

The Role of Transformational Leadership on Employee Performance Through Innovative Work Behavior in a Public Transportation Company

Ahmad Azmy*, Didin Hikmah Perkasa

Faculty of Economics and Business, Paramadina University, Jakarta, Indonesia

ABSTRACT

This study delves into the intricate relationship between transformational leadership and innovative work behavior (IWB) on employee performance within the context of a public transportation company. Given the challenges faced by public transportation companies in improving employee performance quality, this study examines both direct and indirect effects mediated by IWB. Utilizing a purposive sampling technique and questionnaires, data were collected from a total of 303 individuals as respondents who are employed by the company. Structural Equation Modeling with Partial Least Squares (SEM-PLS) was employed to analyze the research model. Contrary to expectations, the direct effect analysis reveals that IWB does not significantly influence employee performance. However, transformational leadership was found to positively affect both IWB and employee performance, albeit not affecting employee performance when mediated by IWB. The results indicate that while routine work processes may not always demand innovation, and the enhancement of employee quality is contingent upon transformational leadership. The study advocates for the optimization of transformational leadership within organizations to bolster employee performance. Furthermore, it posits that IWB can be integrated as part of employee performance through the effective implementation of transformational leadership. The suitability of transformational leadership for public transportation companies is underscored, as it is vital for ensuring customer satisfaction and comfort, as well as maintaining the essential triad of excellent service and high transportation quality.

KEYWORDS

Transformational leadership; Innovative work behavior; Employee performance; Public transportation

1. Introduction

Organizations are the crucible where individuals, united by a shared objective, converge to achieve collective goals (Woodward, 2022). Human resources, both as a social and economic asset, present organizations with the formidable challenge of management and optimization (Ivanova, 2021). The role of human resource management is inextricably linked to the broader spectrum of organizational management. Recently, there has been a pronounced shift towards recognizing individuals and their leadership as pivotal catalysts in organizational success.

Transformational leadership is posited as a dynamic catalyst for fostering innovative work behavior (Reddy & Chan, 2022). This assertion is supported by several previous studies examining the relationship between transformational leadership and innovative behavior, some of which reveal a positive and significant correlation (Amankwaa et al., 2019; Messmann et al., 2022). Transformational

leadership entails enhancing employee motivation, satisfying their needs, and treating them as holistic individuals (Kristiana & Tukiran, 2021). It fosters an environment that motivates employees to achieve organizational goals and cultivate interest in their work (Greimel et al., 2023). Additionally, transformational leadership can enhance integrity levels through shared understanding between leaders and employees. Transformational leadership can be observed through employees' perceptions of their leaders. Indeed, from the employees' perspective, their perception of the leader has a stronger and closer impact on their acceptance of leadership (Kim & Kim, 2017). For this reason, many previous studies tend to rely on the perspective of employees' perceptions in evaluating transformational leadership.

Innovation is the successful implementation of creative ideas within an organization (Fernández, 2023). It is considered as ideas, practices, or objects deemed new by an individual or user groups (Andreini et al., 2022). It can be succinctly concluded that creativity exists at the individual level, while innovation occurs at the organizational level. Innovative behavior refers to actions leading to the emergence, introduction, and application of new beneficial things, including the development of product concepts, technologies, and administrative procedures (Srirahayu et al., 2023). Another perspective posits that innovative behavior is the individual's pursuit to introduce and implement new and useful ideas, processes, products, or procedures (Peerzadah et al., 2023).

Innovative behavior is usually associated with creativity, which bears distinct meanings and functions. Innovative behavior emphasizes clear application and implementation of new ideas or concepts to yield more advantageous products, services, or work processes (El Alfy & Naithani, 2021). Creativity, on the other hand, serves as a generator of innovative ideas (Mikalef & Gupta, 2021). Creativity can be seen as an integral component of innovative behavior, evident in the initial phase of the innovation process, which is later actualized in response to innovation demands (De Jong & Den Hartog, 2010). Thus, creativity merely represents the conceptual phase, with its concrete manifestation as innovative behavior through the execution and application of beneficial ideas.

A research gap was identified concerning the influence of transformational leadership on IWB. Existing literature presents divergent findings on the relationship between transformational leadership and innovative work behavior. Some studies report that transformational leadership has no significant effect on innovative behavior (Knezović & Drkić, 2021; Poppendick, 2009), while others suggest a weak effect (Yi et al., 2019). In contrast, other research indicates a positive influence of transformational leadership on IWB (Bauwens et al., 2023; Sharif et al., 2024). This discrepancy in results warrants further investigation into the influence of transformational leadership on IWB, particularly in the context of achieving performance within public transportation companies in the railway sector.

Given these considerations, this study aims to investigate the influence of transformational leadership on innovative work behavior and employee performance. Railway transportation companies prioritize service quality and the prompt fulfillment of consumer needs. Employees are expected to innovate services to meet evolving consumer demands. The mediator variable, innovative work behavior, serves as a conduit between transformational leadership and improved employee performance. The research results are expected to strengthen references highlighting the positive essence of transformational leadership as one key factor in enhancing employee performance.

2. Literature review

2.1 Transformational leadership

Transformational leadership is characterized by its capacity to provide individualized consideration, intellectual stimulation, and charismatic inspiration (Sun et al., 2017). This leadership style is primarily focused on transforming organizational strategies and culture to better align with the surrounding environment. Leaders play a crucial role as agents of change, invigorating and guiding employees

towards a novel set of values. Transformational leadership involves strong self-identification, creating a shared vision for the future, and fostering relationships between leaders and members that transcend mere compliance-based rewards (Birasnav, 2014). The essence of transformational leadership is that leaders not only inspire their subordinates to achieve lofty goals but also enhance their potential to lead. The positive effects of transformational leaders include motivating followers to exceed their previous expectations, inspiring followers to adhere to shared goals and visions, challenging them to solve problems innovatively, and enhancing their competencies through coaching, mentoring, and supervision (Siangchokyoo et al., 2020). Moreover, transformational leaders are capable of building trust, admiration, loyalty, and respect among their followers.

The multifaceted dimensions of transformational leadership are encapsulated by the concepts of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Antonakis & House, 2014). Idealized influence emphasizes a leader who demonstrates moral and ethical behavior standards that serve as a beacon for followers, guiding them to act righteously (Rothfelder et al., 2012). These leaders act as exemplars within the organizational framework, eliciting respect, trust, and admiration from followers. Inspirational motivation, another keystone of transformational leadership, involves a leader's ability to infuse work with meaning and to set challenging goals that galvanize followers, fostering an environment where optimism and enthusiasm are nurtured, indirectly bolstering followers' self-confidence (Ravet-Brown et al., 2023). Intellectual stimulation is a dimension that propels followers to engage in innovative, and creative thought processes (Bakker et al., 2022), encouraging them to view problems and procedures from novel perspectives and to embrace unconventional approaches to achieve organizational aims. Lastly, individualized consideration underscores a leader's awareness of the unique needs and aspirations of each team member, valuing their individuality and contributing to their personal growth and development within the organization (Deng et al., 2023). Leaders who practice individualized consideration recognize the importance of nurturing and empowering their followers, fostering an environment conducive to personal and professional advancement.

