
THE INFLUENCE OF ORGANISATIONAL CULTURE AND PRINCIPAL LEADERSHIP ON TEACHER PERFORMANCE THROUGH JOB SATISFACTION AND JOB STRESS IN PUBLIC SENIOR HIGH SCHOOLS IN JAMBI PROVINCE

MUHAMMAD ARIF LIPUTO¹, AKMAL SUCA², MUAZZA³

^{1,2,3}Universitas Jambi, Indonesia

Corresponding author: arif.liputo@unja.ac.id

Abstract

Teacher performance is an important indicator for assessing the effectiveness of educational management in schools, especially in efforts to improve the quality of education and ensure the sustainability of school organizational management. This study aimed to analyse the influence of organizational culture and principal leadership behavior on teacher performance, both directly and indirectly through job satisfaction and job stress as managerial mechanisms. This study employed a quantitative, explanatory survey design. The study population included all public high school teachers in Jambi Province, totalling 5,105 people, and a sample of 375 people was selected using a cluster random sampling technique. Data were collected through a structured questionnaire and analysed using the Partial Least Squares Structural Equation Modelling (PLS-SEM) method. The results showed that this model has significant explanatory power. The coefficient of determination (R^2) of 0.701 indicates that variations in teacher job satisfaction are largely explained by organizational culture and principal leadership behaviour, while job stress has an R^2 value of 0.670. Teacher performance has an R^2 value of 0.769, indicating that most of the variation in teacher performance is explained by organizational and psychological factors contained in the model. Organizational culture and principal leadership behaviour were found to have a significant influence on job satisfaction and job stress. Job satisfaction has a positive effect on teacher performance, while job stress has a negative effect, confirming the role of both as important mediating variables. Theoretically, this study strengthens the field of educational management by positioning organizational culture and principal leadership as strategic managerial instruments in improving teacher performance. Practically, these findings suggest that improving teacher performance requires an integrated educational management approach, including strengthening school organizational culture, instructional leadership, and the systematic management of teacher well-being.

Keywords: job satisfaction, job stress, organizational culture, principal leadership, teacher performance

Introduction

Improving human resource quality through education constitutes a strategic national agenda, particularly in the face of Fourth Industrial Revolution challenges. This era is characterised by rapid technological advancement, digitalisation, and evolving workforce competency demands. Quality education is expected to produce individuals who not only master 21st-century knowledge

and skills but also possess character, creativity, and adaptability relevant to global needs (OECD, 2020; UNESCO, 2021). Within this context, teachers occupy a central role as the primary agents shaping learning processes and outcomes in schools. Effective curriculum implementation and pedagogical innovation depend heavily on teachers' professional capacity (Darling-Hammond, 2017; Day, Gu, & Sammons, 2016). Numerous studies confirm that educational quality is significantly determined by how well teachers fulfil their professional responsibilities across the stages of planning, delivery, and assessment (Tschannen-Moran & Hoy, 2001; Blömeke, Gustafsson, & Shavelson, 2015).

Teacher performance is therefore a decisive factor in shaping student learning outcomes and the overall success of schooling. A well-designed curriculum, adequate facilities, and progressive policy frameworks will fail to yield optimal results without effective teaching at the classroom level. Beyond individual competence, research consistently shows that teacher performance is also shaped by organisational and environmental factors, including principal leadership, workplace climate, and the prevailing school culture. A school's organisational culture defines the values, norms, and behavioural patterns that govern how teachers work, collaborate, and grow professionally.

In Indonesia, enhancing teacher professionalism has long been a central concern of national education policy. Foundational legislation, including the National Education System Law and the Teachers and Lecturers Law, stipulates that teaching is a profession requiring integrated mastery of pedagogical, professional, social, and personality competencies. These regulations reflect the government's commitment to building teacher quality as the cornerstone of national educational development (Ministry of Education and Culture, 2020). Nevertheless, educational indicators reveal persistent disparities in teacher performance across regions, driven by differences in institutional contexts, leadership quality, and access to continuing professional development (OECD, 2020; UNESCO, 2021).

In Jambi Province specifically, data from teacher competency assessments and student academic achievement suggest that educational policy targets have not been fully met. This situation is consistent with empirical evidence indicating that competency-oriented policies do not automatically translate into improved performance unless they are reinforced by a conducive organisational culture and sound school management (Schein, 2010; Nguyen, Hallinger, & Truong, 2023). Addressing this gap requires a more comprehensive approach that accounts for the organisational and contextual factors operating at the school level. A positive institutional culture is known to foster work motivation, enhance job satisfaction, and mitigate stress, all of which contribute to sustained performance improvement. By contrast, a dysfunctional culture may generate workplace pressure and undermine instructional quality. Central to shaping this environment is the principal's leadership, which plays a pivotal role in cultivating culture and creating conditions that enable teachers to perform effectively.

Despite the growing body of research on teacher performance, studies that specifically investigate the joint influence of organisational culture and principal leadership on teacher performance in provincial-level secondary schools, particularly in Jambi Province, remain scarce. This study therefore aims to analyse how organisational culture and principal leadership affect teacher performance, both directly and indirectly through job satisfaction and job stress. Its findings are intended to advance theoretical understanding within educational management and to inform practical strategies for policymakers and school leaders seeking to strengthen institutional conditions that support teacher effectiveness.

Literature Review

Teacher performance

Teacher performance is a key indicator in determining the effectiveness of educational delivery in schools. From a human resource management perspective, performance is understood as the result of a series of work behaviours that directly contribute to the achievement of organizational goals (Colquitt et al., 2019). In the educational context, teacher performance reflects not only technical teaching skills but also professional responsibility, commitment, and contributions to a conducive learning environment.

