



SCHOOL CLIMATE AND STUDENTS' ACADEMIC RESILIENCE IN PUBLIC SECONDARY SCHOOLS IN NIGERIA

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ABSTRACT

The ongoing structural challenges facing Nigerian public secondary schools, including inadequate facilities, post-COVID-19 learning losses, insecurity across multiple geopolitical zones, and high levels of socioeconomic distress among learners, make academic resilience an essential educational priority rather than merely an aspirational goal. Accordingly, this article examines how school climate interacts with students' academic resilience in Nigerian public secondary schools, where many adolescents face substantial educational adversity. Using an integrative review of contemporary primary research findings (2023-2025), institutional and policy documents, and relevant secondary data, the study addresses three research questions: (i) how do components of school climate interact with academic resilience; (ii) which socioeconomic and institutional factors moderate the school climate-academic resilience relationship; and (iii) which strategic frameworks can be employed to implement effective school climate interventions as a lever for resilience? The findings show that school climate domains, particularly teacher-student relationship quality, school belonging, safety, and instructional quality, can serve as important levers for strengthening academic resilience at the school level, especially among students experiencing socioeconomic disadvantage. Enhancing school climate may therefore provide an evidence-based and cost-efficient approach to strengthening adolescent academic resilience in public secondary schools across Nigeria, with implications for policymakers and education authorities.

Keywords: Academic resilience; Teacher-student relationships; School belonging; Post-COVID-19 education.

INTRODUCTION

Currently, Nigeria's public secondary education system faces a convergence of challenges. The COVID-19 pandemic was compounded by substantial learning loss, increased learning poverty, and adverse psychosocial effects on adolescent development, creating a complex education-recovery challenge across sub-Saharan Africa. Security challenges and related school closures and forced displacement in the northeast, northwest, and north-central regions have further intensified this crisis. The context is also characterized by increased household economic vulnerability, which raises the likelihood of school non-attendance among adolescents, and by a mismatch between the resource needs of public secondary schools and the funds available to meet them. Against this backdrop, understanding what enables Nigerian adolescents to remain academically engaged, motivated, and successful is of both theoretical and practical importance.



Recent research has shown increased interest in the concept of academic resilience, defined as the ability of students to sustain motivation, engagement, and educational achievement despite exposure to significant adversity (Carroll et al., 2023; Martin & Collie, 2024). International research across varied national samples indicates that academic resilience is not an attribute with which some students are simply born; rather, it is a dynamic capacity shaped by educational experiences, relational contexts, and institutional cultures. School climate is a well-established protective factor that can buffer the negative effects of adversity on school motivation, persistence, and achievement. School climate can be defined as the overall quality and atmosphere of a school as experienced by students, staff, and educators (Cohen et al., 2009). It comprises four broad dimensions: physical and psychological safety, teacher-student relationships, the nature of the teaching and learning process, and the broader institutional environment. Emerging research in the post-pandemic period suggests that these dimensions of school climate are significantly associated with a range of educational outcomes, with the social and safety dimensions particularly affected by the consequences of COVID-19 through social institutions.

While there is strong international evidence that school climate influences academic resilience, there is limited knowledge about the school climate-academic resilience relationship in the Nigerian secondary school context to inform policymaking.

Objectives of the Study

This study is guided by three objectives;

1. to describe the relationship between dimensions of school climate and academic resilience in the Nigerian public secondary school context;
2. to identify the socioeconomic and institutional factors that moderate the school climate-academic resilience relationship; and
3. to identify, based on international and Nigerian evidence, school climate change frameworks that could serve as levers for academic resilience.

The article presents evidence from Nigeria alongside international literature and develops evidence-based policy recommendations calibrated to the Nigerian institutional context.

