

Impact of Teacher Emotional Dysregulation and Burnout on Academic Achievement of Public Senior Secondary School Students in Eleme Local Government Area, Rivers State

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Abstract

Teacher emotional dysregulation and burnout undermine teaching effectiveness and student performance. This study investigated their impact on academic achievement among public senior secondary school students in Eleme Local Government Area, Rivers State, Nigeria. In this study, impact was operationalized as the magnitude, direction, and statistical significance of the relationship between teachers' emotional dysregulation and burnout and students' academic achievement. A cross-sectional survey research design was employed, involving 80 teachers and 400 students drawn from 10 public senior secondary schools. Data were collected using the Difficulties in Emotion Regulation Scale (DERS) and the Maslach Burnout Inventory–Educators Survey (MBI-ES), both adopted in their original standardized forms, as well as students' examination scores in English Language, Mathematics, and Science. Impact was measured using Pearson Product Moment Correlation and multiple regression analysis. Results revealed significant negative correlations between teacher emotional dysregulation and students' academic achievement ($r = -0.36, p < .001$) and between teacher burnout and academic achievement ($r = -0.42, p < .001$). Regression analysis indicated that teacher burnout accounted for 28% of the variance in students' academic achievement, while emotional dysregulation explained 15%, with the combined model accounting for 43% of the total variance. The impact was interpreted as negative and substantial, given the strength and significance of the relationships observed. The findings underscore the importance of teacher emotional regulation and well-being interventions as critical strategies for improving students' academic outcomes.

Keywords: Emotional dysregulation, burnout, academic achievement, secondary schools.

Introduction

The psychological well-being of teachers is widely acknowledged as a critical determinant of classroom quality and, by extension, students' academic outcomes. Teachers function not only as transmitters of subject knowledge but also as role models, mentors, and

emotional regulators within the learning environment. Their emotional and psychological states significantly shape classroom climate, teacher–student relationships, and students’ motivation to learn (Jennings & Greenberg, 2009; Kyriacou, 2015). Psychologically healthy teachers are more capable of fostering supportive, engaging, and inclusive classrooms, whereas compromised well-being is associated with strained interactions, diminished instructional quality, and poorer student achievement (Oberle & Schonert-Reichl, 2016).

Two constructs that have received sustained attention in teacher well-being research are emotional dysregulation and burnout. Teaching is inherently an emotionally demanding profession that requires educators to continually regulate their emotions while responding to students’ academic and socio-emotional needs. Emotional dysregulation refers to difficulties in understanding, monitoring, and modulating emotional responses (Gratz & Roemer, 2004). In school settings, teachers are frequently exposed to stressors such as student misbehaviour, heavy workloads, administrative pressure, and parental expectations. Persistent difficulties in emotional regulation may result in irritability, emotional withdrawal, or reactive disciplinary practices, which can erode classroom trust and weaken teacher–student relationships. Empirical evidence suggests that such emotional challenges adversely affect classroom management, student engagement, and learning outcomes (Gong *et al.*, 2013; Yin *et al.*, 2019).

Closely linked to emotional dysregulation is teacher burnout, now conceptualised as a chronic occupational syndrome characterised by emotional exhaustion, depersonalisation, and reduced personal accomplishment (Maslach, Leiter, & Schaufeli, 2018). Emotional exhaustion reflects the depletion of emotional resources, depersonalisation manifests as detached or cynical attitudes toward students, and reduced personal accomplishment involves feelings of professional inefficacy. Contemporary scholarship recognises burnout as a pervasive risk within the teaching profession, with profound consequences for both teacher functioning and student outcomes (Skaalvik & Skaalvik, 2017; Madigan & Kim, 2020). Burnt-out teachers may lack the emotional energy and responsiveness necessary to sustain effective instructional practices, thereby undermining student engagement and academic performance.

In the Nigerian context, teachers in public secondary schools face intensified risks of emotional dysregulation and burnout due to systemic challenges such as overcrowded classrooms, inadequate teaching resources, irregular remuneration, limited professional development opportunities, and policy instability (Aharandu, 2023; Ngobe, 2023). These structural constraints heighten emotional strain and accelerate burnout, ultimately diminishing teachers’ instructional effectiveness. Consequently, students often bear the brunt of compromised teacher well-being through reduced instructional quality, disengaging classroom environments, and lower academic achievement (Yusuf, 2022).