Various theoretical perspectives suggest that individual performance is shaped by the interaction of ability, motivation, and organizational support (Mathis & Jackson, 2002). Professional competence alone is insufficient to ensure optimal performance if it is not accompanied by a supportive work environment, well-structured management systems, and effective leadership. Bernardin (2002) further argued that individual performance can be evaluated through multiple dimensions, including work quality, quantity, timeliness, effective use of resources, independence, and organizational commitment. These dimensions are particularly relevant in assessing teacher performance, as they capture both the effectiveness of instructional practice and the broader professional responsibilities associated with teaching.

In developing modern performance theory, Colquitt et al. (2019) classify performance into three main dimensions: task performance, Organisational Citizenship Behaviour (OCB), and Counterproductive Work Behaviour (CWB). Task performance refers to the implementation of core tasks directly related to organizational goals, such as lesson planning, teaching implementation, and evaluating learning outcomes. In the educational context, teacher task performance is reflected in the ability to manage learning effectively and orient toward student learning outcomes.

Conversely, Counterproductive Work Behaviour (CWB) is behaviour that negatively impacts the organization, such as rule violations, decreased productivity, and interpersonal conflict (Robinson & Bennett, 1995). In educational settings, counterproductive behaviour can hinder the learning process and reduce the quality of educational services. Therefore, improving teacher performance should not only focus on strengthening task performance but also on developing positive behaviours and preventing counterproductive behaviour.

Normatively, teacher performance in Indonesia is governed by various regulations, including the Teachers and Lecturers Law and the Minister of National Education Regulation on Teacher Competency Standards. These regulations emphasize that teacher performance is integrated into four core competencies: pedagogical, professional, social, and personality. These four competencies serve as the foundation for assessing teacher performance holistically and sustainably.

Organisational culture

Organisational culture is a key concept in the study of educational management and organisational behaviour, explaining how collective values, norms, and practices influence the work behaviour of organizational members. Conceptually, organisational culture is understood as a system of shared meanings held by organizational members that distinguishes one organization from another and serves as a social glue that guides members' behaviour at work (Robbins, 2014).

This culture provides standards for what organisational members should say and do, thus serving as a guide for acting and interacting in the work environment.

From a modern organisational perspective, organisational culture is understood not only as a set of explicit values but also as a shared paradigm that shapes the way members think and act. Culture develops through ongoing social interactions, organisational policies, and collective experiences. Cultural change does not occur instantaneously, but rather through changes in the behaviour of organisational members, which then generate collective benefits and are internalised as new, sustainable practices (Kotter, 1996).

Organisational culture can also be understood as a complex and holistic phenomenon encompassing meanings, symbols, and interpretations constructed through social interactions within the organization. Culture is formed through narratives, conversations, and everyday practices that give meaning to organisational activities. Therefore, understanding organisational culture requires interpreting the symbols, values, and meanings that develop within the organization, not just examining its formal aspects.

Structurally, Organisational culture consists of several main components: observable artefacts, shared values, and basic assumptions that underlie the behaviour of organizational members. Artefacts include symbols, practices, and behaviours that are visible on the surface, while values and basic assumptions exist at a deeper level and shape the behavioural orientation of organisational members. These three components are interrelated and form a cultural framework that influences how organizations work and interact (Colquitt et al.).

A strong organisational culture is characterized by a shared understanding of organisational values and norms and a high level of commitment from organisational members to those values. A strong culture can increase the consistency of organisational member behaviour, strengthen organisational identity, and serve as a social control mechanism that directs the work behaviour of organisational members. Furthermore, organisational culture serves as a means of internal integration and external adaptation of the organization in the face of environmental changes (Robbins, Greenberg, & Baron).

In the context of education, school organisational culture serves as a social environment that shapes teachers' professional behaviour. A positive school culture can encourage collaboration, innovation, and commitment to quality learning. Conversely, a weak or unfavourable organizational culture can lead to conflict, workplace stress, and reduce teacher effectiveness. School organisational culture also serves as a mechanism for organisational learning, where professional values, practices, and knowledge are passed on to new members through socialization and collective learning.

Thus, school organisational culture can be understood as a system of shared values and meanings that shape the behaviour, attitudes, and performance of school members. From an educational management perspective, a strong and positive organisational culture is a crucial foundation for improving teacher performance because it creates a work environment that supports collaboration, professional learning, and instructional innovation. Therefore, strengthening school organisational culture is a crucial managerial strategy for sustainably improving teacher performance and educational quality.

Principal leadership style

Leadership is a key factor in determining organisational effectiveness, including in educational organizations, as leadership quality significantly contributes to individual and overall

school organisational performance (Bush, 2020; Leithwood et al., 2020). From an educational management perspective, principal leadership is not only related to administrative functions but also encompasses a strategic role in directing, motivating, and developing human resources in schools (Hallinger, 2011; Hoy & Miskel, 2013). The leadership style adopted by a principal influences the work climate, organisational culture, and teacher performance in carrying out their professional duties (Robinson et al., 2008; Leithwood et al., 2020).

Conceptually, leadership style is understood as a pattern of behaviour demonstrated by a leader in influencing, directing, and guiding organisational members to achieve common goals (Northouse, 2019). Leadership style reflects how a leader interacts with subordinates, makes decisions, and creates a conducive work environment (Yukl, 2013). In educational organizations, the principal's leadership style plays a crucial role in shaping school culture, increasing teacher motivation, and fostering an effective learning environment (Hallinger & Heck, 2010; Bush, 2020).

