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The Influence of Knowledge Sharing, Transformational Leadership, and Self-Efficacy on Teachers' Innovative Work Behavior in XYZ School Cikarang

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Abstract

The purpose of this paper is to examine teachers' Innovative Work Behavior (IWB) through the integration of knowledge sharing, transformational leadership, and self-efficacy underpinned by the Social Cognitive Theory framework. Previous literature reveals a significant gap in the educational sector, as prior studies predominantly examine these behavioral, environmental and personal factors in isolation, resulting in inconsistent empirical findings regarding their individual impact on IWB. Driven by the institutional necessity to systemize localized innovative initiatives at the kindergarten to elementary level, this study analyzes the concurrent effects of these variables within unified triadic framework. Employing a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM) on a census of 36 teachers at XYZ School Cikarang, the empirical results indicate that the integrated model explains 80.6% of the variance in IWB (R^2 = 0.806). Transformational leadership exerts the strongest predictive effect, followed by knowledge sharing and self-efficacy. This study offers critical insight for educational administrators aiming to transition from fragmented individual initiatives toward an institutionalized innovative culture demonstrating that a structured psychologically safe ecosystem is paramount to sustaining organizational innovation.

Keywords: Innovative Work Behavior; Knowledge Sharing; Self-Efficacy; Transformational Leadership.

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INTRODUCTION

The era of Industry 5.0 has brought fundamental changes to the global education landscape. Within this new paradigm, artificial intelligent (AI) and superior human capability (the super smart society) have become the two principal pillars of value creation. This has implications for the growing demand for personalized learning experiences and for reorienting education systems that position innovation as an inseparable part of modern learning practice (Lin, 2023; Rafique et al., 2022, 2). Educational institutions are now confronted with the challenge of preparing learners to master 21st century skills, adapt to advances in learning technology, and understand the diverse characteristics of learners (Rafique et al., 2022). Alongside this transformation, the role of teachers has also changed significantly. Teachers are required to serve as learning facilitators who design meaningful learning experiences, integrate technology pedagogically, and create adaptive learning environments. In addition, teachers are expected to become the agents of innovation who continuously explore and implement more effective learning approaches. In the organizational behavior literature, this behavior is known as innovative work behavior (Khan et al., 2023, 3).

Innovative work behavior (IWB) is a multidimensional construct describing the overall behavior of individuals in creating, promoting, and implementing new ideas that add value to their work (Nghia & Dong, 2022). Jong & Hartog (2010) conceptualize IWB into three main dimensions: idea generation, idea promotion, and idea implementation. A range of empirical studies show that teachers' IWB contributed positively to student engagement, learning quality, and the effectiveness of educational goal attainment (Rafique et al., 2022; Saif et al., 2024). Teachers' IWB also helps build a school's intellectual capital, since innovations shared among teachers become a source or collective knowledge that strengthens organizational capacity (Nghia & Dong, 2022).

A number of studies confirm that IWB is significantly influenced by knowledge sharing, transformational leadership, and self-efficacy. Knowledge sharing, whether through knowledge donating or knowledge collecting, has been shown directly to enhance IWB (Nghia & Dong, 2022; Baakir & Ellioua, 2025). Transformational leadership has likewise been shown to positively affect IWB, both directly and through mediators such as knowledge sharing and organizational identification (Rafique et al., 2022; Lin, 2023; Saif et al., 2024). Meanwhile, self-efficacy is also consistently reported as a strong predictor of IWB, whether directly or through mediating pathways (Khan et al., 2023; Gkontelos et al., 2023).

This theoretical framework finds a critical empirical manifestation in the current conditions at XYZ School Cikarang. Preliminary interviews with the principal in August 2025 and January 2026

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indicated that teachers' IWB, particularly at the kindergarten to elementary level, has not yet developed systematically or evenly. Existing innovation largely depends on the individual initiative, with only two to three teachers actively applying innovation in their teaching. Knowledge sharing activities also tend to be formality-driven and confined to members of the same team, so that emerging innovative ideas remain fragmented. Furthermore, from a leadership perspective, the practice of transformational leadership has not yet fully created a climate that support teachers' willingness to experiment. Variation in teachers' self-efficacy also poses a further challenge, particularly in larger forum settings. This condition is consistent with Imants and Tillema (1995) who argue that teacher's self-efficacy is related to their acceptance or rejection of new information.