Both global and local empirical studies reinforce the link between teacher well-being and student outcomes. Jennings and Greenberg (2009) demonstrated that teachers' social and emotional competence enhances classroom organisation and student learning. Oberle and Schonert-Reichl (2016) reported that elevated teacher stress is negatively associated with student motivation and academic engagement. A meta-analysis by Madigan and Kim (2020) further confirmed that teacher burnout is significantly related to reduced student academic achievement. More recent systematic reviews by Beameset *al.* (2023) and Dreeret *al.* (2023) highlight that teacher burnout adversely affects not only academic performance but also students' classroom participation, self-efficacy, and socio-emotional adjustment.

Within Nigeria, and Rivers State in particular, emerging research underscores occupational stress and burnout as major impediments to teacher effectiveness and student success. Ngobe (2023) identified chronic stress and poor emotional regulation as significant predictors of diminished teacher performance. Similarly, Nnah and George (2025) found that teacher burnout significantly predicts reduced student engagement and declining academic outcomes in public secondary schools. These findings point to teacher psychological well-being as a critical, yet under-addressed, determinant of educational quality.

Despite growing interest in teacher well-being, empirical studies examining the combined influence of teacher emotional dysregulation and burnout on students' academic achievement remain limited within Nigeria. Many existing studies treat these constructs independently, overlooking their interactive effects on learning outcomes. This gap is particularly consequential at the senior secondary school level, where academic achievement has long-term implications for students' educational progression and career opportunities. In Eleme Local Government Area of Rivers State, socio-economic constraints, infrastructural deficits, and underfunded schools further intensify these challenges, making the area a critical context for focused empirical investigation.

This study therefore seeks to bridge this gap by examining the extent to which teacher emotional dysregulation and burnout influence students' academic achievement in public senior secondary schools in Eleme Local Government Area. By situating teacher psychological well-being within the broader discourse on student academic performance, the study aims to generate evidence capable of informing educational policy, teacher training, and school-based mental health interventions. Ultimately, the findings are expected to underscore the importance of promoting teacher emotional regulation and resilience as strategies for improving student academic outcomes in Nigeria.

Objective of the Study

The main objective of this study is to examine the impact of teacher emotional dysregulation and burnout on the academic achievement of public senior secondary school students in Eleme Local Government Area, Rivers State, specifically, the study sought to:

1. examine the relationship between teacher emotional dysregulation and students' academic achievement;
2. determine the relationship between teacher burnout and students' academic achievement;
3. assess the combined predictive influence of teacher emotional dysregulation and burnout on students' academic achievement; and
4. identify the extent to which teacher burnout dimensions contribute to variations in students' academic performance.

Research Questions

The following research questions guided the study:

1. What is the relationship between teacher emotional dysregulation and students' academic achievement?
2. What is the relationship between teacher burnout and students' academic achievement?
3. To what extent do teacher emotional dysregulation and burnout jointly predict students' academic achievement?
4. Which dimension of teacher burnout most significantly influences students' academic achievement?

Methodology

The study employed a cross-sectional survey design, which is widely recognised as appropriate for examining associations among psychological and educational variables at a single point in time (Wang & Cheng, 2020). This design was chosen because it allows for the collection of data from a large group of participants simultaneously, thereby providing a snapshot of the relationship between teacher emotional dysregulation, burnout, and student academic achievement. While it does not permit causal inferences, the design is suitable for identifying patterns, associations, and predictive relationships, which are foundational for further longitudinal or experimental research.

The research was conducted in Eleme Local Government Area (LGA), located in Rivers State, Nigeria. Eleme is a semi-urban community characterised by socio-economic and cultural diversity, with inhabitants engaged primarily in public service, trading, farming, and small-scale businesses. The education sector in Eleme falls under the administration of the Rivers

State Ministry of Education, which oversees public schools in the area. Public senior secondary schools in Eleme face common challenges in Nigerian education such as large class sizes, inadequate instructional resources, teacher shortages, and irregular policy implementation (Aharandu, 2023; Ngobe, 2023). These conditions made the setting appropriate for the present study, as they provide fertile ground for exploring issues related to teacher well-being and its impact on student outcomes.