2.2 Innovative work behavior

Innovative work behavior (IWB) is characterized by the proactive initiatives of employees in introducing and implementing novel concepts, products, processes, and procedures within their job roles, work units, and organizations (AlEssa & Durugbo, 2022). It is also defined as the collective actions of individuals that lead to the emergence, introduction, and application of something new and beneficial at all levels of the organization (Muchiri et al., 2020). IWB is a complex behavior comprising the generation and propagation of new ideas, whether they are self-originated or adopted, and their subsequent realization in the form of new concepts (Al-Omari et al., 2019). Employees exhibiting IWB are involved in the process of ideation, adoption, and implementation of innovative approaches and work methodologies. This is considered a vital asset for organizations to achieve success in the increasingly volatile and competitive landscape. It is also found that innovative individuals expand their contributions beyond the scope of their job requirements and continuously realize a flow of innovation.

IWB is measured through three principal dimensions: idea generation, promotion, and implementation (Bos-Nehles et al., 2017; De Jong & Den Hartog, 2010). Idea generation refers to the inception and utilization of valuable ideas that can enhance the organization's operations. This indicator is gauged by the extent to which individuals are involved in seeking and employing innovative work methods. Idea promotion involves behaviors aimed at advocating for these innovative ideas to peers and superiors, seeking endorsement and support for their integration into the organizational workflow. Idea implementation, the culmination of the process, involves the actualization of these concepts into functional applications or programs, thereby contributing to the organization's innovation quotient.

2.3 Employee performance

Employee performance is a critical metric within organizational contexts, reflecting the outcomes of an employee's work behavior within a specific time frame in relation to organizational goals (Stone et al., 2023). It is considered as evaluative and episodic behavior adopted by an individual towards their work, shaped by cognitive ability, personality traits, and experiential knowledge, contributing value to the organization (Carlos & Rodrigues, 2016). Performance is conceptualized as a set of behaviors under an individual's control that propel the achievement of organizational goals (Schleicher et al., 2018). It is an all-encompassing term including both positive and negative employee behaviors that influence the organization's efficacy (Garengo et al., 2022). Performance is related to quality, efficiency, and effectiveness (Ivancevich et al., 2014). The assessment of individual performance is imperative for management to ensure alignment with the organization's established objectives. For suboptimal behaviors, strategic redirection is necessary to realign them with goal attainment, as task performance refers to the voluntary, goal-directed actions that contribute to organizational success (McShane & Glinow, 2021).

The constituents of employee performance indicators are multifaceted, including quality, quantity, timeliness, cost-effectiveness, autonomy from supervision, and interpersonal impact (Pradhan & Jena, 2017). Quality emphasizes the excellence in an employee's work process, striving for optimal job execution. Quantity denotes the volume of work output or completion by an employee. Timeliness relates to the expedience of task completion within stipulated timeframes. Cost-effectiveness highlights the judicious use of company resources—human, financial, technological, and material—to maximize profitability and mitigate potential losses due to resource wastage. Autonomy from supervision indicates the level of self-direction in an employee's work, with minimal oversight required from superiors. Interpersonal impact assesses an employee's ability for self-promotion and the quality of teamwork and cooperation within the organizational milieu.

2.4 The interplay between innovative work behavior and employee performance

The manifestation of innovative work behavior (IWB) is fundamentally underpinned by a robust process of data aggregation, information synthesis, and the incubation of novel ideas, all of which are instrumental in improving the calibre of business operations (Miller & Miller, 2020). Innovative employees tend to exhibit a propensity for learning, discovering, and developing novel solutions to complex problems, thereby contributing to the betterment of performance metrics (Curzi et al., 2019). IWB serves as a learning medium, encouraging the acquisition of new skills essential for task execution (S. De Spiegelaere et al., 2014) and fostering an environment that is conducive to the generation of creative and effective approaches to work challenges. The essence of IWB is its capacity to invigorate employee motivation and empower employees, which in turn, contributes to the overall performance of the workforce (Abdullah et al., 2019; Bauwens et al., 2023). A plethora of studies indicate a positive effect of IWB on employee performance (Stan De Spiegelaere et al., 2018; Jankelová & Joniaková, 2021; Vuong & Hieu, 2023). By optimizing IWB, organizations can cultivate a reservoir of innovative ideas to navigate the complexities of the modern business world. Consistent with these findings, this research expects a positive correlation between employee innovative behavior and job performance.

H1: Innovative work behavior has a positive effect on employee performance.

2.5 The effect of transformational leadership on innovative work behavior

Transformational leadership is a paradigm that galvanizes followers to transcend their own self-interests for the realization of higher collective goals. It is a leadership approach that inspires followers to embrace and drive innovation within their roles (Saad Alessa, 2021). This leadership style is characterized by its ability to articulate roles and job requirements in a manner that stimulates followers to engage with their tasks more deeply and creatively. Transformational leaders are known for their attentiveness to the developmental needs and concerns of their followers, fostering an environment

where innovative thinking is encouraged and rewarded so that team members strive for group objectives with renewed vigor (Morf & Bakker, 2022). Several studies indicate that transformational leadership has a positive effect on innovative work behavior (Kaymakçı et al., 2022; Rafique et al., 2022). This positive implication can be attributed to transformational leaders' ability to provide clear direction and intellectual stimulation to employees, nurturing a culture where innovation is not merely an option but an expectation. This assumption is built on the belief that innovation can be generated through the aspirations placed on employees and the envisioned outcomes of their work.

H2: Transformational leadership positively affects innovative work behavior

2.6 The effect of transformational leadership on employee performance

The optimization of employee performance is fundamentally contingent upon the efficacy of leadership directives (Buil et al., 2019). Transformational leadership is posited as a pivotal force in steering organizational transformation and fostering a culture that is oriented towards long-term sustainability (Almaududi Ausat et al., 2022). Employees, as determinants of business success, require coordination in task allocation determined by leaders. By employing transformational leadership, leaders can align task delegation with the competencies of employees, thereby enhancing their performance potential. Several studies indicate a positive correlation between transformational leadership and employee performance improvement (Mansoor et al., 2022; Qalati et al., 2022). The enhancement of employee performance is of paramount importance, as it significantly determines organizational profitability. Businesses are subject to rapid and externally sensitive changes. Therefore, transformational leadership is crucial in inspiring and motivating employees to exceed their own expectations and excel in their roles, thereby contributing to the overall success of the organization. It can be assumed that transformational leadership has a positive effect on employee performance.

H3: Transformational leadership positively affects employee performance moderated by innovative work behavior.

