

Working Conditions and Teacher Performance in Public Primary Schools: Evidence from a Fragile Education System in Mogadishu, Somalia

Dahir Mohamed Ahmed

dahirnadara@salaam.edu.so

Salaam University

AHMED MOHAMED FARAH

Salaam University

Leila Mohamed Warsame

SIMAD University

Abdirahim Hussein Ali

Salaam University

Mohamed wali Hussein

Research Article

Keywords: Teacher working conditions, Compensation adequacy, Job security, Professional support, Teacher performance, Public primary schools, Somalia, PLS-SEM

Posted Date: October 13th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-10997228/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Additional Declarations: No competing interests reported.

Abstract

Teacher performance is essential to the quality and effectiveness of education, particularly in fragile education systems where teachers often work under challenging institutional and socioeconomic conditions. This study examined the relationships between compensation adequacy, job security, professional support, and teacher performance among public primary school teachers in Mogadishu, Somalia. Guided by Social Cognitive Theory, the study employed a quantitative cross-sectional survey design. Data from 192 teachers were analyzed using descriptive statistics and Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings revealed that compensation adequacy had a significant positive relationship with teacher performance ($\beta = 0.395$, $p < 0.001$), as did job security ($\beta = 0.395$, $p < 0.001$). Professional support also demonstrated a significant positive relationship with teacher performance, although its contribution was comparatively smaller ($\beta = 0.185$, $p = 0.001$). Collectively, the three dimensions of working conditions explained 66.8% of the variance in teacher performance ($R^2 = 0.668$). The findings demonstrate that teacher performance is closely associated with both employment conditions and the professional environment in which teachers work. The study concludes that strengthening compensation adequacy, employment stability, and professional support may contribute to improved teacher performance in Somalia's public primary schools. The findings provide context-specific evidence for educational policymakers, school administrators, and institutions seeking to strengthen teacher management and improve the quality and resilience of primary education in fragile educational settings.

1. Introduction

Education systems globally continue to face substantial challenges in ensuring quality learning outcomes, with teacher effectiveness recognized as one of the most important school-based factors influencing student achievement. The United Nations Educational, Scientific and Cultural Organization (Canton, 2021) estimates that achieving universal primary education requires addressing the conditions under which millions of teachers work worldwide. In low-income and fragile education systems, challenges such as teacher absenteeism, inadequate resources, insecure employment, and insufficient compensation can undermine educational quality and equitable access. These conditions highlight the need to examine contextual factors associated with teacher performance, particularly in education systems characterized by institutional fragility (Elele et al., 2020).

The relationship between teachers' working conditions and their professional performance can be understood through Social Cognitive Theory. The theory proposes that human functioning results from reciprocal interactions among personal, behavioural, and environmental influences (Al-Thani et al., 2026). From this perspective, working conditions constitute important environmental factors that may shape teachers' motivation, self-efficacy, professional commitment, and instructional behaviour. Teachers who perceive their work environments as supportive, characterized by adequate compensation, employment security, sufficient resources, and professional support, may be better positioned to perform their

professional responsibilities effectively (NYANGARESI, 2025). Conversely, unfavourable working conditions may weaken teachers' professional commitment and ability to perform effectively.

Working conditions in educational settings are multidimensional and may include physical infrastructure, compensation adequacy, job security, professional support, and school leadership (Eryilmaz et al., 2025). Teacher performance is similarly multidimensional and extends beyond classroom presence to include lesson preparation, curriculum implementation, classroom management, student assessment, task completion, and regular attendance (Omar & Ali, 2025). These dimensions are particularly important in fragile education systems, where teachers may work under conditions characterized by irregular salary payments, inadequate teaching materials, limited professional development opportunities, and employment uncertainty. (Waleed & Waleed, 2026)

Somalia provides an important context for examining these relationships. Following decades of conflict and institutional disruption, the country has made gradual progress toward rebuilding its education system. Nevertheless, public schools continue to operate under considerable financial, institutional, and human-resource constraints. In Mogadishu, public primary school teachers may experience challenges related to compensation, employment stability, instructional resources, and opportunities for professional support. Recent concerns raised by public-school teachers regarding employment conditions and compensation further illustrate the importance of understanding the conditions under which teachers perform their professional responsibilities (Abdi & Idris, 2024)

Despite increasing recognition of the importance of teachers' working conditions, empirical research examining their relationship with teacher performance in fragile education contexts remains limited. Studies conducted in Somalia have often focused on individual factors such as teacher qualifications, instructional supervision, or motivation rather than examining multiple dimensions of working conditions simultaneously. Furthermore, much of the available evidence has focused on secondary schools or employed qualitative approaches, leaving limited quantitative evidence concerning teachers working in public primary schools in Mogadishu (Yasin, 2021).

This study addresses this gap by examining the relationship between working conditions and teacher performance in public primary schools in Mogadishu, Somalia. Specifically, the study examines three dimensions of working conditions: compensation adequacy, job security, and professional support. Teacher performance serves as the dependent construct. Guided by Social Cognitive Theory, the study employs a quantitative cross-sectional survey design and Partial Least Squares Structural Equation Modeling (PLS-SEM) to provide empirical evidence that may inform educational policy and school-management practices in fragile education systems.

Research Objectives

To examine the relationship between compensation adequacy and teacher performance in public primary schools in Mogadishu, Somalia.

To determine the relationship between job security and teacher performance in public primary schools in Mogadishu, Somalia.

To assess the relationship between professional support and teacher performance in public primary schools in Mogadishu, Somalia.

Research Hypotheses

H1: Compensation adequacy has a significant positive relationship with teacher performance in public primary schools in Mogadishu, Somalia.

H2: Job security has a significant positive relationship with teacher performance in public primary schools in Mogadishu, Somalia.

H3: Professional support has a significant positive relationship with teacher performance in public primary schools in Mogadishu, Somalia.

Conceptual Framework

The conceptual framework proposes that teacher performance is associated with three dimensions of teachers' working conditions: compensation adequacy, job security, and professional support. Compensation adequacy refers to teachers' perceptions of the adequacy and reliability of their financial compensation. Job security refers to perceptions of employment stability and continuity, while professional support encompasses access to resources, supervision, assistance, and professional development opportunities.

Teacher performance represents the outcome construct and reflects teachers' fulfilment of key professional responsibilities, including lesson preparation, instructional delivery, classroom management, student assessment, and completion of assigned tasks. Guided by Social Cognitive Theory, the framework assumes that supportive working conditions are positively associated with teacher performance. Accordingly, compensation adequacy, job security, and professional support are hypothesized to have positive relationships with teacher performance.

Figure 1. Conceptual Framework of the Study

Source: Authors' conceptualization based on Social Cognitive Theory and reviewed literature.

2. Literature Review

2.1 Theoretical Foundation

This study is anchored in **Social Cognitive Theory (SCT)**, which provides a useful framework for understanding how environmental conditions are associated with individual behaviour and performance.

Social Cognitive Theory proposes that human functioning emerges from reciprocal interactions among personal factors, environmental influences, and behaviour. Within educational settings, teachers do not perform their professional responsibilities independently of their working environment. Rather, organizational and employment conditions may shape teachers' beliefs, motivation, professional engagement, and subsequent performance (Dari et al., 2026).

