

Impact of Classroom Climate and Teacher Personality on Academic Achievement of Secondary School Students in Kaura LGA of Kaduna State

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ABSTRACT

This research tries to investigate the impact of classroom climate and teacher personality on the academic achievement of secondary school students in Kaura LGA of Kaduna State. The study adopted a correlational research design to examine associations between the variables that come under consideration. The sample used in this study consisted of 300 secondary school students. Sampling the participants were purposively drawn from different secondary schools within Kaura LGA. Data Collection Data was collected through an adapted, structured questionnaire comprising 20 items on perceptions of classroom climate, teacher personality, and academic achievement. The instrument was validated by four experts and yielded a reliability coefficient of 0.85. Results: Pearson's r analysis has shown a moderate to strong positive correlation between classroom climate and students' academic achievement, with $r = 0.52$, $p = 0.0001$, and a moderate positive correlation between teacher personality and academic achievement, with $r = 0.48$, $p = 0.0003$. These therefore mean that positive classroom climate and supportive teacher personality significantly predict improvement in academic performance. Based on the findings from this research, the following recommendations were put forth: Classroom Climate Improved: Schools need to incorporate professional development programs that would help teachers construct a much more positive and interactive atmosphere in their classrooms. This includes classroom management and strategies for ensuring students are engaged. Supportive and Motivational Personality Traits by Teachers: Educational institutions must focus on selecting and building supportive and motivating personality traits among their teaching fraternity. This is to be actualized through revised recruitment criteria and continuous professional development, with the focus on emotional intelligence and effective communication amongst recruits.

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INTRODUCTION

Classroom climate and teacher personality remain paramount in determining the academic experience and performance of students. In the secondary schools of Kaura LGA of Kaduna State, it interactively determines the motivation and engagement of students toward academic work, their overall performance, and

persistence. Classroom climate refers to the emotional or psychological environment of the classroom; hence, it includes the student-teacher relationship, management in the classroom, and general atmosphere that is suitable for learning. In general terms, a positive and supportive classroom climate provides safety and

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encouragement; it enhances students' participation and achievement.

Teacher personality involves enthusiasm, empathy, and patience, which further affects students in their academic achievements. Warm and affable teachers offer an environment where students are valued and supported. How such elements interact in influencing academic achievement in Kaura LGA provides valuable lessons that can help in the improvement of both practice and outcomes in education. Such an analysis will, therefore, enable educators and education policy analysts to respond more appropriately to the needs of students in this region, thereby helping to improve academic success and the overall quality of education.

Background Educational research has increasingly recognized both classroom climate and teacher personality as central variables in students' academic achievement. Classroom climate is simply the quality in the setting of a classroom, which encompasses the emotional, social, and instructional interactions between and among students and teachers. According to Zandvliet and Straker (2021), positive classroom climates - supportive and inclusive in nature - have remained related to high levels of student engagement and achievement. According to Baker, Grant and Morlock (2022), it had been observed that students in the recent past, who viewed their classroom environments as welcoming and respectful, were considered to participate actively in learning activities and also achieved the highest academic performance.

Besides, teacher personality is the other crucial aspect that may feature traits such as empathy, enthusiasm, and approachability. Hattie (2019) adds that when a teacher has supportive and motivational personalities, this will make learning more effective and interesting for students, which in the end guarantees better academic outcomes. Skaalvik and Skaalvik assert that research has underlined the fact that students do well in an atmosphere where teachers show warmth and foster growth mindsets, leading to a learning environment that is more interesting and productive.

It becomes fundamentally important to understand how these variables interrelate within the context of Kaura LGA of Kaduna State, Nigeria. These no doubt have exposed the educational outcomes in this region to a myriad of resource constraints and socio-economic challenges. Exploring, in this respect, the impact of classroom climate and teacher personality might provide a good insight into improvement in academic performance. Duru and Eze (2021) show that recent data indeed suggests that educational interventions targeted at classrooms and teachers could be potential avenues for solving these particular challenges.