On the basis of this theoretical gap and empirical phenomenon, the present study aims to analyze the effect of knowledge sharing, transformational leadership, self-efficacy in the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang. The research questions are: (1) Does knowledge sharing have a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang? (2) Does transformational leadership have a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang? (3) Does self-efficacy have a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang? (4) Do knowledge sharing, transformational leadership and self-efficacy simultaneously have a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang?

LITERATURE REVIEW

Innovative Work Behavior (IWB)

IWB describes individual activities in creating, promoting, and implementing new ideas within a job, team, or organization to improve performance (Janssen, 2000, in Nghia & Dong, 2022; Baakir & Ellioua, 2025). Jong and Hartog (2010) frame this as introducing new ideas, processes, or procedures, while Hughes et al. (2018) note that this behavior is voluntary rather than a formal job requirement. In education this matters because classrooms demand continuous adaptation to shifting curricula, technology, and learner needs (Akram et al., 2020; Yuan & Woodman, 2010). Moreover, Jong and Hartog (2010) identify three core processes of IWB, including idea exploration, generation and championing, while Sudibjo and Prameswari (2021) offer a more detailed indicator model, which are generating new ideas to solve work-related problems,

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communicating those ideas to gain support from colleagues or superiors and implementing ideas so they produce tangible outcomes.

Knowledge Sharing **(KS)**

Knowledge sharing refers to the process of exchanging, disseminating, and applying knowledge, experience, and expertise among individuals within an organization (Razak et al., 2016). This exchange strengthens individual competence and teamwork while steering the organization toward innovation (Dong & Nghia, 2022; Baakir & Ellioua, 2023), and it works in both directions, the party sharing knowledge and the party receiving it are mutually engaged. Razak et al. (2016) and Dong and Nghia (2022) distinguish two forms of knowledge involved in this process, tacit knowledge, which is personal, contextual, and hard to document, and explicit knowledge, which is structured and can be disseminated through formal channels. Kan et al. (2025) point to interpersonal factors, team cohesion and mutual trust, together with organizational support such as flexible structures and an open culture, as the conditions that make knowledge exchange possible in the first place. In schools, this extends to sharing pedagogical knowledge and curriculum innovations that ultimately improve learning quality (Pieters et al., 2019).

Baakir and Ellioua (2023) organize knowledge sharing into knowledge donating and knowledge collecting behaviors, covering activities from mentoring and discussion to actively seeking and synthesizing knowledge from colleagues and external sources. Dong and Nghia (2022) simplify this into two indicators, being an active recipient of knowledge, and engaging in two-way interaction as both giver and recipient.

Transformational Leadership **(TL)**

Transformational leadership us a style focused on transforming individuals' values, motivation, and goals so they align with the organization's vision. Leaders achieve this by encouraging followers to prioritize organizational interest and by building a harmonious work environment (Robbins & Judge, 2023). Rafique et al. (2022) add that this alignment happens through deep personal attention to followers, while Vinh et al. (2022) emphasize how transformational leaders stimulate critical thinking and innovative approaches among their teams. Saif et al. (2024) extend this further, arguing that transformational leaders build trust, psychological safety, and team cohesion, conditions that are themselves prerequisites for a genuinely collaborative work climate.

At a practical level, Robbins and Judge (2023) identify four defining behaviors, modeling

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consistent values and integrity, articulating vision with enthusiasm, encouraging followers to question assumptions and seek new solutions, and offering individualized coaching. While on the other hand, Kinicki (2021) describes a comparable set: generating enthusiasm through an appealing vision, earning respect through exemplary conduct, providing personal support, and encouraging experimentation.

***Self-Efficacy* (SE)**

Self-efficacy is an individual's belief in their own capability to complete tasks and to generate and implement new ideas (Bandura, 1997, in Khan et al., 2023). In professional settings, this translates into confidence in one's ability to perform as expected and to withstand work pressure (Bernales-Turpo et al., 2022), while in education specifically, it refers to teachers' belief in their own ability to teach effectively (Gkontelos et al., 2023). Karimi et al. (2023) identify four dimensions of self-efficacy, confidence in facing challenging tasks, optimism about success, persistence toward goals, and the ability to adjust strategies and recover after setbacks. Moreover, Bernales-Turpo et al. (2022) offer a more compact set which includes confidence in performing to set standards, coping effectively with stress, and sustaining productivity under pressure.