Various leadership theories explain that leadership effectiveness is influenced by the leader's ability to adapt their leadership style to the organisational context and the needs of its members (Yukl, 2013; Northouse, 2019). In the school context, principals who demonstrate supportive, communicative, and participatory leadership tend to be able to create a positive work climate and increase teacher job satisfaction (Leithwood et al., 2020; Collie et al., 2012). Conversely, an authoritarian leadership style that is less responsive to teacher needs can increase work pressure and decrease teacher motivation and performance (Skaalvik & Skaalvik, 2017).

In the development of modern educational management studies, principal leadership is viewed as instructional leadership, or learning leadership, which focuses on improving the quality of learning and teacher professional development (Hallinger, 2011; Robinson et al., 2008). Principals not only manage school administration but also act as learning leaders who facilitate teacher collaboration, curriculum development, and learning innovation (Leithwood et al., 2020). Instructional leadership has been shown to have a significant relationship with improved teacher performance and the quality of learning in schools (Robinson et al., 2008; Hallinger & Heck, 2010).

Furthermore, transformational leadership is a relevant approach in the context of educational organizations because it can increase organisational commitment, work motivation, and teacher performance through a clear vision and individual support (Bass & Riggio, 2006; Leithwood et al., 2020). Principals who implement transformational leadership tend to be able to create a positive work environment, increase job satisfaction, and reduce teacher stress (Collie et al., 2012; Skaalvik & Skaalvik, 2017). Effective leadership also plays a role in creating a sense of fairness, professional support, and open communication, which impact teacher psychological well-being (Leithwood et al., 2020).

From an organisational learning perspective, the principal's leadership style serves as a key driver of organisational learning and innovation in schools (Senge, 2006; Fullan, 2014). Leaders who encourage collaboration, reflection, and continuous learning will create schools as learning organizations that are adaptive to change (Fullan, 2014). Leadership that supports the use of educational technology and teacher professional development also plays a crucial role in increasing teacher readiness to adopt learning innovations (Ertmer & Ottenbreit-Leftwich, 2013).

Principal leadership is closely linked to a school's organisational culture because leaders play a role in shaping the values, norms, and work practices that develop within the school environment (Schein, 2017; Deal & Peterson, 2016). A leadership style consistent with the values of professionalism, collaboration, and an orientation toward quality learning will strengthen a positive organisational culture and support teacher performance (Hoy & Miskel, 2013; Hallinger & Heck,

2010). Conversely, weak or inconsistent leadership can hinder the formation of a conducive organisational culture and reduce teacher effectiveness (Bush, 2020).

Thus, a principal's leadership style can be understood as a pattern of leader behaviour that influences teacher motivation, job satisfaction, job stress, and performance through the creation of a conducive organisational culture and work environment (Leithwood et al., 2020; Robinson et al., 2008). In the context of educational management, effective leadership is a strategic factor in improving teacher performance, strengthening the school's organisational culture, and supporting the sustainable improvement of educational quality (Bush, 2020; Fullan, 2014). Therefore, developing an adaptive, collaborative, and learning-oriented leadership style for principals is key to continuously improving teacher performance and school organisational effectiveness (Hallinger, 2011; Leithwood et al., 2020).

Teacher job satisfaction

Job satisfaction is an important psychological construct in educational management studies because it is directly related to individual motivation, commitment, and performance within school organizations (Judge et al., 2017; Skaalvik & Skaalvik, 2017). In general, job satisfaction is understood as a positive emotional state that arises as a result of an individual's assessment of their job or work experiences (Locke, 1976; Robbins & Judge, 2017). Job satisfaction reflects the extent to which an individual's needs, expectations, and values are met through their work, making it an important indicator in assessing the quality of the work environment and the effectiveness of organisational management (Colquitt et al., 2019; Spector, 1997).

From an organisational behaviour perspective, job satisfaction is influenced by various factors, both intrinsic and extrinsic (Herzberg et al., 1959; Colquitt et al., 2019). Intrinsic factors include a sense of accomplishment, meaningful work, responsibility, and growth opportunities, while extrinsic factors include working conditions, interpersonal relationships, leadership, reward systems, and organisational policies (Robbins & Judge, 2017; Spector, 1997). High job satisfaction indicates a match between individual expectations and the working conditions experienced, while a mismatch between the two can lead to dissatisfaction and reduce work motivation (Judge et al., 2017).

In the context of education, teacher job satisfaction is related to teachers' perceptions of the school work environment, leadership support, relationships with colleagues, workload, and professional development opportunities (Collie et al., 2012; Skaalvik & Skaalvik, 2017). Teachers with high levels of job satisfaction tend to demonstrate a stronger commitment to their professional duties, have high intrinsic motivation, and are able to carry out learning more effectively (Klassen & Chiu, 2010; Day et al., 2016). Conversely, low levels of job satisfaction can result in decreased performance, increased work stress, and decreased learning quality (Skaalvik & Skaalvik, 2017; Collie et al., 2012).

Teacher job satisfaction is also closely related to organisational culture and school leadership (Schein, 2017; Leithwood et al., 2020). A conducive, collaborative, and supportive work environment will increase teachers' sense of belonging to the organization and strengthen their work motivation (Hoy & Miskel, 2013; Deal & Peterson, 2016). An organisational culture that emphasises respect for professionalism, teamwork, and continuous development has the potential to increase teacher job satisfaction (Schein, 2017; Fullan, 2014). Furthermore, principal leadership that is communicative, fair, and supportive of teacher professional development can create a

positive work climate and improve teacher psychological well-being (Leithwood et al., 2020; Robinson et al., 2008).