Ogunyemi (2023), establishes that contemporary research calls for educational strategies with regard for a place. Therefore, one of the possible ways to solve the problem of existing regional disparities is a need for context-specific research studies. Ali and Ojo, 2022, have re-iterated that Northern Nigeria, of which Kaura LGA is a part, has an increasing concern for how local factors such as cultural attitude toward education and resource availability influence the learning outcomes of students. This regional outlook allows the pinpointing of those particular regions where interventions could be maximally effective in enhancing students' achievement.

Problem Statement

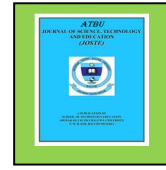
An ideal teaching and learning environment is one wherein the classroom climate and the teacher's personality combine to provide a setting that is productive for academic performance. A classroom climate characterized by mutual respect, inclusiveness, and good communication is one where students can find appreciation and be encouraged toward active participation in their learning. On the other hand, a well-nourished and dynamic personality of a teacher is likely to enhance students' motivation for learning and develop contact with them, which may make learning fast, easy, and enjoyable. It is in this environment that students are most likely to report high levels of academic performance, as the supportive climate intertwined with an encouraging personality of the teacher jointly elevate the student learning experience and academic engagement.

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On the contrary, classroom climate and teachers' personality in Kaura LGA of Kaduna State raise enormous concerns for their implications on the students' academic achievement. It has been suggested that the majority of the secondary schools in this area are plagued by a lack of positive classroom dynamics and fluctuating teacher involvement that adds to less encouraging and supportive educational atmosphere. In such cases, teachers may sometimes be confronted with limited resources or inadequate training, which impairs the possibility of maintaining an encouraging and effective teaching style. Therefore, because of these facts, students in those schools may reach lower levels of academic achievement and motivation, evoking the need for a comprehensive study to determine the effects of these factors on educational outcomes within that setting. This inconsistency has, therefore, given reason for interest in finding out through direct influences of classroom climate and teacher personality effects the performance of students in Kaura LGA.

Objectives of the Study

The study seeks to achieve the following objectives;

1. To assess the relationship between the classroom climate and academic achievement of secondary school students in Kaura LGA of Kaduna State.
2. To determine how the personality of teachers influences the academic achievement of secondary school students in Kaura LGA of Kaduna State.

Research Questions

The following are the research questions for the study:

1. Is there a statistically significant relationship between classroom climate and the academic achievement of secondary school students in Kaura LGA of Kaduna State?
2. Is there any significant relationship between teacher personality and the academic achievement of secondary school students in Kaura LGA of Kaduna State?

Hypotheses

The following hypotheses were tested at 0.001 significant level:

1. There is no significant relationship between classroom climate and the academic achievement of secondary school students in Kaura LGA of Kaduna State.
2. Teacher personality has no significant relationship with the academic achievement of the students in the secondary schools of Kaura LGA, Kaduna State.

METHODOLOGY

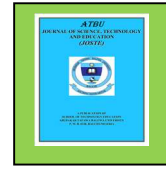
This research will follow a correlational research design to determine the associations between classroom climate, teacher personality, and academic achievement among secondary school students in Kaura LGA of Kaduna State. According to Creswell, correlational research suits best to identify the strength and direction of association of variables without causing any manipulation, while the target population is SS 2 students from public secondary schools only within Kaura LGA of Kaduna State. The targeted demographic excludes the students of SS 1 and SS 3 in the targeted research area so that ample view can be provided with regard to how classroom climate and teacher personality influences academic performance. In this regard, 300 students were selected as a sample size with the help of purposive sampling. As presented by Etikan, Musa, and Alkassim (2016), the purposive technique was employed to place the concentration on those participants who have a greater degree of relevance with the purpose of the study, thus ensuring that the sampled population best represents the target population. The primary means of data collection was the use of a structured questionnaire-the "Classroom Climate and Teacher Personality Impact on Academic Achievement Questionnaire-CCTP-AAQ". The questionnaire consists of 20 items to measure perceptions of classroom climate, teacher personality, and academic achievement. Classroom Climate 7 items: It measures perceived support in the learning environment or classroom atmosphere for the students. Personality of Teacher: 7 items measure students' perception of