2.7 Transformational leadership on employee performance through IWB as mediator

The realization of occupational roles culminates in the achievement of exemplary performance standards. The contribution of employee work is assessed over a specific period, utilizing indicators set by the organization. Performance is the aggregate accomplishments of work that individuals or groups can achieve within the organizational structure, according to their respective authority and responsibility, to legally achieve the organization's goals without violating laws, standards and ethics (Rathnaweera & Jayatilake, 2020; Tuffaha, 2020). Leadership emerges as a pivotal element in dictating the efficacy of employee performance and the organization's adaptive capacity in response to environmental vicissitudes (Siraj et al., 2022).

Several studies indicate positive implications between transformational leadership and employee performance mediated by innovative work behavior (Kartoyo et al., 2023; Sürücü et al., 2022; Wijaya, 2023). The assumption is that transformational leadership is instrumental in engendering the innovative impetus requisite for organizational advancement. The germination of new ideas by employees can greatly contribute to the eminence of corporate operations. It is imperative that effective leadership provide guidance on the endeavors of the workforce with the realization of organizational milestones. Without guidance, the relationship between individual aspirations and collective objectives can become disjunctured. This situation creates a scenario where individuals work to achieve their personal goals, while the entire organization becomes ineffective in achieving its objectives. Leadership is the innate competency of superiors, contingent upon a multitude of factors, encompassing both intrinsic and extrinsic dimensions.

H4: Transformational leadership positively and indirectly affects employee performance through the mediation of innovative work behavior.

Based on the description above, the following research model is proposed.

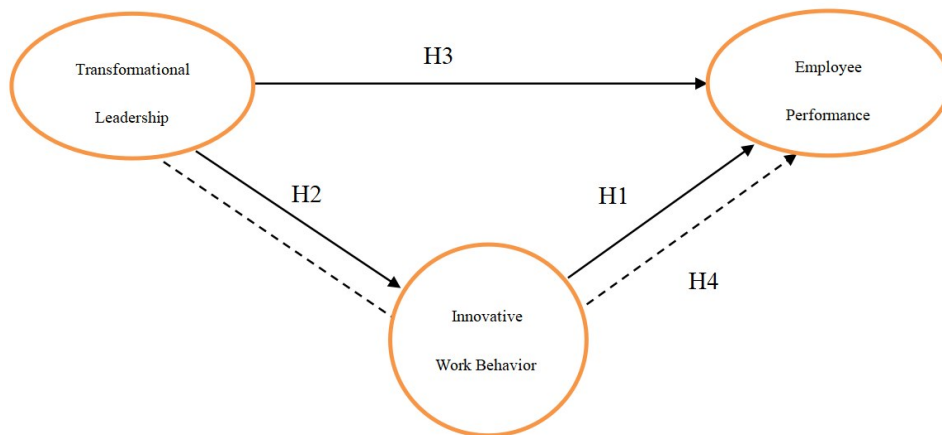


Figure 1 Research model

Figure 1 illustrates that transformational leadership is assumed to have a positive effect on innovative work behavior. The built assumption is that leadership effectiveness can generate innovative work behavior among all employees. The contribution of innovative work behavior can enhance the overall quality of employee performance as expected by the company. The indirect effect provides a positive impact through the mediation of innovative work behavior on the implications of transformational leadership for employee performance. Public transportation companies require business transformation and rapid responses to the complexity of changes. Service speed, service innovation, and new ideas for consumer needs must be promptly addressed by the company. Innovative work behavior should be cultivated as part of the business process carried out by employees.

3. Research method

3.1 Research context

This research was quantitative, analyzing the implications among variables in a single research model. A quantitative exploratory approach is a study analyzing research assumptions on a hypothesis using specific measurements between variables within a model (Hair Jr. et al., 2023). The research was designed to examine the direct and indirect relationships between transformational leadership, innovative work behavior, and employee performance. The research assumed that leadership effectiveness could generate innovative behavior as part of enhancing employee performance. The research was conducted at one of the public transportation companies managing railways. Its business processes require high-quality performance through innovative behavior. The research model was designed in the context of both direct and indirect positive implications, assuming the existence of the mediating variable innovative work behavior.

3.2 Sampling

This research employed purposive sampling technique, tailored to the research context. Purposive sampling is a non-probability approach used based on field conditions and adjusted to research needs (Sekaran & Bougie, 2020). The research sample consisted of employees working in the public transportation company in railway service. The total number of respondents used as the research basis was 313, while the existing population was 530 individuals. Data availability and access were adjusted with the company's permission. The research set qualifications in the respondent screening process, including a minimum work experience of 2 years and a staff job level directly involved in consumer service.

3.3 Data and measurement

Data were collected online using Google Form. The questionnaire was structured with a 5-point

scale: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Transformational leadership and innovative work behavior served as predictors of employee performance. Innovative work behavior acted as a mediator between transformational leadership and employee performance. Transformational leadership was measured by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Antonakis & House, 2014). Innovative work behavior was measured by idea generation, idea promotion, and idea implementation (De Jong & Den Hartog, 2010). Employee performance was measured by quality, quantity, timeliness, cost-effectiveness, supervision, and interpersonal influence (Pradhan & Jena, 2017). Each indicator used precise references according to the research needs. The questionnaire formulation was designed to analyze the implications of transformational leadership and IWB on employee performance. The formulation of this questionnaire is based on the dimensions used in several previous studies. The questionnaire was designed with general questions and did not touch on the company's strategic aspects. The sentence design is adapted to the work process carried out by employees as part of achieving performance.

3.4 Statistical tools

This study utilized Structural Equation Modelling (SEM) to account for the mediating variable, innovative work behavior, in the research model. Several steps were taken to ensure the validity and reliability of the research data. The first step involved examining the research indicators, ensuring that the minimum outer loading value was 0.7 (Hair Jr. et al., 2017). This outer loading value ensured the suitability of each questionnaire item representing the research variables. The second step involved validity checks with minimum Rho and Cronbach's Alpha values of 0.7 (Mariah & Mohammad, 2015). The third step was reliability checks with a minimum composite reliability value of 0.7. If all these values could be met by all variables, they were considered valid and reliable. The fourth step was discriminant validity, where the Fornell-Larcker criterion value was greater than the Average Variance Extracted (AVE) (Ab Hamid et al., 2017). Therefore, it could be concluded that all variables were free from discriminant validity assumptions. The fifth step was coefficient determination, with an R-Square value of 100%, indicating a sufficiently high determination ability between variables and depending on the magnitude of the R-Square value (Monecke & Leisch, 2012). The sixth step involved hypothesis testing, with a p-value less than 5% and a T-statistic greater than the T-Test. Thus, the assumption was made that the hypotheses were accepted, indicating a positive effect among the research variables.

4. Results and discussion

4.1 Respondent profile

In this study, a total of 303 individuals responded to the questionnaire. The following table presents the respondents' profile.

