

## Educational Empowerment: Uncovering Its Impact On Teacher Performance Through Transformational Leadership, Organizational Culture, And Innovation

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### ABSTRACT

*Education becomes the primary focus in achieving societal progress and development. This research aims to analyze the influence of empowerment, transformational leadership, organizational culture, and innovation on teacher performance at the Center of Excellence Vocational High School. A quantitative approach is utilized in this study, employing structured measurement instruments to gather data from a representative sample. The collected data is then statistically analyzed using techniques such as SEM analysis and hypothesis testing. The research findings indicate that empowerment, transformational leadership, organizational culture, and innovation have a significant positive impact on teacher performance. These findings provide valuable insights for school administrators and policymakers in developing strategies to enhance the quality of teaching and learning at the Center of Excellence Vocational High School, as well as potentially in other educational institutions.*

**Keywords:** *empowerment, transformational leadership, organizational culture, innovation, teacher performance.*

### I. Introduction

The Center of Excellence Vocational High School (SMK Pusat Keunggulan) plays a vital role in preparing the younger generation for entry into the workforce with relevant skills and necessary expertise. Faced with the dynamics of globalization and technological advancements, the challenges for SMK Pusat Keunggulan extend beyond providing curricula aligned with industry demands; they also involve enhancing the quality of teaching and learning among the teaching staff. Teacher performance at SMK Pusat Keunggulan significantly impacts students' success in achieving desired competencies. Therefore, it is essential to explore the factors influencing teacher performance in this context. In this regard, teacher empowerment, transformational leadership, organizational culture, and innovation are identified as factors that may have a direct or indirect relationship with teacher performance.

In general, performance refers to the results or achievements attained by an individual in carrying out their assigned tasks or responsibilities (Nurbaya et al., 2019; Onorato, 2013). Performance can be seen as a measure of the extent to which an individual or organization achieves the goals, standards, or expectations that have been set (Sofiyani et al., 2022). In the context of work or organizations, performance refers to the evaluation of the work outcomes of individuals, teams, or organizations in achieving goals, meeting quality standards, and carrying out assigned tasks or responsibilities. Performance can be assessed based on various aspects such as productivity, efficiency, work quality, innovation, collaboration, compliance with rules or procedures, and the impact generated. Teacher performance refers to the results and effectiveness of teachers in fulfilling their professional responsibilities in teaching and guiding students. Teacher performance can be assessed both ideally and objectively, and both approaches provide different perspectives on assessing

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teacher performance (Christin et al., 2017; Sirait et al., 2021). Ideally, teacher performance can be seen as the attainment of standards or desired expectations within the educational context. Several aspects that can serve as benchmarks in assessing teacher performance ideally include, firstly, the teacher's ability to plan and implement effective learning, create a conducive learning environment, and utilize appropriate teaching methods to facilitate student understanding. Secondly, the teacher's qualifications and understanding of the subjects they teach, their skills in classroom management, and their ability to evaluate student progress and provide constructive feedback. Thirdly, the teacher's ability to interact with students, parents, and colleagues with a professional, ethical, empathetic attitude, and respect for diversity. The objective approach to assessing teacher performance refers to the measurement and evaluation of performance based on real, empirically measurable data (Putra et al., 2020).

In reality, teacher performance often falls below standards or fails to meet ideal expectations. Teachers' abilities and skills are not optimally utilized, leading to a tendency for their performance to become routine. The underutilization of teachers' abilities and skills results in monotonous and less innovative teaching practices. Teachers have untapped potential that has not been fully utilized and developed, thereby hindering their ability to make optimal contributions to the learning process. This can negatively impact student achievement and lead to a lack of motivation to learn. Teachers are stuck in traditional and routine teaching methods, without adopting new approaches or techniques that could enhance learning effectiveness. The lack of updating teaching methods results in a lack of variety and creativity in teaching, which can affect student interest and engagement in the learning process. Teacher performance is not oriented towards analyzing needs and potentials, thus lacking relevance to the requirements and challenges of the business and industrial world (Satata et al., 2016). Teacher performance is not yet based on an analysis of the needs and potentials required by the business and industrial world, thus lacking relevance to the latest developments and challenges faced by students entering the workforce. This can result in a mismatch between the competencies students acquire from teachers and the needs and expectations of the workforce. Teachers have not developed adequate understanding of the current needs and developments in the business and industrial world. Lack of knowledge about job trends, required skills, and demands of the workforce can lead to a lack of relevance in the curriculum and teaching delivered to students. The curriculum used in education is insufficient in preparing students for the actual challenges of the workforce. Deficiencies in integrating industry needs, required skills, and relevant competency development can lead to mismatches between what teachers teach and what the workforce needs (Arifin, 2015).

Creativity and innovative abilities of teachers have not been optimally realized, thus the target to produce graduates ready to develop entrepreneurial ventures has not been achieved. Teachers' creativity and innovative abilities have not been optimally utilized in developing learning approaches that encourage entrepreneurship and students' entrepreneurial skills. As a result, the target to produce graduates ready to develop entrepreneurial ventures has not been well achieved. The lack of effort to develop creativity and innovation in learning may limit students' potential to become successful entrepreneurs in the future. Teachers are stuck in conventional teaching methods and do not provide space for creativity and innovation. Learning focused on conventional knowledge and limited information provision can hinder the development of students' entrepreneurial skills. The lack of updating learning methods that encourage creativity, critical thinking, and entrepreneurial skills can limit students' potential to develop entrepreneurial ventures. The educational curriculum is inadequate in incorporating entrepreneurship elements and developing students' creativity. When entrepreneurship and innovative abilities are not specifically emphasized in the curriculum, teachers tend to focus on theoretical knowledge rather than developing practical skills required for entrepreneurship.

Low teacher empowerment is a constraint in improving teaching quality and overall teacher performance. Teachers lack autonomy, resources, and sufficient support to take an

active role in decision-making, curriculum development, and professionalism enhancement. This can limit teachers' ability to deliver effective and innovative teaching and hinder career development. Teachers require ongoing professional training and development to update their knowledge, skills, and teaching approaches. If these opportunities are limited or unavailable, teachers struggle to keep up with the latest developments in education and innovative teaching ideas. The lack of professional development can restrict teachers' ability to adapt to changes in the educational environment.

The development of transformational leadership by school principals has not been optimized within the school environment. Principals have not been able to inspire, motivate, and lead effectively to bring about positive changes in school culture, performance, and achievement. The lack of transformational leadership may hinder the development of individual teacher potential, innovation in teaching, and the creation of a competitive and high-quality school environment. Principals may not have provided sufficient opportunities for teachers and school staff to participate in decision-making and school planning. The lack of involvement can reduce a sense of ownership and responsibility among teachers and hinder the development of initiatives and creativity. School principals need to develop mechanisms that enable active participation and empowerment of teachers in school decision-making. Principals may not have provided adequate support and mentoring to teachers and school staff.

The teacher work culture in the school has not reached an optimal level, where norms, values, and practices supporting collaboration, dedication, and high performance have not been well-established. The lack of a positive and strong work culture can inhibit collaboration among teachers, reduce motivation and engagement in school tasks, and affect the quality of teaching and student learning outcomes. The teacher work culture may not encourage collaboration and cooperation among teachers. The lack of opportunities and mechanisms for sharing knowledge, experiences, and resources hampers collaborative potential that could enhance teaching quality. Teachers may tend to work in isolation and lack mutual support, thereby reducing the effectiveness of teamwork in achieving common goals. A low work culture may reflect a lack of concern for professionalism and teaching quality. Teachers may be less committed to self-improvement through professional development, curriculum updates, and teaching method enhancements. Indifference to professionalism can negatively impact teacher motivation and performance and hinder career development.

Despite the shortcomings in teacher performance, efforts to improve teacher performance are thoughtful and wise considerations. This notion aligns with the fact that teacher performance is influenced by both internal and external factors. It means that enhancing the abilities and skills of teachers must be carried out systematically, purposefully, and sustainably through various training programs and competency certifications. However, improving the abilities and skills of teachers cannot guarantee that teacher performance will become more effective and efficient, as well as more successful and beneficial.

In relation to the above statement, empowering teachers is a wise consideration because it is oriented towards efforts to harness the full potential of teachers. Therefore, empowerment that is planned, purposeful, and sustainable significantly contributes to teacher performance. Thus, empowering teachers is one of the policies that must be implemented genuinely, seriously, and earnestly. This notion aligns with the fact that training and competency certification do not always contribute to improving teacher performance if not accompanied by the optimal utilization or empowerment of teachers' potential.

The contribution of empowerment to improving teacher performance becomes stronger when implemented through appropriate and effective school leadership. A school principal who can analyze educational needs, potentials, and challenges enables teacher performance to be carried out based on the right direction and policies. Leadership becomes more effective when a school principal understands the needs, potentials, and desires of teachers. Therefore, transformational leadership is the right consideration because it can accommodate all the desires of subordinates and stakeholders. Thus, school

leadership plays a strategic role, especially in leveraging the abilities, expertise, and skills of teachers to create optimal performance.

Empowering teachers and transformational leadership have a stronger contribution to teacher performance when implemented through a good and proper work culture. Work culture depicts a conducive, calm, and comfortable working atmosphere and environment that allows each member to work optimally according to their tasks and responsibilities. Work culture encompasses a set of norms, values, and regulations believed to be true and used as guidelines in carrying out tasks. Work culture is characterized by high work spirit, both individually and in teamwork.