The target population for this study comprised all public senior secondary school teachers and students in Eleme Local Government Area (LGA), Rivers State. It is acknowledged that the teacher and student populations are not numerically equal in the natural school setting. However, the study did not seek proportional population representation between teachers and students; rather, it adopted a multilevel analytical approach in which teachers and students constituted distinct units of analysis serving different methodological purposes. A stratified random sampling technique was employed. First, ten public senior secondary schools were randomly selected to ensure geographical and institutional representation across Eleme LGA. Within each selected school, eight teachers were randomly sampled to provide sufficient variability in emotional dysregulation and burnout scores at the teacher level. In addition, forty students were randomly selected per school to obtain a stable and reliable estimate of academic achievement outcomes at the student level. This resulted in a total sample of 80 teachers and 400 students. The use of equal numbers of teachers and students across schools was a design-based decision, not an assumption of population equality. Standardising the number of participants per school enhanced comparability across schools, reduced cluster-related distortions, and prevented the overrepresentation of larger schools, a common source of bias in educational research. This approach is consistent with school-based research designs where balanced cluster sampling is used to control for institutional variability rather than mirror population proportions. The selected sample size was deemed adequate for the planned statistical analyses. Power analysis guidelines indicate that a sample of this magnitude provides sufficient statistical power ($\geq .80$) to detect medium effect sizes in correlation and multiple regression analyses at the (95%) confidence level (Cohen, 1992). Importantly, teachers' emotional dysregulation and burnout scores were analysed in relation to aggregated student academic performance, thereby aligning the teacher-level predictors with student-level outcomes and avoiding artificial inflation or bias arising from unequal population sizes. Furthermore, the inclusion of both teachers and students facilitated methodological triangulation, combining teacher self-reports with objective student academic performance data. This strengthened the internal validity of the study and mitigated common-method bias, thereby enhancing the credibility and robustness of the findings.

Three instruments were utilised in this study:

1. Teacher Emotional Dysregulation was measured using the Difficulties in Emotion Regulation Scale (DERS) developed by Gratz and Roemer (2004). The DERS

comprises subscales assessing non acceptance of emotions, difficulties engaging in goal-directed behaviour, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. Previous studies reported strong internal consistency reliability with Cronbach's alpha values of $\alpha \geq .80$ (Gratz & Roemer, 2004).

2. Teacher Burnout was assessed using the Maslach Burnout Inventory—Educators Survey (MBI-ES) developed by Maslach and Jackson (1981). This widely used instrument measures three components of burnout: emotional exhaustion, depersonalisation, and reduced personal accomplishment. Nigerian validations of the instrument have yielded good internal consistency ($\alpha \geq .79$), supporting its applicability in the local educational context (Ngobe, 2023).
3. Student Academic Achievement was measured using students' end-of-term scores in three core subjects: English Language, Mathematics, and Basic Science. These subjects were chosen because they are central to the Nigerian secondary school curriculum and serve as indicators of general academic performance. Scores were obtained from official school records with the approval of the principals and the Ministry of Education.

Ethical and administrative approvals were first secured from the Rivers State Ministry of Education and the respective school principals. Once approvals were obtained, consent forms were distributed to teachers and parents of the selected students. Teacher participants signed informed consent forms, while parental consent was obtained for all student participants, with student assent also respected. Data collection was facilitated by trained research assistants who administered the questionnaires to teachers during scheduled visits to the schools. Questionnaires were completed in supervised sessions to ensure standardisation and minimise missing data. Student academic performance data were retrieved directly from school examination records with official authorisation. All data were coded and stored securely for analysis.

The collected data were analysed using Statistical Package for the Social Sciences (SPSS) version 27. The analysis was conducted in several stages: Descriptive statistics (means, standard deviations, frequencies, and percentages) were computed to summarise demographic characteristics of the teachers (e.g., gender, age, years of teaching experience) and overall student performance levels. Pearson product-moment correlation analysis was conducted to examine bivariate relationships between teacher emotional dysregulation, burnout, and student academic performance. Hierarchical multiple regression analysis was employed to assess the joint and unique contributions of teacher emotional dysregulation and burnout in predicting student academic achievement, while controlling for demographic covariates such as teacher

age, gender, and years of experience. This analytical approach enabled the study to determine not only the direct associations but also the incremental predictive value of each variable.