Table 1 Respondent profile

Item	Classification	Total	Percentage
Gender	Male	186	61.4%
	Female	117	38.6%
Age	25 years	65	21.4%
	< 26-30 years old	124	41.6%
	31-40 years old	101	33.3%
	41 to 50 years old	11	3%
	> 50 years old	2	0.7%
Job Tenure	< 5 years	45	14.8%
	5 to 10 years	153	50.5%
	11 to 20 years	75	24.8%
	21 to 30 years	30	9.9%
Department	Operational Area	256	84.5%
	Subsidiary	41	31.5%
	Clerical	6	2%

Table 1 Respondent profile (Continued)

Item	Classification	Total	Percentage
Position	Operational	286	94.4%
	Junior Supervisor	3	1%
	Supervisor	8	2.6%
	Assistant Manager	5	1.7%
	Manager	1	0.3%

Table 1 describes that there were 303 respondents, consisting of 61.4 percent males and 38.6 percent females. The majority of respondents were dominated by males working in operational sectors, signal & telecommunication, travel, and bridges. The largest age group was 26-30 years old, with 126 respondents (41.6 percent), followed by the age group of 31-40 years old with 101 respondents (33.3 percent). The next most common age demographic was <25 years old, with 65 individuals (21.4 percent). The lowest number of respondents was in the age group >50 years old, with only 2 individuals (0.7 percent). The majority of respondents were in the productive age range and exhibited high work enthusiasm. Employment tenure was dominated by 5-10 years, with 153 individuals (50.5 percent), followed by 11-20 years with 75 individuals (24.8 percent), less than 5 years with 45 individuals (14.8 percent), and 21-30 years with 30 individuals (9.9 percent). The departments were predominantly operational, with 256 individuals (84.5 percent), subsidiaries with 41 individuals (13.5 percent), and clerical with only 6 individuals (2 percent). The job levels were dominated by operational staff, with 286 individuals (94.4 percent), followed by supervisors with 8 individuals (2.6 percent), assistant managers with 5 individuals (1.7 percent), junior supervisors with 3 individuals (1 percent), and managers with 1 individual (0.3 percent). This data represents the research information base to address the hypothesis of performance improvement from the perspectives of leadership and innovative behavior. The public transportation business process must exhibit high innovation to respond to consumer needs. The following table presents the measurement indicator fitness.

Table 2 Measurement indicator

Indicator	Innovative Work Behavior	Employee Performance	Transformational Leadership
EP1		0.926	
EP2		0.979	
EP3		0.962	
EP4		0.946	
TL1			0.723
TL2			0.803
TL3			0.828
TL4			0.789
TL5			0.902
IWB1	0.932		
IWB2	0.956		
IWB3	0.879		

As shown in table 2, all indicators are considered fit as they exhibit outer loading value above 0.7. The next step was to test the validity and reliability, as shown in Table 3.

Table 3 Construct validity and reliability

Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Innovative Work Behavior	0.880	0.910	0.943	0.891
Employee Performance	0.967	0.977	0.976	0.909
Transformational Leadership	0.871	0.888	0.905	0.658

Table 3 indicates that all research variables meet the criteria of Cronbach Alpha, Rho, and Composite Reliability above 0.7. Innovative work behavior, employee performance, and transformational leadership fulfill the aspects of validity and reliability. The research data is deemed suitable to serve as an information base. The next stage involves discriminant validity, as shown in the following table:

Table 4 Discriminant validity

Variables	Innovative Work Behavior	Employee Performance	Transformational Leadership
Innovative Work Behavior	0.944		
Employee Performance	0.460	0.954	
Transformational Leadership	0.811	0.500	0.811

Table 4 shows that the Fornell-Larcker Criterion values are greater than the AVE values. Thus, it can be concluded that innovative work behavior, employee performance, and transformational leadership fulfill the aspect of discriminant validity. All stages of data validity, reliability, and differentiation are met. The next step involves examining discriminant validity with the following table.

Table 5 R-Square

Variables	R-Square
Innovative Work Behavior	0.659
Employee Performance	0.259

Table 5 shows that transformational leadership has a moderate effect on innovative work behavior by 65.9%, with the remaining 34.1% affected by other variables. Innovative work behavior has a low effect on employee performance by 25.9%. Every improvement in employee performance still requires a significant contribution from innovative work behavior. The transportation service has a consistent level of work and does not require high innovation. The last step is to test the hypotheses.

Table 6 Hypothesis test

Variables	Original sample (O)	T Statistics	P Values
Direct effect			
IWB -> Employee Performance	0.157	1.751	0.081
Transformational Leadership -> IWB	0.811	74.197	0.000
Transformational Leadership -> Employee Performance	0.500	13.718	0.000
Indirect effect			
Transformational Leadership -> IWB -> Employee Performance	0.127	1.762	0.079

Table 6 explains that innovative work behavior does not affect employee performance. This result is observed from the p-value (0.081), which is greater than 5%, and the T-statistic (1.751), which is smaller than 1.98 (T-Test). Thus, H1 is rejected, indicating that IWB does not significantly affect employee performance. If it had a positive implication, it could only increase employee performance by 15.7%. H2 is accepted, stating that transformational leadership affects IWB. The p-value (0.000) is less than 5%, and the T-statistic (74.197) is greater than the T-Test (1.98). Transformational leadership can increase IWB by 81.1%. H3 is accepted, indicating that transformational leadership positively affects employee performance. The p-value (0.000) is less than 5%, and the T-statistic (13.718) is greater than the T-Test (1.98). In the direct effect, it is evident that transformational leadership positively affects IWB and employee performance, while IWB has no implications for employee performance. In the indirect effect, transformational leadership does not affect employee performance mediated by IWB. H4 is rejected, showing that transformational leadership does not indirectly affect employee

performance with IWB as a mediating variable. Even if there were indirect implications, transformational leadership could increase employee performance by 12.7%.

4.2 Discussion

The findings indicate that Innovative Work Behavior (IWB) does not significantly impact employee performance in public transportation companies, only enhancing it by 15.7%. This result contradicts previous studies suggesting a positive relationship between IWB and employee performance (Bataineh et al., 2022; Obeidat, 2021). The nature of service-based business processes tends to be constant and monotonous, with employees engaged in repetitive activities that do not require high levels of innovation. However, when faced with changes in work patterns or technology, employees are compelled to adapt, posing significant risks for the company. Nevertheless, IWB should be a driving factor in improving employee performance, especially in times of transition (Jankelová et al., 2021).

The implementation of IWB and its impact on performance vary significantly across industries. Innovation can enhance technological work processes. Several research results indicate that in information technology companies in Pakistan, innovative work behavior influences self-efficacy and knowledge sharing, particularly under the aegis of entrepreneurial leadership (Islam et al., 2024). The information technology sector's imperative to adapt to market needs with sophisticated applications and infrastructure necessitates a culture of innovation. Similarly, in the hospitality industry in Ghana, the application of IWB has an important role in increasing the conduciveness of the work environment (Kyei-Frimpong et al., 2024). These findings suggest that the influence of IWB is context-dependent, with the potential for significant performance enhancement in sectors characterized by dynamic market demands and rapid technological evolution. Differences in research results in public transportation companies in the railways sector may be attributed to different internal conditions. Innovative work behavior is not always needed in certain areas of work that already have operational standards and procedures as determined by the company. However, innovation is crucial for meeting the company's expectations and addressing evolving market needs.