Conceptually, teacher performance becomes higher and more successful and beneficial when supported by innovative abilities. This notion aligns with the fact that learning in vocational high schools faces continuous and rapid changes. Although innovation can be based on the potential of each region as part of preparing graduates who are capable of developing independent businesses (entrepreneurship), in practice, there is a tendency for innovations to be oriented towards the needs and capabilities of the workforce in the business and industrial world. Therefore, the implementation of empowerment, leadership, and work culture should be directed towards enhancing the innovative abilities of teachers in carrying out their tasks.

A study on teacher empowerment, for example, a study by Puspayanti (2018) investigating the relationship between teacher empowerment and teacher performance in secondary schools. High teacher empowerment is positively associated with better teacher performance, including teaching quality, initiative in learning, and participation in school decision-making. Research by Akbar & Imaniyati (2019) examining the influence of transformational leadership on teacher performance and student achievement in elementary schools. The research findings indicate that transformational leadership has a positive impact on teacher performance and student academic achievement. One example is a study by Novitri et al., (2020) investigating the influence of work culture on teacher performance. The research findings indicate that a positive and collaborative work culture is associated with better teacher performance, including commitment to students, intrinsic motivation, and job satisfaction. Research by Ramadanti et al., (2021) analyzing the relationship between teaching innovation and teacher performance in secondary schools. The research findings indicate that teachers who actively implement teaching innovations have better performance, including classroom management skills, subject matter understanding, and teaching effectiveness.

Based on the explanation above, the issue of low performance remains worthy of investigation through research. Although the relationship between factors influencing teacher performance has been extensively studied in educational contexts, in-depth research on their interaction in the context of SMK Pusat Keunggulan is still limited. Therefore, this research aims to investigate how empowerment, transformational leadership, work culture, and innovation individually affect teacher performance at SMK Pusat Keunggulan. Additionally, teacher performance plays a strategic role in achieving or realizing the vision of SMK Pusat Keunggulan. Therefore, this issue will have unfavorable implications if not systematically, systematically, and objectively examined.

## **II. Literature Review**

### **Teacher Performance**

Teacher performance has long been a primary focus in educational research, given its crucial role in shaping student outcomes and overall school effectiveness. Several studies have sought to explore the diverse nature of teacher performance, examining various factors that contribute to or hinder effective teaching practices. Performance can be defined as the outcomes or achievements of individuals, groups, or organizations in attaining established goals Werang (2014). Performance encompasses the measurement of achievement in various aspects such as productivity, efficiency, quality, compliance, customer satisfaction, or specific goals according to its context. Performance also involves the assessment of the

level of competence, skills, and abilities of an individual or entity in carrying out tasks or responsibilities assigned Novitasari & Asbari (2020).

It's important to understand that the definition of performance can vary depending on the context used, whether it's at the individual, team, or organizational level. Teacher performance refers to the achievements and outcomes of a teacher's work in the educational context. Teacher performance can be measured based on various factors and indicators, including teaching aspects, relationships with students, participation in curriculum development, collaboration with colleagues, and contributions to student progress. In the context of teacher performance, some relevant aspects for evaluation include teaching quality, student progress, relationships with students, professional development, collaboration with colleagues, and communication with parents/guardians.

### **Empowerment**

Empowerment has emerged as a significant construct in educational research, particularly concerning its impact on teacher performance and school effectiveness. Empowerment in the educational context refers to the process of granting autonomy to teachers, decision-making authority, and access to resources to enhance their professional role (Hakanen et al., 2008). This encompasses dimensions such as autonomy, competence, meaningfulness, and impact, which empower teachers to take ownership of their work and contribute to school improvement efforts (Spreitzer, 2005). Schools implement various empowerment initiatives to support teacher growth and development. This may include structures for shared decision-making, professional learning communities, distributed leadership models, and opportunities for participative decision-making (Panjaitan et al., 2023). Research indicates that empowered teachers experience greater job satisfaction because they perceive their work as meaningful and impactful (Goddard et al., 2004). Empowerment fosters a sense of ownership and responsibility, leading to increased motivation and engagement in teaching practices (Hoy & Sabo, 1998). Empowered teachers are more likely to engage in reflective teaching practices, experiment with innovative learning strategies, and adapt their teaching approaches to meet diverse student needs (Leithwood, 1994). This, in turn, contributes to improved student learning outcomes and overall school effectiveness (Marks & Louis, 1997). Empowerment initiatives promote a positive school culture characterized by trust, collaboration, and shared decision-making (Smylie & Denny, 1990). Teachers feel valued and supported in their professional growth, leading to higher levels of job satisfaction and organizational commitment (Tschannen-moran & Hoy, 2002).

### **Transformational Leadership**

Transformational leadership has garnered significant attention in educational research due to its profound impact on organizational culture, teacher motivation, and student outcomes. Several studies have explored the key components and effects of transformational leadership in various educational settings. Transformational leadership is characterized by visionary leadership, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 2008). Transformational leaders inspire and motivate their followers to transcend their personal interests for the greater good of the organization (Avolio et al., 1999). Transformational leadership is often conceptualized within the framework of social exchange theory and broader charismatic leadership (Bass, 2008). Leaders engage in reciprocal relationships with followers, fostering trust, respect, and commitment through inspirational appeal and intellectual stimulation (Bennis & Nanus, 1985). Transformational leaders have been shown to enhance teacher motivation and job satisfaction by articulating compelling visions, setting high expectations, and providing individual support and encouragement (Leithwood, 1994). Teachers are inspired to exceed their role expectations, leading to increased engagement and commitment to organizational goals (Marks & Printy, 2003). Transformational leaders prioritize professional growth and development of their followers, offering opportunities for continuous learning, skill development, and career advancement (Hallinger & Huber, 2012). By fostering a culture of learning and innovation, transformational leaders empower teachers to excel in their roles and contribute to school improvement efforts (Gurr, 2015). Transformational leaders play a crucial role in shaping the organizational culture of schools, nurturing a climate of trust, collaboration, and shared

vision (Bryk et al., 2010). By exemplifying ethical behavior, promoting transparency, and valuing diversity, transformational leaders create a supportive and conducive environment for the teaching-learning process (Lambert, 2006).

### **Work Culture**

Work culture plays a crucial role in shaping the work environment, attitudes, and behaviors of individuals within educational institutions. Research on work culture in education has highlighted its significant impact on teacher performance, job satisfaction, and overall school effectiveness. Organizational culture refers to the shared values, beliefs, norms, and practices that define the identity and function of an organization (Sirait et al., 2021). This encompasses dimensions such as leadership style, communication patterns, decision-making processes, and organizational climate (Deal & Kennedy, 1982). Various typologies of work culture have been proposed, including competing values frameworks (Quinn & Rohrbaugh, 1983) and organizational culture profiles (O'Reilly & Chatman, 1991). These frameworks categorize work culture based on dimensions such as flexibility versus stability, internal focus versus external focus, and integration versus differentiation. A positive work culture fosters collaboration, teamwork, and mutual support among faculty members (Louis et al., 1996). Teachers feel valued and respected, thereby enhancing job satisfaction and commitment to organizational goals (Schneider et al., 2012). A work culture characterized by supportive leadership and participative decision-making empowers teachers to take ownership of their work and contribute to school improvement efforts (Wang et al., 2022). Leaders who value and respect the contributions of their staff create a climate of trust and openness conducive to teaching and learning (Deal & Peterson, 1993). A culture that encourages innovation, experimentation, and risk-taking will cultivate creativity and adaptability among teachers (Fuad & Musa, 2022). Teachers feel empowered to explore new teaching strategies, technologies, and pedagogical approaches, leading to increased student engagement and learning outcomes (Kilag & Abendan, 2023).

### **Innovation**

Innovation has become a significant focus in educational research and practice as educators strive to adapt to changing student needs and prepare them for an increasingly complex and dynamic world. Research on innovation in education has explored various dimensions, drivers, and its impacts on teaching, learning, and organizational effectiveness. Educational innovation refers to the process of introducing new ideas, practices, technologies, or approaches to enhance teaching, learning, and school organizations (Serdyukov, 2017). This includes incremental innovations, such as modifications to existing practices, and radical innovations, which involve fundamentally new ways of thinking and operating. Educational innovations can take many forms, including curriculum reforms, teaching strategies, assessment methods, technology integration, and organizational changes (OECD, 2016). They may target various levels of the education system, from individual classrooms to entire schools or districts.

Innovative teaching approaches, such as project-based learning, flipped classrooms, and personalized learning pathways, have been associated with increased student engagement, motivation, and learning outcomes (OECD, 2016). Teachers who innovate in their practices demonstrate greater flexibility, creativity, and responsiveness to student needs (Ismayilova & Laksov, 2023). Engaging in innovative practices can enhance teachers' professional growth and development by providing opportunities for collaboration, reflection, and experimentation (Sáez & Sancho, 2017). Innovative teachers are more likely to seek out new knowledge, skills, and resources to enhance their practices and stay abreast of emerging trends (Anderson & Krathwohl, 2001).

Schools that embrace a culture of innovation tend to be more effective in achieving their educational goals and meeting the diverse needs of learners. Innovation contributes to a dynamic and responsive learning environment where students are actively engaged in meaningful learning experiences, and teachers are empowered to adapt their practices to address evolving challenges (Hattie, 2009).

