



THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP AND INTERPERSONAL COMMUNICATION ON THE WORK EFFECTIVENESS OF LEADING TEACHERS: AN EMPIRICAL STUDY IN ELEMENTARY SCHOOLS, BOGOR REGENCY

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Abstract

This study aimed to examine the direct effect of transformational leadership and interpersonal communication on the work effectiveness of leading teachers in elementary schools in Bogor Regency, within the context of implementing the Kurikulum Merdeka (Independent Curriculum). The population consisted of 435 leading teachers, with a sample of 116 teachers selected using multistage random sampling (George, 2021). A quantitative, survey-based approach was employed, and data were analyzed using path analysis. The results indicated that transformational leadership had a positive and significant effect on work effectiveness ($\beta = 0.602$; $p < 0.05$), as did interpersonal communication ($\beta = 0.146$; $p < 0.05$). Together, both variables explained 66.2% of the variance in work effectiveness. These findings confirm that strengthening principals' transformational leadership and improving the quality of interpersonal communication are key strategies for enhancing the work effectiveness of leading teachers. Practical implications are discussed.

Keywords: Work Effectiveness, Leading Teachers, Transformational Leadership, Interpersonal Communication, Independent Curriculum.

INTRODUCTION

The Guru Penggerak (Leading Teacher) program is a strategic initiative by the Indonesian Ministry of Education to create agents of change in schools capable of effectively implementing the Kurikulum Merdeka (Hendarman & Rohmah, 2022; Sibagariang et al., 2021). Leading teachers have broader roles than regular teachers, including acting as learning leaders who foster innovation, collaboration, and empowerment of colleagues. The implementation of the Kurikulum Merdeka requires leading teachers not only to teach but also to facilitate projects strengthening the Pancasila student profile (Rachmawati et al., 2022). However, field observations indicate that the effectiveness of leading teachers remains a serious challenge. A preliminary survey of 30 leading teachers in Bogor Regency found that 40% of respondents experienced difficulties in classroom management, technology utilization, and learning outcome orientation. In addition, high administrative burdens and resistance to change hinder work effectiveness (Arifin et al., 2024; Mardin et al., 2024). Therefore, improving the work effectiveness of leading teachers is a critical and urgent issue.

Previous studies have examined factors influencing teacher work effectiveness, such as transformational leadership (Novalianti et al., 2022; Supanji et al., 2020) and interpersonal communication (Prasetyo & Oktarina, 2017). However, most of these studies were conducted separately or focused on only one variable. Few studies have integrated both variables simultaneously in the context of leading teachers, particularly at the elementary school level. Furthermore, the use of path analysis to test the direct effects of transformational leadership and interpersonal communication

on leading teachers' work effectiveness is still rare. Other studies have shown that transformational leadership can motivate teachers through individual consideration and intellectual stimulation (S. Andriani et al., 2018; Purwanto et al., 2021), while effective interpersonal communication can improve performance through openness and feedback (Supriyadi & Indriaty, 2022). Thus, a significant research gap exists to empirically examine how these two factors together contribute to the work effectiveness of leading teachers.

The specific objectives of this study were to test the direct effects of transformational leadership and interpersonal communication on work effectiveness. This study differs from previous research by examining both variables simultaneously within an integrated structural model, using a specific sample of elementary school lead teachers in Bogor Regency. It also complements the limited literature on leading teachers, especially in the context of Kurikulum Merdeka implementation (Rachmawati et al., 2022). Consequently, this study provides empirical evidence regarding the relative contributions of each variable.

Based on the theoretical framework, two main hypotheses were tested. First, there is a positive direct effect of transformational leadership on the work effectiveness of leading teachers. Transformational leadership of principals, encompassing idealized influence/charisma, inspirational vision, intellectual stimulation, individualized consideration, and collaborative behavior, is believed to inspire and empower teachers to work more effectively (S. Andriani et al., 2018; Wibowo & Anisa, 2023). Second, there is a positive direct effect of interpersonal communication on the work effectiveness of leading teachers. Open, empathetic, and supportive communication among principals, teachers, and colleagues is expected to foster a harmonious, collaborative work environment, which, in turn, improves work effectiveness (Pratiwi & Setyaningtyas, 2022; Suchyadi & Nurjanah, 2021).