From the perspective of Social Cognitive Theory, working conditions constitute important environmental influences within teachers' professional lives. Conditions such as adequate compensation, employment security, access to instructional resources, supportive supervision, and professional development opportunities can create an environment that enables teachers to perform their responsibilities effectively. When teachers perceive that their work is adequately rewarded, their employment is relatively secure, and appropriate professional support is available, they may be better positioned to invest effort and attention in instructional responsibilities. Conversely, unfavourable working conditions may create financial pressure, employment uncertainty, and professional constraints that interfere with effective performance (Sabinorio et al., 2024).

Self-efficacy is particularly relevant within Social Cognitive Theory because it concerns individuals' beliefs in their ability to organize and execute actions necessary to achieve desired outcomes. Teachers with stronger professional self-efficacy may demonstrate greater persistence, instructional engagement, and commitment when confronting classroom challenges. Environmental conditions can contribute to these beliefs by providing teachers with resources, support, recognition, and opportunities to perform successfully. Professional support, for example, may provide teachers with instructional resources, feedback, supervision, and professional development that strengthen their ability to undertake classroom responsibilities (Martin & Mulvihill, 2019).

The theory also emphasizes outcome expectations, referring to individuals' beliefs about the likely consequences of their actions. Compensation and employment security may be particularly relevant in this regard because teachers who perceive that their professional effort is appropriately recognized and that their employment is stable may develop more favorable expectations regarding continued professional investment. In contrast, inadequate or irregular compensation and employment uncertainty may weaken the perceived benefits associated with sustained professional effort (Abakah, 2023).

Guided by Social Cognitive Theory, the present study conceptualizes compensation adequacy, job security, and professional support as environmental dimensions of teachers' working conditions and examines their relationships with teacher performance. The framework therefore provides a theoretical basis for expecting more favorable working conditions to be positively associated with teachers' fulfilment of their professional responsibilities.

2.2 Teacher Performance

Teacher performance is a multidimensional concept encompassing the behaviors, activities, and professional responsibilities undertaken by teachers to facilitate effective teaching and student learning.

It extends beyond teachers' physical presence in school and includes lesson preparation, instructional delivery, classroom management, assessment of student learning, completion of assigned tasks, and broader professional engagement. Effective teacher performance is therefore central to the quality and functioning of schools(Masoumi & Noroozi, 2025).

Instructional planning and preparation constitute important components of teacher performance. Teachers are expected to develop appropriate lesson plans, organize instructional activities, select suitable teaching materials, and align classroom instruction with curriculum objectives. Effective preparation provides structure to the teaching process and enables teachers to use instructional time more efficiently. Similarly, instructional delivery requires teachers to communicate subject content effectively, employ appropriate teaching strategies, engage students in learning, and adapt instruction to students' needs(Kiani et al., 2022).

Classroom management and student assessment also represent important dimensions of performance. Effective classroom management enables teachers to establish productive learning environments, maintain appropriate student behavior, and maximize opportunities for learning. Assessment practices allow teachers to monitor students' progress, provide feedback, identify learning difficulties, and adjust instructional strategies accordingly

Teacher performance may be particularly sensitive to contextual conditions in fragile education systems. Teachers working under financial pressure, insecure employment arrangements, inadequate instructional resources, or limited professional support may face additional constraints when fulfilling their responsibilities. In Somalia, these challenges may be particularly relevant because public schools operate within an education system that continues to experience resource and institutional limitations. Consequently, understanding teacher performance requires consideration of the working conditions within which teachers carry out their professional responsibilities(Hanaf et al., 2024).

In the present study, teacher performance is conceptualized as the outcome construct and is assessed through teachers' perceptions of their fulfilment of core professional responsibilities. Compensation adequacy, job security, and professional support are examined as working-condition factors expected to be positively associated with teacher performance.

2.3 Compensation Adequacy

Compensation adequacy refers to the extent to which teachers perceive the financial compensation received for their work as sufficient, appropriate, and reliable. It encompasses not only the amount of compensation but also the consistency and regularity with which teachers receive payment. Compensation represents an important component of teachers' working conditions because employment income directly affects financial security and the perceived recognition of professional effort.

From a Social Cognitive Theory perspective, compensation represents an environmental condition that may influence teachers' outcome expectations and professional behaviour. When teachers perceive that

their work is fairly and reliably compensated, professional effort may be associated with more favorable expected outcomes. Adequate compensation may also reduce financial pressure and allow teachers to devote greater attention to their teaching responsibilities. Conversely, insufficient or irregular compensation may create financial stress and encourage teachers to seek additional sources of income, potentially reducing the time and energy available for professional responsibilities(Korkmaz & İlhan, 2025).

Empirical evidence has identified compensation as an important consideration in teacher motivation and performance. Research from low- and middle-income countries indicates that financial incentives can influence teacher attendance and effort, although their effects may vary across institutional contexts. Financial conditions may be particularly important in fragile education systems, where teachers frequently operate under limited institutional resources and uncertain salary arrangements.

Evidence from Somalia similarly highlights the relevance of financial conditions. Previous research in Mogadishu has identified inadequate financial rewards as an important concern affecting teachers' motivation and professional commitment. Delayed or irregular salary payments may place additional pressure on teachers and potentially interfere with their ability to concentrate on instructional responsibilities(Juma & Stonier, 2023).

Despite the importance of compensation, limited quantitative evidence has directly examined its relationship with teacher performance among public primary school teachers in Mogadishu. The present study therefore examines whether teachers who perceive their compensation as more adequate also report stronger professional performance.

H1: Compensation adequacy is significantly and positively associated with teacher performance in public primary schools in Mogadishu.

2.4 Job Security

Job security refers to teachers' perceptions regarding the stability, continuity, and predictability of their employment. Teachers who perceive their employment as secure can reasonably expect to maintain their professional positions, whereas insecure employment may involve temporary arrangements, uncertainty regarding contract renewal, or concerns about unexpected termination(Colak & Altinkurt, 2022).

Social Cognitive Theory provides a basis for understanding the potential relationship between employment security and teacher performance. Job security represents an environmental condition capable of shaping teachers' expectations regarding the consequences of long-term professional investment. Teachers who expect continued employment may have stronger incentives to develop professionally, invest in school improvement, establish lasting relationships with students and colleagues, and commit to long-term instructional goals.

Conversely, employment insecurity may generate uncertainty and psychological pressure. Teachers who are unsure whether their employment will continue may be less able or willing to make long-term professional investments. Employment instability may also encourage teachers to seek alternative employment or supplementary income, potentially competing with the time and attention required for teaching responsibilities(Güvercin-Seçkin, 2024).

These concerns are particularly relevant in fragile education systems where institutional instability may influence employment arrangements. In Somalia, public-school teachers have operated within an education system undergoing continued institutional rebuilding. Concerns surrounding temporary employment arrangements and employment continuity therefore make job security an important dimension of teachers' working conditions.

Although international evidence suggests that secure employment may support organizational commitment and professional performance, empirical evidence specifically examining job security and teacher performance in Somali public primary schools remains limited. The present study addresses this gap by examining whether more favorable perceptions of job security are positively associated with teacher performance.

H2: Job security is significantly and positively associated with teacher performance in public primary schools in Mogadishu.

2.5 Professional Support

Professional support refers to the resources, supervision, guidance, assistance, and professional development opportunities available to teachers within their working environment. Effective teaching requires more than individual knowledge and effort; teachers also depend on organizational structures that provide the resources and professional assistance necessary to perform their responsibilities.

