motivation of students in the classroom that influence students' achievement in the learning process. It is the stimuli that influences learners psyche in the school environment. Gidado, Apeh and Akinwande (2023), opined that when the psychological environment is laddened with rancour, hatred and hostility, learning is negatively affected. In contrast, Inuen (2020) advocated for a non-threatening but cordial and friendly relationship between teachers and students, which encourages intellectual development, exploration and self-knowledge. According to Richard (2021), the emotional relationship between teachers and students potentially enhances students' achievement such as the expectation of conduct, the nature of reward, reinforcement, punishment mechanisms and learning engagement. This cognitive space depends on the expectation teachers set for students in the classroom and the process of creating motivational climate. Teachers can help students set learning goals, connect with the environment and actualise their potential.

Social learning environment is the relationship between teachers and students and among students. The student is surrounded by other students, peers and teachers who all engage in social interactions in the classroom and the school environment. Good teacher-student relationship stimulates students' motivation for higher achievement. Positive social learning environment establishes the context for healthier level of thinking, feeling and behaviour. This supports the assertion of Ikegbusi, Egwu and Iheanacho (2021) that positive relationships and optimal learning opportunities can increase achievement levels and reduce high-risk behaviours among students across different demographic settings. Omodan and Tsotetsi (2018) conducted a descriptive survey involving 300 randomly selected participants in Nigeria and found a significant association between teacher-student relationships and achievement. Hence, the social learning

environment may have a significant influence on the achievement of Senior Secondary School Students offering History. When students maintain positive relationships with the teachers, they are more likely to engage in learning and less likely to exhibit disruptive behaviour (Aibinuomo, 2021).

Statement of the Problem

In the early years of secondary education in Nigeria, students were witnessing tremendous positive achievement in History as displayed in both teacher-made and standardised examinations. Presently, the one-time prestigious subject held in very high esteem, studied in Nigerian schools from primary one up to the senior secondary has lost its prominence. The subject is gradually disappearing from most Nigerian secondary schools. Despite its introduction into the school curriculum as a distinct subject, there has been a noticeable decline in students' achievement in the subject.

The declining achievement of students in History classes have contributed in a downward trend in the number of students selecting History as a subject in senior secondary schools. Many students have shifted focus to subjects such as Government, Geography and Civic Education, reflecting both perceived relevance and societal preferences. Additionally, the preferential recognition of science subjects over the humanities has marginalised History. While persistent classroom challenges such as the voluminous and densely packed History curriculum, student's difficulty in recalling historical dates and the limited availability of relevant instructional materials, have further diminished students' engagement. These factors collectively undermine students' achievement in History.

Analysis of the WAEC 2019 History results in Plateau North Senatorial Zone obtained from the Educational Resource Centre of the Ministry of Education, indicates that out of the 678 students who sat for History, only 277 students (41%) obtained grades between A1 and C6, while 401 students (59%) obtained grades between D7 and F9. Similarly, in 2022, out of the 190 students who sat for the WAEC History examination, only 83 students (43.7%) obtained grades between A1 and C6, while 107 students (56%) obtained grades between D7 and F9. Analysis of the NECO 2019 History results in Plateau State, obtained from the same source, shows that out of the 719 students who sat for History, 461 students (64%) obtained grades between C5 and C6. In 2020, out of the 163 students who sat for the NECO History examination, 81 students (49.7%) obtained grades between C5 and C6. Although these credit passes indicate that some students met the minimum academic requirement, a predominance of C5 and C6 grades may be viewed as relatively weak achievement. This situation calls for a closer investigation into the factors influencing students' achievement in History. It therefore becomes necessary to examine how the learning environment influences the achievement of students offering History.

A lot has been done within educational circles to improve students' achievement in History. The introduction of History as a distinct subject to be taught in the school curriculum by the Federal Government of Nigeria. Curriculum review and development in secondary schools to make History more inclusive, culturally relevant and aligned with national development goals. The reviewed curriculum places greater emphasis on Nigerian and African History to promote national identity and civic responsibility. Teacher training and professional development programmes, organising conferences, workshops, seminars and retraining programmes for teachers of History on how to make History teaching interesting are efforts being made to improve students' achievement in History. Despite these commendable efforts, challenges still persist as students' achievement in History continue to decline.