Relevant Prior Research and Hypothesis Development

Across diverse context, prior literature consistently points to a positive relationship between all three predictor variables and IWB. For knowledge sharing, Nghia and Dong (2022) and Baakir and Ellioua (2025) find a positive effect among lecturers and engineers respectively, with knowledge donating dan collecting together forming a collaborative ecosystem that drives innovation. This finding is aligned with Xu and Suntrayuth (2022) and Chen et al. (2021), both of whom ground their result in Bandura's (1997) social cognitive theory.

For transformational leadership, Rafique et al. (2022) and Saif et al. (2024) report a significant positive effect on IWB ($\beta = 0.325$; $p = 0.001$). Bhatia's (2023) systematic review of 92 articles also suggest this effect strengthens further hen supported by employees' positive psychological states. In the psychological domain, Gkontelos et al. (2023) identify self-efficacy as a primary predictor of teachers' IWB, while at a more integrated level, Sudibjo and Prameswari (2021) and Wang (2025) show that knowledge sharing can mediate the effect of transformational leadership on IWB. Most of these studies, however, were conducted outside the education sector, which is the gap this study addresses. Taken together, these relationship among knowledge

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sharing, transformational leadership, self-efficacy and innovative work behavior lead to the following hypotheses:

H1: Knowledge sharing has a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang.

H2: Transformational leadership has a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang.

H3: Self-efficacy has a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang.

H4: Knowledge sharing, transformational leadership, and self-efficacy simultaneously have a positive effect on the innovative work behavior of kindergarten to elementary teachers at XYZ School Cikarang.

RESEARCH METHOD

This study employs a quantitative approach with an explanatory survey design to test the relationship among variables based in numerical data obtained from the research sample (Creswell & Creswell, 2018). The variables tested are the effects of knowledge sharing, transformational leadership, and self-efficacy on innovative work behavior. The data gathered in this study were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4, a method well suited to studies with several distinct indicators and a relatively small sample size, as in the present study (Ringle et al., 2018).

This study was conducted at XYZ School Cikarang, an educational institution offering basic to secondary education, over a period of approximately four months, from January to April 2026. The subjects were all active kindergarten to elementary teachers at XYZ School Cikarang. Given the relatively small population, a census method was employed, thereby including the entire population of 36 teachers as respondents. This census comprised both permanent and non-permanent teaching staff who met the inclusion criterion of having taught at the school for at least six months.

Primary data acquisition relied on a structured questionnaire administered via Google Forms, featuring close-ended questions rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A total of 36 positively phrased items comprised the research instrument, with each of the four conceptual variables allocated nine items. The analytical framework was executed in a two-fold sequence using SmartPLS, assessing the measurement (outer) model for construct reliability and validity, followed by evaluating the structural (inner)

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model to examine intervariable paths. The outer model assessment required convergent validity criteria (outer loading ≥ 0.70 and AVE ≥ 0.50), internal consistency Cronbach's alpha ≥ 0.70), and discriminant validity verification through HTMT ratios <0.90. Subsequently, the inner model was scrutinized using collinearity diagnostics (VIF < 5.0), the coefficient of determination (R^2), and path significance derived from a 5000-subsample bootstrapping technique. Hypotheses achieved statistical significance under the threshold of *t*-statistics > 1.96 and *p*-values <0.05.

RESULT

Respondent Profile

The participating teachers exhibit diverse demographic backgrounds. Detail distributions regarding their gender, teaching level, and teaching experience is summarized in Table 1.

Table 1. Respondent Profile

No	Description	Characteristics	Total	Percentage
1	Sex	Male	7	80.6%
		Female	29	19.4%
2	Teaching Level	Kindergarten	6	16.7%
		Elementary	30	83.3%
3	Teaching Experience	1 year	3	8.3%
		2-3 years	5	13.9%
		4-6 years	7	19.4%
		>6 years	21	58.3%

Measurement Model (outer model)

To confirm that the research instruments are suitable for further statistical analysis, a measurement model evaluation must be executed. This procedure defines the formal relationship between the latent construct and their respective indicators through validity and reliability assessments. In this study the outer model is evaluated based in convergent validity, construct reliability, and discriminant validity.

