



INFLUENCE OF CLASSROOM ENVIRONMENT ON STUDENTS' MOTIVATION TO LEARN SOCIAL STUDIES IN MAKURDI LOCAL GOVERNMENT

Gloria Hundekela Adi

Department of Arts and Social Sciences Education,
Faculty of Education,
Rev. Fr. Moses Orshio Adasu University
(formerly Benue State University), Makurdi

Abstract

This study examined the influence of the classroom environment on students' motivation to learn Social Studies in Makurdi Local Government Area of Benue State, Nigeria. The study specifically investigated the effects of the physical classroom environment, teacher–student interaction, and peer relationships on students' motivation. A correlational survey design was adopted for the study. The population consisted of 3,482 Upper Basic II students in public junior secondary schools, from which a sample of 360 students was selected through multi-stage sampling. Data were collected using a structured instrument titled the Classroom Environment and Motivation Questionnaire (CEMQ). The instrument's reliability was confirmed through a trial test, yielding a Cronbach's Alpha coefficient of 0.83. Data were analysed using mean, standard deviation, Pearson's Product–Moment Correlation, and multiple regression analysis at the 0.05 level of significance. Findings revealed that the physical classroom environment ($r = 0.487$, $p < 0.05$), teacher–student interaction ($r = 0.562$, $p < 0.05$), and peer relationships ($r = 0.294$, $p < 0.05$) each had significant positive influences on students' motivation to learn Social Studies. The three variables jointly accounted for 38.1% of the variance in students' motivation ($R = 0.617$, $R^2 = 0.381$, $F = 76.12$, $p < 0.05$). The study concluded that students' motivation in Social Studies is not merely a product of individual effort but is largely shaped by the physical and social conditions of the classroom. A positive learning environment that satisfies students' psychological needs for autonomy, competence, and relatedness. It is recommended that teachers cultivate empathetic relationships with learners, school administrators improve classroom facilities, and policymakers develop standards that promote learner-friendly environments in Nigerian schools.

Keywords: Classroom Environment, Teacher-Student Interaction, Peer Relationship, Students' Motivation, Social Studies Education

Introduction

Education is widely recognised as a vital instrument for national development, shaping the human capacity needed for progress in every sphere of life (Arowolo & Lawal, 2023; Huda & Osman, 2020). Motivation, as scholars note, lies at the heart of effective learning because it determines the level of effort, persistence, and enthusiasm students bring to academic tasks (Ryan & Deci, 2020). In Social Studies education, motivation plays a particularly crucial role since the subject promotes civic awareness, social responsibility, and critical thinking among learners (Suleiman & Ibrahim, 2023). Yet, students' motivation to learn Social Studies in many Nigerian schools has continued to decline, largely due to deficiencies in the classroom environment (Ngussa & Role, 2022).

The classroom environment is a key determinant of students' motivation and learning outcomes. It extends beyond the physical structure to include the quality of social and emotional interactions that occur within it. A conducive and stimulating classroom, characterised by proper lighting, ventilation, and comfortable seating, promotes engagement and enthusiasm among learners. Conversely, a poorly structured classroom often leads to boredom, distraction, and disengagement (Ramdass & Masithulela, 2022). Scholars such as Huda and Osman (2020) argue that effective learning takes place only when physical space, social interaction, and emotional support are integrated harmoniously.

Across Africa, however, learning environments are frequently characterised by overcrowded classrooms, inadequate resources, and limited teacher–student interaction, all of which impede students' intrinsic motivation (Chowdhury & Obondo, 2021). Many schools also fail to promote positive peer relationships that are essential for cooperative learning and emotional wellbeing (Ngussa & Role, 2022). As a result, students often view schooling as a routine process rather than a meaningful experience that fosters curiosity and self-development. These challenges highlight the urgent need to improve classroom environments across the continent to ensure that learning becomes both engaging and transformative.

In Nigeria, these issues are particularly

evident. Despite government efforts to reform the curriculum and improve teacher education, many public schools still operate in substandard physical conditions — poorly ventilated rooms, broken furniture, and overcrowded spaces (Nwafor & Ugwu, 2021). Social Studies, a subject that relies on interaction and participatory methods, suffers greatly under these conditions. Weak teacher–student relationships, scarce learning materials, and negative peer dynamics further erode learners' interest and motivation. Over time, these factors have contributed to declining student engagement and poor performance in Social Studies.