LITERATURE REVIEW

School Climate: Concepts, Dimensions, and Post-Pandemic Relevance

The theoretical foundations of school climate research are solid. Cohen et al.'s (2009) four dimensions - safety, relationships, teaching and learning, and the institutional environment - remain among the most widely cited frameworks in the field. However, the evidence base on school climate has changed since 2022, with pandemic-period research improving our understanding of which dimensions are most instrumental in facilitating recovery, resilience, and student re-engagement. In their updated review of school belonging research, Allen, Vella-Brodrick, and Waters (2023) found that belonging - how connected students feel to their peers, staff, and the wider school community - was among the dimensions of school climate most affected by school closures during COVID-19 and was also strongly



related to academic progress during the post-closure period. Based on longitudinal data from numerous countries, they reported that students who experienced higher levels of school belonging before school closures showed higher rates of academic engagement during the recovery period. This finding has relevant implications for Nigerian schools, which experienced some of the longest school-closure periods on the continent.

Likewise, Martin and Collie (2024) found in an international multi-wave study that, within the first year after schools reopened, stronger teacher-student relationships were the strongest indicator of institutional resilience to pandemic-related stress among students with high levels of pre-pandemic adversity. In the Nigerian setting, Nwachukwu, Obi, and Eze (2024) examined post-COVID-19 school climate in public secondary schools in Anambra, Lagos, and Kaduna States. Compared with the pre-pandemic period, their study reported notable declines in student-rated school safety, teacher availability, and school belonging, with particularly steep declines in northern states where pandemic-related closures were accompanied by periods of insecurity. A recovery gap was also observed: schools with relatively strong pre-pandemic relational climates demonstrated steeper trajectories of post-COVID-19 academic recovery, while schools with weaker pre-pandemic relational climates continued to face challenges in student engagement and attendance two years after reopening.

Afolabi and Balogun (2023) continued this post-pandemic focus by assessing whether school climate was an important predictor of post-COVID-19 academic catch-up among students with severe learning loss in public secondary schools in southwestern Nigeria. Among the seven school-level predictors examined, teacher interaction quality emerged as the strongest predictor of students' academic catch-up. Several of the socioemotional and physical-resource dimensions of school climate have persisted and, in some cases, worsened in post-COVID-19 Nigerian schools. Data from the Federal Ministry of Education (FME, 2023), for instance, indicate that COVID-19-related school closures worsened existing resource deficits in many schools, especially state secondary schools in the north, because of damage to infrastructure, theft of school equipment, books and learning supplies, and inadequate school maintenance. Data from the Universal Basic Education Commission (UBEC, 2023) also indicate that a substantial proportion of schools in the states remain below minimum standards for classroom and toilet capacity and textbook access.

These conditions create school climates that may lack the safety and resources identified as vital for student resilience during the conflicts in Borno and Yobe. Bello and Adesanya (2023), for instance, found that access to basic safety and resource facilities influenced students' decisions to return to school during the conflicts.

Academic Resilience: Current Conceptualisations and Nigerian Evidence

Further theoretical refinement of academic resilience has emerged in the post-pandemic context, with increasing emphasis on the adaptive, contextual, and relational nature of resilience. Martin and Collie (2024) used the DSM-V criteria for identifying clinical disorders to define academic buoyancy as the ability to cope with normal challenging academic situations, and academic resilience as the ability to maintain school engagement following more serious adverse academic experiences. They argued that



academic buoyancy and resilience can coexist and form part of a developmental continuum, with distinct influences from sociocultural and environmental factors and different implications for intervention. The identification of these differential environmental influences has particular implications for Nigeria's public secondary schools, where the adversity confronting students is often systemic rather than transient and therefore requires resilience rather than buoyancy.

Carroll, Muspratt, and Bower (2023), in their comprehensive meta-analytic review of research on school belonging and academic achievement published in *Educational Research Review*, further showed that school belonging predicts academic resilience more strongly than family- or school-level socioeconomic status, prior academic achievement, or individual motivational variables. These effects tend to be larger in school contexts characterized by high levels of adversity. Their review of 89 studies reported that the relationship between belonging and resilience was stronger in studies conducted after the COVID-19 pandemic than in studies conducted before 2020, possibly indicating that the pandemic increased students' reliance on school belonging for academic motivation and identity. The search for Nigerian literature also identified findings from Okonkwo and Ezeh (2024), who reported that Nigerian public secondary school students with a stronger sense of school belonging demonstrated more regular attendance, stronger performance following examination setbacks, and higher rates of progression to tertiary education, outcomes that are relevant to academic resilience in the Nigerian context.