Convergent validity evaluates the extent to which an indicator positively correlated with alternatives measures of the same construct. According to the criteria established by Hair et al. (2021), this is verified through outer loadings, which should exceed a threshold of 0.70. Initial assessments indicated then need to eliminate several substandard indicators that failed to meet

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the loading criteria. Following this refinement, all retained indicators demonstrated strong outer loading ranging comfortably from 0.701 to 0.890 as shown on Table 2. Furthermore, the calculated AVE values for all latent variables ranged between 0.630 and 0.744, safely exceeding the 0.50 bench mark and conforming that the constructs capture a substantial portion of variance from their indicators.

Construct reliability is subsequently examined to verify the internal consistency and stability of the measurement instrument. This study utilizes Cronbach's alpha as the primary metric, applying the standard rule of thumb where values above 0.70 indicate satisfactory reliability (Hair et al., 2021). The statistical output revealed high consistency across all dimensions, with Cronbach's alpha values reaching 0.935 for IWB, 0.914 for knowledge sharing, 0.901 for transformational leadership, and 0.875 for self-efficacy. These results signify that the questionnaire items are dependably for data collection. Moreover, discriminant validity testing is conducted to guarantee that each latent construct is truly unique and empirically distinct from other variables within the structural framework using Heterotrait-Monotrait Ratio (HTMT) criterion. Hair et al. (2021) suggest that HTMT values must remain strictly below a conservative 0.90 to establish distinctiveness. The analysis yielded HTMT values ranging from 0.519 to 0,861 as shown on Table 3. Since all the coefficient are comfortably below the maximum limit, the discriminant validity of the measurement model is full substantiated.

Structural Model (inner model)

Following the outer model evaluation, the structural model (inner model) is analyzed to assess the model's predictive power and hypotheses relationship using collinearity diagnostics, the coefficient determination (R^2), and effect sizes (f^2). First, collinearity testing ensures that overlapping information among predictors does not distort the structural estimates. According to Hair et al. (2021), Variance Inflation Factor (VIF) values must remain below 5.0 to rule out multicollinearity. The empirical data showed on Table 4 that VIF values for all predictors ranged between 1.466 and 2.250, confirming the absence of collinearity issues and ensuring unbiased path coefficients. Next, The model's predictive accuracy is evaluated using R^2, representing the combiner explanatory power of the independent variables on the endogenous target. For the IWB variable, the model yielded an R^2 of 0.806 (adjusted R^2 = 0.787). classified as substantial by Hair et al. (2021). This indicates that knowledge sharing, transformational leadership, and self-efficacy simultaneously account for 80.6% of the variance in teachers' innovative work behavior. Finally, the effect-size (f^2) evaluation measures the relative, individual contribution of each predictor to

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the R^2 value. The result indicate that transformational leadership exerts the strongest influence on IWB (f^2 = 0.376) followed by knowledge sharing (f^2 = 0.330), and self-efficacy (f^2 = 0.293). this establishes that while all three dimensions are critical, leadership capability serves as the primary catalyst within this structural framework.

Tabel 2. Factor loading, reliability and AVE Test Result

Construct	Factor loading	Mean	SD	Cronbach's α	AVE	Composite Reliability (CR)
Innovative Work Behavior				0.935	0.690	0.940
I can find effective ways to complete difficult task.	0.796	4.33	0.71			
I note down idea for improvement that come to my mind.	0.834	4.03	0.93			
I am confident in sharing new idea my coworkers.	0.90	4.17	0.76			
I attempt to convince my supervisor to support my ideas.	0.868	3.94	0.91			
I discuss my ideas with others at work.	0.719	4.33	0.67			
I test new ideas before implementing them fully.	0.854	4.06	0.88			
The new ideas I implement yield tangible results in my work.	0.855	4.08	0.72			