The consequences of these factors are evident in the low achievement of students in various secondary schools, as reflected in results from both the WASSCE and SSCE. This trend suggests that students' low achievement in History may be attributed to the unconducive physical, psychological and social learning environments in the schools. To the best of the researchers' knowledge, there are currently no targeted interventions aimed at improving students' achievement in History within the study area. This underscores the need for the present study to fill this knowledge gap. It is on this premise that the researcher seeks to investigate the Influence of Learning Environment on Achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria.

Aim and Objectives of the Study

The aim of this study is to investigate the Influence of Learning Environment on Achievement of Senior Secondary School Students in History in Plateau Central Senatorial Zone, Nigeria. The specific objectives of the study were to:

1. Ascertain the influence of physical learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria.
2. Determine the influence of psychological learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria.
3. Examine the influence of social learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria.

Research Questions

The following research questions guided the study:

1. What is the influence of physical learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?

2. What is the influence of psychological learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?
3. What is the influence of social learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

1. There is no significant difference in students' mean achievement scores in History between schools with adequate physical learning environments and schools with inadequate physical learning environments in Plateau Central Senatorial Zone, Nigeria.
2. There is no significant relationship between psychological learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria.
3. There is no significant relationship between social learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria.

Materials and Method

This study adopted both cross-sectional survey and correlational research designs. The justification for using cross-sectional research design is that data were collected from the representative sample of SS2 students offering History at a particular time of the study. The justification for using correlational research design is that it describes the relationship between two or more variables in a study. Cross-sectional survey research design requires that data were collected at a particular time, from a sample, for the purpose of describing the population presented by the sample at that particular time bearing in mind that data can change at a later time (Wang and Cheng, 2020). The population of the study comprised 268 SS2 students offering History in Public Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. The sample consisted of 32 SS2 students drawn from two secondary schools offering History in Mangu Local Government Area of Plateau Central Senatorial Zone, Nigeria, selected using purposive sampling technique as at 2025/2026 academic session. Data were collected using School Physical Environment Questionnaire, Learning Environment Questionnaire and History Achievement Test which were validated by four experts in the field of Education with content validity index of 0.84, 0.89 and 0.91 respectively. Cronbach Alpha reliability coefficient index were: School Physical Environment 0.651, Psychological Learning Environment 0.852, Social Learning Environment 0.785 and History Achievement Test (HAT) 0.728 Kuder-Richardson coefficient. Descriptive statistics of mean, standard deviation, percentages and inferential statistics of t-test and Pearson Product Moment Correlation coefficient were used to test the hypotheses at 0.05 level of significance.

Results and Discussion

Research Question One: *What is the influence of physical learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?*

Table 1 shows influence of physical learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. Based on simple percentage analysis, School A indicates 1(3.1%) with a moderate Physical Learning Environment Level. 5(15.6%) had Low History Achievement level, 11(34.4%) had Moderate History Achievement Level and 1(3.1%) had High History Achievement Level. In School B, 6(18.8%) had Low Physical Learning Environment Level. 9(28.1%) had Moderate History Achievement Level and zero do not show high History Achievement Level. This implies that school A and B with moderate Physical Learning Environment Level influence students' History Achievement level to a moderate extent.

Hypothesis One: *There is no significant difference between History achievement mean score of students' in schools with adequate physical learning environment and schools with inadequate physical learning environment in Plateau Central Senatorial Zone, Nigeria.*

Table 2 reveals the t-test analysis on History achievement mean score of students' in schools with adequate physical learning environment and schools with inadequate physical learning environment in Plateau Central Senatorial Zone, Nigeria. Inadequate (School A) had a mean score of 27.47 and standard deviation of 6.44, while Adequate (School B) had a mean score of 32.24 and standard deviation of 14.99, with a calculated t-value of 1.14 and p-value of 0.263. Since the p-value is greater than 0.05, the null hypothesis was accepted and the alternative hypothesis rejected. Therefore, there is no significant difference between History achievement mean score of students in adequate and inadequate physical learning environment.