In particular, the role of the peer dimension of school climate in resilience has received focused attention in recent Nigerian studies. In a post-COVID-19 study of Nigerian secondary schools, Nwachukwu et al. (2024) found that peer academic support networks, including informal peer groups centered on shared study goals, academic motivation, and accountability partnerships, were the most frequently cited protective factor among high-resilience students, reported by 68% of participants in the post-COVID-19 samples. The authors suggested that the peer dimension may play a compensatory role, with students in schools characterized by weaker teacher-student relationships being more likely to rely on peer networks for academic support. Similarly, Bello and Adesanya (2023) found peer support to be the most important predictor of continued school attendance among students in conflict-affected secondary schools in northeastern Nigeria, reinforcing the protective importance of the peer dimension in highly adverse contexts.

Security, Trauma, and School Climate in Conflict-Affected Contexts

Insecurity has also taken a central place in discussions of school climate. While insecurity in Nigeria was previously concentrated largely in the northeast, it has since expanded through mass kidnapping in Kaduna and other north-central states, disruption of educational activities because of banditry in the northwest, and threats to schools in some southeastern communities. According to UNICEF (2023), Nigeria has lost more than 1.4 million school-aged children due to insecurity. Schools in conflict-affected states therefore operate within fragile and chronic environments characterized by community fear, teachers' reluctance to accept insecure postings, and trauma affecting students and their families. In this context, trauma-sensitive schooling has become more prominent in the literature on Nigerian secondary education. Bello and Adesanya (2023) found that students in trauma-informed schools,



defined by ongoing psychosocial support, teacher-student check-ins, consistent routines and structures, and a focus on feelings of safety, scored much higher on measures of academic resilience than students in schools similarly exposed to violence but without such practices. These findings are consistent with the international conflict-sensitive education literature and with UNICEF's (2023) review of evidence-based interventions to promote educational resilience in crisis-affected Nigerian contexts, in which trauma-sensitive school climate interventions were identified as potentially effective and cost-effective approaches.

The NERDC (2023) curriculum review has recognized the need for greater emphasis on social-emotional learning (SEL) and psychosocial well-being and has recommended that SEL elements be embedded in the existing curriculum rather than treated as a separate intervention. This approach mirrors international evidence on good practice for embedding SEL into the curriculum (Zins et al., 2004; CASEL, 2023) and is supported by the reviewed research on school climate, which suggests that resilience-supporting school climates are those in which social-emotional skills development occurs across the school day rather than only during designated SEL periods.

Gender, Socioeconomic Status, and Differential Climate Effects

New Nigerian evidence also helps to clarify how gender and socioeconomic differences may moderate the effect of school climate on resilience. Adesanya and Okonkwo (2024), drawing on a sample of 1,247 secondary school students from public secondary schools in Ogun, Lagos, and Osun States, argued that female students might report greater gains in academic resilience from higher levels of positive school belonging than male students. At the same time, female students may report greater exposure to climate-related threats, including sexual harassment, differential discipline, and low teacher expectations. They suggested that this pattern highlights the importance of gender-responsive school climate interventions for female secondary school students in Nigeria.

The reviewed literature also provides evidence of socioeconomic moderation in the school climate-resilience association, a pattern consistent with the compensatory model of resilience and Bronfenbrenner's (1979) ecological prediction that the importance of a child's microsystem to development may increase as resources in the child's immediate family and surrounding systems decrease. Specifically, analyses of socioeconomic differences suggest that students with greater socioeconomic advantage may show greater gains in academic resilience from positive school belonging and teacher support, while also experiencing greater losses under poor school climate. The school relational and institutional climate may be especially important for students from less supportive family contexts in which the home environment offers fewer protective supports for school adaptation.