Within the framework of human resource management theory, job satisfaction also acts as a mediator between organisational factors and individual performance (Judge et al., 2017; Colquitt et al., 2019). Teachers who are satisfied with their jobs tend to demonstrate higher levels of performance, stronger organisational commitment, and positive work behaviours that support school goals (Klassen & Chiu, 2010; Tschannen-Moran & Hoy, 2001). Therefore, job satisfaction is not only viewed as a result of working conditions, but also as a mechanism explaining how organisational factors influence teacher performance (Bakker & Demerouti, 2017).

From an organisational learning perspective, teacher job satisfaction has important implications for the sustainability of organisational learning in schools (Senge, 2006; Fullan, 2014). Teachers who are satisfied with their work environment tend to be more open to innovation, collaboration, and professional development (Collie et al., 2012). They are more active in sharing knowledge, participating in training, and adopting new learning practices, including the use of educational technology (Ertmer & Ottenbreit-Leftwich, 2013). Conversely, job dissatisfaction can hinder the organisational learning process by reducing teacher motivation and participation in professional development activities (Skaalvik & Skaalvik, 2017).

Thus, teacher job satisfaction can be understood as a psychological state reflecting teachers' positive evaluations of their work and the school's organisational environment (Locke, 1976; Spector, 1997). Job satisfaction serves as an important mechanism linking organisational factors—such as organisational culture and principal leadership to teacher performance (Bakker & Demerouti, 2017; Leithwood et al., 2020). Therefore, in the context of educational management, increasing teacher job satisfaction is an important strategy for improving performance, strengthening organisational commitment, and supporting the sustainable improvement of educational quality in schools (Fullan, 2014; Day et al., 2016).

Teacher occupational stress

Occupational stress is an important psychological factor in educational management studies because it directly impacts teacher well-being, motivation, and performance within school organizations (Kyriacou, 2001; Skaalvik & Skaalvik, 2017). Conceptually, occupational stress is understood as an individual's physical and psychological response to perceived work demands exceeding their abilities or resources (Lazarus & Folkman, 1984; Robbins & Judge, 2017). In an organisational context, stress arises when there is an imbalance between work demands and an individual's capacity to cope, which can impact individual health, job satisfaction, and performance (Beehr & Newman, 1978; Colquitt et al., 2019).

From an organisational behaviour perspective, work stress is influenced by various factors originating from the work environment and individual characteristics (Robbins & Judge, 2017). Sources of work stress can include excessive workload, time pressure, role conflict, task ambiguity, and less harmonious interpersonal relationships (Cooper et al., 2001). In addition, organisational factors such as leadership, organisational culture, reward systems, and social support also play a role in influencing an individual's work stress levels (Bakker & Demerouti, 2017; Spector, 1997). High levels of work stress can negatively impact psychological health, job satisfaction, and individual performance, while moderate levels of stress in some circumstances can serve as a performance booster if managed well (Lazarus & Folkman, 1984).

In the context of education, teacher job stress is a significant concern because the teaching profession has high emotional, cognitive, and administrative demands (Kyriacou, 2001; Klassen & Chiu, 2010). Teacher job stress can be caused by various factors, such as high workload, administrative demands, student behaviour, performance evaluation pressure, and limited learning resources (Skaalvik & Skaalvik, 2017; Collie et al., 2012). In addition, changes in education policy, demands for learning innovation, and the integration of technology in learning can also increase teacher job stress if not balanced with adequate organisational support (Ertmer & Ottenbreit-Leftwich, 2013; Day et al., 2016).

Teachers' work stress has significant implications for the quality of learning and professional performance. Teachers experiencing high levels of stress tend to exhibit decreased work motivation, reduced engagement in learning, and increased emotional exhaustion (Maslach et al., 2001; Skaalvik & Skaalvik, 2017). These conditions can result in decreased interaction with students, reduced teaching effectiveness, and an increased risk of long-term burnout (Kyriacou, 2001; Klassen & Chiu, 2010). Conversely, a supportive work environment, effective leadership, and a positive organisational culture can help reduce teachers' work stress levels and improve their psychological well-being (Collie et al., 2012; Leithwood et al., 2020).

Within the Job Demands–Resources (JD-R) theoretical framework, job stress is understood as the result of the interaction between job demands and available job resources (Bakker & Demerouti, 2017). High job demands, such as excessive workload and administrative pressure, can increase job stress if not balanced with adequate resources, such as leadership support, a positive organisational culture, and professional development opportunities (Bakker & Demerouti, 2017; Skaalvik & Skaalvik, 2017). In the school context, principal leadership and a supportive organisational culture act as organisational resources that can reduce teacher job stress and improve their well-being (Leithwood et al., 2020; Collie et al., 2012).

From an organisational learning perspective, teacher job stress also impacts a school's ability to function as a learning organization (Senge, 2006; Fullan, 2014). Teachers experiencing high levels of job stress tend to be less open to innovation, collaboration, and professional development, which can hinder the organisational learning process in schools (Day et al., 2016). Conversely, manageable levels of job stress enable teachers to actively participate in professional development activities, share knowledge, and adopt innovative learning practices, including the use of educational technology (Ertmer & Ottenbreit-Leftwich, 2013).

Thus, teacher job stress can be understood as a psychological response to job demands that affects teacher well-being, motivation, and performance within the school organization (Kyriacou, 2001; Bakker & Demerouti, 2017). Job stress plays a crucial role in explaining the relationship between organisational factors, such as Organisational culture and principal leadership, and teacher performance (Skaalvik & Skaalvik, 2017; Leithwood et al., 2020). Therefore, in the context of educational management, managing teacher job stress is an important strategy for improving performance, maintaining teacher psychological well-being, and supporting the continued improvement of educational quality in schools (Fullan, 2014; Day et al., 2016).