Research Question Two: *What is the influence of psychological learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?*

The findings presented in Table 3 shows the influence of psychological learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. The data, analysed using simple percentages, reveals that 1 student (3.1%) who experienced a low psychological learning environment level achieved both low *and* moderate History achievement. Among the 5 students (15.6%) who experienced a moderate psychological learning environment level, 1 student (3.1%) attained low achievement while 4 students (12.5%) attained moderate achievement. The majority, 25 students (78.1%), experienced a high psychological learning environment level, of which 9 students (28.1%) recorded low achievement. 15 students (46.9%) attained moderate achievement and only 1 student (3.1%) achieved a high History achievement. These findings suggest that a positive psychological learning environment influences students' achievement in History to a moderate extent.

Hypothesis Two: *There is no significant relationship between psychological learning environment on students' achievement in History in Plateau Central Senatorial Zone, Nigeria.*

Table 4 reveals the Pearson Correlation relationship between psychological learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria. Psychological learning environment had a mean score of 40.63 and standard deviation of 8.86, while History achievement had a mean score of 30.00 and standard deviation of 11.86, with a calculated r-value of 0.054 and p-value of 0.77. Since the p-value is greater than 0.05, the null hypothesis was accepted and the alternative hypothesis rejected. Therefore, there is no significant relationship between psychological learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria. The coefficient of determination of 0.054 shows that a weak positive relationship exists between psychological learning environment and students' achievement in History.

Research Question Three: *What is the influence of social learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria?*

The findings presented in Table 5 shows the influence of the social learning environment on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. The results, analysed using simple percentages, indicate that 1 student (3.1%) who experienced a low social learning environment recorded a low History achievement level. Among the 13 students (40.6%) who were exposed to a moderate social learning environment, 3 students (9.4%) recorded low achievement while 10 students (31.3%) recorded moderate achievement. In comparison, 18 students (56.3%) who experienced a high social learning environment recorded 7 students (21.9%) with low achievement, 10 students (31.3%) with moderate achievement and only 1 student (3.1%) with high History achievement. These findings suggest that the social learning environment has a positive but limited influence on students' achievement in History. Although students who experienced moderate and high levels of social learning environment tended to achieve at least moderate academic outcomes.

Hypothesis Three: *There is no significant relationship between social learning environment on students' achievement in History in Plateau Central Senatorial Zone, Nigeria.*

Table 6 presents the Pearson Correlation analysis of the relationship between social learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria. Social Learning Environment had a mean score of 36.56 and standard deviation of 8.42, while History achievement had a mean score of 30.00 and standard deviation of 11.86. The analysis yielded a correlation coefficient (r) of -0.032 and p-value of 0.86. Since the p-value is greater than 0.05, the null hypothesis was accepted and the alternative hypothesis rejected. Therefore, there is no significant relationship between social learning environment and students' achievement in History in Plateau Central Senatorial Zone, Nigeria. The coefficient of determination of -0.032 shows that a negative relationship exists between social learning environment and students' achievement in History.

Discussion

The findings of this study revealed that the physical learning environment had a moderate influence on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. Although schools with moderate and adequate physical learning environments showed some level of improved achievement, the t-test result indicated no significant difference in achievement between students in adequately equipped and inadequately equipped schools ($p > 0.05$). This suggests that while physical facilities may support teaching and learning process, they do not independently determine students' achievement in History. This finding is consistent with Giani and Alete-Omoni (2023), who found that students' achievement is influenced not only by physical facilities but also by other aspects of the school environment, including effective teaching practices, teacher capacity and a safe learning atmosphere. However, the finding contradicts Adepoju and Akinola (2020), who reported that well-equipped physical learning environments significantly enhance students' achievement by improving concentration, engagement and access to learning materials. The implication is that within the context of this study, factors such as teacher effectiveness, instructional strategies and students' motivation may have exerted greater influence on achievement than the physical environment.