LITERATURE REVIEW

Transformational Leadership

Transformational leadership is a leadership style that inspires and motivates teachers to exceed their normal performance through vision building, intellectual stimulation, and individual consideration. In elementary schools, principals who apply transformational leadership can improve teachers' work effectiveness by encouraging commitment and professional growth. This leadership style plays an important role in enhancing educational outcomes and organizational performance. Research shows its strong influence on teacher performance in schools. (Andriani, et al, 2018).

Interpersonal Communication

Interpersonal communication refers to the process of exchanging information, ideas, and feelings between individuals in an organization effectively and continuously. In school settings, good communication between principals and teachers helps improve coordination, clarify tasks, and build a

positive working climate. Effective interpersonal communication is essential for improving teachers' performance and organizational effectiveness. It strengthens collaboration and supports the achievement of educational goals. (Bucăța & Rizescu, 2017).

Work Effectiveness of Teachers

Teacher work effectiveness refers to the ability of teachers to achieve educational goals through efficient, timely, and high-quality performance in teaching and learning activities. Effective teachers are able to plan, implement, and evaluate instruction properly to improve student outcomes. Work effectiveness is influenced by leadership style and interpersonal communication within the school environment. These factors collectively determine the success of educational processes in schools. (Mukhtar, et al, 2020).

METHOD

This study used a quantitative, survey-based approach. The research was conducted in the even semester of the 2024-2025 academic year (March–September 2025) in public elementary schools across seven sub-districts of East Bogor Regency. The target population was all leading teachers in those areas, totaling 435 individuals. A sample of 116 teachers was determined using the Slovin formula with an 8% margin of error and selected through multistage random sampling (George, 2021), which involved four stages: random selection of the region, inclusion of all sub-districts, proportional selection of schools (16% of total schools), and proportional selection of individual teachers.

Data were collected using questionnaires completed by respondents. The transformational leadership instrument (X_1) was developed based on indicators: idealized influence/charisma, inspirational vision, intellectual stimulation, individualized consideration, and collaborative behavior (Chiu et al., 2021; Obeidat et al., 2018). The interpersonal communication instrument (X_2) was measured using the following indicators: openness, empathy, supportiveness, positivity, equality, message clarity, feedback, and expressiveness (Ritonga, 2020; Singh, 2014). The work effectiveness instrument (Y) was measured using indicators: strategic planning, classroom management, technology and resource utilization, positive interaction, learning outcome orientation, constructive evaluation, and teaching enthusiasm (Francis et al., 2015; Mukhtar et al., 2020). Instrument testing on 30 teachers showed that all instruments were valid ($r > r\text{-table } 0.361$) and reliable (Cronbach's Alpha > 0.96 for each variable).

Data analysis was conducted in three stages. First, descriptive statistics were used to describe data distribution. Second, assumption tests included normality of estimated residuals (Kolmogorov-Smirnov), homogeneity of variances (Levene's), and linearity (deviation from linearity). Third, path

analysis was used to test the direct effects of the independent variables on the dependent variable, with $\alpha = 0.05$. All analyses were performed using SPSS.

RESULTS AND DISCUSSION

Descriptive statistics showed that the mean score for work effectiveness (Y) was 135 (SD = 24.55), for transformational leadership (X₁) was 121 (SD = 30.14), and for interpersonal communication (X₂) was 120 (SD = 29.93). The data distributions were relatively normal and met the assumptions for path analysis.

The normality test for estimated residuals (Y-Ŷ) for each relationship showed Asymp. Sig. (2-tailed) > 0.05, indicating normally distributed data. Levene's test for homogeneity of variances showed significance values > 0.05 for all groups (Sig. values ranged from 0.151 to 0.705), indicating homogeneous variances. The linearity test showed that the significance values for deviation from linearity for all variable pairs were > 0.05, indicating that the relationships between the independent and dependent variables were linear.

Path Analysis

The results of the path analysis for direct effects are presented in Table 1.