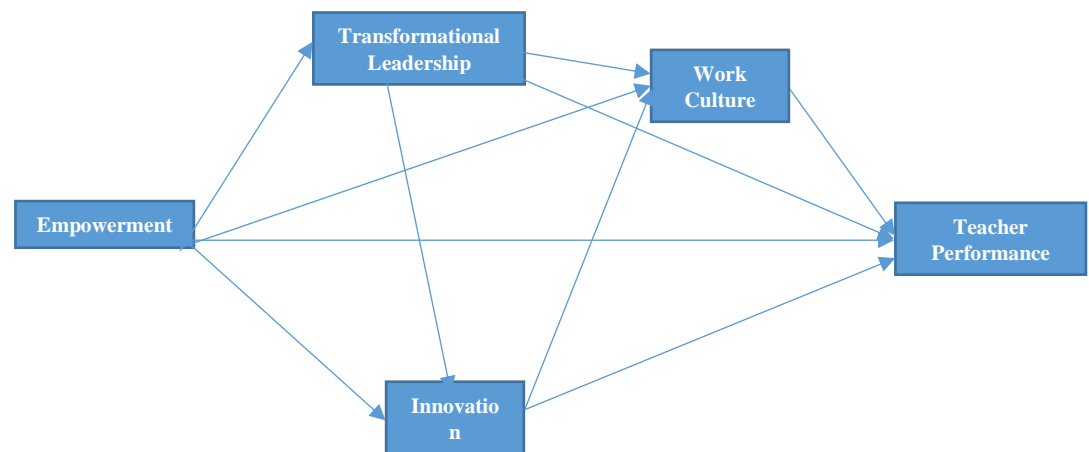


Figure 1. Thinking Framework

Based on the literature review above, the hypothesis in this research is as follows.

- H<sub>1</sub> : Empowerment has a positive influence on transformational leadership.
- H<sub>2</sub> : Empowerment has a positive influence on work culture.
- H<sub>3</sub> : Empowerment has a positive influence on innovation.
- H<sub>4</sub> : Empowerment has a positive influence on teacher performance.
- H<sub>5</sub> : Transformational leadership has a positive influence on work culture.
- H<sub>6</sub> : Transformational leadership has a positive influence on innovation.
- H<sub>7</sub> : Transformational leadership has a positive influence on teacher performance.
- H<sub>8</sub> : Work culture has a positive influence on innovation.
- H<sub>9</sub> : Work culture has a positive influence on teacher performance.
- H<sub>10</sub> : Innovation has a positive influence on teacher performance.
- H<sub>11</sub> : Empowerment indirectly influences teacher performance through transformational leadership, work culture, and innovation.

### III. Methods

This research employs a quantitative method focusing on the collection and analysis of numerical data to measure variables and analyze the relationships between them. In this study, researchers use structured measurement instruments, such as questionnaires or rating scales, to collect data from a representative sample. The collected data is then statistically analyzed using techniques such as regression analysis, hypothesis testing, or multivariate analysis. This research is a type of causal study aimed at identifying and understanding cause-and-effect relationships between variables. The goal is to determine whether there is a cause-and-effect relationship between independent variables (causes) and dependent variables (outcomes). Through this research, researchers can draw conclusions about the cause-and-effect relationships between independent and dependent variables, which can be used to provide more effective recommendations or interventions in specific contexts. This study aims to analyze the relationships between empowerment, transformational leadership, work culture, and innovation with teacher performance in Vocational High Schools (SMK) at the Excellence Center in Semarang Regency. The population in this study consists of all SMK teachers who are civil servants (PNS) at the Excellence Center SMK in Semarang Regency, totaling 195 teachers. The sampling technique in this study uses multistage proportional random sampling, which is a method of data collection by taking a proportionate sample of the population (Supranto, 2008, p. 118). Based on the calculations, a total of 131 teachers were obtained as the sample size. The data analysis technique in this research utilizes structural equation modeling-partial least squares (SEM-PLS) using SmartPLS software.

### IV. Results and Discussion



## Results

### Evaluation of the Outer Model (Measurement Model): Validity and Reliability Testing

Convergence validity is a part of the measurement model in SEM-PLS, which is typically referred to as the outer model, while in covariance-based SEM it is termed confirmatory factor analysis (CFA) (Mahfud & Ratmono, 2013, p. 64). There are two criteria for assessing whether the outer model meets the requirements of convergence validity for reflective constructs, namely (1) loadings should be above 0.7 and (2) significant p-values ( $<0.05$ ) (Hair et al. in Mahfud and Ratmono, 2013:65). However, in some cases, the criterion of loadings above 0.7 is often not met, especially for newly developed questionnaires. Therefore, loadings between 0.40 and 0.70 should still be considered for retention (Mahfud and Ratmono, 2013:66). Indicators with loadings below 0.40 should be removed from the model. However, for indicators with loadings between 0.40 and 0.70, it is advisable to analyze the impact of removing these indicators on the average variance extracted (AVE) and composite reliability. We can remove indicators with loadings between 0.40 and 0.70 if they can improve the AVE and composite reliability above their thresholds (Mahfud & Ratmono, 2013, p. 67). The threshold values for AVE is 0.50 and for composite reliability is 0.7. Another consideration in removing indicators is their impact on content validity of the constructs. Indicators with low loadings are sometimes retained because they contribute to the content validity of the constructs (Mahfud and Ratmono, 2013:67).

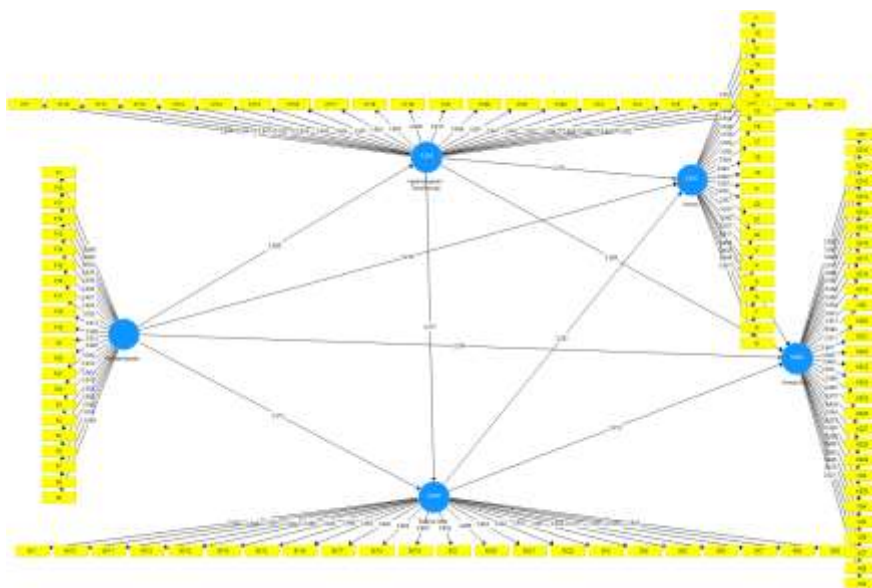


Figure 2. Validity Testing based on Outer Loading

Based on the validity testing of outer loadings in Figure 2, it is known that all outer loading values are  $> 0.7$ , which means they have met the validity criteria based on loading values. Next, validity testing is conducted based on the average variance extracted (AVE) values.

Table 1. Validity Testing based on Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Work Culture	<b>0.897</b>
Innovation	<b>0.877</b>
Transformational Leadership	<b>0.875</b>
Teacher Performance	<b>0.885</b>



Empowerment	<b>0.839</b>
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The recommended AVE value is above 0.5 (Mahfud and Ratmono, 2013:67). It is known that all AVE values are  $> 0.5$ , which means they have met the validity criteria based on AVE. Next, reliability testing is conducted based on the composite reliability (CR) values.

Table 2. Reliability Testing based on Composite Reliability (CR)

	<b>Composite Reliability</b>
Work Culture	<b>0.995</b>
Innovation	<b>0.994</b>
Transformational Leadership	<b>0.994</b>
Teacher Performance	<b>0.996</b>
Empowerment	<b>0.991</b>

The recommended CR value is above 0.7 (Mahfud and Ratmono, 2013:67). It is known that all CR values are  $> 0.7$ , which means they have met the reliability criteria based on CR. Next, reliability testing is conducted based on the Cronbach's alpha (CA) values.

Table 3. Reliability Testing based on Cronbach's Alpha (CA)

	<b>Cronbach's Alpha</b>
Work Culture	<b>0.995</b>
Innovation	<b>0.993</b>
Transformational Leadership	<b>0.993</b>
Teacher Performance	<b>0.995</b>
Empowerment	<b>0.991</b>

The recommended CA value is above 0.7 (Mahfud and Ratmono, 2013:67). It is known that all CA values are  $> 0.7$ , which means they have met the reliability criteria based on Cronbach's alpha. Next, discriminant validity testing is conducted using the Fornell-Larcker approach. The results of the discriminant validity testing are presented in Table 4.6.

Table 4. Reliability Testing based on Cronbach's Alpha (CA)

	<b>Work Culture</b>	<b>Innovation</b>	<b>Transformational Leadership</b>	<b>Teacher Performance</b>	<b>Empowerment</b>
Work Culture	(0.947)				
Innovation	0.611	(0.937)			
Transformational Leadership	0.600	0.608	(0.935)		
Teacher Performance	0.764	0.772	0.761	(0.941)	
Empowerment	0.598	0.608	0.596	0.758	(0.916)

Note: The value between “( )” is the square root of AVE

In discriminant validity testing, the square root of the AVE value of a latent variable is compared with the correlation value between that latent variable and other latent variables. It is known that the square root of the AVE value for each latent variable is greater than the correlation value between that latent variable and other latent variables. Thus, it is concluded that the discriminant validity criteria have been met.