Furthermore, the findings on the psychological learning environment revealed that it exerted a moderate influence on students' achievement in History. Although a large proportion of students experienced a high psychological learning environment, the majority still recorded only moderate achievement levels. The correlation analysis further revealed no significant relationship between psychological learning environment and students' achievement ($r = 0.054$, $p > 0.05$). This indicates that while psychological factors such as motivation, encouragement, confidence and emotional support are important for effective learning, they may not directly translate into higher achievement. This finding agrees with Gidado *et al.*, (2023), who observed that a negative psychological learning environment laden with rancour, hate and hostility, can negatively affect students' achievement when other structural factors such as resources and teaching quality are not adequately addressed. On the contrary, the finding disagrees with Inuen (2020) study which advocated for a non-threatening but cordial and friendly relationship between teachers and students, which encourages intellectual development, exploration and self-knowledge. The discrepancy suggests that the psychological environment may be context-dependent and influenced by other intervening educational and environmental factors.

In addition, the findings on the social learning environment showed that it exerts a moderate influence on students' achievement in History. Although students in high social learning environments demonstrated better interaction and participation, the majority still achieved only moderate levels and the correlation analysis indicated no significant relationship ($r = -0.032$, $p > 0.05$). This implies that positive teacher-student and student-student relationships alone may not be sufficient to significantly improve achievement. This finding is in line with Ikegbusi, Egwu and Iheanacho (2021), who asserted that positive relationships and optimal learning opportunities could increase achievement level and reduce high-risk behaviour of students in all demographic settings. However, the finding contradicts Omodan and Tsotetsi (2018), who established that effective teacher-student relationships significantly enhance students' achievement. The weak and negative relationship observed in this study suggests that although social interactions may promote engagement and participation, they do not necessarily translate into improved achievement without adequate instructional materials and effective teaching practices.

Conclusion and Recommendations

Based on the findings of this study, it can be concluded that physical, psychological, and social learning environments have a moderate influence on students' achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria. However, none of these environmental factors showed a statistically significant relationship with students' achievement. This implies that while a conducive learning environment supports learning, it is not the sole determinant of academic success. Other factors such as teaching effectiveness, availability and utilization of instructional materials, student motivation, and individual learning differences may play more critical roles in determining students' achievement in History.

In view of the major findings of this study, the following recommendations are proposed.

1. Government should improve and maintain school infrastructure to provide a more conducive physical learning environment.
2. Government should adequately provide instructional materials such as textbooks and visual aids to schools and ensure their proper utilisation in teaching History.
3. Teachers should continue to promote supportive psychological and social environments through encouragement, motivation, and constructive feedback
4. Guidance counsellors should assist students in managing academic challenges and emotional difficulties.