Table 1. Path Coefficients for Direct Effects

Independent Variable	Path Coefficient (β)	Standard Error	t-value	Sig.	Status
Transformational Leadership	0.602	0.053	9.233	0.000	Significant
Interpersonal Communication	0.146	0.059	2.230	0.028	Significant

Dependent Variable: Work Effectiveness of Leading Teachers (Y)

As shown in Table 1, transformational leadership had a positive and significant direct effect on work effectiveness ($\beta = 0.602$; $p < 0.05$). Similarly, interpersonal communication also had a positive and significant effect, although with a smaller coefficient ($\beta = 0.146$; $p < 0.05$). The coefficient of determination (R Square) was 0.662, indicating that both independent variables together explained 66.2% of the variance in work effectiveness. In comparison, the remaining 33.8% was attributed to factors outside the model. The resulting structural equation was: $Y = 0.602 X_1 + 0.146 X_2 + \varepsilon$, with $\varepsilon = \sqrt{1 - 0.662} = 0.582$.

DISCUSSION

This study found that principals' transformational leadership had a positive and significant effect on the work effectiveness of leading teachers, with a path coefficient of 0.602. This finding supports the first hypothesis and indicates that transformational leadership is the strongest predictor among the variables studied. Substantively, this means that for every one standard deviation increase

in the implementation of transformational leadership, work effectiveness increases by 0.602 standard deviations. This coefficient falls into the strong effect category (Riduwan, 2010).

This result aligns with previous studies by Supanji et al. (2020) and Novalianti et al. (2022), which also found a significant effect of transformational leadership on teacher performance. It is reinforced by Aunga & Masarel (2017), who reported a significant relationship between transformational leadership style and teacher performance effectiveness in Arusha District. Furthermore, Leithwood & Sun (2015) showed that principals who practice transformational leadership can foster a positive school culture, increase teacher job satisfaction, and, consequently, enhance work effectiveness. In the current study, the path coefficient (0.602) is higher than the 0.40–0.65 range reported in previous meta-analyses, indicating that, in the context of leading teachers, the role of transformational leadership is even more critical. Other studies by Purwanto et al. (2021) and Wibowo & Anisa (2023) also confirmed that transformational leadership has a direct impact on teacher performance in elementary schools.

The theoretical explanation for the strong effect of transformational leadership lies in its ability to inspire and empower teachers. Through idealized influence/charisma, the principal serves as a role model, building trust and respect. Inspirational vision provides direction and meaning to teachers' work, making them feel called rather than merely assigned to achieve common goals. Intellectual stimulation encourages teachers to think critically and innovatively when facing challenges of the Kurikulum Merdeka. Individualized consideration ensures that each teacher is treated personally, that their development needs are accommodated, and that appropriate support is provided. Collaborative behavior creates a synergistic work environment (S. Andriani et al., 2018; Çop et al., 2021). These five indicators work in an integrated manner to form an ecosystem that drives work effectiveness. The Scientific Identification Theory to Conduct Operation Research in Education Management (SITOREM) analysis revealed that, from the perspective of transformational leadership, the indicators most in need of improvement were individualized consideration (score 3.33) and idealized influence/charisma (score 3.67).

This study also found that interpersonal communication had a positive and significant effect on the work effectiveness of leading teachers, although with a smaller coefficient ($\beta = 0.146$). This finding supports the second hypothesis. Although the effect is moderate (Riduwan, 2010), its statistical significance ($p = 0.028$) indicates that interpersonal communication remains an important factor that cannot be ignored. Each 1 standard deviation increase in interpersonal communication quality is associated with a 0.146 standard deviation increase in work effectiveness. In practice, this increase may manifest as reduced misunderstandings, faster problem-solving, and improved team coordination.

This result is consistent with Prasetyo & Oktarina (2017) and Kusman (2019), who reported that effective interpersonal communication has a positive effect on teacher performance and student

motivation to learn. Riyanti & Akbar (2019) also emphasized that interpersonal communication builds productive working relationships in schools. Furthermore, Bucăța & Rizescu (2017) highlighted that effective internal communication enables better coordination within organizations. In this study, effective interpersonal communication—characterized by openness, empathy, supportiveness, positivity, equality, message clarity, feedback, and expressiveness—proved capable of creating a collaborative and supportive work environment, which ultimately improves work effectiveness. Recent studies by Pratiwi & Setyaningtyas (2022) and Supriyadi & Indriaty (2022) also confirmed the important role of interpersonal communication in improving teacher performance during the implementation of the Kurikulum Merdeka. Specifically, Suchyadi & Nurjanah (2021) found a positive relationship between interpersonal communication and teacher performance in Bogor Regency.