Table 5. Discriminant Validity Test: HTMT

	Work Culture	Innovation	Transformational Leadership	Teacher Performance	Empowerment
Work Culture					
Innovation	<b>0.614</b>				
Transformational Leadership	<b>0.603</b>	<b>0.612</b>			
Teacher Performance	<b>0.767</b>	<b>0.776</b>	<b>0.765</b>		
Empowerment	<b>0.602</b>	<b>0.613</b>	<b>0.600</b>	<b>0.763</b>	

Based on the discriminant validity testing using the HTMT approach, it is found that all values are < 0.9, which means it is concluded that the discriminant validity criteria have been met based on the HTMT approach.

### Significance Test of Influence (Boostrapping, Hypothesis Testing, and Inner Model)

Table 6. Path Coefficient Test & Significance of Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Work Culture -> Innovation	0.281	0.272	0.118	2.374	<b>0.018</b>
Work Culture -> Teacher Performance	0.273	0.266	0.086	3.156	<b>0.002</b>
Innovation -> Teacher Performance	0.281	0.283	0.110	2.543	<b>0.011</b>
Transformational Leadership -> Work Culture	0.377	0.385	0.133	2.846	<b>0.005</b>
Transformational Leadership -> Innovation	0.276	0.282	0.125	2.211	<b>0.027</b>
Transformational Leadership -> Teacher Performance	0.269	0.272	0.095	2.840	<b>0.005</b>
Empowerment -> Work Culture	0.373	0.363	0.134	2.794	<b>0.005</b>
Empowerment -> Innovation	0.276	0.266	0.123	2.240	<b>0.026</b>
Empowerment -> Transformational Leadership	0.596	0.599	0.092	6.462	<b>0.000</b>
Empowerment -> Teacher Performance	0.264	0.254	0.086	3.081	<b>0.002</b>

Based on the results in Table 6, the results obtained to answer the hypothesis are as follows:

- H<sub>1</sub> : Empowerment positively influences Transformational Leadership, with a coefficient value (Original Sample column) = 0.596, and significant, with P-Values = 0.000 < 0.05 (Hypothesis Accepted).

- H<sub>2</sub> : Empowerment positively influences Work Culture, with a coefficient value (Original Sample column) = 0.373, and significant, with P-Values = 0.005 < 0.05 (Hypothesis Accepted).
- H<sub>3</sub> : Empowerment positively influences Innovation, with a coefficient value (Original Sample column) = 0.276, and significant, with P-Values = 0.026 < 0.05 (Hypothesis Accepted).
- H<sub>4</sub> : Empowerment positively influences Teacher Performance, with a coefficient value (Original Sample column) = 0.264, and significant, with P-Values = 0.002 < 0.05 (Hypothesis Accepted).
- H<sub>5</sub> : Transformational Leadership positively influences Work Culture, with a coefficient value (Original Sample column) = 0.377, and significant, with P-Values = 0.005 < 0.05 (Hypothesis Accepted).
- H<sub>6</sub> : Transformational Leadership positively influences Innovation, with a coefficient value (Original Sample column) = 0.276, and significant, with P-Values = 0.027 < 0.05 (Hypothesis Accepted).
- H<sub>7</sub> : Transformational Leadership positively influences Teacher Performance, with a coefficient value (Original Sample column) = 0.269, and significant, with P-Values = 0.005 < 0.05 (Hypothesis Accepted).
- H<sub>8</sub> : Work Culture positively influences Innovation, with a coefficient value (Original Sample column) = 0.281, and significant, with P-Values = 0.018 < 0.05 (Hypothesis Accepted).
- H<sub>9</sub> : Work Culture positively influences Teacher Performance, with a coefficient value (Original Sample column) = 0.273, and significant, with P-Values = 0.002 < 0.05 (Hypothesis Accepted).
- H<sub>10</sub> : Innovation positively influences Teacher Performance.
- H<sub>11</sub> : Innovation positively influences Teacher Performance, with a coefficient value (Original Sample column) = 0.281, and significant, with P-Values = 0.011 < 0.05 (Hypothesis Accepted).

Table 7. R-Square

Variabel	R Square
Work Culture	0.449
Innovation	0.507
Tranformational Leadership	0.355
Teacher Performance	0.830

Based on table 7, it is known that the R-Square value of Work Culture is 0.449, meaning Empowerment and Transformational Leadership can explain or influence Work Culture by 44.9%. The R-Square value of Innovation is 0.507, indicating that Empowerment, Transformational Leadership, and Work Culture can explain or influence Innovation by 50.7%. The R-Square value of Transformational Leadership is 0.355, suggesting that Empowerment can explain or influence Transformational Leadership by 35.5%. The R-Square value of Teacher Performance is 0.830, indicating that Empowerment, Transformational Leadership, Work Culture, and Innovation can explain or influence Teacher Performance by 83%.

Table 8. Q-Square

Variable	Q <sup>2</sup> (=1-SSE/SSO)
Work Culture	0.400
Innovation	0.443
Transformational Leadership	0.305
Teacher Performance	0.729

Based on table 8, it is known that the Q-Square value of Work Culture is  $0.400 > 0$ , which means Empowerment and Transformational Leadership have predictive relevance to Work Culture. The Q-Square value of Innovation is  $0.443 > 0$ , indicating that Empowerment, Transformational Leadership, and Work Culture have predictive relevance to Innovation. The Q-Square value of Transformational Leadership is  $0.305 > 0$ , suggesting that Empowerment has predictive relevance to Transformational Leadership. The Q-Square value of Teacher Performance is  $0.729$ , indicating that Empowerment, Transformational Leadership, Work Culture, and Innovation have predictive relevance to Teacher Performance.

Table 9. Goodness of Fit Model Testing

Estimated Model	
SRMR	0.025

It is known that based on the results of the SRMR goodness of fit test, the SRMR value =  $0.025 < 0.1$ , it is concluded that the model is FIT.

Table 10. Mediation Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Empowerment -> Transformational Leadership -> Work Culture -> Innovation -> Teacher Performance	0.168	0.168	0.065	2.601	<b>0.010</b>

Based on the results of the mediation testing in Table 10, Empowerment indirectly, significantly influences Teacher Performance through Transformational Leadership, Work Culture, and Innovation (Mediation Hypothesis Accepted).

## Discussion

### The Influence of Empowerment on Transformational Leadership

Based on the statistical calculations, there is a significant positive relationship between empowerment and transformational leadership. The coefficient value of  $0.596$  indicates a strong relationship between these two variables. Additionally, the p-value of  $0.000$ , which is smaller than the significance level used ( $0.05$ ), indicates that this relationship is not by chance but rather significant. These research findings support the study by Huang et al., (2020), which showed that empowerment has a significant positive effect on transformational leadership. These findings indicate that when individuals or groups are given autonomy, responsibility, and adequate support, they tend to exhibit a progressive leadership style, including elements such as inspirational vision, individual development, and profound influence in achieving common goals. This is consistent with the findings of Engelbrecht (2021) which demonstrated that empowerment has a positive influence on transformational leadership. The findings presented in the study by Engelbrecht (2021) support previous findings revealed by Huang et al. (2020), affirming that empowerment plays an important role in the development of transformational leadership. These results indicate consistency in related research that when individuals or groups are empowered in the right way, they are more likely to exhibit leadership characteristics that go beyond merely leading but also inspiring, motivating, and influencing significant changes in their organization or work environment.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), empowerment has a significant and positive impact on transformational leadership. Empowerment is considered one of the main pillars in creating an environment that supports the development of transformational leadership in this school. Firstly,

empowerment provides opportunities for leaders in SMK Pusat Keunggulan to enhance their leadership skills. Leaders are encouraged to think creatively, take calculated risks, and create an inspirational vision for the school's future. Empowerment enables leaders to feel empowered in making strategic decisions that will bring positive changes to the school and its members. Additionally, empowerment also fosters the creation of an organizational culture that supports transformational leadership. By granting freedom to leaders to innovate and take initiative, empowerment creates an environment where new ideas are encouraged and valued. Leaders feel supported in fulfilling their roles as change agents who bring vision and inspiration to the school.

### **The Influence of Empowerment on Work Culture**

Based on statistical calculations, there is a significant positive relationship between empowerment and work culture. With a coefficient value of 0.373, this indicates a positive relationship between the level of empowerment implemented within an organization and the developing work culture. Furthermore, the p-value of 0.005, which is smaller than the established significance level (0.05), indicates that this relationship is not by chance but rather significant. These research findings support studies conducted by Hadiwinata et al., (2023) Wahyudin et al., (2021) Panjaitan et al., (2023) and Haryono et al., (2021) which demonstrated that empowerment significantly influences work culture positively. Findings from the studies conducted by Hadiwinata et al., (2023) Wahyudin et al., (2021) Panjaitan et al., (2023) and Haryono et al., (2021) consistently show that empowerment has a significant positive impact on work culture. The implication is that when individuals or groups within an organization are empowered by being given responsibilities, autonomy, and adequate support, they tend to contribute positively to the dynamics of organizational culture. These findings indicate that empowerment not only enhances individual engagement and motivation but also shapes an inclusive, progressive, and performance-oriented organizational culture. In other words, when teachers feel supported to take initiative, collaborate, and innovate, it tends to create a more dynamic work environment that is responsive to change and promotes values such as trust, responsibility, and teamwork.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), empowerment serves as the primary pillar in shaping a dynamic and high-quality work culture. Through a strong empowerment approach, every teacher and staff member in this school is given the opportunity to take initiative, actively participate in the learning and development processes, and feel a significant responsibility towards the school's success. Teachers at SMK Pusat Keunggulan are not only seen as educators but also as mentors and learning facilitators who empower students to develop their full potential. Teachers are given the freedom to adopt innovative teaching methods, create classroom environments that support collaboration and creativity, and facilitate learning experiences tailored to the individual needs of students. Additionally, empowerment is reflected in the school's organizational structure, where staff and students are encouraged to participate in decision-making related to school activities and the learning process. This fosters a sense of ownership and high engagement among all school members, which in turn cultivates an inclusive, collaborative, and proactive work culture.