Transformational leadership demonstrates a significant positive effect on IWB, with the potential to increase it by 81.1%. Other research also supports the notion that transformational leadership fosters positive implications for IWB (Aydin & Erkilic, 2020; Nafees et al., 2019). Innovation can be fostered through the guidance and empowerment provided by leaders (Amoroso et al., 2021; Moschko & Blažević, 2023). Companies must integrate innovation into their performance objectives, requiring leaders capable of identifying business opportunities with the assistance of their employees' innovations. Collaboration between leaders and employees is essential, as innovation cannot be achieved without coordination. Employees, as executors of business plans, understand the expected work processes, enabling businesses to adapt to market needs.

Transformational leadership can significantly enhance employee performance by up to 50%, supported by other research indicating its positive effect (Budur & Demir, 2022; Haryanto et al., 2022). This aligns with the hypothesis that transformational leadership affects IWB, leading to behavioral changes that enhance employee performance (Chrisanty et al., 2021). Leaders bear responsibility for their employees' work outcomes, and any innovation introduced by employees is ultimately the leader's responsibility. Innovative business practices greatly contribute to service quality and customer satisfaction (Neck et al., 2020). Public transportation businesses must meet market needs in both human and technological aspects. Innovative work behavior is a cornerstone of improving employee performance. However, the finding that IWB does not significantly impact employee performance suggests the need for organizations to continually nurture innovative work behavior, regardless of the nature of work processes, whether constant or highly flexible.

The study did not find indirect effects assumed between transformational leadership and the improvement of employee performance through Innovative Work Behavior (IWB) as a mediating variable. If there are implications between these variables, they only enhance employee performance by

12.7%. Some studies yield different results, indicating that transformational leadership indirectly affects employee performance positively, mediated by IWB (Alshahrani et al., 2023; Kartoyo et al., 2023). The differentiation in research objects may account for this indirect effect. The direct impact of transformational leadership on employee performance is more pronounced. The responsibility for innovation lies with both employees and leaders. Business transformation should align with the leader's directives. Innovation can arise from work behavior and business activities targeting the market.

Public transportation businesses face the imperative to address the evolving challenges of consumer expectations by delivering exceptional service quality (Porru et al., 2020). Each travel route should provide consumers with a positive experience (Bambale et al., 2020), meeting their expectations and garnering positive evaluations. In the face of incessant change, businesses must be agile, continuously refining their operational processes and services to align with the dynamic demands of consumers. Consumer expectations must be met with prompt, high-quality service provision. Business organizations require transformational leadership and innovative work behavior as performance drivers.

The difference in research findings is evident regarding the indirect effects. The improvement in employee performance does not depend on transformational leadership mediated by IWB. The quality of employee performance is determined by the direct effect of transformational leadership, and transformational leadership has a direct impact on IWB. Even though IWB does not affect employee performance, it should be acknowledged that IWB can contribute positively to transformational leadership. Leaders are committed to fostering innovative work behavior in achieving employee performance. This aligns with the results of the two direct effects generated by transformational leadership, both in terms of work behavior and performance resulting from employee contributions.

4.3 Business implication

The findings of this research offer salient implications for enhancing organizational performance. Each business is anchored in the pursuit of productivity and the realization of predefined targets (Cammarano et al., 2022). Innovation is not only an integral component of the work process but also the cornerstone of achieving high-quality performance outcomes (Helmold, 2022). The interesting result is that innovative work behavior does not affect employee performance, which means IWB cannot independently suffice as a determinant of success in employee performance metrics. However, when innovation is strategically embedded within the fabric of business operations, it can be optimally harnessed to meet organizational goals.

Transformational leadership is identified as a potent catalyst in the cultivation of IWB, thereby laying a solid foundation for business activity and innovation. By employing leadership strategies that are effective, pertinent, and efficient, organizations can engender an environment ripe for innovation, tailored to meet their specific needs. This aligns with the established premise that transformational leadership significantly influences employee performance, with IWB integrated as a key element of the business process. The direct impact of transformational leadership on enhancing employee performance is thus underscored, highlighting its pivotal role in organizational advancement.

The nuanced relationship between transformational leadership, IWB, and employee performance, as mediated by indirect effects, suggests a complex interplay. While IWB may not always be the optimal driver in every business activity, the study indicates that the direct effect of transformational leadership is paramount. The alignment of transformational leadership with the fostering of IWB can significantly amplify the positive outcomes on employee performance. In the context of public transportation services, leaders need to navigate the organization through transformative and adaptive measures in response to market conditions (Aleksandrovna Zhuravleva & Poliak, 2022). The infusion of innovation-based work behavior in every business activity can markedly elevate the quality of services and, consequently, the overall profitability of the company.

5. Conclusion

This research concludes with the insight that within the direct effect, innovative work behavior (IWB) does not significantly affect employee performance. Conversely, transformational leadership is identified as a positive force, impacting both IWB and employee performance. The hypothesized indirect effect of transformational leadership does not have an influence on employee performance through the mediation of IWB. The findings underscore the dichotomy between direct and indirect effects, positioning them as pivotal in the study's conclusions. The model, tested across various business contexts, reveals a distinction between these effects, highlighting their significance in organizational performance. Businesses, as entities engaged in the marketplace, are perpetually in need of innovation at multiple levels of product or service development. The capacity of an organization to meet market expectations is a testament to its products or service quality. In the public transportation sector, where consumer demand is constant, the imperative to ensure timeliness, excellent service, and technological proficiency is paramount. Optimization in this sector can be achieved through the deliberate cultivation of innovative work behaviors within business activities, and innovation can be generated through transformational leadership, leading to improved employee performance.

This model is not confined to the public transportation industry but is adaptable to other sectors, such as education, pulp and paper, and automotive organizations, which may present different problem contexts. Variables for further exploration within this model include psychological capital and employee empowerment. Model development can yield different results depending on the context of the problem. Further research could employ different statistical tools, such as panel regression or logistic regression, to cater to the specific capabilities and requirements of the study.