In Makurdi Local Government Area of Benue State, the situation mirrors these national challenges. Overcrowded classrooms, limited instructional resources, and inconsistent teaching practices often combine to create environments that do not inspire learning. Students frequently describe their classrooms as uncomfortable and uninspiring, leading to low attention spans and waning motivation (Terwase & Anzene, 2023). In some cases, strained teacher–student relationships and unhealthy peer competition discourage collaboration, thereby undermining the core objectives of Social Studies — civic responsibility, critical inquiry, and social awareness.

Motivation itself is shaped by both internal drives and the external environment. Self-Determination Theory (Ryan & Deci, 2020) offers a useful lens for understanding how environmental factors influence learners' intrinsic motivation. According to the theory, students are most motivated when their psychological needs for autonomy, competence, and relatedness are fulfilled. In the classroom context, supportive teacher–student interactions nurture relatedness, well-structured physical spaces promote competence, and positive peer relationships enhance autonomy and belonging. The extent to which these needs are satisfied determines whether students experience learning as empowering or discouraging.

Empirical studies in Nigeria and other parts of Africa (Arowolo & Lawal, 2023; Suleiman & Ibrahim, 2023; Ngussa & Role, 2022) have shown that both physical and social components of the classroom environment play significant roles in shaping students' motivation. However, research

focusing specifically on how these elements jointly predict motivation in Social Studies — particularly within Makurdi Local Government Area — remains limited. Given the interactive and participatory nature of Social Studies, an empirical understanding of how classroom conditions and relationships affect students' motivation is both timely and necessary. This study, therefore, examined the influence of the classroom environment on students' motivation to learn Social Studies in Makurdi Local Government Area of Benue State. It focused on three key aspects of the classroom environment: physical classroom conditions, teacher–student interaction, and peer relationships, and ascertained how each contributes to students' motivation to learn the subject. Specifically, the study sought to:

1. Determine the influence of the physical classroom environment on students' motivation to learn Social Studies;
2. examine the influence of teacher–student interaction on students' motivation to learn Social Studies; and
3. Ascertain the influence of peer relationships on students' motivation to learn Social Studies.

Research Questions

1. What is the influence of the physical classroom environment on students' motivation to learn Social Studies?
2. What is the influence of teacher–student interaction on students' motivation to learn Social Studies?
3. What is the influence of peer relationships on students' motivation to learn Social Studies?

Research Hypotheses

Based on the research questions, the following null hypotheses were tested at the 0.05 level of significance:

1. H₀ : The physical classroom environment does not significantly influence students' motivation to learn Social Studies.
2. H₀ : Teacher–student interaction does not significantly influence students' motivation to learn Social Studies.
3. H₀ : Peer relationships do not significantly influence students' motivation to learn Social Studies.

Literature Review

Students' motivation to learn has long been recognised as a crucial determinant of educational success. Motivation refers to the internal drive or external influence that prompts learners to initiate and sustain learning activities (Ryan & Deci, 2020). According to Deci and Ryan's Self-Determination Theory (SDT), learners' motivation thrives when their basic psychological needs for autonomy, competence, and relatedness are satisfied within supportive environments. Thus, the classroom environment—comprising the physical setting, teacher–student relationships, and peer interactions—plays a fundamental role in shaping learners' willingness to engage in learning. In the context of Social Studies, which aims to foster civic responsibility and critical thinking, a motivating classroom environment enables students to connect knowledge with real-life experiences. Studies have shown that when students perceive their learning spaces as comfortable, relationally supportive, and socially inclusive, they tend to develop stronger intrinsic motivation and better academic outcomes (Mensah & Kwarteng, 2022; Suleiman & Ibrahim, 2023).