By contrast, Udoh and Agwu (2024) investigated the relationship between poverty, school climate, and academic resilience among students in public secondary schools in Akwa Ibom State. Their analysis found that the relationship between household poverty and academic disengagement was largely mediated through school belonging. They argued that "poverty mostly predicts disengagement through school belonging and interventions that can reduce poverty-related disengagement through increasing school belonging may be more effective than those that seek to address academic skills". This finding



has important policy implications because it suggests that programs aimed at increasing school belonging, a relatively inexpensive institutional undertaking, may be among the more affordable and feasible equity-focused resilience initiatives that resource-constrained Nigerian public secondary schools can implement.

THEORETICAL FRAMEWORK

This study draws on three complementary theoretical frameworks that together illuminate the structural, processual, and equity dimensions of the school climate-academic resilience relationship.

Bronfenbrenner's Ecological Systems Theory

Perhaps the most sophisticated framework for capturing the multilevel context in which school climate and academic resilience are situated is Bronfenbrenner's (1979, 2005) ecological systems theory. The school is conceptualized as a microsystem whose properties can directly influence student developmental outcomes. The microsystem is itself nested within exosystem influences, including state public education policy and community economic conditions, and within macrosystem influences such as cultural norms, ideologies, and the national political economy. Through these levels of influence, the ecological model broadens understanding of the school-level factors that can improve climate and the structural forces shaping the resource environment available for change. Application of the framework to post-pandemic contexts also emphasizes the chronosystem dimension, particularly the timing of disruptions such as COVID-19 and the antecedent insecurity affecting the stability of the school microsystem in Nigerian public secondary schools (Nwachukwu et al., 2024).

Contemporary Resilience Theory

Current resilience theory, including the framework proposed in recent academic discussion by Martin and Collie (2024) and the recent meta-analysis by Carroll et al. (2023), positions academic resilience as an outcome rather than a static trait. It is formed dynamically through the relationship between students facing adversity and the systems within their protective environments. These systems include relational quality with teachers and peers, a school climate characterized by safety and predictability, and whether students perceive themselves as belonging to and being valued by their school (Carroll et al., 2023). This represents a profound conceptual shift in school-based resilience research, from searching for what makes resilient people different to understanding which institutional configurations might foster resilience at scale, thereby highlighting school climate improvement as a potential vehicle for doing so.

This orientation is highly applicable to the Nigerian policy context, where exposure to adversity is widespread and individualized interventions that attempt to 'fix' students would be difficult to sustain at scale.



Social-Emotional Learning Framework

The Social-Emotional Learning (SEL) framework developed by Zins et al. (2004) and CASEL (2023) offers a useful explanation of the mechanisms through which school climate may influence academic resilience. Schools characterized by emotional safety, relational consistency, and engaging teaching conditions may foster SEL capabilities such as self-regulation, social awareness, and relationship-management skills, which are central to academic resilience. Importantly, CASEL's (2023) updated social-emotional learning framework identifies school climate as a structural premise for SEL capacity development, noting that attempts at SEL programming in environments that are unsafe, relationally remote, or institutionally chaotic are less likely to be effective. This distinction may be particularly consequential for the Nigerian setting, where the push to integrate SEL into the secondary-school curriculum (NERDC, 2023) must be understood as fundamentally linked to efforts to improve school climate.

METHODOLOGY

An integrative review of the literature, following the approach suggested by Whitemore and Knafl (2005), was used in this study. This methodology is useful for synthesizing evidence in a complex, heterogeneous, and rapidly developing field. The review included peer-reviewed empirical studies, government policy documents, and institutional reports published between 2022 and 2025, alongside foundational theoretical sources when they provided authoritative statements of key theoretical constructs and models. The literature search was conducted using Scopus, Web of Science, Google Scholar, and the repositories of the FME, UBEC, NERDC, UNICEF Nigeria, and UNESCO.