About the authors

Ahmad Azmy is an Associate Professor in Human Resources Management at Paramadina University. Doctoral education at Jakarta State University with areas of research study are employee engagement, organizational behavior, and human resource issues. Email: ahmad.azmy@paramadina.ac.id

Didin Hikmah Perkasa is a Permanent Lecturer at Paramadina University. Doctoral education at Jakarta State University with areas of research study namely green HRM, job copying, and human strategic. Email: didin.perkasa@paramadina.ac.id

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References

- [1] Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. *Journal of Physics: Conference Series*, 890(1), 0–5. <https://doi.org/10.1088/1742-6596/890/1/012163>
- [2] Abdullah, N. H., Wahab, E., & Shamsuddin, A. (2019). Creative self-efficacy, innovative work behaviour and job performance among selected manufacturing employees. *Journal of Social Sciences Research*, 5(2), 583-595. <https://doi.org/10.32861/jssr.52.291.297>
- [3] Al-Omari, M. A., Choo, L. S., & Ali, M. A. M. (2019). Innovative work behavior: A review of literature. *International Journal of Psychosocial Rehabilitation*, 23(2), 39-47.

- [4] AlEssa, H. S., & Durugbo, C. M. (2022). Systematic review of innovative work behavior concepts and contributions. *Management Review Quarterly*, 72(4), 1171-1208. <https://doi.org/10.1007/s11301-021-00224-x>
- [5] Ausat, A. M. A., Suherlan, S., Peirisal, T., & Hirawan, Z. (2022). The effect of transformational leadership on organizational commitment and work performance. *Journal of Leadership in Organizations*, 4(4), 61-82. <https://doi.org/10.22146/jlo.71846>
- [6] Alshahrani, I., Al-Jayyousi, O., Aldhmour, F., & Alderaan, T. (2023). Towards understanding the influence of innovative work behavior on healthcare organizations' performance: The mediating role of transformational leaders. *Arab Gulf Journal of Scientific Research*, 42(1), 198-216. <https://doi.org/10.1108/AGJSR-09-2022-0167>
- [7] Amankwaa, A., Gyensare, M. A., & Susomrith, P. (2019). Transformational leadership with innovative behaviour: Examining multiple mediating paths with PLS-SEM. *Leadership and Organization Development Journal*, 40(4), 402-420. <https://doi.org/10.1108/LODJ-10-2018-0358>
- [8] Amoroso, D. L., Lim, R. A., & Santamaria, J. G. O. (2021). Business model innovation: A study of empowering leadership. *Creativity and Innovation Management*, 30(2), 286-302. <https://doi.org/10.1111/caim.12439>
- [9] Andreini, D., Bettinelli, C., Foss, N. J., & Mismetti, M. (2022). Business model innovation: A review of the process-based literature. *Journal of Management and Governance*, 26(4), 1089-1121. <https://doi.org/10.1007/s10997-021-09590-w>
- [10] Antonakis, J., & House, R. J. (2014). Instrumental leadership: Measurement and extension of transformational-transactional leadership theory. *Leadership Quarterly*, 25(4), 746-771. <https://doi.org/10.1016/j.leaqua.2014.04.005>
- [11] Aydin, E., & Erkilic, E. (2020). Transformational leadership and innovative work behaviour: The mediating role of knowledge sharing. *Tourism and Recreation*, 2(2), 106-117.
- [12] Bambale, S. A., Ghani, M. B. A., & Ado, A. B. (2020). How service quality affects customer satisfaction: A study of Malaysian electric train service (ETS). *Journal of International Business and Management*, 3(2), 1-7.
- [13] Bakker, A. B., Hetland, J., Kjellefold Olsen, O., & Espevik, R. (2022). Daily transformational leadership: A source of inspiration for follower performance? *European Management Journal*, 41(5), 700-708. <https://doi.org/10.1016/j.emj.2022.04.004>
- [14] Bataineh, M. S. E., Zainal, S. R. M., Muthuveloo, R., Yasin, R., Al Wali, J., & Mugableh, M. I. (2022). Impact of inclusive leadership on adaptive performance: The role of innovative work behaviour. *International Journal of Business Science and Applied Management*, 17(1), 28-43.
- [15] Bauwens, R., Audenaert, M., & Decramer, A. (2023). Performance management systems, innovative work behavior and the role of transformational leadership: An experimental approach. *Journal of Organizational Effectiveness*, 11(1), 178-15. <https://doi.org/10.1108/JOEPP-03-2022-0066>
- [16] Birasnav, M. (2014). Relationship between transformational leadership behaviors and manufacturing strategy. *International Journal of Organizational Analysis*, 22(2), 205-223. <https://doi.org/10.1108/IJOA-10-2011-0520>
- [17] Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: A systematic literature review. *Personnel Review*, 46(7), 1228-1253. <https://doi.org/10.1108/PR-09-2016-0257>
- [18] Budur, T., & Demir, A. (2022). The relationship between transformational leadership and employee performance: Mediating effects of organizational citizenship behaviors. *Iranian Journal of Management Studies*, 15(4), 899-921. <https://doi.org/10.22059/IJMS.2022.325482.674598>
- [19] Buil, I., Martínez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality. *International Journal of Hospitality Management*, 77, 64-75. <https://doi.org/10.1016/j.ijhm.2018.06.014>
- [20] Cammarano, A., Varriale, V., Michelino, F., & Caputo, M. (2022). Open and crowd-based platforms: Impact on organizational and market performance. *Sustainability*, 14(4), 2223. <https://doi.org/10.3390/su14042223>
- [21] Carlos, V. S., & Rodrigues, R. G. (2016). Development and validation of a self-reported measure of job performance. *Social Indicators Research*, 126(1), 279-307. <https://doi.org/10.1007/s11205-015-0883-z>
- [22] Chrisanty, F. N., Gunawan, M. S., Wijayanti, R. W., & Soetjipto, B. W. (2021). The role of transformational entrepreneurship, readiness to change and counterproductive work behavior in enhancing employee performance. *Organizacija*, 54(1), 63-81. <https://doi.org/10.2478/orga-2021-0005>
- [23] Curzi, Y., Fabbri, T., Scapolan, A. C., & Boscolo, S. (2019). Performance appraisal and innovative behavior in the digital era. *Frontiers in Psychology*, 10, 1659. <https://doi.org/10.3389/fpsyg.2019.01659>