Based on the theoretical studies presented, teacher performance can be understood as the result of the interaction between individual competencies and the school's organizational context. From an educational management perspective, teacher performance is determined not only by pedagogical and professional abilities, but also by organisational factors such as organisational culture, principal leadership, job satisfaction, and job stress. This approach emphasises that teacher performance is a product of an integrative school management system, where the quality of the

organizational environment plays a crucial role in shaping teacher behaviour and work effectiveness.

School organisational culture serves as a social learning environment that shapes values, norms, and work practices that influence teachers' professional attitudes and behaviour. A positive organisational culture fosters a collaborative work climate, open to innovation, and oriented toward quality learning. In such an environment, teachers not only carry out their teaching duties but also engage in organisational learning through reflection, collaboration, and ongoing professional development. A strong organisational culture serves as an informal control mechanism that guides work behaviour, increases organisational commitment, and strengthens teachers' professional identity as part of a learning community.

From an organizational learning perspective, schools are viewed as learning organizations that continuously adapt to changes in the educational environment. An organizational culture that supports learning enables teachers to share knowledge, collaborate, and adapt innovative learning practices, including the use of educational technology. A conducive work environment provides space for teachers to develop professional competencies, improve digital literacy, and implement learning strategies relevant to technological developments. Thus, a conducive organisational culture not only contributes directly to improving teacher performance but also strengthens the school's capacity as an adaptive and sustainable learning organization.

In addition to organisational culture, principal leadership plays a strategic role in shaping and strengthening the school work environment. Leadership oriented toward learning and professional development can create a supportive work climate, increase job satisfaction, and reduce teacher stress levels. Job satisfaction acts as a psychological mechanism that strengthens teachers' motivation, commitment, and engagement in carrying out their professional duties. Conversely, high levels of job stress can reduce work effectiveness and the quality of learning. Therefore, job satisfaction and job stress serve as mediating variables that explain how organisational factors indirectly influence teacher performance.

Overall, this theoretical synthesis confirms that improving teacher performance requires a comprehensive and contextual approach to educational management. Strengthening the school's organisational culture, developing learning-oriented principal leadership, and managing teacher well-being are interrelated factors in sustainably improving teacher performance. Thus, teacher performance is understood not only as a result of individual abilities but also as a reflection of the quality of school organisational management and a work environment that supports learning and educational innovation.

Methodology

Research design

This study used a quantitative approach with an explanatory survey design to test the causal relationships between theoretically formulated variables. The survey design was chosen because the study aimed to explain the influence of organisational culture and principal leadership behaviour on teacher performance, both directly and indirectly through job satisfaction and job stress.

Research site and participants

The study population consisted of all civil servant teachers at public senior high schools (SMA Negeri) in Jambi Province, totalling 5,105 teachers. Given the vastness of the study area and the geographical distribution of the population, this study employed cluster random sampling.

The population was grouped into several clusters based on districts and cities, and then schools within the selected clusters were used as sampling units. Each selected school contributed a relatively equal number of respondents. Based on calculations using the Slovin formula with a 5% error rate, the minimum sample size required was 371 respondents. This study involved 371 teachers spread across five clusters in Jambi Province, thus meeting and exceeding the minimum required sample size.

Data collection

The data used in this study were primary data obtained directly from respondents through a structured questionnaire. This technique was chosen because it aligns with the characteristics of survey research and allows for efficient data collection from a large number of respondents.

The questionnaire was structured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument used was a standardised instrument that has been widely used in previous research and has proven to have adequate validity and reliability, thus eliminating the need for retesting. The use of this tested instrument aims to improve measurement accuracy and data reliability.

The research variables were measured as follows:

- 1) Organisational culture was measured through the dimensions of innovation, results orientation, individual orientation, team orientation, stability, and attention to detail.
- 2) Principal leadership behaviour was measured through the dimensions of leadership vision, teacher empowerment, professional development support, interpersonal relationships, and support for innovation.
- 3) Teacher job satisfaction was measured using an adaptation of the Minnesota Satisfaction Questionnaire (MSQ) – Short Form.
- 4) Teacher job stress was measured using an adaptation of the Teacher Stress Inventory (TSI) that covers psychological, physiological, and behavioural aspects.
- 5) Teacher performance was measured through indicators of lesson planning, lesson implementation, assessment of learning outcomes, classroom management, and professional responsibility.

Data analysis

Data analysis was conducted using Structural Equation Modelling (SEM) with a Partial Least Squares (PLS-SEM) approach. This method was chosen because it can simultaneously examine complex relationships between latent variables and is suitable for predictive research models. The analysis stages include:

- 1) Descriptive statistical analysis to describe the characteristics of the respondent data.
- 2) Evaluation of the measurement model by testing indicator reliability, construct reliability, and convergent and discriminant validity.

- 3) Evaluation of the structural model by testing path coefficients, coefficient of determination (R^2), and predictive relevance (Q^2) to assess the strength and accuracy of the research model.

The PLS-SEM approach allows testing of direct and indirect influences between variables, thus aligning with the research objectives of examining the mechanisms of the relationship between Organisational culture, leadership, job satisfaction, work stress, and teacher performance.

Findings

Measurement model evaluation

The measurement model evaluation showed that all constructs met the validity and reliability criteria in the SEM-PLS analysis. The outer loading values of the indicators were within the acceptable range, the Composite Reliability (CR) and Cronbach's Alpha values for all constructs exceeded the minimum threshold of 0.70, and the Average Variance Extracted (AVE) value was greater than 0.50. This confirms that the indicators adequately represent the latent constructs.