Within Social Cognitive Theory, professional support constitutes an environmental resource that can strengthen teachers' capability beliefs and facilitate effective professional behavior. Access to instructional materials, constructive supervision, collegial assistance, and professional development may provide teachers with opportunities to strengthen their knowledge, improve instructional practices, and respond effectively to classroom challenges(Thomas et al., 2019).

Professional support may also facilitate teacher performance by reducing barriers to effective instruction. Adequate teaching materials can support lesson preparation and delivery, while effective supervision can provide feedback and identify areas requiring improvement. Professional development opportunities may enable teachers to update pedagogical knowledge, develop classroom-management skills, and respond to changing curriculum requirements.

This dimension is especially relevant in educational contexts where institutional and instructional resources are constrained. Research concerning Somali schools has identified limited instructional materials, inadequate supervision, and insufficient professional training as challenges affecting

teachers' professional work. Such conditions may restrict teachers' ability to perform effectively even when they possess appropriate professional commitment (Mohamed & Nkomo, 2023).

Despite its theoretical importance, limited empirical evidence has simultaneously examined professional support alongside compensation adequacy and job security as predictors of teacher performance in public primary schools in Mogadishu. Examining professional support within the same structural model therefore provides an opportunity to assess its relative relationship with teacher performance while accounting for other dimensions of teachers' working conditions.

H3: Professional support is significantly and positively associated with teacher performance in public primary schools in Mogadishu.

2.6 Synthesis of Literature and Research Gaps

The reviewed literature indicates that teacher performance is associated with multiple aspects of the professional environment in which teachers work. Compensation adequacy can influence teachers' financial stability and perceptions of professional recognition; job security can shape employment stability and expectations regarding continued professional investment; and professional support can provide the resources, supervision, and development opportunities necessary for effective instructional practice. Social Cognitive Theory supports the expectation that these environmental conditions are associated with teachers' professional behavior and performance (Herliana et al., 2023).

Despite substantial international literature on teacher working conditions, several important gaps remain. First, empirical evidence from fragile and post-conflict education systems remains comparatively limited. Working conditions may have particular importance in these settings because teachers operate under institutional, financial, and resource constraints that differ considerably from those found in more stable education systems.

Second, existing studies in Somalia have often examined individual aspects of teachers' professional environments separately, including teacher motivation, qualifications, supervision, or financial incentives. Consequently, there is limited evidence concerning the simultaneous relationships of multiple dimensions of working conditions with teacher performance.

Third, much of the existing Somali educational research has focused on secondary schools or has employed conventional descriptive and regression approaches. Quantitative evidence based specifically on public primary school teachers in Mogadishu and employing Structural Equation Modeling remains limited.

Finally, compensation adequacy, job security, and professional support represent conceptually related but theoretically distinct dimensions of teachers' working conditions. Examining these constructs simultaneously provides evidence regarding their relative associations with teacher performance and offers a more comprehensive understanding of teachers' professional environments (Sidow, 2022).

To address these theoretical, contextual, empirical, and methodological gaps, the present study examines the associations of compensation adequacy, job security, and professional support with teacher performance among public primary school teachers in Mogadishu using Partial Least Squares Structural Equation Modeling (PLS-SEM). By integrating the three working-condition dimensions into a single structural model, the study provides context-specific evidence that may inform teacher-management policies, employment practices, professional-support initiatives, and broader efforts to strengthen public primary education in Somalia.

3. Methodology

This study adopted a quantitative research approach to examine the relationships between teachers' working conditions and teacher performance in public primary schools in Mogadishu, Somalia. Specifically, the study examined compensation adequacy, job security, and professional support as predictor constructs and teacher performance as the outcome construct. A descriptive cross-sectional survey design was employed because it enabled quantitative data to be collected from teachers during a defined period and relationships among multiple constructs to be examined without manipulating the study environment. Given the cross-sectional nature of the study, the estimated relationships were interpreted as associations rather than definitive causal effects (OLUWASHINA et al., 2025).

The target population comprised teachers working in public primary schools in Mogadishu, Somalia. Based on the administrative population information used in planning the study, approximately 3,500 teachers were employed across public primary schools in the study area. The initial sample requirement was approximately 346 teachers. Teachers were selected from participating schools using the sampling procedures established for the study to obtain responses across the targeted public-primary-school setting.

A total of 346 records were initially available for analysis. Before statistical analysis, the dataset underwent data-quality screening to identify incomplete, inconsistent, and repeated observations. During this process, 154 exact duplicate records were identified and excluded, leaving 192 unique observations as the final analytical sample ($N = 192$). The removal of exact duplicate records was undertaken to ensure that repeated observations did not artificially influence descriptive statistics, measurement-model estimates, or structural relationships. All statistical results reported in the study are therefore based on the cleaned sample of 192 respondents.

Data were collected using a structured questionnaire developed from the study's conceptual framework and relevant literature and adapted to the context of public primary schools in Mogadishu. The instrument comprised demographic questions and 20 measurement items representing four constructs: Compensation Adequacy (5 items; CA1–CA5), Job Security (5 items; JS1–JS5), Professional Support (5 items; PS1–PS5), and Teacher Performance (5 items; TP1–TP5). All construct items were measured using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

Compensation Adequacy measured teachers' perceptions of the adequacy and reliability of compensation received for their professional work. Job Security assessed teachers' perceptions of employment stability and continuity. Professional Support captured perceptions concerning access to resources, supervision, professional assistance, and development opportunities. Teacher Performance assessed respondents' perceptions of their fulfillment of core professional responsibilities, including lesson preparation, instructional delivery, classroom management, student-related responsibilities, and completion of assigned tasks.

The questionnaire also collected demographic information concerning **gender, educational qualification, age, and period of service**. Following data cleaning, the final sample consisted of 192 respondents. Of these, 69.3% were male and 30.7% were female. Most respondents held a Master's degree (69.3%), followed by a Bachelor's degree (28.6%) and Diploma (2.1%). The largest age category was 21–30 years (31.2%), while 47.9% of respondents reported 7–9 years of service.

Data analysis was conducted using descriptive statistics and **Partial Least Squares Structural Equation Modeling (PLS-SEM)**. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were first used to summarize respondents' characteristics and study constructs. PLS-SEM was subsequently employed to evaluate the measurement and structural models. This analytical approach was appropriate because the study sought to estimate relationships among multiple latent constructs and assess both measurement quality and the explanatory performance of the proposed structural model.

The measurement model was evaluated using indicator loadings, internal consistency reliability, convergent validity, and discriminant validity. Internal consistency was assessed using **Cronbach's alpha, composite reliability (rho_a), and composite reliability (rho_c)**. Values of approximately 0.70 or higher were considered evidence of satisfactory reliability. Convergent validity was evaluated using the **Average Variance Extracted (AVE)**, with 0.50 used as the conventional benchmark. Indicator loadings were also examined to determine how strongly individual measurement items represented their respective constructs.

Discriminant validity was assessed using the **Fornell–Larcker criterion and Heterotrait–Monotrait ratio (HTMT)**. The Fornell–Larcker criterion compares the square root of each construct's AVE with its correlations with other constructs, while HTMT provides a more sensitive assessment of construct distinctiveness. HTMT values below 0.90 were generally considered desirable. Because CA–TP and JS–TP exceeded this threshold in the cleaned dataset, the empirical overlap among these constructs was acknowledged and the affected structural relationships were interpreted with caution rather than treating discriminant validity as fully established.