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Construct	Factor loading	Mean	SD	Cronbach's α	AVE	Composite Reliability (CR)
My ideas contribute to improving my job performance.	0.818	4.28	0.61			
Knowledge Sharing				0.914	0.744	0.921
I set aside time to teach my coworkers about new things I have learned.	0.885	4.28	0.80			
I dedicated specific time to searching for new information.	0.850	4.11	0.97			
I review my coworkers' administrative documents.	0.819	3.78	1.06			
I provide feedback when coworkers share knowledge during discussions.	0.872	4.33	0.88			
I initiate discussion with coworker to deliberate on new ideas.	0.887	4.19	0.94			
Transformational Leadership				0.901	0.630	0.907
My leader communicates a vision of the future in a motivating manner.	0.887	4.28	0.80			
My leader gets me excited about major goals for the future.	0.867	4.14	0.71			

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Construct	Factor loading	Mean	SD	Cronbach's α	AVE	Composite Reliability (CR)
My leader fosters trust, engagement and cooperation among team members.	0.776	4.28	0.73			
My leader encourages new ways of thinking to solve problems and questions existing assumption.	0.768	4.19	0.81			
My leader expresses confidence that organizational goals will be achieved.	0.701	4.17	0.80			
My leader provides me with opportunities to try new methods.	0.752	4.22	0.79			
My leader rewards me when I propose new ideas.	0.788	4.00	0.85			
Self-Efficacy				0.875	0.668	0.879
I am optimistic that I can achieve the assigned work targets.	0.841	4.31	0.70			
Workplace pressure does not decrease my productivity.	0.804	4.06	0.91			
I am capable of adapting to policy changes in the workplace.	0.760	4.25	0.79			

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Construct	Factor loading	Mean	SD	Cronbach's α	AVE	Composite Reliability (CR)
I can adjust my work strategies when encountering obstacles.	0.824	4.33	0.53			
I am able to find alternative solution when the initial approach fails.	0.853	4.47	0.55			

Table 3. Discriminant Validity Test Results

Construct	IWB	KS	SE
IWB	–		
KS	0,766	–	
TL	0,861	0,598	0,786
SE	0,836	0,519	–

Table 4. VIF Test Result

	IWB	KS	TL	SE
IWB	-	-	-	-
KS	1,466	-	-	-
TL	2.250	-	-	-
SE	2.030	-	-	-

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DISCUSSION

Table 5. Hypothesis Testing Result

Hypotheses	Path Coef.	T-Statistic	P-Values	Decision
H1: KS → IWB	0,355	4,574	0,000	Supported
H2: TL → IWB	0,372	2,942	0,003	Supported
H3: SE → IWB	0,332	2,704	0,007	Supported
H4: KS+TL+SE → IWB	R^2 = 0,806	-	-	Supported

The result on Table 5 show that knowledge sharing has a positive effect on IWB (β = 0.355; p = 0.000) with the highest t-statistics among the three predictors, at 4.574. this finding confirms that the more frequently teacher share knowledge, experience, and information, the greater likelihood that innovative work behavior will emerge, because the process of knowledge exchange gives teachers new understanding that becomes the basis for developing ideas and solutions. This finding is consistent with Nghia and Dong (2022) and Baakir and Ellioua (2025), who demonstrate a positive correlation between knowledge sharing and IWB. Conceptualized through Bandura's (1997) social cognitive theory, the act of sharing knowledge operationalizes the behavioral dimension within the triadic reciprocal determinism paradigm. This finding exhibits further congruence with the work of Xu and Suntrayuth (2022, 7), whose investigation into high-technology enterprises in China demonstrated that within a social cognitive framework, knowledge sharing serves as a catalyst for generating an organizational climate highly conducive to innovative work behavior.

Transformational leadership proved to be the strongest predictor of IWB, with the largest path coefficient among the three predictors (β = 0.372; p = 0.003). Leaders who are able to articulate an inspiring vision, provide intellectual stimulation, and create a psychologically safe climate for exploration have been shown to encourage teachers to behave more innovatively. This finding is consistent with Saif et al. (2024), who report a positive and significant effect on IWB (β = 0.325; p = 0.001), and is supported by Bhatia's (2023) systematic review, which concludes that transformational leadership consistently contributes to increased IWB through vision articulation and intellectual stimulation. Within the social cognitive theory framework, transformational leadership represents the environmental factor. This finding is further reinforced by Karimi et al.

