



Research Paper

Who Else Wants to Work Innovatively? The Role of Transformational Leadership in the Workplace

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Abstract

This study aims to determine the effect of transformational leadership and job satisfaction as mediators on teachers' innovative work behavior. By using a quantitative approach, 212 teachers from senior high schools and vocational high schools in three suburbs of Bandung City, Indonesia, were involved in this study. The research model in this study was tested using PLS-SEM assisted by SmartPLS 3.2.9 for Windows software. The results indicate that transformational leadership has a positive and significant effect on innovative work behavior. Job satisfaction also played a significant role in mediating the relationship between transformational leadership and innovative work behavior. The findings also demonstrate that job satisfaction has a significant effect on innovative work behavior. Finally, this study proved that leadership is an indispensable factor in promoting innovative work behavior. These findings provide practical and theoretical contributions regarding the role of leadership in fostering a culture that values and pushes for innovation in the workplace.

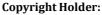
Keywords Transformational Leadership, Job Satisfaction, Innovative Work Behavior, Teachers, Innovation

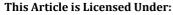
INTRODUCTION

Rapid digital transformation is driving major changes for many organizations, which means they need to adopt new knowledge and innovate. According to Park et al. (2014), innovation within an organization is the primary factor determining its success or failure. Innovation is also seen as the key to maintaining competitive advantage because by innovating, it can be ensured that the organization has the opportunity to develop and excel (Zainal & Matore, 2019). Schools as an educational institution need major innovation because it has a direct effect on improving the quality of education (Messmann et al., 2018). Innovation also helps schools to keep abreast of digital transformation in the ever-changing and developing world of education. For this reason, schools do not only focus on digital transformation that affects the teaching and learning process but also must pay attention to teacher work behavior in accordance with existing changes. This happens because teachers play an essential role in ensuring the success and effectiveness of the education system (Zainal & Matore, 2019).

Digital transformation in the world of education creates conditions for teachers to change how they teach, adopt technology in the classroom, and be more innovative (Puentedura, 2014). This condition has an impact on teacher's motivation at work. For example, some teachers may need help with the teaching process because they have to use digital teaching materials and supporting technology (Calumno et al., 2022). In addition to the limited use of technology, teachers may experience fatigue adjusting to constant changes. Meanwhile, schools must continue to provide the right directions and strategies to support teachers in completing their work which is increasingly dependent on technology and working more innovatively (Haleem et al., 2022).

Innovative work behavior can be in the form of applying new methods, new procedures, or new approaches in an organization that is of value to the organization (AlEssa & Durugbo, 2022).







In the context of schools, principals create new methods to encourage innovation by other teachers by setting up training forums to train teachers to be more creative. Innovative work behavior can be the foundation in schools because innovative behavior can help teachers be more creative and produce new innovations useful in the teaching and learning process (Gupta et al., 2020; Mansoor et al., 2021).

Studies on innovative work behavior itself have been carried out in many countries, such as the Netherlands (De Jong & Den Hartog, 2007), China (Afsar et al., 2017), Spain (Laguna et al., 2019), and carried out in various industries. Such as manufacturing (Carmeli et al., 2006), services (Slåtten & Mehmetoglu, 2015), government (Carmeli et al., 2006), and educational institutions (Baharuddin et al., 2019; Messmann et al., 2018). However, few studies still exist on innovative work behavior in educational settings (Baharuddin et al., 2019; Parthasarathy & Premalatha, 2017). Innovative work behavior in the educational environment is important because there are always new advances and new knowledge in the field of education. Furthermore, the learning process in schools also requires innovative work behavior in teachers. In addition, it is agreed that teachers' innovative work behavior directly impacts the quality of teaching and services to students. Therefore, this study focuses on innovative work behavior among senior high school and vocational high school teachers in the city of Bandung.