Following assessment of the measurement model, the structural model was evaluated to test the three proposed hypotheses. Collinearity among predictor constructs was examined using the **Variance Inflation Factor (VIF)**. Standardized path coefficients (β) were used to determine the direction and relative strength of the relationships between Compensation Adequacy, Job Security, Professional

Support, and Teacher Performance. Statistical significance was evaluated using bootstrapping, while the **coefficient of determination (R^2)** was used to assess the proportion of variance in Teacher Performance explained jointly by the three predictors. **Effect sizes (f^2)** were additionally examined to determine the relative contribution of each predictor to the explanatory power of the model.

The final structural model explained **66.8% of the variance in Teacher Performance ($R^2 = 0.668$)**. However, these results were interpreted within the limitations of a cross-sectional self-report design. Accordingly, statistically significant structural paths were interpreted as evidence of positive associations rather than proof of causal effects.

Ethical principles for educational research were observed throughout the study. Respondents were informed about the purpose of the research and the voluntary nature of participation before completing the questionnaire. Participants were informed that they could decline participation without penalty, and confidentiality and anonymity were maintained during data collection, analysis, and reporting. Attention was given to confidentiality because compensation and employment security may represent sensitive professional issues for public-school teachers. Individual responses were therefore treated confidentially and were not reported in a manner that could identify individual participants.

4. Results

Table 1
Demographic Characteristics of Respondents (N = 192)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	133	69.3
	Female	59	30.7
	Total	192	100.0
Education level	Diploma	4	2.1
	Bachelor's degree	55	28.6
	Master's degree	133	69.3
	Total	192	100.0
Age	Below 20 years	53	27.6
	21–30 years	60	31.2
	31–40 years	57	29.7
	41 years and above	22	11.5
	Total	192	100.0
Period of service	Less than 2 years	24	12.5
	3–6 years	54	28.1
	7–9 years	92	47.9
	10 years and above	22	11.5
	Total	192	100.0

Table 1 presents the demographic characteristics of the 192 respondents included in the cleaned dataset. Regarding gender, 133 (69.3%) respondents were male and 59 (30.7%) were female, indicating that male teachers constituted most of the sample. In terms of educational qualifications, most respondents held a master's degree (69.3%), followed by those with a bachelor's degree (28.6%), while only 2.1% held a diploma.

Regarding age, respondents aged 21–30 years constituted the largest group (31.2%), followed closely by those aged 31–40 years (29.7%) and those below 20 years (27.6%). Respondents aged 41 years and above represented 11.5% of the sample. In terms of teaching experience, nearly half of the respondents (47.9%) had served for 7–9 years, while 28.1% had 3–6 years of service, 12.5% had less than two years, and 11.5% had ten years or more. Overall, the demographic profile indicates that the sample was predominantly male, highly educated, and included a substantial proportion of teachers with several years of professional experience

Figure 2 illustrates the PLS-SEM measurement and structural model. Compensation Adequacy ($\beta = 0.395$) and Job Security ($\beta = 0.395$) showed the strongest positive relationships with Teacher Performance, while Professional Support also showed a positive relationship ($\beta = 0.185$). The outer loadings correspond to the cleaned analytical sample of 192 respondents.

Table 2
Descriptive Statistics and Internal Consistency of the Study Constructs

Construct	Code	Mean	Standard Deviation	Cronbach's Alpha (α)
Compensation Adequacy	CA	3.589	0.816	0.781
Job Security	JS	3.719	0.716	0.797
Professional Support	PS	3.771	0.556	0.728
Teacher Performance	TP	3.685	0.758	0.790

Table 2 presents the descriptive statistics and internal consistency reliability of the study constructs based on the cleaned sample of 192 respondents. Professional Support recorded the highest mean ($M = 3.771$, $SD = 0.556$), followed by Job Security ($M = 3.719$, $SD = 0.716$), Teacher Performance ($M = 3.685$, $SD = 0.758$), and Compensation Adequacy ($M = 3.589$, $SD = 0.816$). Overall, the mean scores indicate relatively positive respondent assessments across the four constructs.

The Cronbach's alpha coefficients ranged from 0.728 to 0.797. Compensation Adequacy ($\alpha = 0.781$), Job Security ($\alpha = 0.797$), Professional Support ($\alpha = 0.728$), and Teacher Performance ($\alpha = 0.790$) all exceeded the commonly applied threshold of 0.70, indicating satisfactory internal consistency reliability.

Table 3
Measurement Model Assessment

Construct	Items	Loadings	Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE
Compensation Adequacy (CA)	CA1	0.704	0.781	0.785	0.851	0.533
	CA2	0.735				
	CA3	0.765				
	CA4	0.760				
	CA5	0.684				
Job Security (JS)	JS1	0.774	0.797	0.804	0.860	0.552
	JS2	0.713				
	JS3	0.755				
	JS4	0.669				
	JS5	0.798				
Professional Support (PS)	PS1	0.677	0.728	0.732	0.823	0.482
	PS2	0.695				
	PS3	0.737				
	PS4	0.670				
	PS5	0.689				
Teacher Performance (TP)	TP1	0.720	0.790	0.796	0.856	0.544
	TP2	0.678				
	TP3	0.773				
	TP4	0.755				
	TP5	0.756				

The results in Table 3 indicate that the measurement model demonstrated acceptable reliability and convergent validity. All constructs recorded Cronbach's alpha, rho_a, and rho_c values above 0.70, confirming satisfactory internal consistency. The AVE values for Compensation Adequacy, Job Security, and Teacher Performance exceeded the recommended threshold of 0.50. However, Professional Support

recorded an AVE of 0.482, which was slightly below the recommended threshold. Overall, the measurement model showed acceptable reliability and generally adequate convergent validity.

Table 4
Discriminant Validity (Fornell–Larcker Criterion)

Construct	CA	JS	PS	TP
CA	0.730			
JS	0.720	0.743		
PS	0.368	0.376	0.694	
TP	0.749	0.747	0.480	0.738

Table 4 shows that the Fornell–Larcker criterion was satisfied for most construct relationships. However, the correlations between CA and TP and between JS and TP slightly exceeded their respective square roots of AVE, indicating some conceptual overlap among these constructs. Therefore, discriminant validity was largely supported, although minor concerns remained for these construct pairs.

Table 5
Heterotrait–Monotrait Ratio (HTMT)

CA	CA	JS	PS	TP
JS	0.900			
PS	0.479	0.486		
TP	0.941	0.927	0.620	

Table 5 shows that the HTMT results supported discriminant validity for most construct pairs. However, CA–TP (0.941) and JS–TP (0.927) exceeded the recommended threshold of 0.90, indicating potential construct overlap. These relationships were therefore interpreted with caution in the subsequent structural model analysis.

Table 6
Collinearity Assessment (Inner VIF)

Predictor Construct	Outcome Construct	VIF
Compensation Adequacy (CA)	Teacher Performance (TP)	2.310
Job Security (JS)	Teacher Performance (TP)	2.348
Professional Support (PS)	Teacher Performance (TP)	1.207

Table 6 shows that all VIF values were below the recommended threshold of 3.0, indicating that multicollinearity was not a concern among the predictor constructs in the structural model.