Physical Classroom Environment and Students' Motivation

The physical condition of the classroom is one of the most visible and measurable aspects of the learning environment. Factors such as lighting, ventilation, seating arrangement, classroom size, and the availability of instructional materials significantly affect how students perceive and engage with learning tasks. A well-organised and aesthetically appealing classroom can stimulate learners' curiosity and interest, while a poorly maintained one can hinder concentration and enthusiasm (Ramdass & Masithulela, 2022). Empirical evidence consistently supports this link. In Nigeria, Arowolo and Lawal (2023) found that secondary school students studying Social Studies in well-ventilated classrooms with adequate furniture displayed significantly higher motivation than those in congested and poorly lit classrooms. Similarly, Adedokun and Sule (2021) reported that classroom design and spatial arrangement accounted for notable differences in students' engagement levels across public secondary schools in southern Nigeria. At the

continental level, Komba and Mkulu (2021) observed that Tanzanian students taught in classrooms with sufficient lighting, space, and visual learning aids showed increased interest and task persistence compared to those in overcrowded settings. In Ghana, Aboagye and Yidana (2020) noted that classrooms that were orderly, bright, and equipped with visual materials fostered more enthusiasm and participation among learners. Internationally, Barrett, Davies, Zhang, and Barrett (2019) demonstrated that classroom design factors explained about 16% of the variation in pupils' academic progress across different contexts. Collectively, these studies affirm that the physical learning environment provides the foundation for motivation and engagement in Social Studies classrooms.

Teacher–Student Interaction and Students' Motivation

Beyond physical structures, interpersonal relationships between teachers and students form the emotional core of the classroom experience. Supportive, respectful, and communicative teacher–student relationships create a psychologically safe environment where learners feel valued and motivated to participate. According to Roorda, Koomen, Spilt, and Oort (2019), positive teacher–student interactions predict higher motivation, stronger self-efficacy, and sustained academic engagement. Evidence from Nigeria reinforces this connection. Adeyemi and Adebola (2021) found that students who described their teachers as approachable and encouraging demonstrated greater motivation and persistence in learning. Likewise, Suleiman and Ibrahim (2023) discovered that frequent teacher feedback and genuine concern for students' progress significantly improved intrinsic motivation in Social Studies classrooms across Benue State. In Ghana, Mensah and Kwarteng (2022) concluded that students who felt respected and supported by their teachers displayed higher enthusiasm and stronger classroom participation. Beyond Africa, Botes, Dewaele and Greiff (2022) emphasised that teacher clarity, empathy, and responsiveness directly enhance students' engagement and sense of competence. Similarly, Awang, Ismail, and Aziz (2020) used structural equation modelling to demonstrate that effective

teacher communication strengthens learners' motivation by fulfilling their psychological need for relatedness. These findings affirm that teacher–student interaction remains one of the strongest determinants of motivation in Social Studies learning.

Peer Relationships and Students' Motivation

Peer relationships also play a critical role in students' academic motivation. According to Social Learning Theory, learners often model behaviours and attitudes observed among their peers. Supportive peer interactions foster collaboration, mutual respect, and positive competition, all of which encourage participation and persistence. Conversely, negative peer influence—such as ridicule, exclusion, or rivalry—can undermine self-esteem and dampen motivation (Wentzel, Russell & Baker 2020). Empirical findings indicate the significance of peer influence. In Nigeria, Chukwu and Okeke (2021) found that positive peer interactions enhanced students' interest in Social Studies through group discussions and shared learning experiences. Similarly, Eze and Okonkwo (2021) established that students who belonged to cooperative peer groups showed higher motivation and engagement. In East Africa, Ngussa and Role (2022) observed that peer encouragement in group learning improved both academic participation and intrinsic motivation among secondary school learners. Internationally, Xie and Zhang (2021) reported that peer support predicted students' academic persistence and willingness to engage in classroom tasks. These findings suggest that peer relationships significantly contribute to classroom motivation by fostering a sense of belonging and shared responsibility for learning outcomes. When learners feel accepted by their peers, they are more likely to participate actively and to view learning as a social and enjoyable experience.

The reviewed literature demonstrates that students' motivation to learn Social Studies is influenced by three interrelated dimensions of the classroom environment—physical conditions, teacher–student interaction, and peer relationships. Studies across various contexts confirm that each dimension plays a distinct yet complementary role in promoting motivation. However, most of these studies were conducted in

urban or better-resourced areas, with limited empirical evidence from Makurdi Local Government Area, where infrastructural challenges and large class sizes may uniquely affect classroom experiences. Therefore, this study seeks to fill this gap by examining how these three dimensions of the classroom environment influence students' motivation to learn Social Studies in Makurdi.