### **The Influence of Empowerment on Innovation**

Based on statistical calculations, there is a significant positive relationship between empowerment and innovation. With a coefficient value of 0.276, this indicates a positive relationship between the level of empowerment implemented within an organization and the level of innovation that occurs. Furthermore, the p-value of 0.026, which is smaller than the established significance level (0.05), indicates that this relationship is not by chance but rather significant. These research findings support studies conducted by Zhang and Zhong (2014), Ratnasari and Sudarma (2019), Nikpour (2018), Yildirim (2018), Masadeh et al., (2019), Overton and Putra (2021), Suryo et al., (2023), Prabowo et al., (2018), Uzunbacak (2017), Mahendri et al., (2022) and Risambessy (2023) which demonstrate that empowerment significantly influences innovation positively. These research findings confirm that when individuals or groups are empowered by being given trust, support, and

sufficient resources, they tend to be more motivated to generate new ideas, innovate, and contribute to positive changes within the organization. By providing space for experimentation, exploration, and controlled risk-taking, empowerment creates an environment that fosters creativity and innovation. The implication is that organizations that implement empowerment practices effectively have better opportunities to develop and compete in an ever-changing market because they encourage a culture that promotes new ideas, innovative solutions, and continuous improvement.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), empowerment is considered as the primary driver for sustainable innovation. Through a strong empowerment approach, the school provides opportunities for all staff and students to contribute to the innovation process, both in learning and school management. Teachers at SMK Pusat Keunggulan are encouraged to adopt innovative teaching approaches, create classroom environments that support experimentation and exploration, and encourage students to think critically and creatively. They are given the freedom to try new methods, the latest educational technologies, and teaching strategies relevant to students' needs. This creates an atmosphere where new ideas are encouraged and valued, fostering innovation in the learning process. Additionally, empowerment also strengthens a culture of collaboration among staff and students. By feeling responsible for the school's development, all members of the SMK Pusat Keunggulan community are encouraged to participate in identifying problems, formulating solutions, and implementing innovative projects. Collaboration among teachers, students, and even parents creates space for the exchange of ideas and experiences, which in turn stimulates the creation of broader and more diverse innovations.

### **The Influence of Empowerment on Teacher Performance**

Based on the statistical calculations, there is a significant positive relationship between empowerment and teacher performance. With a coefficient value of 0.264, this indicates a positive relationship between the level of empowerment applied to teachers and their performance. Furthermore, the p-value of 0.002, which is smaller than the set significance level (0.05), indicates that this relationship does not occur by chance but is significant. These research findings support studies conducted by Mualim (2022), Ahmadi and Arif (2022), and Damayanti (2021) which show that empowerment significantly influences teacher performance positively. These research results suggest that when teachers are empowered with autonomy in decision-making, adequate training, and proper support, they tend to be more motivated, confident, and perform better in carrying out their duties as educators. Feeling valued, listened to, and supported by the school or educational institution, teachers have a greater opportunity to develop creativity, innovation, and commitment to improving the quality of education. The implication is that policies and practices of empowering teachers can be effective strategies in enhancing the overall quality of education. By giving teachers control over the learning process and involving them in decision-making at the school level, schools can create an environment that supports professional growth and improves teacher performance, which in turn will have a positive impact on student learning outcomes.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), empowerment has a significant and positive impact on the performance of teachers. Through a strong empowerment approach, the school provides opportunities for teachers to feel valued, actively engage in decision-making, and have autonomy in the teaching and learning process. Empowerment of teachers at SMK Pusat Keunggulan is reflected in various aspects, ranging from curriculum design to classroom management. Teachers are encouraged to be innovative and creative in their teaching methods, using various approaches that are suitable for the needs and interests of students. They are given the freedom to develop engaging and relevant teaching materials and to adapt teaching strategies to the latest developments in educational technology. Moreover, empowerment also strengthens the well-being of teachers. Teachers at SMK Pusat Keunggulan feel supported in their professional development, with access to training and opportunities for



knowledge exchange and experience sharing among fellow teachers. They also feel they play a significant role in shaping school policies and improving the operational efficiency of the school.

### **The Influence of Transformational Leadership on Organizational Culture**

Based on statistical calculations, there is a significant positive relationship between transformational leadership and organizational culture. With a coefficient value of 0.377, this indicates a positive relationship between the level of transformational leadership practiced within an organization and the resulting organizational culture. Furthermore, the p-value of 0.005, which is smaller than the set significance level (0.05), indicates that this relationship is not by chance but rather statistically significant. These research findings support studies conducted by Indriasari et al., (2023) and Priarso et al., (2018) which demonstrate that transformational leadership significantly influences organizational culture. These findings underscore that when leaders implement transformational leadership styles, characterized by elements such as strong visionary development, inspirational encouragement, setting a good example, as well as empowering and supporting team members, they tend to foster an inclusive, progressive, and collaboration-oriented organizational culture. The implications are that leaders capable of practicing transformational leadership can shape a work environment supportive of innovation, self-development, and high employee engagement. Thus, investing in the development of transformational leadership can be an effective strategy for organizations to strengthen a workplace culture that promotes productivity, creativity, and sustainable job satisfaction.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), transformational leadership plays a key role in shaping a positive and dynamic work culture. Here, transformational leadership is not just about providing direction and supervision but also about inspiring, empowering, and motivating all members of the school to achieve common goals. Leaders at SMK Pusat Keunggulan are not only authoritative figures but also agents of change who provide clear and inspirational visions for the school's future. They encourage staff and students to dream big and take risks in achieving ambitious school goals. Through a transformational leadership approach, an inclusive, collaborative, and proactive work culture is fostered at SMK Pusat Keunggulan. Leaders not only motivate but also provide active support and resources for staff and students to grow and excel. They create an environment where new ideas are supported, mistakes are seen as learning opportunities, and collaboration is valued. Additionally, leaders at SMK Pusat Keunggulan also serve as good role models for all members of the school. Their high commitment to school values, integrity, and strong work ethic inspires staff and students to do their best and fully develop their potential.

### **The influence of Transformational Leadership on Innovation**

Based on the statistical calculations, there is a significant positive relationship between transformational leadership and innovation. With a coefficient value of 0.276, this indicates a positive relationship between the level of transformational leadership implemented within an organization and the level of innovation that occurs. Furthermore, the p-value of 0.027, which is smaller than the set significance level (0.05), indicates that this relationship is not by chance but rather significant. These research findings support studies conducted by Al-Amri et al., (2018), Auliasari et al., (2023), Anzarwati (2021), Fibriandhini et al., (2022), Hadi et al., (2023) Mayastinasari et al., (2023) and Purwanto et al., (2021) which demonstrate that transformational leadership significantly influences innovation. These findings underscore that when leaders implement transformational leadership styles, characterized by elements such as developing a strong vision, providing inspirational encouragement, setting a good example, and empowering and supporting team members, they tend to build an inclusive, progressive, and collaboration-oriented work culture. The implication is that leaders who can practice transformational leadership can create a work environment that supports innovation, self-development, and high employee engagement. Therefore, investing in the development of transformational leadership can be an effective strategy for organizations to strengthen a work culture that promotes productivity, creativity, and sustainable job satisfaction.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), transformational leadership serves as the primary driver for the creation of a sustainable culture of innovation. The leaders in this school not only act as decision-makers but also as change agents who inspire, encourage, and empower both staff and students to innovate. Through a transformational leadership approach, an environment is created where new ideas are encouraged and valued, and the willingness to try new things is reinforced. The leaders at SMK Pusat Keunggulan provide a clear and inspirational vision for the future of education, motivating all members of the school to participate in the innovation process.

### **The Influence of Transformational Leadership on Teacher Performance**

Based on the statistical calculations, there is a significant positive relationship between transformational leadership and teacher performance. With a coefficient value of 0.269, this indicates a positive relationship between the level of transformational leadership implemented within an organization and teacher performance. Furthermore, the p-value of 0.005, which is smaller than the set significance level (0.05), indicates that this relationship does not occur by chance but rather significantly. These research findings support studies conducted by Andriani et al., (2018), Azizah et al., (2022), Chaniago et al., (2023), Rachmad et al., (2023), Sirait et al., (2021) and Selamet et al., (2023) which demonstrate that transformational leadership significantly influences teacher performance. Consistently, the findings from these studies emphasize the significant positive impact of transformational leadership on teacher performance. These results reinforce previous evidence that underscores the critical role of transformational leadership in the educational context. Transformational leadership, which encompasses aspects such as developing a strong vision, providing inspirational encouragement, empowering individuals, and supporting professional development, can create a work environment that motivates teachers to perform at their best in their roles as educators. Teachers led by leaders with a transformational leadership style tend to be more committed, enthusiastic, and productive in carrying out their responsibilities, which in turn can enhance the quality of learning and student achievement. With consistency in these findings, it is essential for schools to recognize the importance of developing transformational leadership among school leaders and teachers. Investing in training and developing leaders who understand and apply the principles of transformational leadership can have a positive impact not only on teacher performance but also on student learning outcomes and the overall quality of the education system.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), transformational leadership plays a crucial role in enhancing the performance of teachers. The leaders in this school not only act as managers but also as visionaries who inspire and empower their staff to achieve high standards of excellence in education. Through a transformational leadership approach, the leaders at SMK Pusat Keunggulan create an environment where teachers feel supported, valued, and directed to reach their full potential. They provide a clear vision of the school's goals and values, as well as profound guidance on how to achieve these objectives. In addition to providing direction, the leaders also empower teachers to take initiative and play an active role in decision-making related to the learning process. They encourage collaboration among teachers, facilitate the exchange of ideas and best practices, and provide the necessary resources for professional development.