Table 7
Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	β	SE	t-value	p-value	95% CI	Decision
H1	CA -> TP	0.395	0.088	4.499	< 0.001	[0.224, 0.561]	Supported
H2	JS -> TP	0.395	0.071	5.563	< 0.001	[0.256, 0.529]	Supported
H3	PS -> TP	0.185	0.058	3.204	0.001	[0.076, 0.303]	Supported

Table 7 shows that Compensation Adequacy ($\beta = 0.395$, $p < 0.001$), Job Security ($\beta = 0.395$, $p < 0.001$), and Professional Support ($\beta = 0.185$, $p = 0.001$) had significant positive effects on Teacher Performance. Therefore, H1, H2, and H3 were supported.

Table 8
Explained Variance and Effect Sizes

Outcome Construct	R ²	Predictor	f ²	Effect Size
Teacher Performance (TP)	0.668	Compensation Adequacy (CA)	0.232	Medium
		Job Security (JS)	0.224	Medium
		Professional Support (PS)	0.084	Small

Table 8 shows that Compensation Adequacy, Job Security, and Professional Support jointly explained 66.8% of the variance in Teacher Performance ($R^2 = 0.668$). Compensation Adequacy ($f^2 = 0.232$) and Job Security ($f^2 = 0.224$) showed medium effect sizes, while Professional Support ($f^2 = 0.084$) showed a small effect. Overall, the model demonstrated substantial explanatory power for Teacher Performance.

Table 9
Summary of Hypothesis Testing

Hypothesis	Proposed Relationship	B	p-value	Decision
H1	Compensation Adequacy -> Teacher Performance	0.395	< 0.001	Supported
H2	Job Security -> Teacher Performance	0.395	< 0.001	Supported
H3	Professional Support -> Teacher Performance	0.185	0.001	Supported

Table 9 summarizes the hypothesis-testing results. All three hypotheses were supported, indicating that Compensation Adequacy, Job Security, and Professional Support were positively and significantly associated with Teacher Performance. Compensation Adequacy and Job Security showed the strongest relationships with Teacher Performance, while Professional Support had a comparatively smaller positive relationship.

The bootstrapping results indicate that all three structural relationships were statistically significant. Compensation Adequacy and Job Security were significantly associated with Teacher Performance ($p < 0.001$), while Professional Support was also statistically significant ($p = 0.001$). Overall, the findings provide statistical support for all three hypothesized relationships in the model.

Discussion

The study examined the relationships between three dimensions of teachers' working conditions—compensation adequacy, job security, and professional support—and teacher performance in public primary schools in Mogadishu, Somalia. The findings showed that all three dimensions were positively and significantly associated with teacher performance. Together, the three predictors explained 66.8% of the variance in teacher performance ($R^2 = 0.668$), indicating that working conditions constitute an important set of factors associated with teachers' professional performance in the study context.

The findings generally support the expectations derived from Social Cognitive Theory, which emphasizes the interaction between environmental conditions and individual behavior. Teachers perform their professional responsibilities within organizational and employment environments that may either facilitate or constrain their work. In the present study, more favorable perceptions of compensation, employment security, and professional support were associated with stronger reported teacher performance. This suggests that understanding teacher performance in fragile education systems requires attention not only to teachers' individual capabilities but also to the conditions under which they work.

The first hypothesis proposed that compensation adequacy would be positively associated with teacher performance. The results supported this hypothesis, with compensation adequacy demonstrating a positive and statistically significant relationship with teacher performance ($\beta = 0.395$, $p < 0.001$). The effect-size analysis further indicated a medium contribution of compensation adequacy to the model ($f^2 = 0.232$).

This finding suggests that teachers who perceive their compensation as adequate and reliable are more likely to report stronger professional performance. Adequate compensation may reduce financial pressure, strengthen perceptions that professional effort is appropriately recognized, and enable teachers to devote greater attention to their instructional responsibilities. Conversely, inadequate or unreliable compensation may create financial difficulties that compete with teachers' professional commitments.

The finding is consistent with previous research indicating that financial incentives and compensation conditions can influence teacher attendance, effort, motivation, and professional commitment. For example, [1] reported that financial incentives can positively influence teacher attendance and effort in low- and middle-income settings. The finding is also relevant to earlier evidence from Somalia identifying financial inadequacy as an important concern affecting teachers' professional experiences. In a fragile education system such as Somalia's, where teachers may face substantial economic uncertainty,

compensation may therefore represent more than a financial reward; it may constitute an important condition supporting continued professional engagement(WANGECI, 2025).

The second hypothesis proposed that job security would be positively associated with teacher performance. This hypothesis was also supported. Job security demonstrated a positive and statistically significant relationship with teacher performance ($\beta = 0.395$, $p < 0.001$) and produced a medium effect size ($f^2 = 0.224$). The standardized coefficient was equal to that of compensation adequacy, indicating that the two factors had similarly strong relationships with teacher performance in the structural model.

The result suggests that teachers who perceive greater stability and continuity in their employment tend to report stronger professional performance. Employment security may encourage teachers to invest in longer-term professional responsibilities, including instructional preparation, development of relationships with students, participation in school activities, and professional development. By contrast, uncertainty concerning continued employment may create psychological and economic pressure that interferes with professional engagement.

This relationship is particularly important in the Somali context, where institutional fragility and uncertain employment arrangements may affect teachers' professional experiences. From the perspective of Social Cognitive Theory, job security represents an environmental condition that may influence teachers' expectations regarding the benefits of continued professional effort. Greater employment stability may strengthen confidence that investments in teaching and professional development will generate meaningful long-term outcomes.

The third hypothesis proposed that professional support would be positively associated with teacher performance. The results supported this hypothesis, with professional support demonstrating a positive and statistically significant relationship with teacher performance ($\beta = 0.185$, $p = 0.001$). Its effect size was smaller ($f^2 = 0.084$) than those of compensation adequacy and job security.

Although comparatively weaker, this finding remains important. Teachers require appropriate resources, supervision, professional guidance, and development opportunities to perform their responsibilities effectively. Professional support may help teachers improve lesson preparation, instructional delivery, classroom management, and responses to students' learning needs. The positive relationship identified in this study is therefore consistent with the expectation that supportive organizational environments facilitate teachers' professional work.

Previous research in Somali educational settings has similarly identified limited instructional resources, inadequate supervision, and insufficient professional-development opportunities as challenges to effective teaching. The present finding extends this literature by demonstrating that professional support remained significantly associated with teacher performance even when compensation adequacy and job security were considered simultaneously.

Taken together, the findings demonstrate that teacher performance in public primary schools should not be understood solely as an individual teacher characteristic. Rather, performance is associated with the broader professional environment within which teachers work. Compensation adequacy and job security demonstrated the strongest relationships, while professional support made a smaller but statistically significant contribution. This pattern suggests that both teachers' basic employment conditions and the professional resources available to them are relevant to their performance.

Nevertheless, the findings concerning compensation adequacy and job security should be interpreted with some caution because the discriminant-validity assessment identified potential overlap involving these constructs and teacher performance. In particular, HTMT values for CA–TP (0.941) and JS–TP (0.927) exceeded the conventional threshold of 0.90. Although the constructs are theoretically distinct, the results suggest that respondents may perceive aspects of compensation, employment security, and professional performance as closely connected within the specific employment context of public primary schools in Mogadishu. Consequently, the significant structural relationships should be interpreted as evidence of strong associations rather than completely independent effects.

Overall, the findings contribute context-specific quantitative evidence concerning teacher working conditions in a fragile education system. By examining compensation adequacy, job security, and professional support simultaneously, the study demonstrates that improving teacher performance may require a multidimensional approach that addresses both employment conditions and the professional environment in which teaching takes place.