- [24] De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23-36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- [25] De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2014). The innovative work behaviour concept: Definition and orientation. *Gedrag En Organisatie*, 27(2), 139-156.
- [26] De Spiegelaere, Stan, Van Gyes, G., & Van Hootegem, G. (2018). Innovative work behaviour and performance-related pay: Rewarding the individual or the collective? *International Journal of Human Resource Management*, 29(12), 1900-1919. <https://doi.org/10.1080/09585192.2016.1216873>
- [27] Deng, C., Gulseren, D., Isola, C., Grocutt, K., & Turner, N. (2023). Transformational leadership effectiveness: An evidence-based primer. *Human Resource Development International*, 26(5), 627-641. <https://doi.org/10.1080/13678868.2022.2135938>
- [28] El Alfy, S., & Naithani, P. (2021). Antecedents of innovative work behaviour: A systematic review of the literature and future research agenda. *World Review of Entrepreneurship, Management and Sustainable Development*, 17(1), 1-19. <https://doi.org/10.1504/WREMSD.2021.112082>
- [29] Fernández, I. A. (2023). Innovation and international business: A systematic literature review. *Heliyon*, 9(1), e12956. <https://doi.org/10.1016/j.heliyon.2023.e12956>
- [30] Garengo, P., Sardi, A., & Nudurupati, S. S. (2022). Human resource management (HRM) in the performance measurement and management (PMM) domain: A bibliometric review. *International Journal of Productivity and Performance Management*, 71(7), 3056-3077. <https://doi.org/10.1108/IJPPM-04-2020-0177>
- [31] Greimel, N. S., Kanbach, D. K., & Chelaru, M. (2023). Virtual teams and transformational leadership: An integrative literature review and avenues for further research. *Journal of Innovation and Knowledge*, 8(2), 100351. <https://doi.org/10.1016/j.jik.2023.100351>
- [32] Hair Jr., J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123. <https://doi.org/10.1504/ijmda.2017.10008574>
- [33] Hair Jr., J. F., Page, M., Brunsveld, N., Merkle, A., & Cleton, N. (2023). *Essentials of business research methods* (5th ed.). Taylor & Francis.
- [34] Haryanto, B., Suprapti, A. R., Taufik, A., & Maminirina Fenitra, R. (2022). Moderating role of transformational leadership in the relationship between work conflict and employee performance. *Cogent Business and Management*, 9(1), 2105578. <https://doi.org/10.1080/23311975.2022.2105578>
- [35] Helmold, M. (2022). Innovations as part of performance management. In *Strategic performance management. Management for professionals*. Springer. https://doi.org/10.1007/978-3-030-98725-1_15
- [36] Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2024). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership. *Global Knowledge, Memory and Communication*, 73(1-2), 67-83. <https://doi.org/10.1108/GKMC-02-2022-0041>
- [37] Ivancevich, J. M., Konopaske, R., & Matteson, M. T. (2014). *Organizational, behavior & management* (10th ed.). McGraw-Hill.
- [38] Ivanova, O. E. (2021). Philosophical consulting as a tool for "problem hacking" in human management in organizations. *Administrative Consulting*, 7, 39-48. <https://doi.org/10.22394/1726-1139-2021-7-39-48>
- [39] Jankelová, N., & Joniaková, Z. (2021). How to increase production performance of Slovak agricultural companies: The key task of supporting innovative work behavior and information sharing. *Agricultural Economics (Czech Republic)*, 67(1), 11-20. <https://doi.org/10.17221/319/2020-AGRICECON>
- [40] Jankelová, N., Skorková, Z., Joniaková, Z., & Némethová, I. (2021). A diverse organizational culture and its impact on innovative work behavior of municipal employees. *Sustainability*, 13(6), 3419. <https://doi.org/10.3390/su13063419>
- [41] Kartoyo, S. H., Ardi, A., & Berlianto, M. P. (2023). The relationship of digital transformational leadership on employee performance with the mediation effect of knowledge management and innovation work behavior in retail company. *Enrichment: Journal of Management*, 13(4), 2668-2677.
- [42] Kaymakci, R., Görener, A., & Toker, K. (2022). The perceived overqualification's effect on innovative work behaviour: Do transformational leadership and turnover intention matter? *Current Research in Behavioral Sciences*, 3, 100068. <https://doi.org/10.1016/j.crbeha.2022.100068>
- [43] Kim, H., & Kim, T. (2017). Emotional intelligence and transformational leadership: A review of empirical studies.

- Human Resource Development Review*, 16(4), 377-393. <https://doi.org/10.1177/1534484317729262>
- [44] Knezović, E., & Drkić, A. (2021). Innovative work behavior in SMEs: The role of transformational leadership. *Employee Relations*, 43(2), 398-415. <https://doi.org/10.1108/ER-03-2020-0124>
- [45] Kristiana, Y., & Tukiran, M. (2021). A systematic review: Is transformational leadership effective for organizational commitment? *Journal of Industrial Engineering & Management Research*, 2(4), 266-273.
- [46] Kyei-Frimpong, M., Berko Obeng Damoah, O., & Osafooadu Amankwah, M. (2024). Modeling innovative work behavior through leadership behaviors in the hospitality industry; the role of work–family enrichment. *Journal of Hospitality and Tourism Insights*, 7(2), 1010-1030. <https://doi.org/10.1108/JHTI-11-2023-0815>
- [47] Mansoor, A., Wahab, S. A., Jahan, S., & Islam, A. (2022). Boosting employees' performance through the affective commitment and transformational leadership: The role of employee engagement as a mediator. *Vision*, OnlineFirst. <https://doi.org/10.1177/09722629221130847>
- [48] Mariah, M., & Mohammad, A. H. (2015). Reliability and validity of facilities management competencies instrument using Partial Least Squares. *International Journal of Social Science and Humanity*, 5(1), 95-99. <https://doi.org/10.7763/ijssh.2015.v5.430>
- [49] McShane, S. L., & Glinow, M. A. Von. (2021). *Organizational behavior: Emerging knowledge. global reality*. McGraw-Hill.
- [50] Messmann, G., Evers, A., & Kreijns, K. (2022). The role of basic psychological needs satisfaction in the relationship between transformational leadership and innovative work behavior. *Human Resource Development Quarterly*, 33(1), 29-45. <https://doi.org/10.1002/hrdq.21451>
- [51] Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information and Management*, 58(3), 103434. <https://doi.org/10.1016/j.im.2021.103434>
- [52] Miller, L., & Miller, A. F. (2020). Innovative work behavior through high-quality leadership. *International Journal of Innovation Science*, 12(2), 219-236. <https://doi.org/10.1108/IJIS-04-2019-0042>
- [53] Monecke, A., & Leisch, F. (2012). SemPLS: Structural Equation Modeling Using Partial Least Squares. *Journal of Statistical Software*, 48(1), 1–32. <https://doi.org/10.18637/jss.v048.i03>
- [54] Morf, M., & Bakker, A. B. (2022). Ups and downs in transformational leadership: A weekly diary study. *European Management Journal*, 42(2), 200-210. <https://doi.org/10.1016/j.emj.2022.12.007>
- [55] Moschko, L., & Blažević, V. (2023). Managing digitization of industrial incumbents through innovation-oriented leadership. *Industrial Marketing Management*, 113, 232-242. <https://doi.org/10.1016/j.indmarman.2023.06.009>
- [56] Muchiri, M. K., McMurray, A. J., Nkhoma, M., & Pham, H. C. (2020). Mapping antecedents of innovative work behavior: A conceptual review. *The Journal of Developing Areas*, 54(4). <https://doi.org/10.1353/jda.2020.0047>
- [57] Nafees, M., Khan, S., & Imran, A. (2019). Influence of transformational leadership on innovative work behaviour, and mediating role of teachers self efficacy and innovative climate: Insight from engineering institutions. *Middle East Journal of Management*, 6(4), 359-377. <https://doi.org/10.1504/mejm.2019.10021656>
- [58] Neck, C. P., Houghton, J. D., & Murray, E. L. (2020). *Organizational behavior : A skill-building approach*. SAGE Publishing.
- [59] Obeidat, S. M. (2021). Do high-performance work practices induce innovative work behaviour? The case of the Qatari banking sector. *International Journal of Innovation Management*, 25(1), 2150003. <https://doi.org/10.1142/S1363919621500031>
- [60] Peerzadah, S. A., Mufti, S., & Majeed, S. (2023). Mapping the scientific evolution of innovative work behavior: A bibliometric analysis of three decades. *International Journal of Innovation Science*, 16(1), 43-60. <https://doi.org/10.1108/IJIS-08-2022-0154>
- [61] Poppendick, P. (2009). *Direct and indirect effects of transformational leadership on innovative behavior* (Bachelor's thesis, University of Twente).
- [62] Porru, S., Misso, F. E., Pani, F. E., & Repetto, C. (2020). Smart mobility and public transport: Opportunities and challenges in rural and urban areas. *Journal of Traffic and Transportation Engineering (English Edition)*, 7(1), 88-97. <https://doi.org/10.1016/j.jtte.2019.10.002>
- [63] Pradhan, R. K., & Jena, L. K. (2017). Employee performance at workplace: Conceptual model and empirical validation. *Business Perspectives and Research*, 5(1), 69-85. <https://doi.org/10.1177/2278533716671630>