Research Method

The study adopted a correlational survey design to examine the relationship between the classroom environment and students' motivation to learn Social Studies. This design was considered appropriate because it enables the researcher to determine the extent and direction of the relationship between two or more variables without manipulation (Emaikwu, 2015). In this study, the independent variables were the *physical classroom environment*, *teacher–student interaction*, and *peer relationships*, while the dependent variable was *students' motivation to learn Social Studies*. The population comprised all Upper Basic II students in public junior secondary schools in Makurdi Local Government Area of Benue State during the 2023/2024 academic session. Records from the Benue State Ministry of Education indicated a total of 3,482 students (1,460 males and 2,022 females) distributed across fifty-two schools. This class level was selected because the students were not preparing for external examinations and had sufficient classroom experience to provide informed responses regarding the study variables. The sample size was determined using Krejcie and Morgan's (1970) sample size determination table, which recommends a minimum of 346 participants for a population of 3,500. Accordingly, a sample of 360 students was used to enhance representativeness. A multi-stage sampling technique was employed. In the first stage, schools were stratified into urban and rural categories to ensure equitable representation of different settings. In the second stage, twelve schools were randomly selected through a simple balloting method—six from urban areas and six from rural areas. In the third stage, proportionate stratified random sampling was used to select students based on gender distribution within each school. This process ensured that both male and

female students were fairly represented in the sample.

Data were collected using a structured questionnaire titled the Classroom Environment and Motivation Questionnaire (CEMQ). The instrument consisted of two sections. Section A gathered demographic information about respondents, while Section B measured the three predictor variables—physical classroom environment, teacher–student interaction, and peer relationships—and the dependent variable, students' motivation to learn Social Studies. Each variable was measured using items adapted from previously validated scales (Roorda et al., 2019; Adeyemi & Adebola, 2021; Ngussa & Role, 2022; Arowolo & Lawal, 2023). Items were rated on a four-point Likert scale: *Strongly Agree* (4), *Agree* (3), *Disagree* (2), and *Strongly Disagree* (1). Higher scores indicated more favourable perceptions of the classroom environment and greater motivation.

The instrument was subjected to face and content validation by three experts—two from Social Studies Education and one from Measurement and Evaluation—all at Rev. Fr. Moses Orshio Adasu University, Makurdi. The experts evaluated the questionnaire for clarity, relevance, and adequacy in addressing the study objectives. Their corrections led to modifications in wording, sequencing, and scaling to enhance clarity and alignment with the study variables. To establish reliability, a trial test was conducted using forty Upper Basic II students from a school within Makurdi that was not part of the main study sample. The responses were analysed using Cronbach's Alpha to determine internal consistency. The results showed reliability coefficients as follows: physical classroom environment (0.82), teacher–student interaction (0.85), peer relationships (0.79), and students' motivation (0.87). The overall reliability coefficient of 0.83 exceeded the minimum acceptable threshold of 0.70 recommended by Nworgu (2015), confirming that the instrument was reliable.

The researcher personally administered the questionnaire with the assistance of two trained Social Studies teachers who served as research assistants. Before administration, formal permission was obtained from the school principals, and respondents were assured of

confidentiality and voluntary participation. The questionnaires were distributed during regular school hours and retrieved immediately after completion to ensure a high return rate. Data collection was completed within two weeks. Descriptive statistics, including means and standard deviations, were used to answer the research questions, while Pearson's Product–Moment Correlation (r) was applied to determine the strength and direction of the relationships between variables. The null hypotheses were tested at the 0.05 level of significance using multiple regression analysis, which assessed the combined predictive power of the physical classroom environment,

teacher–student interaction, and peer relationships on students' motivation to learn Social Studies.

Results

The results of the study are presented and discussed in line with the three research questions and hypotheses earlier formulated. Statistical analyses were carried out to determine the extent to which the physical classroom environment, teacher–student interaction, and peer relationships influenced students' motivation to learn Social Studies in Makurdi Local Government Area.