References

- Adjepong, A. (2020). What is history? The science of the past in perspective. *International Journal of Trend in Scientific Research and Development*, 4(3), 13-41.
- Adepoju, T. L. and Akinola, A. O. (2020). Physical facilities and students' academic performance in public secondary schools in Oyo State, Nigeria. *Journal of Education and Practice*, 11(15), 120-127.
- Aibinuomo, M. P. (2021). Effective classroom management: An overview of critical behaviour expected of teachers in public secondary schools in Nigeria. *Rivers State University Journal of Education*, 24(2), 14-25.
- Barrett, P., Zhang, Y., Moffat, J., and Kobbacy, K. (2018). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, 89(2), 118-133.
- Giami, C. B. N., and Alete-Omoni, I. (2023). Influence of school environment on academic performance of students in public senior secondary school in Yenagoa Metropolis of Bayelsa State. *International Journal of Economics, Environmental Development and Society*, 4(4), 436-447.
- Gidado, B. K., Apeh, H. A., and Akinwande, A. O. (2023). Learning environment as correlates of academic achievements of senior secondary school students in North Central, Nigeria. *International Journal of Educational Research*, 6(4), 34-44.
- Ikegbusi, N. G., Egwu, J. U., and Iheanacho, R. C. (2021). Students' perception of utilization of ICT in teaching and learning in post-covid-19 era in Nigeria. *ANSU Journal of Arts and Social Sciences*, 8(2), 127-138.
- Inuen, U. E. (2020). The learning environment and learning outcomes of students in Nigerian secondary schools: Implications for sustainable personal development. *The Educational Psychologist*, 11(1), 326-334.
- Omodan, B. I. and Tsotetsi, C. T. (2018). Teacher-student relationships as a panacea for students' academic performance in Nigerian secondary schools: An attachment perspective. *Journal of Social Studies Education Research*, 9(4), 82-101. <https://doi.org/10.17499/jsr.19219>.
- Richard, K. A. B. (2021). *Impact of school learning environment on students' academic performance in senior high school in the Greater Accra Region, Ghana*. 1-16. Doctoral Dissertation in Education, Doctoral School of Education, Faculty of Education and Psychology, Eotvos Lorand University, Ghana. Retrieved from <https://ppk.elte.hu/document>. on 20.12.2023.
- Wang, X., and Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses and recommendation. *Chest*, 158(1), 565-571.

Tables

Table 1: Influence of Physical Learning Environment on Students' Achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria

Schools	HAT_Graded_Groups			
	Low	Moderate	High	Total
School A	5(15.6)	11(34.4)	1(3.1)	17 (53.1)
School B	6(18.8)	9(28.1)	0	15(46.9)
Total	11(34.4)	20(62.5)	1(3.1)	32(100)

Table 2: t-test Analysis of Students' Mean Achievement Scores in History in Schools with Adequate and Inadequate Physical Learning Environments in Plateau Central Senatorial Zone, Nigeria

	N	$\bar{X}$	SD	Df	t-cal	p-value
Inadequate (School A)	17	27.47	6.44	30	1.141	.263
Adequate (School B)	15	32.24	14.99			

Table 3: Extent to which Psychological Learning Environment Influence on Students Achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria

Psychology Learning Environment Levels	History Achievement Test Levels			Total
	Low	Moderate	High	
Low	1(3.1)	1(3.1)	0	2(6.3)
Moderate	1(3.1)	4(12.5)	0	5(15.6)
High	9(28.1)	15(46.9)	1(3.1)	25(78.1)
Total	11(34.4)	20(62.5)	1(3.1)	32(100)

Note: 0-25 = Low History Achievement Level, 26-50 = Moderate History Achievement Level, and 51 and Above = High History Achievement Level

Table 4: Pearson Correlation Relationship between Psychological Learning Environment and Students' Achievement in History in Plateau Central Senatorial Zone, Nigeria

Items	N	$\bar{X}$	SD	r-cal	p-value
Psychology Learning Environment	32	40.63	8.86	.054	.77
History Achievement	32	30.00	11.86		

Table 5: Extent to which Social Learning Environment Influence on Students' Achievement in History in Senior Secondary Schools in Plateau Central Senatorial Zone, Nigeria

Social Learning Environment Levels	History Achievement Test Levels			Total
	Low	Moderate	High	
Low	1(3.1)	0	0	1(3.1)
Moderate	3(9.4)	10(31.3)	0	13(40.6)
High	7(21.9)	10(31.3)	1(3.1)	18(56.3)
Total	11(34.4)	20(62.5)	1(3.1)	32(100)

Note: 0-25 = Low History Achievement Level, 26-50 = Moderate History Achievement Level, and 51 and Above = High History Achievement Level

Table 6: Pearson Correlation Relationship between Social Learning Environment and Students' Achievement in History in Plateau Central Senatorial Zone, Nigeria

Items	N	$\bar{X}$	SD	r-cal	p-value
Social Learning Environment	32	36.56	8.42	-0.032	.86
History Achievement	32	30.00	11.86		