Discriminant validity was tested using the Fornell–Larcker criterion, which requires that the square root of the Average Variance Extracted (AVE) for each construct be greater than its correlation with other constructs in the model. As shown in Table 1, the square root of the AVE values for organisational culture (0.836), job satisfaction (0.854), teacher performance (0.855), leadership behaviour (0.864), and work stress (0.866) were all higher than the correlation values between the corresponding constructs. These results indicate that each construct has a greater variance within its own indicators compared to other constructs in the model; thus, discriminant validity can be declared well-met. Thus, all constructs have an adequate level of distinction and are worthy of further analysis in the structural model.

Table 1. *Discriminant validity*

	X1	Z1	Y	X2	Z2
OrganisationalCulture (X1)	0,836				
Job Satisfaction (Z1)	0,732	0,854			
Teacher Performance (Y)	0,684	0,811	0,855		
Leadership Behaviour (X2)	0,382	0,655	0,668	0,865	
Job Stress (Z2)	0,652	0,703	0,802	0,707	0,866

Findings respond to the purpose of the study and are presented systematically. Findings are supported with sufficient and relevant quotations, examples, tables and diagrams.

Structural model evaluation

The predictive power of the structural model was evaluated using the coefficient of determination (R^2). The analysis results indicate that the model has strong explanatory power for endogenous variables.

Table 2. *Coefficient of Determination (R²) of endogenous constructs*

Endogenous Construct	R ²	Interpretation Category
Job Satisfaction (Z1)	0.701	Substantial
Job Stress (Z2)	0.670	Moderate–Substantial
Teacher Performance (Y)	0.769	Substantial

The predictive power of the structural model was evaluated using the coefficient of determination (R²) for each endogenous construct. The R² value indicates the proportion of variance that can be explained by the exogenous construct relative to the endogenous construct in the model. The analysis results indicate that the model has strong explanatory power for the endogenous variables studied. The R² value for job satisfaction of 0.701 indicates that 70.1% of the variation in teacher job satisfaction can be explained by organisational culture and the principal's leadership behaviour. This value is included in the substantial category, indicating that organizational factors have a significant contribution in shaping teacher job satisfaction.

Furthermore, the R² value for work stress of 0.670 indicates that 67.0% of the variation in teacher work stress can be explained by organisational culture and principal leadership. This value is in the moderate to substantial category, indicating that school organisational conditions play a significant role in influencing teacher work stress levels, although other factors outside the model also contribute.

The R² value of 0.769 for the teacher performance construct indicates that 76.9% of the variation in teacher performance can be explained simultaneously by organisational culture, principal leadership behaviour, job satisfaction, and job stress. This value indicates that the model has strong explanatory power and is relevant in explaining teacher performance in the context of secondary schools in Jambi Province. Thus, the constructed structural model has high predictive power and is able to provide a comprehensive explanation of the mechanisms of influence of organisational and psychological factors on teacher performance.

Theoretically, these findings confirm that organizational culture and school leadership are important organisational resources that play a significant role in improving teacher performance by enhancing job satisfaction and managing work stress. Practically, these results suggest that efforts to improve teacher performance need to focus on strengthening school organisational management, developing supportive principal leadership, and creating a work environment conducive to teacher psychological well-being.

Hypothesis testing results (SEM-PLS)

The hypothesis testing in this study was conducted using a bootstrapping procedure within the SEM-PLS framework to assess the significance of direct and indirect influences between variables. The analysis results in Table 3 indicate that all hypotheses proposed in the research model are empirically supported. This finding indicates that the relationships between variables in the structural model are significantly strong and consistent with the established conceptual framework.

In more detail, the influence of organisational culture on teacher performance (H1) was proven significant, indicating that a conducive, collaborative, and performance-oriented school

organisational environment can directly improve teacher performance. Furthermore, organisational culture also significantly influenced job satisfaction (H2) and job stress (H3). This indicates that organisational culture not only directly influences performance aspects but also shapes teachers' psychological conditions. A strong organisational culture tends to increase job satisfaction and decrease job stress levels, thus creating a more productive work environment.

Table 3. Summary of SEM-PLS hypothesis testing results

Hypothesis	Relationship Between Variables	Result
H1	OrganisationalCulture → Teacher Performance	Significant
H2	OrganisationalCulture → Job Satisfaction	Significant
H3	OrganisationalCulture → Job Stress	Significant
H4	Leadership Behaviour → Teacher Performance	Significant
H5	Leadership Behaviour → Job Satisfaction	Significant
H6	Leadership Behaviour → Job Stress	Significant
H7	Job Satisfaction → Teacher Performance	Significant
H8	Job Stress → Teacher Performance	Significant (negative)
H9	OrganisationalCulture → Teacher Performance through Job Satisfaction	Significant
H10	Leadership Behaviour → Teacher Performance through Job Satisfaction	Significant
H11	OrganisationalCulture → Teacher Performance through Job Stress	Significant
H12	Leadership Behaviour → Teacher Performance through Job Stress	Significant

The principal's leadership behaviour also showed a significant influence on teacher performance (H4), job satisfaction (H5), and job stress (H6). These findings confirm the principal's strategic role as a learning leader who can influence teacher working conditions and performance through professional support, interpersonal communication, and adaptive managerial policies.

In the psychological pathway, job satisfaction positively influences teacher performance (H7), while job stress negatively influences teacher performance (H8). These results indicate that teachers with high levels of job satisfaction tend to demonstrate more optimal performance, while high levels of job stress can decrease teacher performance. These findings align with the educational management perspective and job demands–resources theory, which emphasises the importance of balancing job demands and organisational resources.