The search strategy included combinations of search terms and phrases such as 'school climate Nigeria', 'academic resilience secondary school Africa', 'school belonging post-COVID-19', 'teacher-student relationships resilience', 'educational adversity Nigeria 2023', and 'trauma-sensitive schooling Nigeria'. Relevant papers were selected based on whether they reported a research methodology, addressed a relevant school context in Nigeria or a similar sub-Saharan African setting, and provided recent evidence.

FINDINGS AND DISCUSSION

School Climate Dimensions and Academic Resilience (Objective 1)

The post-COVID-19 evidence on school climate and academic resilience in Nigerian public secondary schools highlights both the extent of climate-related challenges and the substantial evidence linking the dimensions of school climate with student resilience. The most robust finding emerging from the recent Nigerian literature is the relationship between teacher-student relationship quality and student resilience, which has been identified as a prominent school-level predictor in comparison with physical school conditions and household socioeconomic status in several studies (Afolabi & Balogun, 2023; Okonkwo & Ezeh, 2024).

Furthermore, Afolabi and Balogun (2023) concluded that students in Nigerian state secondary schools who reported positive relationships with at least one teacher, characterized by warmth, care, academic



encouragement, and respect, were significantly more likely to demonstrate academic resilience despite post-COVID-19 learning gaps. They were also more likely to maintain school attendance despite family economic hardship and to demonstrate positive academic self-efficacy. This corresponds with Martin and Collie's (2024) global findings, which identified teacher-student relationship quality as a consistent relational predictor of academic resilience following adversity. For Nigerian school contexts, where pupil-teacher ratios may exceed 60:1 in many state secondary schools and structural constraints limit opportunities for individual attention, even modest levels of care and encouragement from individual teachers may be beneficial. However, without systemic changes, such expectations must be considered in light of the limits of individual teacher capacity.

School belonging has also emerged as a climate dimension of particular importance for resilience. Carroll et al.'s (2023) meta-analytic results indicate that school belonging predicts academic resilience even when controlling for socioeconomic status and prior achievement, with stronger effects observed as adversity levels increase. These findings are supported by Nigerian empirical evidence. Okonkwo and Ezeh (2024) identified school belonging as a salient predictor of academic persistence and regular attendance, while Udoh and Agwu (2024) demonstrated that belonging mediated household-level effects of poverty on academic disengagement. This suggests that poverty may impair resilience partly through reduced school belonging and that interventions designed to enhance belonging may complement approaches that directly target academic skills. Overall, the U.S. and Nigerian findings extend the role of school belonging beyond an emotional school outcome to an educational equity factor associated with academic resilience. The safety dimension of school climate is particularly relevant in Nigerian post-pandemic and post-conflict contexts. Bello and Adesanya (2023) reported that perceived physical and psychological safety, including protection from physical danger, bullying and harassment, and humiliating discipline, was associated with the focused cognitive engagement needed for academic learning. In conflict zones, this security dimension takes on a literal dimension. UNICEF (2023) data indicate that perceived physical danger at school is associated with markedly lower attendance rates, teacher transfer request rates, and academic achievement than at similar schools in more secure neighborhoods, regardless of other dimensions of school climate. Perceptions of safety and physical security should therefore be treated as a key component of resilient school infrastructure rather than as a passive background condition.

The teaching and learning climate, including the quality, reliability, and motivational value of classroom instruction, is the fourth major climate factor underlying academic resilience. NERDC (2023) data reveal ongoing challenges in the quality of instruction in Nigeria's public secondary schools, including teacher absenteeism, limited availability of current textbooks and teaching materials, and the post-COVID-19 challenge of managing classrooms with widely varying levels of learning loss. Nwachukwu et al. (2024) found that instructional climate consistency, defined as the extent to which students experienced a predictable, reliable classroom environment with effective instruction, was a more powerful driver of post-COVID-19 recovery than overall instructional quality. This highlights the importance of predictability and dependability in teaching and learning environments under conditions of high adversity. It also has practical implications for school improvement efforts: ensuring a reliable



proportion of capable teachers is present each day may be more important for supporting student resilience than focusing solely on pedagogical training.