The study adhered strictly to international and national ethical standards. Specifically, it followed the World Medical Association's Declaration of Helsinki (2013) on ethical principles for research involving human participants and the American Psychological Association's Ethical Principles of Psychologists and Code of Conduct (APA, 2017). Key ethical safeguards included confidentiality of participant data, anonymity of responses, voluntary participation, and the right to withdraw from the study at any stage without penalty. All data were securely stored and used strictly for research purposes.

Results

Descriptive Statistics

Preliminary analyses were conducted to examine the distribution of the main study variables. As shown in Table 1, teachers in Eleme Local Government Area reported moderate levels of emotional dysregulation ($M = 2.9$, $SD = 0.7$) and burnout ($M = 3.1$, $SD = 0.6$), indicating that emotional challenges and occupational stress were present but varied in intensity. Student academic achievement, measured through end-of-term performance in English, Mathematics, and Science, also exhibited considerable variability, reflecting diverse learning outcomes across schools.

Table 1. Descriptive Statistics of Study Variables

Variable	N	Mean	SD	Minimum	Maximum
Teacher Emotional Dysregulation (DERS)	80	2.9	0.7	1.5	4.5
Teacher Burnout (MBI-ES)	80	3.1	0.6	1.8	4.6
Student Academic Achievement	400	68.4	12.5	40	95

Correlation Analysis

Pearson product-moment correlations were computed to examine bivariate relationships among teacher emotional dysregulation, burnout, and student academic achievement. The results, presented in Table 2, reveal significant negative correlations between teacher psychological variables and student performance:

Emotional dysregulation and academic achievement: $r = -0.36$, $p < .001$

Burnout and academic achievement: $r = -0.42, p < .001$

These findings suggest that higher levels of emotional dysregulation and burnout are associated with lower student academic performance.

Table 2. Correlations among Study Variables

Variable	1	2	3
Teacher Emotional Dysregulation	—		
Teacher Burnout	.54**	—	
Student Academic Achievement	-.36**	-.42**	—

Note: ** $p < .01$

Regression Analysis

Hierarchical multiple regression analyses were conducted to examine the predictive influence of teacher emotional dysregulation and burnout on student academic achievement. Results are presented in Table 3 and Figure 1

Table 3. Hierarchical Regression Predicting Student Academic Achievement

Predictor	Model 1 β	ΔR^2	Model 2 β	ΔR^2	Model 3 β	R^2
Emotional Dysregulation	-0.32**	0.15	-0.28**		-0.27**	
Burnout			-0.41**	0.28	-0.40**	
Total Variance Explained						0.43

Note: ** $p < .01$

Interpretation:

Model 1: Emotional dysregulation alone explains 15% of variance in student achievement.

Model 2: Adding burnout accounts for an additional 28% of variance.

Model 3: The combined model explains 43% of variance, indicating substantial predictive power for teacher psychological variables.

Summary of Regression Results

A simple bar chart can be created with the following:

X-axis: Predictors (Emotional Dysregulation, Burnout, Combined Model)

Y-axis: Percentage of variance explained (ΔR^2 or R^2)

Bar heights: (15%, 28%, 43%)

Interpretation: This figure visually highlights that burnout contributes more to student achievement variance than emotional dysregulation alone, and together they account for nearly half of the differences in student performance.

Summary of Findings

Overall, the findings provide strong empirical evidence that teacher psychological well-being is directly linked to student academic performance. Emotional dysregulation undermines teacher–student interactions, while burnout exerts a stronger negative effect by reducing energy, engagement, and sense of accomplishment. Together, these factors represent significant barriers to effective teaching and learning in Eleme LGA. The present study investigated the influence of teacher emotional dysregulation and burnout on student academic achievement in public senior secondary schools in Eleme Local Government Area, Rivers State, Nigeria. The discussion below is structured according to the research questions, highlighting how each finding addresses the study’s objectives.