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(2023) who show that employee's psychological capital compromising self-efficacy, hope, resilience, and optimism functions as a meaningful mediator between transformational leadership and IWB, indicating that the effect of transformational leadership on innovation is not only direct but is also strengthened through the cultivation of teacher's positive psychological capacity.

Moreover, the quantitative analysis demonstrated that self-efficacy exerts a significant positive effect on IWB ($\beta = 0.332$; $p = 0.007$), suggesting that highly efficacious teachers are inherently bolder in taking initiatives, experimenting with new instructional approaches, and confronting innovation related challenges. This finding conceptually aligns with Gkontelos et al. (2023), who identified self-efficacy as a primary predictor of IWB with robust direct effect, as well as with Choi et al. (2021), who demonstrated its mediating role between leader-member exchange quality and innovative work behavior. However, this elevated quantitative score presents a stark discrepancy with the baseline context established in the introduction, which highlighted a prevalent trend of low teacher self-efficacy. To reconcile this contradiction and scrutinize the underlying motivations behind this unexpectedly high scores, qualitative in-depth interviews were conducted with three selected respondents. Interestingly, the qualitative insights reveal that this high self-efficacy score reflect teacher's ability to complete routine task under pressure more than their willingness to take innovative initiatives, pointing to a gap between routine performance and proactive behavior that warrants further attention.

Interviewees explained that this confidence stems from problem-solving strategies such as setting priorities. At the same time, strong emotional regulation under work pressure tends instead to drive teachers to avoid social interaction as a self-protective mechanism. This finding is consistent with Cabrera-Aguilar et al. (2023) who stated that individuals with high self-efficacy tend to interpret work demands as challenges to be resolved independently rather than as opportunities for collaboration, indicating that the questionnaire and interview findings in this study are complementary rather than contradictory in describing teacher's proactive behavior.

Jointly, the three variables explain 80.6% of the variance in IWB ($R^2 = 0.806$), classified as substantial. This finding confirms that knowledge sharing, transformational leadership, and self-efficacy should be understood as an interdependent ecosystem, with transformational leadership acting as the initial driver that promotes knowledge sharing practices and strengthens teachers' self-efficacy, ultimately manifesting as IWB. This finding is consistent with Sudibjo and Prameswari (2021), who show that transformational leadership exerts a stronger effect on IWB when operating alongside other variables such as knowledge sharing. Viewed through the lens if social cognitive theory, these results offer robust empirical validation for the triadic reciprocal

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determinism paradigm. Within this framework, self-efficacy operates as the personal determinant, knowledge sharing functions as the behavioral component, and transformational leadership constitutes the environmental factor. This dynamic is further substantiated by Wang (2025) whose research indicates that knowledge sharing concurrently fosters thriving at work, thereby accelerating IWB. Consequently, the three predictors evaluated in this study function synergistically and complementarily to drive teachers' innovative work behavior.

CONCLUSION

This study aims to discuss the dynamics of teacher's innovative work behavior (IWB), particularly through the aspects of knowledge sharing, transformational leadership, and self-efficacy within the educational context of XYZ School Cikarang. The empirical findings demonstrated that knowledge sharing, transformational leadership, and self-efficacy each exert a distinct positive direct effect on the innovative work behavior of kindergarten to elementary teachers. These three predictors align remarkably well in influencing teacher outcomes, jointly, accounting for a substantial 80.6% of the variance (R^2 = 0.806) in a simultaneous capacity, with transformational leadership emerging as the most significant driving force.

Theoretically, these outcomes contribute to the IWB literature within basic education while providing robust empirical validation for Bandura's (1997) social cognitive theory through the mechanism of triadic reciprocal determination. There exists a significant recognition that enhancing educators' innovative capacity requires an integrated approach rather than isolated interventions, confirming that personal, environmental, and behavioral factors must work complementarily to turn teachers into active innovators. While practically, these findings offer vital implications for how school management and similar educational institutions structure professional growth. To achieve success in reshaping outcomes, school leaders must work closely with teacher by strengthening professional learning communities, optimizing internal digital platforms, and actively building principal's leadership capacity through vision articulation and intellectual stimulation. Furthermore, management should provide structured professional development opportunities paired with psychologically safe work environment, empowering educators to challenge routine practices and explore new pedagogical strategies without fear of failure.