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teachers' attributes, including whether they are encouraging, engaging, and approachable. Academic Achievement: 6 items assess students for their self-described academic achievement and motivational levels. Items had responses on a Likert scale: from 1 (Strongly Disagree) to 5 (Strongly Agree). Content validity was ensured through expert reviews in the field of educational psychology concerning the appropriateness of items as representatives of the constructs being measured. Reliability of the instrument The Cronbach's alpha coefficient was computed from a pilot test conducted with another set of students to measure the reliability of the instrument. A cut off of 0.70 for Cronbach's alpha will determine acceptable reliability. This agrees with Tavakol and Dennick 2011, who report that a Cronbach's alpha value of 0.70 and above is acceptable. Data for the study were collected after permissions were sought by the researcher from school authorities and ethics committees. Then distributed consent forms among the students and the guardians of the students, with assurance of voluntary participation and confidentiality. Then, "CCTP - AAQ" questionnaires were divided among the 300 purposively selected students with prior instructions on how to fill them out. The researcher then collected the completed questionnaires in time to maximize response rates and reduce data loss. Means and standard deviations were used as descriptive statistics to answer the research questions while Pearson correlation coefficients was used to test the hypotheses.

THEORETICAL CLARIFICATIONS

The following theories help to widen our horizon in understanding the impact of classroom climate and teacher personality on academic achievement of secondary school students:

Theory of School Climate

Wang and Degol also discussed the Theory of School Climate that dwelt on the role played by the general learning environment in influencing the student outcome. This theory postulates that in schools where the climate was warm, safe, and welcoming, the students have

higher academic achievements and are psychologically sound. This is relevant to the study in that it aims at explaining differences in the class climate and relate them to academic achievement of students. This theory, as stated by Cohen et al. (2009) states that a supportive and engaging classroom environment positively enhances and boosts the motivational level and achievement of students

Social Learning Theory

Social Learning Theory, for which Albert Bandura (1977), explained that people learn behaviors, values, and attitudes through observation, imitation, and modeling. In this connection, the present theory brings to the surface the influence of the teacher's behavior and personality in acting as models for the students to achieve or improve their behavior and academic performance. This theory applies since it explains the various ways in which the teachers' personality traits, in this case, encouragement and engaging the learners would influence or affect the learning behavior and academic performance of their students. Indeed, Schunk and Pajares (2009) reported that a teacher modeling certain attitudes and behaviors may promote similar characteristics in students, and this may boost their academic achievement.

Self-Determination Theory (SDT)

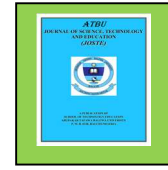
According to the self-determination theory-SDT-devised by Deci and Ryan (2000), intrinsic and extrinsic motivation represent the building blocks that underlie human behavior. According to this theory, the fulfillment of one's basic psychological needs for autonomy, competence, and relatedness guarantees that individuals will be the most motivated and perform best. This theory also relates to the study in that it discusses how the classroom climate and personality traits of teachers influence changes in students' intrinsic motivation and academic achievement. The motivational pre-conditions would therefore be satisfied by the classroom climate and supportive teacher personality. Their motivation and best academic performance would thus improve accordingly. (Ryan & Deci, 2000).

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RESULTS

Hypothesis 1: There is no significant relationship between the classroom climate and the academic

achievement of secondary school students in Kaura LGA of Kaduna State.

Table 1: Pearson Correlation Analysis of Relationship between Classroom Climate and Academic Achievement

Variables	N	Mean (Classroom Climate)	SD (Classroom Climate)	Mean (Academic Achievement)	SD (Academic Achievement)	r	df	p- value
Classroom Climate & Academic Achievement	300	3.80	0.85	3.50	0.90	0.52	298	0.0001

The r-value of 0.52 indicates a moderate positive correlation between classroom climate and academic achievement. This suggests that as the classroom climate improves, academic achievement tends to increase as well. The p-value of 0.0001 is less than the typical significance level of 0.05, which implies that the relationship is statistically significant. Based on this result, we reject the null hypothesis and conclude that there is a significant relationship between classroom

climate and academic achievement among secondary school students in Kaura LGA, Kaduna State. This shows that a better classroom climate positively impacts students' academic performance.

Hypothesis 2: There is no significant relationship between teacher personality and the academic achievement of secondary school students in Kaura LGA of Kaduna State.

Table 2: Pearson Correlation Analysis of Relationship between Teacher Personality and Academic Achievement.