Limitations of the Study

Several limitations should be considered when interpreting the findings. First, the study employed a cross-sectional research design, with data collected at a single point in time. Although the results demonstrate statistically significant relationships between working conditions and teacher performance, the design does not establish temporal ordering or causality. The findings should therefore be interpreted as associations rather than evidence that changes in working conditions necessarily cause changes in teacher performance.

Second, the study relied on self-reported questionnaire data. Teachers assessed both their working conditions and their own professional performance, which may introduce common-method bias and social-desirability effects. Some respondents may have evaluated their performance more positively than would be observed through independent classroom observations or administrative performance records. Future research could strengthen measurement by combining teacher surveys with classroom observations, supervisor evaluations, attendance records, or other objective indicators of performance.

Third, although the initial dataset contained 346 records, data-quality screening identified and removed 154 exact duplicate records, resulting in a final analytical sample of 192 unique respondents. Removing duplicates was necessary to prevent repeated observations from influencing the statistical estimates; however, the reduction in sample size may affect the breadth of representation of the original target

population. The findings should therefore be generalized beyond the analyzed sample with appropriate caution.

Fourth, the study focused specifically on public primary school teachers in Mogadishu. Working conditions may differ between public and private schools, primary and secondary schools, and across different regions of Somalia. Consequently, the findings may not necessarily represent teachers working in other educational settings or geographical areas.

Fifth, some evidence of construct overlap was identified during discriminant-validity assessment. HTMT values for CA–TP (0.941) and JS–TP (0.927) exceeded the commonly recommended threshold of 0.90. This indicates that respondents may not have distinguished completely between aspects of compensation adequacy, job security, and teacher performance. Although the constructs were retained because they are theoretically distinct and central to the conceptual framework, structural relationships involving these constructs should be interpreted cautiously.

Finally, the study examined only three dimensions of teachers' working conditions. Other potentially important factors—including school leadership, workload, physical infrastructure, class size, teacher motivation, organizational climate, and availability of teaching materials—were not separately modeled. The model's R^2 of 0.668 indicates substantial explanatory power, but approximately 33.2% of the variance in teacher performance remained unexplained. Future research could therefore incorporate additional individual, school-level, and institutional factors.

Conclusion

This study examined the relationships between compensation adequacy, job security, professional support, and teacher performance among public primary school teachers in Mogadishu, Somalia. Using a cleaned analytical sample of 192 respondents and PLS-SEM, the study provides quantitative evidence concerning the importance of teachers' working conditions within a fragile education context.

The findings showed that all three working-condition dimensions were positively and significantly associated with teacher performance. Compensation adequacy ($\beta = 0.395$, $p < 0.001$) and job security ($\beta = 0.395$, $p < 0.001$) demonstrated the strongest relationships, while professional support ($\beta = 0.185$, $p = 0.001$) showed a smaller but significant positive relationship. Together, the three predictors explained 66.8% of the variance in teacher performance, demonstrating the substantial explanatory relevance of teachers' working conditions.

These findings support the central proposition of Social Cognitive Theory that environmental conditions are associated with individual behavior and performance. In the context of public primary schools in Mogadishu, teacher performance appears to be closely connected to both fundamental employment conditions and the professional support available within schools. Teachers may be better positioned to fulfill their professional responsibilities when compensation is perceived as adequate, employment is relatively secure, and appropriate professional resources and support are available.

The study therefore highlights the importance of addressing teacher performance through a broader working-conditions perspective. Efforts to improve teaching quality should not focus exclusively on teacher competence or individual responsibility. Educational authorities and school leaders should also consider the employment and organizational conditions that enable teachers to perform effectively. Particular attention may be warranted for the adequacy and reliability of teacher compensation, greater predictability of employment arrangements, access to instructional resources, supportive supervision, and continuing professional development.

At the same time, the findings should be interpreted within the limitations of the cross-sectional self-report design and the identified discriminant-validity concerns. Further longitudinal and multi-source research is needed to establish temporal relationships and determine whether improvements in specific working conditions lead to subsequent improvements in teacher performance.

Overall, the study contributes to the limited empirical literature on teacher working conditions in Somalia by demonstrating that compensation adequacy, job security, and professional support are important correlates of teacher performance in public primary schools in Mogadishu. Strengthening these conditions may form an important component of broader efforts to improve teacher effectiveness, educational quality, and the resilience of Somalia's public education system.

Declarations

Acknowledgements

The authors gratefully acknowledge the valuable contributions of all teachers who participated in this study and generously shared their experiences and perspectives regarding working conditions and teacher performance. Their participation was essential to the successful completion of the research. The authors also extend their sincere appreciation to the administrators and staff of the participating public primary schools in Mogadishu, Somalia, for their cooperation and support during the data collection process. Finally, the authors acknowledge **Salaam University** for its institutional and financial support toward the successful completion of this study.

Clinical Trial Registration

Not applicable. This study was an educational, cross-sectional survey and did not involve a clinical trial.

Declarations

Ethical Approval

Ethical approval for this study was obtained from salaam university Research Ethics Committee (SU-REC) Approval No. 2026/SU-REC/AMSHS/P0405 on Jan 20, 2026. The study was conducted in accordance with relevant institutional ethical guidelines and established ethical principles for research involving human participants.

Consent to Participate

Informed consent was obtained from all participants before data collection. Participants were provided with information about the purpose of the study, voluntary participation, confidentiality, and their right to withdraw from the study at any time without penalty. Only participants who provided informed consent were included in the study.

Competing Interests

The authors declare that they have no competing interests.

Consent to Publish

Not applicable. The manuscript does not contain identifiable personal information, images, or other individual-level data requiring consent for publication.

Availability of Data and Materials

The dataset generated and analyzed during the current study is available from the corresponding author upon reasonable request.

Funding

This research received financial support from **Salaam University, Mogadishu, Somalia**. No external funding was received for this study.

Author Contributions

D.M.A. contributed to conceptualization, investigation, data collection, and writing of the original draft. **A.M.F** contributed to investigation, data collection, resources, and review of the manuscript. **L.M.W.** contributed to conceptualization, methodology, formal analysis, supervision, and writing—review and editing. All authors read and approved the final manuscript.

References

1. Abakah, E. (2023). Reframing motivation as ‘investment’ in teacher continuing professional development. *Teacher Development*, 27(3), 353–373.
2. Abdi, A. I., & Idris, M. O. A. (2024). Teachers’ role in implementing the Somali primary school curriculum in Mogadishu, Somalia. *International Journal of Advanced And Applied Sciences*, 11(6), 205–214.
3. Al-Thani, H., Santhosh, M. E., Sellami, A., & Alkubaisi, A. (2026). The association between teachers’ cognitive and psychological capacities, their well-being, and implications for professional effectiveness: a systematic review. *BMC Psychology*, 14(1), 429.