Testing for mediation effects indicates that job satisfaction and job stress act as important mechanisms in explaining the relationship between organisational variables and teacher performance. organisational culture and principal leadership behaviours were shown to significantly influence teacher performance through job satisfaction (H9 and H10) and through job stress (H11 and H12). This confirms that improving teacher performance is not only directly influenced by organisational factors but also by the psychological conditions shaped by the school work environment.

Overall, the results of the hypothesis testing indicate that the research model has strong empirical support. The relationships between organisational culture, principal leadership, job satisfaction, job stress, and teacher performance form an interrelated mechanism in the context of educational management. These findings confirm that strengthening organisational culture and effective school leadership are important strategies for sustainably improving teacher performance through enhanced psychological well-being and a conducive work environment.

Discussion

The findings of this study demonstrate that organisational culture and principal leadership behaviour are the primary determinants of teacher performance, operating both directly and through psychological mechanisms such as job satisfaction and job stress. The high coefficient of determination (R^2) for the teacher performance variable confirms that school-level organisational factors play a strategic role in shaping instructional quality. This finding aligns with educational management theory, which positions schools as social organisations whose effectiveness is governed by the quality of their structure, leadership, and institutional culture. Prior research has similarly established that a positive organisational culture is strongly associated with heightened work motivation, greater organisational commitment, and stronger teacher performance (Hoy & Miskel, 2013; Schein, 2017). In educational settings, a culture characterised by collaboration, openness, and a shared learning orientation has been shown to reinforce professional commitment and raise the quality of classroom practice.

A well-established organisational culture enhances teacher job satisfaction and reduces job stress, both of which contribute to improved performance. These findings are consistent with the Job Demands-Resources (JD-R) framework, which holds that organisational resources, including social support, collective values, and a conducive work climate, promote individual well-being and productivity (Bakker & Demerouti, 2017). Clear and consistent cultural norms provide teachers with behavioural guidance and a sense of belonging, enabling them to feel valued and motivated in their professional roles. Research further indicates that schools with robust institutional cultures tend to report lower levels of teacher stress, owing to the structural and emotional support embedded in their work environments (Collie et al., 2012). These results also reinforce the organisational learning perspective, which conceptualises schools as learning organisations whose effectiveness is fundamentally shaped by the collective values, norms, and practices that operate within them (Senge, 2006).

Principal leadership behaviour likewise exerts a significant influence on teacher job satisfaction and stress. Principals who function as instructional and learning leaders foster a professional climate that encourages pedagogical growth, collegial collaboration, and instructional innovation. Leadership that is supportive, communicative, and oriented toward staff development has been shown to increase job satisfaction and alleviate perceived stress among teachers (Leithwood et al., 2020). Within contemporary educational management, both transformational and instructional leadership contribute substantially to teacher performance by reinforcing institutional culture and promoting professional well-being. In the context of educational technology, these conditions are equally important: research indicates that leadership support and an innovative organisational climate play a significant role in enhancing teacher readiness to integrate digital technology into instruction (Ertmer & Ottenbreit-Leftwich, 2013).

Taken together, these findings confirm that improving teacher performance cannot be separated from the concurrent strengthening of organisational culture and leadership that prioritises institutional learning and educational innovation. Schools that cultivate a collaborative work culture, sustain strong leadership support, and actively manage teacher psychological well-being are better positioned to achieve durable gains in instructional quality. These results carry important implications for educational management, particularly for designing school development policies that prioritise the reinforcement of organisational culture, learning-focused leadership, and work environments conducive to innovation and teacher well-being.

Theoretical and practical implications for educational management

Theoretical implications

Theoretically, this study enriches educational management scholarship by demonstrating that teacher performance is the outcome of an integrative school management system rather than a product of individual competencies alone. The substantial contribution of organisational culture and principal leadership to teacher performance ($R^2 = 0.769$) underscores the decisive influence of managerial factors within educational organisations. This is consistent with the view that school effectiveness is significantly shaped by the quality of leadership and the institutional culture operating within it (Hoy & Miskel, 2013; Bush, 2020). Prior studies similarly confirm that a conducive organisational environment and effective leadership are meaningfully associated with improved teacher performance and learning outcomes (Leithwood et al., 2020; Hallinger, 2011). Teacher performance may therefore be understood as a product of the dynamic interaction between school management systems, leadership quality, and the organisational conditions that sustain professional practice.

From the standpoint of educational management theory, these results support the school-based management approach, which emphasises the school's internal context, comprising its values, norms, leadership, and work climate, as core determinants of teacher effectiveness. Organisational culture functions as an informal managerial system, guiding teacher behaviour through the internalisation of professionalism, collaboration, and performance orientation (Schein, 2017). Schools with a strong institutional culture tend to exhibit higher levels of teacher commitment and engagement, ultimately yielding improvements in instructional quality (Deal & Peterson, 2016). Additionally, the school-based management approach highlights that successful policy implementation depends on school leaders' capacity to manage human resources and institutional culture effectively (Caldwell & Spinks, 2013).

The role of job satisfaction and job stress as mediating variables extends the theoretical framework of educational management by incorporating the psychological dimensions of teacher experience into the school management model. This finding resonates with Job Demands-Resources (JD-R) theory, which posits that the balance between occupational demands and organisational resources directly shapes individual well-being and performance (Bakker & Demerouti, 2017). High job satisfaction enhances teacher motivation, commitment, and productivity, whereas elevated stress diminishes work effectiveness and instructional quality (Collie et al., 2012; Skaalvik & Skaalvik, 2017). School management effectiveness is therefore contingent not only on organisational structures and formal policies but also on the capacity of school leadership to sustain teacher well-being as a critical institutional resource.