### **The Influence of Work Culture on Innovation**

Based on the statistical calculations, there is a significant positive relationship between organizational culture and innovation. With a coefficient value of 0.281, this indicates a positive relationship between the level of organizational culture developed within an organization and the level of innovation that occurs. Furthermore, the p-value of 0.018, which is smaller than the set significance level (0.05), indicates that this relationship does not occur by chance but is statistically significant. This research finding supports studies conducted by Aboramadan et al., (2020) Basuki et al., (2020), Diah et al., (2022), Priyadi

et al., (2023), Schuldt et al., (2020), and Siswanti et al., (2022) which state that organizational culture significantly influences innovation. The findings from the research consistently demonstrate that organizational culture has a significant positive impact on innovation. These results provide strong support for the idea that a work environment that promotes values such as trust, collaboration, and experimentation tends to create conditions conducive to the development and implementation of innovative ideas. In a work culture that fosters creativity and innovation, employees feel valued and supported to share new ideas, take risks in trying new approaches, and learn from failures. This enables organizations to continue to evolve, adapt to market changes, and create sustainable value. Therefore, the alignment of these findings underscores the importance for organizations to pay attention to and strengthen a work culture that supports innovation. This can be achieved through leadership commitment to supporting freedom of expression, cross-team collaboration, continuous learning, and recognition of innovative efforts. Thus, organizations can harness the creative and innovative potential of their employees to achieve competitive excellence and maintain relevance in rapidly changing markets

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), the work culture has a significantly positive influence on the creation of sustainable innovation. The work culture in this school fosters an environment where new ideas are encouraged, valued, and effectively implemented. Firstly, the inclusive and collaborative work culture allows teachers to share their ideas, experiences, and knowledge. Teachers feel encouraged to collaborate in developing innovative teaching methods and effective learning strategies. Secondly, a work culture that supports risk-taking and experimentation provides freedom for school members to try new things and take calculated risks. When teachers feel safe to experiment without fear of punishment or criticism, they are more likely to innovate and create creative solutions to complex problems. Additionally, a work culture driven by values such as courage, openness, and perseverance provides additional encouragement for school members to create and implement their innovative ideas. The leaders at SMK Pusat Keunggulan play a crucial role in reinforcing and promoting these values, thereby creating an environment where innovation is valued and encouraged.

### **The Influence of Work Culture on Teacher Performance**

Based on the statistical analysis, there is a significant positive relationship between work culture and teacher performance. With a coefficient value of 0.273, this indicates a positive relationship between the level of evolving work culture within an organization and teacher performance. Furthermore, the p-value of 0.002, which is smaller than the set significance level (0.05), indicates that this relationship is not by chance but rather significant. These research findings support studies conducted by Christin et al., (2017), Metan et al., (2022), Nurbaya et al., (2019), Satata et al., (2016), Singh et al., (2023), and Widjajani et al., (2022) which suggest that work culture significantly influences teacher performance. Consistently, the findings from the research conducted by Christin et al., (2017), Metan et al., (2022), Nurbaya et al., (2019), Satata et al., (2016), Singh et al., (2023), and Widjajani et al., (2022) demonstrate that work culture has a significant positive impact on teacher performance. These results strongly support the idea that a supportive, collaborative, and positively reinforcing work environment can enhance teacher performance and job satisfaction. In a positive work culture, teachers feel valued, supported, and motivated to deliver their best in teaching and guiding students. Factors such as support from colleagues and management, open communication, continuous learning, and opportunities to participate in decision-making at the school can provide additional encouragement for teachers to improve teaching quality and achieve learning goals. Therefore, these findings underscore the importance for schools and educational institutions to pay attention to and strengthen a positive work culture. Investing in the development of an inclusive, collaborative, and supportive work culture will provide long-term benefits for teacher performance, educational quality, and overall student learning outcomes.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), the work culture has a positive and significant impact on the performance of teachers. The work culture established in this school creates a supportive, inclusive, and proactive environment, which in turn positively influences the performance of teachers. Firstly, a

collaborative and feedback-supportive work culture allows teachers to work as teams in developing effective teaching strategies. They feel encouraged to share knowledge, experiences, and resources, thereby creating opportunities for shared learning and beneficial exchange of ideas. Secondly, a work culture that promotes professional growth provides additional encouragement for teachers to continuously improve their skills. Teachers at SMK Pusat Keunggulan feel supported in facing challenges and pursuing career development opportunities. This creates an atmosphere where teachers feel motivated to continue learning and enhancing their practices. Additionally, a work culture driven by values such as mutual respect, fairness, and open communication creates a positive and harmonious work environment. Teachers feel valued and supported by their colleagues, thus fostering a sense of trust and high engagement in achieving the school's common goals.

### **The Influence of Innovation on Teacher Performance**

Based on the statistical analysis, there is a significant positive relationship between innovation and teacher performance. With a coefficient value of 0.281, this indicates a positive relationship between the level of innovation within an organization and teacher performance. Furthermore, the p-value of 0.011, which is smaller than the set significance level (0.05), indicates that this relationship is not by chance but rather significant. These research findings support the study conducted by Sofiyan et al., (2022) that innovation has a significant positive impact on teacher performance. These results suggest that when teachers adopt innovative practices in the teaching process, they tend to achieve higher levels of performance. These innovative practices may include the use of technology in teaching, implementing creative teaching methods, developing engaging learning materials, or experimenting with new teaching approaches. By fostering innovation among teachers, whether through training, institutional support, or other incentives, schools or educational institutions can enhance the quality of teaching and student learning outcomes. Thus, this research underscores the importance for educational institutions to create an environment that supports innovation and facilitates dynamic and effective learning processes for both teachers and students.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), innovation has a significant and positive impact on the performance of teachers. Innovation is not only seen as a way to improve the efficiency and effectiveness of teaching but also as a strategy to promote professional growth and enhance students' academic outcomes. Firstly, innovation in teaching and learning methods provides opportunities for teachers to present lesson materials in more engaging, interactive, and relevant ways for students. Through the use of the latest educational technology, the development of competency-based curricula, and the introduction of project-based learning methods, teachers at SMK Pusat Keunggulan can create stimulating, challenging, and motivating learning environments for students. Secondly, innovation also allows teachers to tailor their teaching to the needs and interests of individual students. With a student-centered approach, teachers at this school can design learning experiences tailored to each student's learning style, thereby increasing their engagement, understanding, and academic achievement. Furthermore, innovation in student assessment and progress monitoring enables teachers to effectively assess student performance and provide constructive feedback. Through the use of innovative evaluation tools, such as technology-based formative assessments or digital portfolios, teachers can monitor student progress in real-time and design appropriate interventions to help students reach their full potential..

### **The Indirect Influence of Empowerment on Teacher Performance Through Transformational Leadership, Organizational Culture, and Innovation**

Based on the results of the mediation analysis, there is evidence that empowerment indirectly influences teacher performance significantly through the mediation paths of transformational leadership, organizational culture, and innovation. The hypothesis of mediation is accepted based on these findings. This means that empowerment not only

directly affects teacher performance but also has effects through the mediation paths of three other factors: transformational leadership, organizational culture, and innovation. The mediation process suggests that empowerment can influence transformational leadership, which then affects organizational culture, leading to innovation within the organization. This innovation, in turn, contributes to improving teacher performance. Therefore, empowerment is not only important directly in enhancing teacher performance but also in creating a supportive environment for organizational transformation and innovation, which ultimately positively affects teacher performance.

At the Center of Excellence Vocational High School (SMK Pusat Keunggulan), empowerment not only has a direct impact on teacher performance but also has an indirect influence through various factors such as transformational leadership, organizational culture, and innovation. Empowerment is considered the primary foundation driving the creation of a dynamic and high-quality learning environment in this school. First and foremost, empowering teachers enables them to take initiative, participate actively in decision-making, and feel accountable for the school's success. This aligns with the transformational leadership style at SMK Pusat Keunggulan, where leaders not only provide guidance but also empower staff to innovate and improve their practices. Transformational leadership provides a clear and inspirational vision, encourages collaboration, and builds trusting relationships between leaders and staff.

## V. Conclusion

This research has revealed that empowerment, transformational leadership, organizational culture, and innovation play significant roles in influencing teacher performance at SMK Pusat Keunggulan in Semarang Regency. The analysis results indicate that efforts to enhance teacher empowerment, promote visionary transformational leadership, strengthen collaborative organizational culture, and stimulate innovation in teaching practices can positively impact teacher performance. These findings highlight the importance of developing an educational environment that supports, empowers, and encourages innovation in schools to achieve desired educational goals.

Practical recommendations from this study include implementing training and development programs that emphasize teacher empowerment, enhancing transformational leadership skills for school leaders, fostering an inclusive and collaborative organizational culture, and facilitating innovation initiatives at the school level. Thus, stakeholders in the education field are expected to use these findings as a basis for designing more effective strategies and interventions to enhance the quality of teaching, learning, and teacher performance at SMK Pusat Keunggulan and other educational institutions.