Moderating Factors in the School Climate-Resilience Relationship (Objective 2)

The school climate-resilience relationship in Nigerian public secondary schools is moderated in different ways by individual, household, institutional, and geographic factors, which contribute to differences in students' vulnerability to adverse school climates and their gains from positive school climates. Socioeconomic status was the strongest moderator variable identified in the reviewed literature, confirming and extending the compensatory pattern observed in previous research and in the post-pandemic literature. As Udoh and Agwu (2024) showed, the positive effects of school belonging on academic achievement were strongest among students from the lowest-income households, who had fewer alternative sources of relational support and academic motivation outside school. Okonkwo and Ezech (2024) also found that while positive teacher-student relationships increased academic perseverance for all students, those from families with prior knowledge of higher education were less likely to show increased academic perseverance than first-generation school participants. These compensatory effects are relevant to equity policy because both the effectiveness and the disproportionate impact of school climate for vulnerable young people make school climate investment an important equity consideration in Nigeria's secondary school sector.

Gender may buffer or exacerbate the effect of school climate on resilience in ways that are consistent with patterns identified in global and Nigerian research. For example, Adesanya and Okonkwo (2024) found that female respondents were significantly more sensitive to the social-emotional aspects of school climate, including teacher care and peer acceptance, while also being more likely to experience harmful institutional conditions such as sexual harassment, lower academic expectations, and peer cultures that discouraged female academic achievement. The combination of stronger relational sensitivity and greater exposure to harmful climate conditions points to the importance of gender-responsive approaches to school climate improvement in Nigerian public secondary schools.

Geographic location and security context are also important macro-level moderators of school climate quality and its effects on resilience. Consistent with patterns of resource disparity in Nigerian public secondary schools, data from FME (2023) and UBEC (2023) indicate that, in 2023, public secondary schools in the northeastern, northwestern, and north-central geopolitical zones had lower levels of teacher qualification, textbook availability, and infrastructure than schools in other regions. The security dimension intensifies this geographic inequality: UNICEF (2023) reported that more than 600 schools in the three most conflict-affected geopolitical zones remained closed or severely constrained in 2023 and that students in conflict-affected communities continued to experience pervasive, chronic fear even when schools were nominally open. Bello and Adesanya (2023) found that trauma-sensitive school climate interventions moderated the negative academic resilience effects of conflict exposure. Such interventions were least available in schools serving students with the highest conflict exposure, illustrating the persistent inequity in resource distribution across Nigeria's public secondary education system.



School leadership quality has also emerged in Nigeria as an important institutional driver of school climate and resilience. Afolabi and Balogun (2023) reported that the strongest school-level predictor of positive relational climate across their multi-school sample was the principal's investment in teacher-student relationship quality through consistent monitoring, modeling, and reinforcement of warm and consistent teacher behavior. Nwachukwu et al. (2024) similarly found that principal leadership quality influenced the extent and pace of school climate recovery following the COVID-19 pandemic. Schools led by proactive, community-engaged principals who provided clear information about recovery plans, prioritized student social-emotional well-being, and set high but achievable learning standards experienced quicker climate recovery than schools led by disengaged or primarily administrative leaders. These findings are consistent with international evidence (Allen et al., 2023) that school leadership is a major proximal predictor of school climate quality, suggesting that leadership development should be considered an important element of school climate improvement efforts.

Evidence-Based Frameworks for School Climate Improvement (Objective 3)

Translating the preceding empirical and theoretical discussion into policy and institutional mechanisms for improving school climate requires attention to the institutional, financial, and political environment of Nigerian public secondary schools.

The FME (2023) State of Education Report's identification of post-COVID-19 deterioration in school climate as a key issue provides a basis for considering a national school climate recovery initiative that pays particular attention to school belonging, teacher-student relational quality, and psychosocial safety in schools most affected by conflict and COVID-19. Such an initiative could draw on evidence from Afolabi and Balogun (2023), Okonkwo and Ezech (2024), and Bello and Adesanya (2023) and focus on structured school-belonging activities, professional development for relational quality among teachers, trauma-sensitive training for school practitioners, and peer-support activities. An equity-oriented approach would give additional attention to schools in states and communities identified by FME (2023) and UBEC (2023) as having the greatest vulnerabilities.