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LIMITATION AND SUGGESTION FOR FUTURE RESEARCH

This study has several limitations. First, data were obtained through a self-report questionnaire and therefore depend heavily in respondents' honesty and perception. Second, respondents' demographic data did not include information on functional role or additional duties held by teachers beyond their teaching assignments, which limits the interpretation of the result, particularly in explaining on how knowledge sharing occurs across roles, for example between level coordinators and teacher, or among teachers themselves. Meanwhile, for the self-efficacy variable, such data could also enrich the understanding of whether self-efficacy levels are related to respondents assigned roles. In light of these limitations, future research is encouraged to combine questionnaire data with assessment from principals or colleagues to minimized self-report bias, and to include demographic data on functional roles and additional teaching duties in order to deepen the analysis.

REFERENCES

Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2020). The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. *Journal of Innovation & Knowledge, 5*(2), 117–129. https://doi.org/10.1016/j.jik.2019.10.001

Baakir, H., & Ellioua, H. (2025). Knowledge sharing and innovative work behavior: A quantitative study of pharmaceutical engineers in Morocco. *Electronic Journal of Knowledge Management, 23*(2), 194–207. https://doi.org/10.34190/ejkm.23.2.4029

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman Company.

Bernales-Turpo, D., Quispe-Velasquez, R., Flores-Ticona, D., Saintila, J., Ruiz Mamani, P. G., Huancahuire-Vega, S., Morales-García, M., & Morales-García, W. C. (2022). Burnout, professional self-efficacy, and life satisfaction as predictors of job performance in health care workers: The mediating role of work engagement. *Journal of Primary Care & Community Health, 13*, 1–9. https://doi.org/10.1177/21501319221101845

Bhatia, H. (2023). Transformational leadership and innovative work behavior: A systematic review. *ShodhKosh: Journal of Visual and Performing Arts, 4*(2), 4071–4075. https://doi.org/10.29121/shodhkosh.v4.i2.2023.4628

Cabrera-Aguilar, E., Zevallos-Francia, M., Morales-Garcia, M., Ramírez-Coronel, A. A., Morales-García, S. B., Sairitupa-Sanchez, L. Z., & Morales-García, W. C. (2023). Resilience and stress as predictors of work engagement: The mediating role of self-efficacy in nurses. *Frontiers in Psychiatry, 14*, 1–11. https://doi.org/10.3389/fpsyt.2023.1202048

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Chen, W., Zhu, X., Sun, S., Liao, S., & Guo, Z. (2021). The impact of employees' psychological capital on innovative work behavior: The chain mediating effect of knowledge donating and knowledge collecting. *Frontiers in Psychology, 12*, 1–13. https://doi.org/10.3389/fpsyg.2021.761399

Choi, W.-S., Kang, S.-W., & Choi, S. B. (2021). Innovative behavior in the workplace: An empirical study of moderated mediation model of self-efficacy, and leader-member exchange. *Behavioral Sciences, 11*(182), 1–17. https://doi.org/10.3390/bs11120182

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage Publications Ltd.

Dong, D. T., & Nghia, N. K. (2022). The relationship between online knowledge sharing, innovative behavior, and academic performance: Evidence from Vietnam. *International Journal of eBusiness and eGovernment Studies, 14*(1), 181–203. https://doi.org/10.34109/ijebeg

Gkontelos, A., Vaiopoulou, J., & Stamovlasis, D. (2023). Teachers' innovative work behavior as a function of self-efficacy, burnout, and irrational beliefs: A structural equation model. *European Journal of Investigation in Health, Psychology and Education, 13*, 403–418. https://doi.org/10.3390/ejihpe13020030

Hair, J., Hult, T., Ringle, C., Sarstedt, M., Danks, N., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer.

Hughes, M., Rigtering, J. P. C., Covin, J. G., Bouncken, R. B., & Kraus, S. (2018). Innovative behavior, trust and perceived workplace performance. *British Journal of Management, 29*(1), 750–768. https://doi.org/10.1111/1467-8551.12305

Imants, J. G. M., & Tillema, H. H. (1995). *A dynamic view of training for the professional development of teachers*. Plus Postage.