Variables	N	Mean (Teacher Personality)	SD (Teacher Personality)	Mean (Academic Achievement)	SD (Academic Achievement)	r	df	p- value
Teacher Personality & Academic Achievement	300	3.90	0.80	3.50	0.90	0.48	298	0.0003

The r-value of 0.48 suggests a moderate positive correlation between teacher personality and academic achievement. This indicates that students tend to achieve higher academically when their teachers exhibit more favorable personality traits. The p-value of 0.0003 is less than 0.05, indicating that the relationship between teacher personality and academic achievement is statistically significant. Therefore, the null hypothesis is rejected, and we conclude that there is a significant relationship between teacher personality and academic achievement among secondary school students in Kaura LGA,

Kaduna State. This implies that a positive teacher personality contributes to improved academic performance among students.

SUMMARY OF RESULTS

Relationship between Classroom Climate and Academic Achievement:

The analysis revealed a moderate positive correlation ($r = 0.52$) between classroom climate and academic achievement, indicating that a more positive classroom climate is associated with higher academic achievement. The p-value of 0.0001 is statistically significant,

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meaning there is strong evidence that classroom climate positively influences academic performance. As a result, the null hypothesis was rejected, confirming that there is a significant relationship between classroom climate and academic achievement among secondary school students in Kaura LGA, Kaduna State.

Relationship between Teacher Personality and Academic Achievement:

The results showed a moderate positive correlation ($r = 0.48$) between teacher personality and academic achievement, suggesting that students perform better academically when their teachers exhibit more positive personality traits. The p-value of 0.0003 is also statistically significant, indicating a meaningful relationship between teacher personality and student academic achievement. The null hypothesis was rejected, and it was concluded that there is a significant relationship between teacher personality and academic achievement among secondary school students in Kaura LGA, Kaduna State.

Empirical research

Cohen et al. (2022) examine how school climate forms the future academic and emotional path for students. It reflects that various dimensions of school climate, safety, relationships, and engagement build up the academic performance of the student. In that respect, this study postulates that a positive school climate is strongly associated with increased achievement and well-being of students.

Wang and Holcombe (2023) explore the personality traits of teachers and how these are related to the students' academic performances and behavior in a classroom. This addresses the fact that supportive and engaging personality traits from teachers can help students feel motivated and achieve good results. Evidence from this study now illustrates that teacher personality is an important predictor of students' success and classroom engagement in academics:

CONCLUSION

The study explores the influence of classroom climate and teacher personality on

academic achievement among secondary school students in Kaura LGA, Kaduna State. The findings showed that these variables are significantly related and, as such, are of great importance in educational institutions. From the analysis, one could establish that there is a moderate to strong positive correlation between classroom climate and academic achievement, with an r-value of 0.52 and a p-value of 0.0001. That means the more positive and supportive a class is, the better academic performance is shown by the students. In relation to this, the positive relationship deduced between teacher personality and academic achievement had a very moderate correlation, with an r-value of 0.48 and a p-value of 0.0003, to show that positive teacher traits, in supportiveness and engagement, also explain better academic outcomes. The findings indicate that classroom climate and teachers' personality are very important in the amelioration of academic performance among students. A warm and engaging classroom atmosphere, coupled with positive and encouraging teacher behavior, enhances the probability of students making surges and increasing their achievement. The results suggest that educational policies and practices should be laid down for improving classroom climate and supporting teacher development to create a climate that supports students in improving their performance.

RECOMMENDATIONS

The recommendations based on this finding are that classroom climate, teacher personality, and academic achievement all are related positively to one another. Therefore, class climate can be improved by schools through effective professional development and support programs in the following ways: -

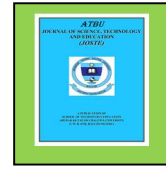
1. Schools should inculcate an extensive professional development program aimed at improving class climate. This may include training for teachers that can help them create an environment for students to learn with support and engagement, manage positive relationships between students and teachers, and adopt inclusive practices in classes.

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2. Schools will attempt to select and support those teachers who reveal the personality traits that are necessary for developing a friendly, warm, encouraging learning environment. An example could be the development of selection criteria on the qualities required to select teachers, which should include empathy, enthusiasm, and good communication skills, among others.

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