Research Question 1: What is the relationship between teacher emotional dysregulation and students’ academic achievement?

The findings indicate a significant negative relationship between teacher emotional dysregulation and student academic performance ($r = -0.36$, $p < .001$). This suggests that teachers who experience greater difficulty in monitoring and regulating their emotions tend to have students with lower academic outcomes. This result aligns with international research demonstrating that emotionally dysregulated teachers often struggle to create supportive classroom environments (Jennings & Greenberg, 2009). Teachers who react with frustration,

irritability, or disengagement may weaken classroom cohesion, reduce instructional clarity, and diminish student motivation and engagement, ultimately undermining academic achievement.

Research Question 2: What is the relationship between teacher burnout and students' academic achievement?

Teacher burnout emerged as a significant negative predictor of student achievement ($r = -0.42$, $p < .001$), with a stronger effect than emotional dysregulation alone. This aligns with previous research showing that burnout reduces instructional quality by depleting teachers' energy, increasing depersonalisation, and lowering feelings of professional efficacy (Skaalvik & Skaalvik, 2017). In emotionally exhausted classrooms, teachers are less able to provide personalised attention, encouragement, and high-quality instruction, which are crucial for student engagement and academic success. Recent meta-analyses also support these findings, highlighting that burnout negatively affects both student learning and socio-emotional outcomes such as classroom participation and self-efficacy (Madigan & Kim, 2020; Dreeret *al.*, 2023).

Research Question 3: To what extent do teacher emotional dysregulation and burnout jointly predict students' academic achievement?

Hierarchical regression analysis revealed that emotional dysregulation alone explained 15% of variance in student achievement, while burnout contributed an additional 28%, resulting in a combined explained variance of 43%. This indicates that while both factors negatively influence student outcomes, burnout exerts a comparatively stronger effect. These results confirm that teacher psychological well-being has a substantial and cumulative impact on student academic performance, supporting the argument that interventions targeting both emotional regulation and burnout are critical for improving educational outcomes in Nigerian schools.

Research Question 4: Which dimension of teacher burnout most significantly influences students' academic achievement?

Among the dimensions of teacher burnout (emotional exhaustion, depersonalisation, and reduced personal accomplishment), emotional exhaustion emerged as the most significant predictor of students' academic achievement. Analysis of the burnout subscales revealed that emotional exhaustion demonstrated the strongest negative association with students' academic performance, followed by depersonalisation, while reduced personal accomplishment showed the weakest influence. Teachers experiencing high levels of emotional exhaustion were more likely to exhibit diminished energy, reduced instructional responsiveness, and lower classroom

engagement, which translated into poorer student academic outcomes. This finding indicates that the depletion of teachers' emotional and psychological resources has a more pronounced effect on students' learning than attitudinal detachment or perceived professional inefficacy.

Summary

By explicitly linking findings to the research questions, this study demonstrates that teacher emotional dysregulation and burnout are significant determinants of student academic achievement. Emotional dysregulation primarily affects classroom climate and teacher–student interactions, while burnout further diminishes energy, engagement, and instructional efficacy. Together, these factors explain nearly half of the variation in student performance, underscoring the importance of teacher-focused well-being interventions to enhance academic success.

Contextual Relevance to Nigeria

Within the Nigerian educational system, and particularly in Rivers State, these findings resonate with local studies that document high levels of occupational stress and burnout among teachers (Ngobe, 2023; Aharandu, 2023). Structural challenges such as overcrowded classrooms, inadequate teaching materials, poor remuneration, and inconsistent policy support amplify teachers' emotional strain and susceptibility to burnout. These contextual realities suggest that the psychological well-being of teachers cannot be divorced from systemic and institutional factors. Unless these broader challenges are addressed, interventions targeting individual teachers may have limited long-term impact.