## References

- Aboramadan, M., Albashiti, B., Alharazin, H., & Zaidoune, S. (2020). Organizational culture, innovation and performance: a study from a non-western context culture. *Journal of Management Development*, 39(4), 437–451. <https://doi.org/10.1108/JMD-06-2019-0253>
- Ahmadi, R., & Arief, N. F. (2022). Teacher empowerment to improve the quality of education and school progress. *Journal of Education and Technology*, 6(2), 431–439.
- Akbar, L., & Imaniyati, N. (2019). Gaya kepemimpinan transformasional kepala sekolah terhadap kinerja guru. *Jurnal Pendidikan Manajemen Perkantoran*, 4(2), 176–181. <https://doi.org/10.17509/jpm.v4i2.18012>
- Al, A. Y., Hassan, R., Isaac, O., & Masoud, Y. (2018). The effect of transformational leadership on organizational innovation in higher education: the case of developing countries. *International Journal of Management and Human Science*, 2(4), 25–37.
- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Addison Wesley Longman, Inc.
- Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of the transformational leadership and work motivation on teachers performance. *International Journal of Scientific & Technology Research*, 7(7), 19–29.
- Anzarwati, E. (2021). The influence of transformational leadership, distributive justice, and intrinsic motivation on innovative work behaviour. *Journal of Community Empowerment*, 2(2), 26–36.
- Arifin, H. M. (2015). The influence of competence, motivation, and organisational culture to high school teacher job satisfaction and performance. *International Education Studies*, 8(1), 38–45.

- <https://doi.org/10.5539/ies.v8n1p38>
- Auliasari, R. W., Santoso, A., & Setiawan, F. (2023). Transforming sustainability: the role of transformational leadership and knowledge in disruptive innovation. *Journal of Ultimate Research and Trends in Education*, 5(3), 231–245.
- Avolio, B., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72(4), 441–462.
- Azizah, N. R., & Wahidin. (2022). The effect of principal transformational leaders and work motivation on teacher's performance. *Al-Ishlah: Jurnal Pendidikan*, 14(3), 3781–3792. <https://doi.org/10.35445/alishlah.v14i3.1504>
- Bass, B. M. (2008). *Transformational Leadership: Industrial, Military, and Educational Impact*. Thousand Oaks, CA: Sage Publications.
- Basuki, S., Asbari, M., Purwanto, A., Agistiawati, E., Fayzhall, M., Radita, F. R., Maesaroh, S., Asnaini, S. W., Chidir, G., Basuki, S., Yani, A., Singgih, E., Sudiyono, R. N., Goestjahjanti, S., Yuwono, T., & Hutagalung, D. (2020). Pengaruh organizational culture terhadap teacher innovation capability dalam perspektif knowledge sharing: studi kasus Jabodetabek. *Journal of Education, Psychology and Counseling*, 2(1), 171–192.
- Bennis, W., & Nanus, B. (1985). *Leaders: The Strategies for Taking Charge*. New York: Harper & Row.
- Bryk, Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. (2010). *Organizing Schools for Improvement*. Chicago: Lessons.
- Chaniago, S., Hs, W. H., & Nasution, M. (2023). The influence of transformational leadership of principals and teacher achievement on teacher teaching performance at SMA Dirgantara Center. *International Journal of Science, Technology & Management*, 1(1), 346–350.
- Christin, Ginting, R. R., Purba, M. N., & Sutanto, A. T. (2017). The influence of leadership and organizational culture on teacher performance with work motivation as an intervening variable at The Kristen Methodist Indonesia College 5. *International Journal of Science, Technology, & Management*, 1(1), 1054–1060.
- Damayanti, Y. (2021). Pengaruh empowering leadership terhadap kinerja guru dengan psychological empowerment sebagai variabel mediasi. *Jurnal Ilmu Manajemen*, 9(3), 907–919.
- Deal, & Peterson. (1993). *Shaping School Culture: The Heart of Leadership*. San Prabcisco: Hossey-Bass.
- Deal, T., & Kennedy, A. (1982). *Corporate Culture: The Rites and Rituals of Corporate Life*. Reading, MA: Addison-Wesley.
- Diah, K., Giri, D., Widnyana, I. W., & Agung, A. A. P. (2022). Improving cooperative's business performance with entrepreneurial orientation and organizational culture through innovation. *Journal of Business & Behavioural Entrepreneurship*, 6(1), 36–50.
- Engelbrecht, A. S. (2021). How transformational leadership, psychological contract violation, empowerment and affective commitment influence employee's intention to quit an organisation. *South African Journal of Business Management*, 52(1), 1–12. <https://doi.org/https://doi.org/10.4102/sajbm.v52i1.2278>
- Fibriandhini, A., Suratni, Hermanto, & Faerossa, Lady. (2022). The effect of transformational leadership on innovative work behavior mediated by the organizational culture. *Journal of Economics, Business, & Entrepreneurship*, 3(2), 25–31. <https://doi.org/10.29303/alexandria.v3i2.336>
- Fuad, D. R. S., & Musa, K. (2022). Innovation culture in education: a systematic review of the literature. *Management in Education*, 1(1), 1–16. <https://doi.org/10.1177/0892020620959760>
- Goddard, R. D., LoGerfo, L., & Hoy, W. K. (2004). High school accountability: the role of perceived collective efficacy. *Educational Policy*, 18(3), 403–425. <https://doi.org/https://doi.org/10.1177/0895904804265066>
- Gurr, D. (2015). A model of successful school leadership from the international successful school principalship project. *Societies*, 5(1), 136–150. <https://doi.org/10.3390/soc5010136>.
- Hadi, S., Fitriana, H., Kirana, K. C., Subekti, N. B., & Ogwu, I. J. (2023). The impact of temporal and transformational leadership on innovation performance: a mediation analysis of self-efficacy. *Journal of Leadership in Organisation*, 5(2), 132–154. <https://doi.org/10.22146/jlo.86213>
- Hadiwinata, N., Sunaryo, W., & Yusnita, N. (2023). The influence of organizational culture and empowerment on commitment to the organization through employee work motivation. *Journal of Social Studies, Arts, and Humanities (JSSAH)*, 03(01), 7–14.



- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The job demands-resources model: a three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224–241. <https://doi.org/10.1080/02678370802379432>
- Hallinger, P., & Huber, S. (2012). School leadership that makes a difference: international perspectives. *International Journal of Research, Policy and Practice*, 1(1), 1–9. <https://doi.org/10.1080/09243453.2012.681508>
- Haryono, K., Eryanto, H., & Wibowo. (2021). The effect of organizational culture and empowerment correlated to work engagement as an intervening variables towards to the service quality of employee. *Journal of Business & Behavioural Entrepreneurship*, 5(2021), 1–15.
- Hattie, J. A. C. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. London and New York: Routledge.
- Huang, Y., Liu, H., & Huang, L. (2020). Studies in Higher Education How transformational and contingent reward leaderships influence university faculty 's organizational commitment : the mediating effect of psychological empowerment. *Studies in Higher Education*, 1(1), 1–18. <https://doi.org/10.1080/03075079.2020.1723534>
- Indriasari, R., Permatasari, M., Khair, O. I., Yusuf, A., & Luthfi, A. (2023). The impact of transformational leadership on employee performance: an intermediary function of organizational commitment and job satisfaction. *Kawanua International Journal of Multicultural Studies*, 4(1), 29–34. <https://doi.org/10.30984/KIJMS.v4i1.580>
- Ismayilova, K., & Laksov, K. B. (2023). Teaching creatively in higher education: the roles of personal attributes and environment. *Scandinavian Journal of Management*, 67(4), 536–548. <https://doi.org/10.1080/00313831.2022.2042732>
- Kilag, O. K. T., & Abendan, C. F. K. (2023). Empowering teachers: integrating technology into livelihood education for a digital future. *Excellencia Internaional Multi-Disciplinary Journal of Education*, 1(1), 30–41.
- Lambert, L. (2006). *Lasting Leadership: A Study of High Leadership Capacity Schools*. The Educational Forum, 70(1), 238–254.
- Leithwood, K. (1994). Leadership for school restructuring. *Educational Administration Quarterly*, 27(3), 498–518.
- Louis, K. S., Marks, H. M., & Kruse, S. D. (1996). Teacher's professional community in restructuring schools. *American Educational Research Journal*, 33(4), 757–798. <https://doi.org/10.2307/1163415>
- Mahendri, M. R., Susita, D., & Yohana, C. (2022). The effect of servant leadership innovative work behavior with psychological empowerment and job crafting as intervening variables. *The International Journal of Social Sciences World*, 4(2), 197–214. <https://doi.org/https://doi.org/10.5281/zenodo.7310898>
- Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Education Evaluation and Policy Analysis*, 19(3), 245–275. <https://doi.org/10.3102/01623737019003245>
- Marks, & Printy, M. (2003). Principal leadership and school performance: an integration of transformational and instructional leadership. *Educational Administr2*, 39(1), 370–397. <https://doi.org/http://dx.doi.org/10.1177/0013161X03253412>
- Masadeh, M., Al-Sabi, S. M., & Al-Ababneh, M. M. (2019). Understanding the impact of empowerment on employees innovation performance: evidence from the Jordanian Hotel Industry. *Journal of Tourism, Hospitality and Sports*, 44(1), 7–22.
- Mayastinasari, V., & Suseno, B. (2023). The role of transformational leadership and knowledge sharing on innovative work behavior of public organization in the digital era. *International Journal of Professinal Business Review*, 8(7), 1–12. <https://doi.org/https://doi.org/10.26668/businessreview/2023.v8i7.2977>
- Metan, O., Natsir, M., & Setyadi, S. (2022). The effect of organizational culture, work environment, and leadership style on teacher performance at Bina Budi Mulia Foundation, Malang. *International COnference of Graduate School on Sustainability*, 4(5), 143–155.
- Mualim. (2022). The influence of leadership and empowerment on the competence and work achievement of teachers in the office of the ministry of religion of Cirebon Regency. *International Journal of Science and Society*, 4(4), 131–141.
- Nikpour, A. (2018). Psychological empowerment and organizational innovation: mediating role of job satisfaction and organizational commitment. *International Journal of Organizational Leadership*, 7(1), 106–119.
- Novitasari, D., & Asbari, M. (2020). Peran kesiapan untuk berubah terhadap kinerja guru di masa pandemi covid-19. *Journal of Industrial Engineering & Management Research (JIEMAR)*,