Jong, J. de, & Hartog, D. den. (2010). Measuring innovative work behavior. *Creativity and Innovation Management, 19*(1), 23–36. https://doi.org/10.1111/j.1467-8691.2010.00547.x

Kan, H., Li, Y., & Li, X. (2025). The influence mechanism of organizational context and tacit knowledge sharing on innovation performance in mega project. *Buildings, 15*(17), 1–20. https://doi.org/10.3390/buildings15173237

Karimi, S., Malek, F. A., Farani, A. Y., & Liobikienė, G. (2023). The role of transformational leadership in developing innovative work behaviors: The mediating role of employee's psychological capital. *Sustainability, 15*(2), 1–21. https://doi.org/10.3390/su15021267

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Khan, H. S. ud din, Li, P., Chughtai, M. S., Mushtaq, M. T., & Zeng, X. (2023). The role of knowledge sharing and creative self-efficacy on the self-leadership and innovative work behavior relationship. *Journal of Innovation and Knowledge, 8*(4), 1–10. https://doi.org/10.1016/j.jik.2023.100441

Kinicki, A. (2021). *Organizational behavior: A practical, problem-solving approach* (3rd ed.). McGraw Hill.

Lin, Q. (2023). Transformational leadership and innovative work behavior: The role of identification, voice and innovation climate. *International Journal of Hospitality Management, 113*, 1–14. https://doi.org/10.1016/j.ijhm.2023.103521

Nghia, N. K., & Dong, D. T. (2022). The role of individualism-collectivism in enhancing knowledge sharing and innovative work behavior: Evidence from higher education in Vietnam. *International Journal of Operations and Quantitative Management, 28*(1), 134–155. https://doi.org/10.46970/2022.28.1.8

Pieters, J., Voogt, J., & Pareja Roblin, N. (2019). *Collaborative curriculum design for sustainable innovation and teacher learning*. Springer Open.

Rafique, M. A., Hou, Y., Chudhery, M. A. Z., Waheed, M., Zia, T., & Chan, F. (2022). Investigating the impact of pandemic job stress and transformational leadership on innovative work behavior: The mediating and moderating role of knowledge sharing. *Journal of Innovation and Knowledge, 7*(3), 1–11. https://doi.org/10.1016/j.jik.2022.100214

Razak, N. A., Pangil, F., Zin, M. L. M., Yunus, N. A. M., & Asnawi, N. H. (2016). Theories of knowledge sharing behavior in business strategy. *Procedia Economics and Finance, 37*(1), 533–545. https://doi.org/10.1016/S2212-5671(16)30163-0

Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. (2018). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 1–27. https://doi.org/10.1080/09585192.2017.1416655

Robbins, S. P., & Judge, T. A. (2023). *Organizational behavior* (19th ed.). Pearson Education.

Saif, N., Amelia, Goh, G. G. G., Rubin, A., Shaheen, I., & Murtaza, M. (2024). Influence of transformational leadership on innovative work behavior and task performance of individuals: The mediating role of knowledge sharing. *Heliyon, 10*, 1–13. https://doi.org/10.1016/j.heliyon.2024.e32280

Sudibjo, N., & Prameswari, R. K. (2021). The effects of knowledge sharing and person-organization fit on the relationship between transformational leadership on innovative work behavior. *Heliyon, 7*(6), 1–8. https://doi.org/10.1016/j.heliyon.2021.e07334

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Vinh, N. Q., Hien, L. M., & Do, Q. H. (2022). The relationship between transformational leadership, job satisfaction and employee motivation in the tourism industry. *Administrative Sciences, 12*(161), 1–17. https://doi.org/10.3390/admsci12040161

Wang, Z. (2025). Linking innovative knowledge sharing and employees' innovative behavior: The mediating role of thriving at work. *Knowledge Management and Research Practice, 23*(1), 52–62. https://doi.org/10.1080/14778238.2023.2261411

Xu, Z., & Suntrayuth, S. (2022). Innovative work behavior in high-tech enterprises: Chain intermediary effect of psychological safety and knowledge sharing. *Frontiers in Psychology, 13*, 1–11. https://doi.org/10.3389/fpsyg.2022.1017121

Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal, 52*(2), 323–342.

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