Research Question 1: *What is the influence of the physical classroom environment on students' motivation to learn Social Studies?*

Table 1: Influence of Physical Classroom Environment on Students' Motivation to Learn Social Studies

Variable	r	p-value	Remark
Physical Classroom Environment	0.487	< 0.05	Positive influence
Students' Motivation			

The analysis showed a correlation coefficient of $r = 0.487$ ($p < 0.05$), indicating a statistically significant influence of the physical classroom environment on students' motivation to learn Social Studies. This means that students who studied in classrooms with good lighting, proper ventilation, comfortable seating, and adequate learning materials were more motivated to learn Social Studies than those in poorly maintained environments. This finding aligns with Arowolo and Lawal (2023), who found that well-structured classrooms enhanced Social Studies students' motivation in Nigerian secondary schools. It also

supports Ramdass and Masithulela (2022), who reported that classroom design and spatial organisation significantly influence learners' enthusiasm in developing contexts. Similarly, Barrett et al. (2019) established that classroom design features accounted for 16% of pupils' learning progress, confirming that physical conditions play a vital role in sustaining learner motivation. Collectively, these studies affirm that conducive physical environments are not peripheral but central to student motivation in Social Studies.

Research Question 2: *What is the influence of teacher–student interaction on students' motivation to learn Social Studies?*

Table 2: Influence of Teacher–Student Interaction on Students' Motivation to Learn Social Studies.

Variable	r	p-value	Remark
Teacher–Student Interaction	0.562	< 0.05	Strong positive influence
Students' Motivation			

The results revealed a correlation coefficient of $r = 0.562$ ($p < 0.05$), signifying a strong and statistically significant positive influence of teacher–student interaction on students’ motivation to learn Social Studies. This implies that students who experienced respectful communication, encouragement, and consistent feedback from teachers showed greater interest and willingness to participate in learning activities. This finding agrees with Roorda et al. (2019), who concluded that positive teacher–student relationships enhance learners’ motivation and engagement. It also corroborates Adeyemi and Adebola (2021), who reported that

teacher support and empathy significantly improved students’ interest in Social Studies in South-West Nigeria. In Benue State, Suleiman and Ibrahim (2023) found that teachers’ responsiveness and feedback increased intrinsic motivation among Social Studies learners. Similarly, Awang, Ismail, and Aziz (2020) demonstrated that effective communication between teachers and students fosters greater classroom participation. These converging findings suggest that teacher–student relationships remain a strong determinant of students’ academic motivation.

Research Question 3: What is the influence of peer relationships on students’ motivation to learn Social Studies?

Table 3: Influence of Classroom Management Practices and Students’ Motivation to Learn Social Studies

Variable	r	p-value	Remark
Peer Relationships	0.294	< 0.05	Weak positive influence
Students’ Motivation			

The correlation analysis yielded $r = 0.294$ ($p < 0.05$), showing a weak but statistically significant positive influence of peer relationships on students’ motivation to learn Social Studies. This suggests that positive peer interactions, such as group cooperation, mutual respect, and peer encouragement, modestly enhance students’ willingness to learn. This finding supports Chukwu and Okeke (2021), who found that collaborative peer learning in Nigerian junior secondary schools increased students’ enthusiasm for Social Studies. Similarly, Eze and Okonkwo (2021) observed that supportive peer

relationships promoted greater participation and academic engagement. In East Africa, Ngussa and Role (2022) discovered that positive peer interactions in group tasks significantly improved students’ motivation and performance. At the international level, Wentzel et al. (2020) and Xie and Zhang (2021) both established that peer support strengthens learners’ persistence and confidence in academic settings. Collectively, these studies affirm that peer relationships—though less powerful than teacher influence—remain an important motivational factor in Social Studies classrooms.

Combined Effect of the Classroom Environment Variables

To examine the joint predictive power of the three variables—physical classroom environment, teacher–student interaction, and peer relationships—multiple regression analysis was conducted.

Table 4: Multiple Regression Summary Predicting Students’ Motivation from Classroom Environment Variables (N=360)

Model Summary	R	R ²	Adjusted R ²	F (3,356)	p-value	Remark
	0.617	0.381	0.374	76.12	< 0.05	Significant combined positive influence

The three predictors jointly explained 38.1% of the variance in students' motivation to learn Social Studies, confirming that classroom conditions—both physical and relational—substantially influence learners' engagement and enthusiasm.