SITOREM analysis showed that from the interpersonal communication perspective, the weakest indicators requiring immediate improvement were equality (score 3.00) and empathy (score 3.33). Low equality leads to one-way, hierarchical communication, where junior or less experienced teachers feel uncomfortable expressing opinions. It hinders knowledge transfer and reflective dialogue, which are central to collective learning. Low empathy makes it difficult for teachers to understand colleagues' perspectives, resulting in shallow communication. Therefore, principals need to build a culture of equal communication, for example, by providing equal speaking opportunities in discussion forums and avoiding authoritarian communication styles. Training in active listening skills is also necessary to increase empathy.

Interestingly, although the path coefficient for interpersonal communication (0.146) is smaller than that for transformational leadership (0.602), its unique contribution cannot be replaced. In the regression model, both variables together explained 66.2% of the variance in work effectiveness, meaning that without interpersonal communication, the model's predictive ability would be significantly reduced. It indicates that even ideal transformational leadership will not be optimal without healthy interpersonal communication. Charismatic and visionary principals still need to master basic communication skills such as active listening, providing feedback, and demonstrating empathy and equality. Without these, even an inspiring vision may fail to translate into concrete action due to message distortion or resistance from teachers who feel undervalued.

Furthermore, these findings have important implications for the professional development of leading teachers. As agents of change, leading teachers are required not only to be pedagogically excellent but also to mobilize colleagues, collaborate across subjects, and build learning communities. All these roles are impossible without effective interpersonal communication. Leading teachers with good interpersonal communication skills will more easily influence their peers, build consensus, resolve conflicts, and create collective energy for positive change. Research by Andriani & Fitriani (2021) also emphasized that interpersonal communication and organizational culture have direct

implications for teacher work effectiveness, especially during the pandemic era. Therefore, leading teacher training programs should include modules on effective interpersonal communication, with a particular focus on equality and empathy.

Strengths of this study include the use of path analysis, allowing simultaneous testing of causal hypotheses, and a representative sample obtained through multistage random sampling. However, several limitations exist. First, this study only used two independent variables, whereas many other factors (such as learning organization, work motivation, and organizational culture) also influence work effectiveness. Second, the cross-sectional design captures relationships at only one point in time, so causality cannot be firmly established. Third, generalizability is limited to the context of elementary school leading teachers in Bogor Regency.

This study makes a theoretical contribution by strengthening the model of relationships among transformational leadership, interpersonal communication, and teacher work effectiveness in the context of elementary education. In practice, the findings serve as a reference for principals and education agencies in designing integrated leadership development and communication training programs. Principals are advised not only to focus on strengthening charisma and vision but also to build a culture of equal and empathetic communication. The most effective interventions should prioritize improving weak indicators: individualized consideration and charisma in leadership, and equality and empathy in interpersonal communication.

CONCLUSION

This study proves that transformational leadership and interpersonal communication simultaneously have a positive and significant effect on the work effectiveness of leading teachers. Transformational leadership has a very strong effect ($\beta = 0.602$), while interpersonal communication provides a significant but smaller contribution ($\beta = 0.146$). Together, both variables explain 66.2% of the variance in work effectiveness. These findings confirm that strengthening principals' leadership and improving the quality of interpersonal communication are inseparable strategies for enhancing the work effectiveness of leading teachers in implementing the Kurikulum Merdeka.

Limitations of this study include the cross-sectional design, the limited sample scope to Bogor Regency, and the inclusion of only two independent variables. Future research is encouraged to use longitudinal designs, expand the geographical coverage, and include mediating variables such as learning organization or work motivation. Practical recommendations for principals include prioritizing improving individualized attention and charisma, as well as building a culture of equal and empathetic communication.

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