4. Canton, H. (2021). United nations educational, scientific and cultural organization—UNESCO. In *The Europa Directory of International Organizations 2021* (pp. 359–365). Routledge.
5. Colak, I., & Altinkurt, Y. (2022). The Precarization of Educational Labor: The Examination of Teachers' Job Insecurity Perceptions. *Educational Process: International Journal*, 11(2), 60–95.
6. Dari, W., Haliza, Z. N., Chadidjah, S., & Mawaddah, I. (2026). Social Cognitive-Based Human Resource Performance Evaluation to Improve the Quality of Educational Institutions. *At-Tahsin: Jurnal Manajemen Pendidikan*, 6(1), 60–81.
7. Elele, E. C., Yudana, I. M., Lasmawan, I. W., & Dantes, K. R. (2020). The contingent effects of school leadership and organizational culture on teacher performance in fragile educational systems. *International Research Journal of Management Sciences*.
8. Eryilmaz, N., Kennedy, A. I., Strietholt, R., & Johansson, S. (2025). Teacher job satisfaction: International evidence on the role of school working conditions and teacher characteristics. *Studies in Educational Evaluation*, 86, 101474.
9. Güvercin-Seçkin, G. (2024). Precarity and informal workplace learning: changing employment regulations and professional practices of teachers. *Globalisation, Societies and Education*, 1–16.
10. Hanaf, A. B., Mohamed, M. H., Nhial, B. C., Desai, A., Sharma, A., & Sayed, Y. (2024). Inclusion and Continuous Professional Development for Teachers in Ethiopia and Somalia. In *Education and Resilience in Crisis* (pp. 132–164). Bristol University Press.
11. Herliana, H., Kristiawan, M., & Wardiah, D. (2023). The effect of principal's academic supervision, teacher's professionalism and work environment on teacher's performance. *Journal of Social Work and Science Education*, 4(2), 480–492.
12. Juma, A. A., & Stonier, F. (2023). Teacher absenteeism and poor learning outcome in Tanzania: rethinking an incentive scheme as a strategic solution to the problem. *The African Review*, 1(aop), 1–26.
13. Kiani, K. M., Shah, N. H., & Azhar, M. (2022). Effectiveness of instructional planning and strategies of teachers as a national professional standard for teachers in Pakistan. *Journal of Education and Social Studies*, 3(3), 194–204.
14. Korkmaz, O., & İlhan, B. (2025). Can decent work lead to greater life satisfaction? Exploring the mediating and moderating role of positivity in teachers. *British Journal of Guidance & Counselling*, 53(6), 955–972.
15. Martin, L. E., & Mulvihill, T. M. (2019). Voices in education: Teacher self-efficacy in education. *The Teacher Educator*, 54(3), 195–205.
16. Masoumi, D., & Noroozi, O. (2025). Developing early career teachers' professional digital competence: A systematic literature review. *European Journal of Teacher Education*, 48(3), 644–666.
17. Mohamed, A. A., & Nkomo, N. N. (2023). Instructional supervision and improved teaching performance for public primary schools in Somalia. *International Journal of Education and Evaluation*, 9(3), 100–105.

18. NYANGARESI, D. (2025). *TEACHERS' PERCEPTIONS ON THE IMPLEMENTATION OF COMPETENCY-BASED EDUCATION IN JUNIOR SCHOOLS, TRANS-NZOIA WEST SUB COUNTY-KENYA*. University of Eldoret.
19. OLUWASHINA, A. A., JOSHUA, S., ALIBE, H. G., SHEHU, M. B., & KIRAWA, A. B. (2025). EXPLORING THE ROLE OF TEACHERS AS CATALYSTS FOR SOCIAL CHANGE IN A DYNAMIC SOCIETY. *Journal of Humanities and Social Science*.
20. Omar, A. M., & Ali, A. G. (2025). The Role of Supervision in Enhancing Teacher Development in Secondary Schools in Banadir Region, Mogadishu, Somalia. *Journal of Somali Studies (JoSS)*, 12(2), 71.
21. Sabinorio, R. L., Presno, R. M., Mamac, S. J. F. R., & Fernandez, E. J. (2024). Teaching Behavior: A Social Cognitive Inquiry into the Work Context of Special Education Teachers. *International Journal of Research Publications*, 175(1), 921–945.
22. Sidow, M. I. (2022). Factors Affecting the Implementation of the Competency-Based Curriculum in Public Secondary Schools In Mogadishu, Somalia: A Multiple Regression Analysis. *EPRA International Journal of Environmental Economics, Commerce and Educational Management (ECEM)*, 9(5), 1–8.
23. Thomas, L., Tuytens, M., Devos, G., Kelchtermans, G., & Vanderlinde, R. (2019). Beginning teachers' professional support: A mixed methods social network study. *Teaching and Teacher Education*, 83, 134–147.
24. Waleed, H., & Waleed, E. (2026). Education in Yemen during the Armed Conflict: The Impact of Teachers' Salary Interruptions on the Quality of Education. *Available at SSRN 6310618*.
25. WANGECI, W. M. (2025). *MOTIVATIONAL FACTORS AND TEACHER RETENTION IN PRIVATE SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA*.
26. Yasin, G. M. (2021). Teacher Qualifications and Academic Performance of Pupils in Public Primary Schools in Hargeisa District. *Education Quarterly Reviews*, 4(3), 39–44.

Figures

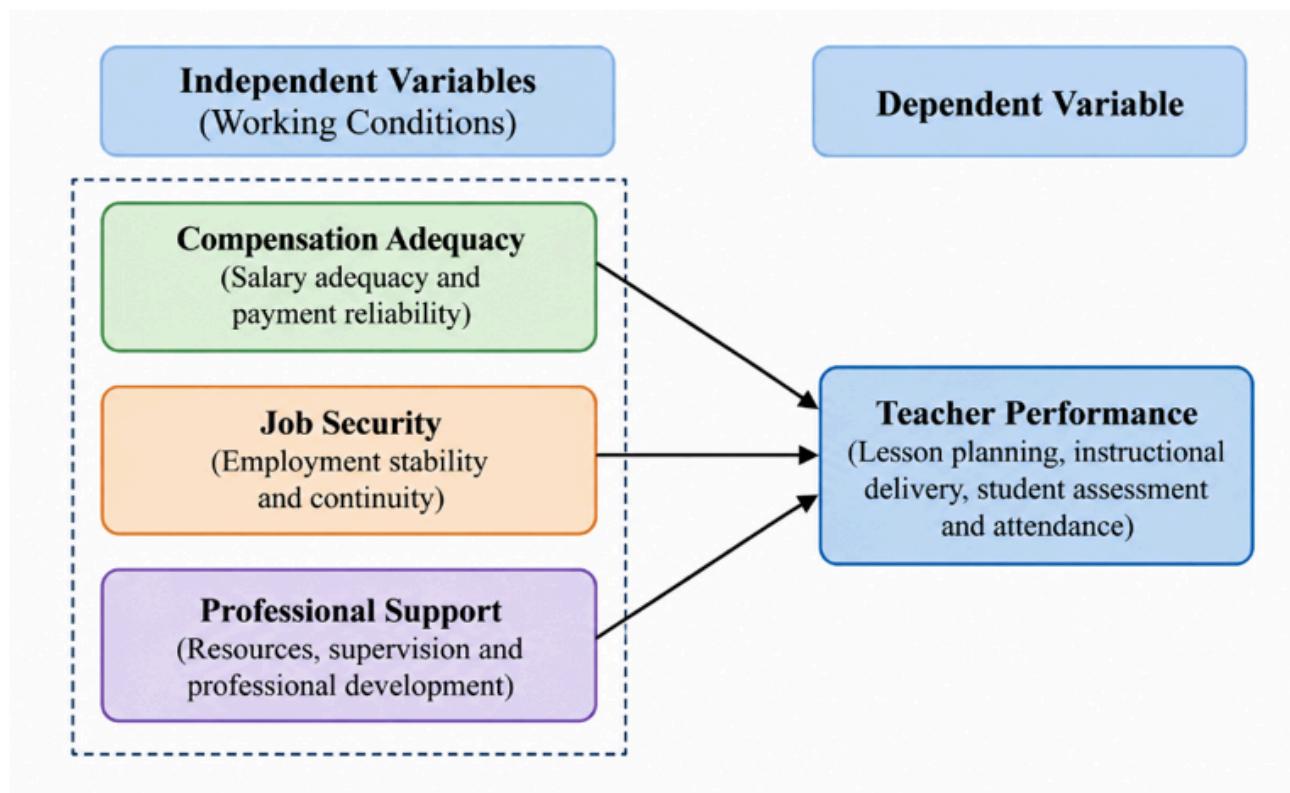


Figure 1

Conceptual Framework of the Study

Source: Authors' conceptualization based on Social Cognitive Theory and reviewed literature.