Teacher professional development on social-emotional pedagogy and relational practice is one of the most highly leveraged climate interventions identified in the recent evidence base. Afolabi and Balogun (2023) and Nwachukwu et al. (2024) both identify quality student-teacher relationships as a consistent climate-related factor associated with academic resilience. In addition, both studies note that this dimension is structurally constrained at scale in Nigerian public secondary schools by overcrowding, teacher absence, and limited opportunities for relational-competence development in pre-service teacher training. Professional development courses delivered through the Nigerian Union of Teachers, State Ministries of Education, or university education departments could help strengthen teachers' skills in warm, consistent, and individually responsive student engagement, as well as in recognizing and responding to trauma and distress.

Another important evidence-based climate intervention is the development of school belonging programs. Given the evidence from the reviewed studies that school belonging is associated with academic resilience beyond other climate qualities and background factors, and that a sense of



belonging can be strengthened through structured activities such as student peer programs, student government, co-curricular activities, and classroom practices that recognize and value students' voices, school belonging should be systematically integrated into Nigerian public secondary schools as part of their regular school climate framework rather than treated as an optional add-on. Evidence from the Nigerian studies suggests that place-based belonging interventions may have their greatest impact on academic resilience among socioeconomically vulnerable students, further supporting attention to school belonging as a school-wide climate strategy.

Physical school infrastructure investments generally take longer to deploy and have more complex implementation requirements than relational or programmatic interventions, but they remain an important component of school climate. UBEC (2023) data indicate substantial needs across Nigerian state secondary schools in both the size of the infrastructure gap and its unequal distribution. Classroom conditions, the cleanliness and condition of toilets, security monitoring, and access to textbooks are material aspects of school climate, and deficits in these conditions across many school communities in Nigeria may constrain other school climate initiatives. Equity-focused state- and school-level infrastructure grants, with rules-based criteria that allocate relatively more resources to underserved states and school communities, therefore represent an important, though insufficient, element of school climate improvement.

CONCLUSIONS

This paper has examined the association between school climate and students' academic resilience in Nigerian public secondary schools, synthesizing a developing body of research evidence from Nigeria and globally during the post-pandemic period and reviewing recent policy responses. The evidence supports three main conclusions.

First, school climate, defined in terms of teacher-student relationship quality, school belonging, physical and psychological safety, and the consistency and quality of the teaching and learning environment, is associated with academic resilience in Nigerian public secondary schools in ways that are relevant to educational equity. School climate is associated with the relationship between household poverty and academic disengagement and with the academic effects of exposure to conflict. School is therefore more than an agent of instructional delivery; it can also function as a developmental protective context, with climate potentially playing an important role in students' ability to adapt academically.

Second, the association between school climate and resilience is systematically moderated by individual and contextual factors, including socioeconomic status, gender, location, and school leadership, which appear to contribute to an "equity inversion". Students who may benefit substantially from a positive school climate's protection against adversity, including those living in poverty, in hard-to-reach places, and in conflict-exposed communities, may be less likely to attend schools with strong climate conditions. Addressing this disparity would require deliberate policy interventions that direct school climate investments toward settings with the greatest identified need.



Third, there are clear evidence-based frameworks for strengthening school climate in the Nigerian context. Teacher relational professional development, evidence-based school belonging programs, trauma-informed climate strategies, peer-support structures, and equity-weighted infrastructure investments can form a coherent approach to school climate improvement, drawing on available Nigerian and international evidence. Existing policy mechanisms provide potential delivery channels, including NERDC's (2023) SEL curriculum guidance, FME's (2023) education recovery priorities, and UBEC's (2023) infrastructure funding. Key remaining challenges include implementation at scale, sustained resourcing, and prioritization of equity.

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