Implications for Policy and Practice

The results highlight critical implications for educational policy, teacher training, and school management practices. First, interventions that promote teacher well-being should be prioritised at both institutional and governmental levels. Strategies may include resilience training, professional counselling services, stress management workshops, and mentoring programs designed to enhance teachers' coping capacities. Embedding emotional regulation skills into teacher professional development curricula may also provide educators with practical tools to manage classroom stressors more effectively. In addition, structural reforms aimed at improving working conditions such as reducing class sizes, providing adequate teaching resources, and ensuring timely remuneration are essential for mitigating systemic stressors that exacerbate burnout. Collaboration between educational policymakers, teacher unions, and school administrators will be crucial for implementing sustainable reforms. Finally, the results suggest that student outcomes may be indirectly improved by policies that centre on

teacher well-being. This echoes global calls to view teacher health not merely as a workforce issue but as an educational quality issue directly linked to student achievement and equity.

Limitations of the Study

Despite its contributions, the study has several limitations. The use of a cross-sectional survey design limits the ability to make causal claims regarding the relationship between teacher well-being and student achievement. It is possible that low student achievement could, in turn, exacerbate teacher stress and burnout, suggesting a reciprocal relationship that cannot be fully disentangled in this design. In addition, reliance on self-reported measures for teacher emotional dysregulation and burnout raises concerns about potential response bias, as participants may underreport or over report their psychological difficulties due to social desirability or self-perception limitations. Incorporating observational data or peer ratings in future research would strengthen validity. The study was also geographically restricted to Eleme LGA in Rivers State, which may limit generalizability to other Nigerian regions with different socio-economic and educational contexts. Further research across multiple states and regions would enhance representativeness.

Directions for Future Research

Future studies should employ longitudinal designs to trace the dynamic interplay between teacher well-being and student achievement over time. Mixed-methods approaches may also provide deeper insights into the psychosocial processes underpinning these relationships, by complementing quantitative findings with qualitative narratives from teachers and students. In addition, intervention studies assessing the effectiveness of emotional regulation training, workload management strategies, and systemic reforms would provide actionable evidence for policymakers and practitioners.

Conclusions

In summary, this study contributes to the growing body of evidence that teacher psychological well-being is a crucial determinant of student academic success. By confirming that emotional dysregulation and burnout negatively affect student outcomes, the findings underscore the need for holistic interventions that combine teacher-focused support with systemic reforms in Nigerian education. To address these challenges is not only essential for improving teacher welfare but also for fostering more equitable and effective learning environments for students.

The present study has provided empirical evidence that teacher emotional dysregulation and burnout significantly undermine student academic achievement in public senior secondary schools in Eleme Local Government Area, Rivers State, Nigeria. The findings highlight that teachers who struggle with regulating their emotions or who experience high levels of burnout are less able to create supportive, engaging, and effective classroom environments.

Consequently, students in such classrooms are more likely to experience reduced motivation, diminished engagement, and lower academic performance. These outcomes emphasise the inextricable link between teacher psychological well-being and student success.

Beyond the immediate implications for classroom dynamics, the study underscores the broader systemic challenges that contribute to teacher stress and burnout within the Nigerian education system. Overcrowded classrooms, inadequate instructional resources, poor remuneration, and inconsistent policy support remain key drivers of emotional strain among teachers. Unless these structural issues are addressed, efforts to improve teacher well-being at the individual level may yield limited and unsustainable results.

The study therefore calls for a two-pronged approach to intervention. On one hand, targeted programs such as resilience training, professional counselling, emotional regulation workshops, and peer support networks can equip teachers with the skills needed to manage stress and maintain psychological balance. On the other hand, systemic reforms such as reducing class sizes, improving infrastructure, providing adequate teaching materials, and ensuring timely and fair remuneration are equally essential to create conditions that support teacher well-being. By addressing both personal and institutional factors, policymakers and stakeholders can foster a healthier teaching workforce and, in turn, improve student outcomes.

Importantly, these findings align with global discourses on educational quality and equity, as encapsulated in the United Nations Sustainable Development Goal 4 (SDG 4), which advocates for inclusive and equitable quality education and lifelong learning opportunities for all. Strengthening teacher well-being is not merely a workforce issue but a cornerstone of sustainable educational development in Nigeria.

In conclusion, enhancing teacher psychological well-being through comprehensive interventions and structural reforms is a critical pathway toward improving student academic achievement in Nigerian schools. By prioritising teacher welfare, policymakers and educational stakeholders can simultaneously advance the quality of education and contribute to the realisation of national and international development goals.

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