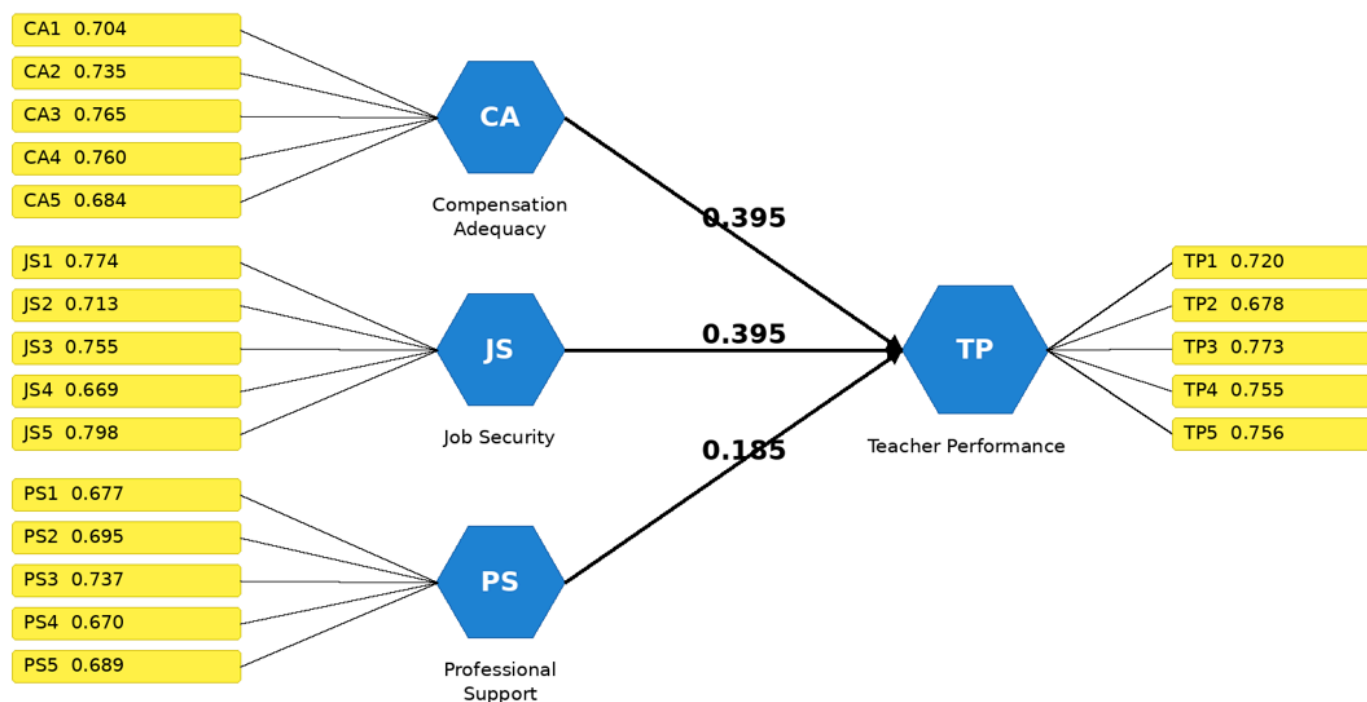


Figure 2

PLS-SEM Measurement and Structural Model

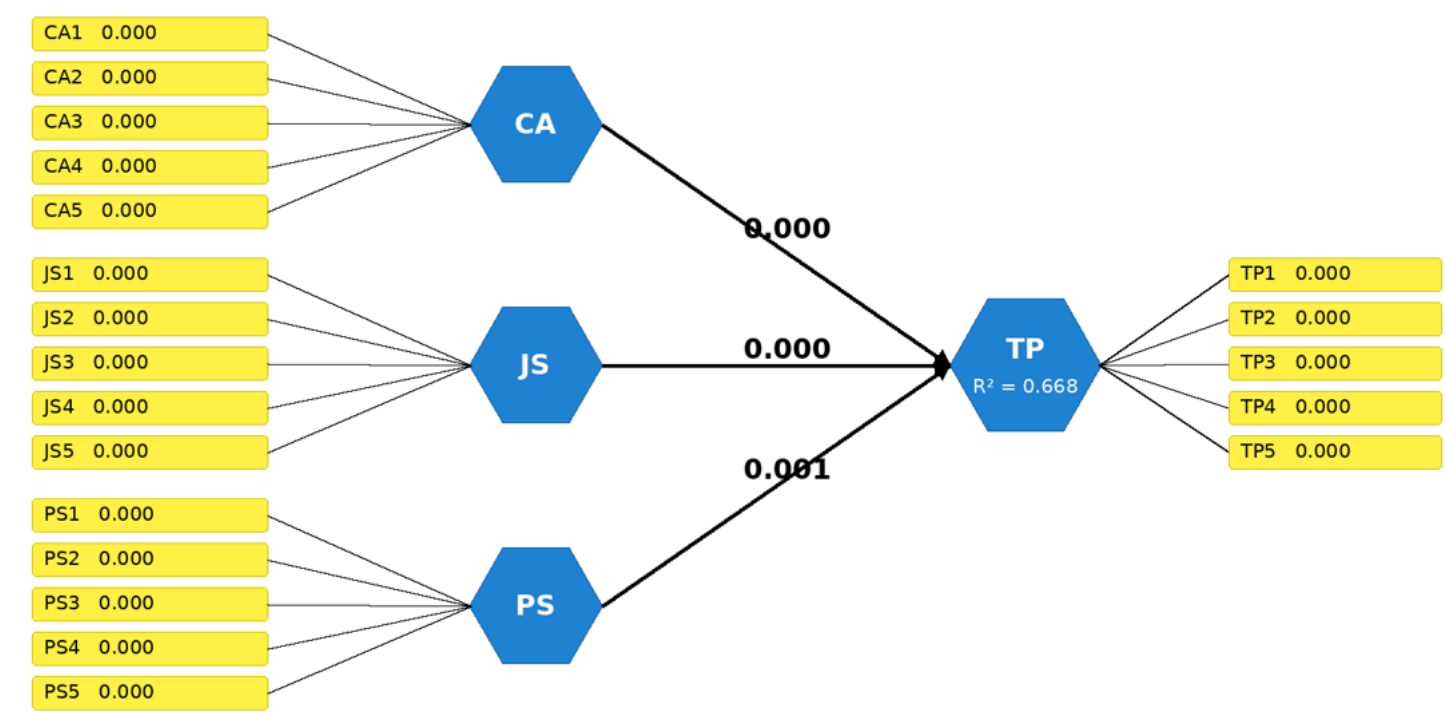


Figure 3

Structural Model (Bootstrapping Results)