- [64] Qalati, S. A., Zafar, Z., Fan, M., Sánchez Limón, M. L., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational citizenship behavior: A mediated model. *Heliyon*, 8(11), e11374. <https://doi.org/10.1016/j.heliyon.2022.e11374>
- [65] 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), 100214. <https://doi.org/10.1016/j.jik.2022.100214>
- [66] Ravet-Brown, T. É., Furtner, M., & Kallmuenzer, A. (2023). Transformational and entrepreneurial leadership: A review of distinction and overlap. *Review of Managerial Science*, 18, 493-538. <https://doi.org/10.1007/s11846-023-00649-6>
- [67] Reddy, K., & Chan, K. Y. (2022). An empirical study on the effects of leader behaviour and resilience on innovative work behaviour. In *2022 IEEE 28th International Conference on Engineering, Technology and Innovation (ICE/ITMC) & 31st International Association for Management of Technology (IAMOT) Joint Conference* (pp. 1-9). IEEE. <https://doi.org/10.1109/ICE/ITMC-IAMOT55089.2022.10033253>
- [68] Rothfelder, K., Ottenbacher, M. C., & Harrington, R. J. (2012). The impact of transformational, transactional and non-leadership styles on employee job satisfaction in the German hospitality industry. *Tourism and Hospitality Research*, 12(4), 201-214. <https://doi.org/10.1177/1467358413493636>
- [69] Rathnaweera, R. R. N. T., & Jayatilake, L. V. K. (2020). Construct of employee job performance: Conceptual discussion on definitions and dimensions. *Journal of Management*, 4(2), 1-33.
- [70] Saad Alessa, G. (2021). The dimensions of transformational leadership and its organizational effects in public universities in Saudi Arabia: A systematic review. *Frontiers in Psychology*, 12, 682092. <https://doi.org/10.3389/fpsyg.2021.682092>
- [71] Schleicher, D. J., Baumann, H. M., Sullivan, D. W., Levy, P. E., Hargrove, D. C., & Barros-Rivera, B. A. (2018). Putting the system into performance management systems: A review and agenda for performance management research. *Journal of Management*, 44(6), 2209-2245. <https://doi.org/10.1177/0149206318755303>
- [72] Sekaran, U., & Bougie, R. (2020). Research methods for business : A skill-building approach. In *Nucleic acids research* (8th ed.). Wiley.
- [73] Sharif, S., Tongkachok, K., Akbar, M., Iqbal, K., & Lodhi, R. N. (2024). Transformational leadership and innovative work behavior in three-star hotels: Mediating role of leader-member exchange, knowledge sharing and voice behavior. *VINE Journal of Information and Knowledge Management Systems*, 54(1), 1-21. <https://doi.org/10.1108/VJIKMS-07-2021-0122>
- [74] Siangchokyo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *Leadership Quarterly*, 31(1), 101341. <https://doi.org/10.1016/j.leaqua.2019.101341>
- [75] Siraj, N., Hågen, I., Cahyadi, A., Tangl, A., & Desalegn, G. (2022). Linking leadership to employees performance: The mediating role of human resource management. *Economies*, 10(5), 111. <https://doi.org/10.3390/economies10050111>
- [76] Srirahayu, D. P., Ekowati, D., & Sridadi, A. R. (2023). Innovative work behavior in public organizations: A systematic literature review. *Heliyon*, 9(2), e13557. <https://doi.org/10.1016/j.heliyon.2023.e13557>
- [77] Stone, R. J., Cox, A., Gavin, M., & Carpin, J. (2023). *Human resource management* (11th ed.). Wiley.
- [78] Sun, J., Chen, X., & Zhang, S. (2017). A review of research evidence on the antecedents of transformational leadership. *Education Sciences*, 7(1), 15. <https://doi.org/10.3390/educsci7010015>
- [79] Sürücü, L., Maslakçi, A., & Sesen, H. (2022). Transformational leadership, job performance, self-efficacy, and leader support: Testing a moderated mediation model. *Baltic Journal of Management*, 17(4), 467-483. <https://doi.org/10.1108/BJM-08-2021-0306>
- [80] Tuffaha, M. (2020). The determinants of employee's performance: A literature review. *Journal of Economics and Management Sciences*, 3(3), 14. <https://doi.org/10.30560/jems.v3n3p14>
- [81] Vuong, B. N., & Hieu, V. T. (2023). The effect of empowering leadership on job performance among frontline employees: Does power distance orientation matter? *Journal of Organizational Effectiveness*, 10(3), 394-412. <https://doi.org/10.1108/JOEPP-11-2021-0333>
- [82] Wijaya, E. (2023). The role of perceived organizational support (POS) and innovative work behavior (IWB) on SMEs

- performance with organizational trust as mediation variable. *International Journal of Social and Management Studies*, 4(1), 61–71.
- [83] Woodward, S. N. (2022). *Business organization | Definition, Types, History, Roles and Responsibilities, & Facts | Britannica*. Encyclopedia Britannica.
- [84] Yi, L., Uddin, M. A., Das, A. K., Mahmood, M., & Sohel, S. M. (2019). Do transformational leaders engage employees in sustainable innovative work behaviour? Perspective from a developing country. *Sustainability*, 11(9), 2485. <https://doi.org/10.3390/su11092485>
- [85] Zhuravleva, N. A., & Poliak, M. (2022). Green transformational leadership and green growth. In *Leadership - New insights*. <https://doi.org/10.5772/intechopen.102653>