- 1(2), 219–237. <https://doi.org/https://doi.org/10.7777/jiemar.v1i2.63>
- Novitri, B. S., Kamil, M., & Rianto, J. (2020). Pengaruh disiplin kerja, pengembangan diri dan kompensasi terhadap kinerja karyawan. *Pemandhu*, 1(1).
- Nurbaya, S., Ramly, M., & Sinring, B. (2019). Teacher job performance: the mediating role of work culture. *Advances in Social Sciences Research Journal*, 6(7), 113–125.
- O'Reilly, C., & Chatman, J. (1991). People and organizational culture: a profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3), 487–516. <https://doi.org/10.2307/256404>
- OECD. (2016). *Innovating Education and Educating for Innovation*. Paris: OECD Publishing.
- Onorato, M. (2013). Transformational leadership style in the educational sector: an empirical study of corporate managers and educational leaders. *Academy of Educational Leadership Journal*, 17(1), 33–47.
- Overton, C. S., & Putra, M. S. (2021). The role of employee empowerment mediates the effect of transformational leadership on innovation. *American Journal of Applied Sciences*, 5(3), 23–29.
- Panjaitan, A. P., Hasibuan, S., & Effendi, I. (2023). The effect of employee empowerment, organizational culture, compensation, and work environment on employee performance. *International Journal of Accounting, Management, Economics and Social Sciences*, 1(4), 453–464.
- Prabowo, R., Mustika, M. D., & Sjabadhyni, B. (2018). How leader transforms employees' psychological empowerment into innovative work behavior. *Psychological Research on Urban Society*, 1(2), 1–11. <https://doi.org/10.7454/proust.v1i2.32>
- Priarso, T., Diatmono, P., & Mariam, S. (2018). The effect of transformational leadership style, work motivation, and work environment on employee performance that in mediation by job satisfaction variables in PT. Gynura Consulindo. *Business and Entrepreneurial Review*, 18(2), 165–176.
- Priyadi, H., Surono, & Hakim, C. (2023). Innovative work behavior and the impact of organizational culture. *Insiatif: Jurnal Ekonomi, Akuntansi, Dan Manajemen*, 2(2), 215–228.
- Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2021). Effect of management innovation, transformational leadership, and knowledge sharing on market performance of Indonesian consumer goods company. *Journal of Applied Management*, 19(2), 424–343.
- Puspayanti, A. (2018). Evaluasi pembelajaran diklat menggunakan model. *Andragogi: Jurnal Diklat Teknis Pendidikan Dan Keagamaan*, 6(1), 143–167. <https://doi.org/https://doi.org/10.36052/andragogi.v6i1.52>
- Putra, A. S., Novitasari, D., Asbari, M., Purwanto, A., Iskandar, J., Hutagalung, D., Suroso, & Cahyono, Y. (2020). Examine relationship of soft skills, hard skills, innovation and performance: the mediation effect of organizational learning. *International Journal of Science and Management Studies (IJSMS)*, 3(3), 27–43. <https://doi.org/10.51386/25815946/ijms-v3i3p104>
- Quinn, R., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: toward a competing values approach to organizational analysis. *Management Science*, 29(1), 363–377. <https://doi.org/http://dx.doi.org/10.1287/mnsc.29.3.363>
- Rachmad, Y. E., Mokan, A., Badriyyah, E. S. R., Gusliana, E., & Tawil, M. R. (2023). The effect of principal transformational leadership and motivation on performance of teacher in Islamic Elementary School. *Journal on Education*, 5(3), 7043–7056.
- Ramadanti, F. A., Butar, B. B., & Hariyanto, M. (2021). Analisis pengaruh penggunaan google classroom terhadap efektivitas pembelajaran siswa SMAN 95 Jakarta Barat. *Jurnal Inovasi Informatika*, 6(1), 11–17. <https://doi.org/https://dx.doi.org/10.51170/jii.v6i1.151>
- Ratnasari, E., & Sudarma, K. (2019). The mediating role of psychological empowerment on the relationship between person fit organization and knowledge sharing behavior in innovative work behavior. *Management Analysis Journal*, 8(3), 1–10.
- Risambessy, A. (2023). Influence of innovative leadership on work culture and empowerment at the department of industry and trade Maluku Province. *International Journal of Humanities Education and Social Sciences*, 2(4), 1212–1218.
- Sáez, I. A., & Sancho, N. B. (2017). The integrated curriculum, university teacher identity and teaching culture: The effects of an interdisciplinary activity. *Journal of New Approaches in Educational Research*, 6(2), 127–134. <https://doi.org/10.7821/naer.2017.7.235>
- Satata, S., Trisnamansyah, S., Sujiarto, H., & Kosasih, U. (2016). The effect of leadership, organizational culture, commitment, and teacher competency on teacher performance. *International Journal of Educational Research & Social Sciences*, 1(1), 1673–1681.

- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2012). Organizational climate and culture. *The Annual Review of Psychology*, 64(1), 361–368. <https://doi.org/10.1146/annurev-psych-113011-143809>
- Schuldt, K. S., & Gomes, G. (2020). Influence of organizational culture on the environments of innovation and organizational performance. *Gestão & Produção*, 27(3), 1–26. <https://doi.org/https://doi.org/10.1590/0104-530X4571-20>
- Selamet, & Soelistya, D. (2023). The effect of transformational leadership style on teacher performance. *Journal of Humanities and Social Studies*, 7(2), 524–528. <https://doi.org/https://doi.org/10.33751/jhss.v7i1.8639>
- Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it? *Journal of Research in Innovative Teaching & Learning*, 10(1), 4–33. <https://doi.org/10.1108/JRIT-10-2016-0007>
- Singh, S., & Singla, B. B. (2023). Impact of workplace culture on teacher's performance in higher education institutions. *Journal of Informatics Education and Research*, 3(2), 216–225. <https://doi.org/https://doi.org/10.52783/jier.v3i2.95>
- Sirait, D., Suriansyah, Ngadimun, & Suhaimi. (2021). The influence of principal transformational leadership, work culture, and work environment on teacher performance in State Senior High Schools throughout Banjarbaru City. *Journal of Advances in Education and Philosophy*, 5(12), 391–400. <https://doi.org/10.36348/jaep.2021.v05i12.004>
- Siswanti, Y., & Nurhariati, E. (2022). The influence of organizational culture to innovation behavior: a hierarchical linear modelling approach. *Journal of International Conference Proceedings*, 5(5), 267–284.
- Smylie, M., & Denny, J. (1990). Teacher leadership: Tensions and ambiguities in organizational perspective. *Educational Administration Quarterly*, 26(3), 235–259. <https://doi.org/10.1177/0013161X90026003003>
- Sofiyan, Sembiring, R., Danilwan, Y., Anggriani, R., & Sudirman, A. (2022). Innovative work behavior and its impact on teacher performance: the role of organizational culture and self efficacy as predictors. *Journal of Educational Research and Evaluation*, 6(1), 44–52.
- Spreitzer, G. M. (2005). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442–1465.
- Supranto. (2008). *Statistika: Teori dan Aplikasi*. Jakarta: Erlangga.
- Suryo, R., Hamidah, & Saptono, A. (2023). The effect of empowerment and emotional intelligence on innovation in civil servants. *Journal of International Conference Proceedings*, 6(3), 146–155.
- Tschannen-moran, M., & Hoy, A. W. (2002). The influence of resources and support on teachers' efficacy beliefs. *Efficacy and Support*, 1(1), 1–8.
- Uzunbacak, H. H. (2017). The impacts of employee empowerment on innovation. *The Journal of International Social Research*, 8(37), 977–989. <https://doi.org/10.17719/jisr.20153710663>
- Wahyudin, I., Hadjar, I., & Yusnita, N. (2021). The influence of organizational culture, employee empowerment and job satisfaction on organizational commitments. *Agricultural Socio-Economics Journal*, 21(3), 209–214.
- Wang, Q., Hou, H., & Li, Z. (2022). Participative leadership: a literature review and prospects for future research. *Front Psychol*, 3(13), 1–8. <https://doi.org/10.3389/fpsyg.2022.924357>.
- Werang, B. R. (2014). Pengaruh kepemimpinan transformasional kepala sekolah, moral kerja guru, dan kepuasan kerja terhadap kinerja guru SDN di Kota Merauke. *Jurnal Cakrawala Pendidikan*, XXXIII(1), 128–137. <https://doi.org/https://doi.org/10.21831/cp.v1i1.1869>
- Widjajani, S., Khotimah, K., & Jatmoko, D. (2022). Organizational culture, commitment, and teacher performance: the role of job satisfaction. *Jurnal Pendidikan Bisnis Dan Manajemen*, 8(3), 155–167.
- Yildirim, F. (2018). The mediator role of employee empowerment on the effect of organizational learning on innovation. *Istanbul Gelisim University Journal of Social Sciences*, 5(2), 18–38. <https://doi.org/http://dx.doi.org/10.17336/igusbd.398990>
- Zhang, C., & Zhong, C. (2014). Research on the influencing factors and mechanism to innovation performance of team psychological empowerment. *Open Journal of Social Sciences*, 2(2), 49–55. <https://doi.org/http://dx.doi.org/10.4236/jss.2014.21207>