In sum, this study integrates theories of organisational culture, educational leadership, and human resource management into a coherent model that offers a more comprehensive account of teacher performance. The convergence of these three perspectives indicates that performance improvement requires a holistic approach encompassing institutional culture development, effective instructional leadership, and systematic attention to teacher well-being. This model provides a conceptually sound foundation for advancing educational management theory in an era of increasing complexity, where schools are expected to function as adaptive, collaborative learning organisations committed to continuous improvement (Senge, 2006; Fullan, 2014).

Practical implications for educational management

From a practical standpoint, the findings of this study have direct relevance for school management and broader education policy. First, the significant influence of organisational culture on teacher performance suggests that cultivating school culture should be a strategic priority. A culture centred on collaboration, professionalism, and a shared commitment to learning quality has been shown to strengthen teacher commitment and raise instructional standards (Deal & Peterson, 2016; Schein, 2017). School management should therefore systematically nurture shared values through both formal and informal mechanisms, including the development of collaborative work habits, professional learning communities, and ongoing reflective practice. Research consistently shows that schools with strong institutional cultures achieve higher teacher performance through the alignment of organisational values with professional practice (Hallinger & Heck, 2010; Fullan, 2014).

Second, the significant effect of principal leadership on teacher job satisfaction and stress reaffirms the principal's dual role as both administrator and instructional leader. Effective principals create equitable, psychologically safe work environments that support professional growth. Transformational and learning-oriented leadership has been shown to enhance job satisfaction and reduce stress through professional support, transparent communication, and genuine teacher empowerment in decision-making (Leithwood et al., 2020; Robinson et al., 2008). Principals who embrace an instructional leadership role further enable schools to sustain innovation and continuous improvement in teaching quality (Hallinger, 2011).

Third, the mediating role of job satisfaction and job stress implies that educational management must adopt a well-being-centred approach to teacher development. Workload management, role clarity, recognition systems, and professional support should be comprehensively designed to enhance satisfaction and reduce stress. The Job Demands-Resources perspective holds that alignment between occupational demands and available resources is essential for sustaining individual well-being and performance (Bakker & Demerouti, 2017). School-level policies that promote teacher welfare, such as providing ongoing professional training, reducing excessive administrative load, and strengthening collegial support, have been shown to improve both motivation and performance (Skaalvik & Skaalvik, 2017; Collie et al., 2012). A well-being-oriented management approach is therefore a necessary strategy for achieving sustainable gains in teacher effectiveness.

Fourth, at the regional and national policy level, the findings indicate that meaningful teacher performance improvement requires coherent alignment between policy frameworks, school leadership, and internal management practices. Top-down quality improvement programmes will remain limited in impact if not accompanied by efforts to strengthen school leaders' capacity to manage organisational culture and teacher welfare. Research on education reform consistently demonstrates that successful policy implementation depends on the ability of school organisations to translate external mandates into effective daily practice (Fullan, 2014; Spillane, 2006). Education quality improvement strategies should therefore be designed integratively, addressing not only individual teacher competencies but also the leadership systems, institutional culture, and management practices that collectively underpin teacher performance.

Conclusion and Recommendations/Implications

This study examined the influence of organisational culture and principal leadership on teacher performance, both directly and indirectly through job satisfaction and job stress among public senior high school teachers in Jambi Province. The findings demonstrate that the proposed model has strong explanatory power, indicating that teacher performance is shaped not only by individual competencies but also by organisational and psychological factors within the school environment. Organisational culture and principal leadership were found to have significant effects on job satisfaction and job stress, which in turn influence teacher performance. Job satisfaction positively contributes to teacher performance, while job stress negatively affects it, confirming their roles as key mediating variables in the relationship between organisational factors and performance outcomes.

These results highlight that teacher performance is embedded within a broader organisational system in which leadership practices, organisational values, and workplace conditions interact to shape teachers' professional behaviour and effectiveness. A supportive organisational culture and effective school leadership create conditions that enhance teachers' motivation, commitment, and well-being, thereby improving performance. Conversely, inadequate organisational support and ineffective leadership may increase stress and reduce the effectiveness of teaching practices. From an organisational learning perspective, schools that foster collaborative and supportive cultures enable teachers to engage in continuous professional development and adapt to educational innovations, including the integration of technology in teaching and learning.

The findings of this study carry several implications for educational management and policy. First, strengthening school organisational culture should be prioritised as a strategic component of school management. School leaders and policymakers need to foster shared values that promote collaboration, professional responsibility, and a focus on instructional quality. Developing a positive organisational culture can enhance teacher engagement, reduce workplace stress, and support sustainable improvements in teaching performance.

Second, the role of principal leadership as an instructional and organisational leader must be reinforced. Principals should not only manage administrative functions but also actively support teachers' professional growth, encourage collaborative learning communities, and create supportive working conditions. Leadership development programmes that emphasise instructional leadership, transformational leadership, and teacher support mechanisms can contribute to improved teacher satisfaction and performance.

Third, the findings underscore the importance of managing teachers' work-related well-being. Educational institutions should adopt policies and practices that address workload management, provide professional support, and ensure fair and supportive working conditions. By enhancing job satisfaction and reducing stress, schools can create a more productive and sustainable teaching environment.

Finally, future research should consider expanding the model by incorporating additional contextual factors such as organisational climate, professional development opportunities, and technology integration to further explain teacher performance. Longitudinal and multi-level studies may also provide deeper insights into how organisational and psychological factors interact over time to influence teacher performance. Overall, improving teacher performance requires an integrated approach that combines effective leadership, supportive organizational culture, and

attention to teachers' professional well-being within the broader framework of educational management.

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