From the results in Tables 1 to 3 above, the results demonstrate that all three dimensions of the classroom environment: physical conditions, teacher–student interaction, and peer relationships, significantly influenced students' motivation to learn Social Studies. Among the three, teacher–student interaction exerted the strongest influence, followed by the physical classroom environment, while peer relationships had a weaker yet significant influence. This pattern suggests that students' motivation depends not only on the physical features of their learning spaces but also on the quality of interpersonal relationships that exist within them. The findings of this study align with Self-Determination Theory (SDT) as proposed by Ryan and Deci (2020), which asserts that learners are motivated when their psychological needs for autonomy, competence, and relatedness are met. The classroom environment provides the context in which these needs are satisfied. A well-ventilated and resourceful classroom supports learners' competence; positive teacher–student interactions promote autonomy and relatedness; and supportive peer relationships enhance belongingness. The findings therefore reinforce the SDT principle that motivation flourishes in environments that are physically conducive and socially supportive.

Implications of the Findings

The results of this study have several practical implications. For teachers, the findings underscore the need to cultivate empathetic relationships with students, use feedback constructively, and foster interactive learning atmospheres. For school administrators, the findings highlight the importance of investing in classroom infrastructure—such as ventilation, seating, and lighting—to enhance learning motivation. For curriculum developers, there is a need to incorporate peer-collaborative strategies and relational pedagogy into Social Studies curricula to sustain students' interest. Finally, for educational policymakers, these results

emphasise that motivation cannot be improved solely through curriculum reform; it must be supported by adequate facilities and teacher capacity development.

Conclusion

This study examined the influence of the classroom environment on students' motivation to learn Social Studies in Makurdi Local Government Area of Benue State. The results revealed that the classroom environment, measured through the physical classroom setting, teacher–student interaction, and peer relationships, significantly influences students' motivation. Specifically, the physical classroom environment was found to have a moderate but meaningful influence on students' willingness to learn, indicating that comfortable, well-lit, and adequately ventilated spaces promote concentration and engagement. Teacher–student interaction exerted the strongest influence, confirming that respect, empathy, and supportive communication from teachers enhance students' enthusiasm and persistence in Social Studies. Peer relationships also showed a significant, though weaker, influence, suggesting that cooperative and encouraging peer networks foster participation and interest. The study concludes that students' motivation in Social Studies is not merely a product of individual effort but is largely shaped by the physical and social conditions of the classroom. A positive learning environment that satisfies students' psychological needs for autonomy, competence, and relatedness, consistent with Self-Determination Theory, can greatly improve their motivation and learning outcomes.

Recommendations

Based on the findings, the following recommendations are made:

1. The Benue State Ministry of Education and local education authorities should prioritise the renovation and maintenance of classrooms. Proper lighting, ventilation, and adequate furniture should be ensured to create spaces that support concentration and comfort.
2. Teachers of Social Studies should cultivate warm and respectful relationships with students by providing regular feedback,

encouraging open dialogue, and demonstrating empathy. This approach will increase students' intrinsic motivation and make learning more engaging.

3. Schools should incorporate group-based and cooperative learning activities that encourage collaboration, mutual respect, and teamwork among students. Such strategies will help build supportive peer networks that enhance classroom motivation.
4. Teacher training institutions, in collaboration with the Benue State Ministry of Education and school administrators, should organise continuous professional development programmes for Social Studies teachers. These programmes should equip teachers with the interpersonal and pedagogical skills required to foster positive classroom environments. Training modules should focus on effective communication, classroom rapport, empathetic teaching, and motivational instructional techniques that encourage student participation and
5. The Federal Ministry of Education, through the Quality Assurance Department and the Benue State Teaching Service Board, should integrate classroom environment standards into the national and state school evaluation frameworks. Policies promoting smaller class sizes, equitable distribution of resources, and learner-friendly classroom designs, including adequate lighting, ventilation, and furniture, will significantly enhance students' motivation and overall achievement in Social Studies.

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