Various factors can form innovative work behavior. These include HR system, high performance work systems, self-leadership skills (AlEssa & Durugbo, 2022; Ariyani & Hidayati, 2018; Li et al., 2019; McMurray et al., 2013), job satisfaction (Ozturk et al., 2021), and work engagement (Rosdaniati & Muafi, 2021). In organizations, a leader is crucial for providing direction, structure, and effective management. Leaders need to make the right decisions so subordinates can follow them properly. Therefore, transformational leadership is the right leadership to support innovative work behavior because it has a unique leadership style (Bass et al., 2003; Yukl, 2012). Transformational leadership is expected to encourage intellectual change and stimulate innovation at work because good performance will support the achievement of educational goals. By using intellectual stimulation and inspirational motivation, a transformational leader is able to induce within followers a belief in their ability to perform and re-evaluate potential problems and their work environment from which innovative ideas can grow. As a transformational leader highlights individual qualities of followers, it is plausible that individualized consideration instigates innovative work behavior. Thus, previous studies found that transformational leadership will enhance employee's capacity to work innovatively (Feng et al., 2016; Gemeda & Lee, 2020; Reuvers et al., 2008). Contrary, the results of Khan et al. (2019) and Sheehan et al. (2020) assume that transformational leadership has no significant effect on the emergence of innovative work behavior of employees in an organization. According to Feng et al. (2016), one of the reasons why there are differences in findings from previous studies is that the impact of transformational leadership behavior on innovative work behavior does not occur directly but requires other variables that mediate it. Therefore, the inconsistency of this relationship is an essential reason for retesting.

Another factor that forms innovative work behavior is work engagement (Alamri, 2023). Employees with high work engagement will make more contributions, especially in generating ideas to develop the company to make it better and produce initiatives that will impact innovation (Ariyani & Hidayati, 2018). Furthermore, innovative work behavior is also formed from job satisfaction (Niu, 2014). Some researchers (e.g. Mustafa et al., 2021; Niu, 2014) believe that there is a positive effect of job satisfaction on innovative work behavior. An employee's job satisfaction is a feeling about their job and what employees think about it. Job satisfaction can also be interpreted as a person's attitude towards the job obtained and their self-assessment of work and experience at work. Therefore, this state of emotions will lead to innovative work behavior. In contrast, Coetzer et al. (2018) find that the relationship between job satisfaction and innovative

work behavior does not occur directly. This finding is the same vein with Bysted's (2013) finding that job satisfaction has no direct and significant relationship to innovative work behavior. Furthermore, according to Mustafa et al. (2021) the ambiguity in these findings can be explained by the fact that employees who have high levels of job satisfaction might not want to change certain parts of their jobs because they are averse to changing how busy their days are at work., or also because they want to avoid conflicts with other colleagues. As a result of the inconsistency of previous results, this study was undertaken. This study re-examines the relationship between job satisfaction and innovative work behavior. Tanjung et al. (2020) also state that only a few studies have included job satisfaction variables in studies of transformational leadership and innovative work practices.

Because of the inconsistencies in prior studies, this study aims to answer the following questions: (1) What is the relationship between transformational leadership and innovative work behavior? and (2) What is the influence of job satisfaction as mediation in the relationship between transformational leadership and innovative work behavior? The study focuses on high school and vocational high school teachers in Bandung. This study is critical because the changes that occur in schools must continue to be responded to by managing human resources so they can innovate and provide value (Calumno et al., 2022).

LITERATURE REVIEW

Transformational Leadership

According to Bass and Avolio (1994), transformational leadership is the behavior of leaders who communicate their expectations and create enthusiasm for the team through inspiring words and behaviors. Transformational leaders can be seen as a leader who has a spirit to inspire their subordinates and is responsible on developing the abilities of their subordinates. Furthermore, Bass et al. (2003) states that transformational leadership involves employees participating in the decision-making process and capturing innovative ideas. Therefore, subordinates feel that they are important and needed at work, which motivates them to continue to do well in the organization. Transformational leadership can be achieved when leaders and followers motivate each other. Furthermore, transformational leadership also acts as a mentor and advisor, pays attention to employees' personal development, provides learning, and creates trust for employees (Korejan & Shahbazi, 2016). For the long term, this type of leader helps the organization to create more competitive advantage.

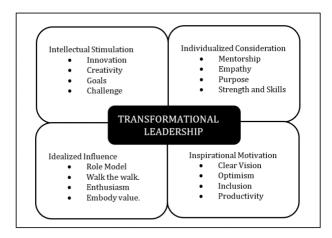


Figure 1. Transformational Leadership Model Source: Bass (1985)

Furthermore, transformational leadership has four dimensions proposed by Bass (1985), namely, an idealized influence, which explains the attitude of leaders who can give hope, admiration, trust, and respect to their followers. Inspirational motivation includes the attitude of leaders who can motivate their followers to be more innovative and creative and think about an old concept but in a new way. Intellectual stimulation includes a leader's attitude that can foster the enthusiasm and loyalty of followers towards a shared vision and encourage growth. Individual consideration includes the attitude of leaders who help their followers achieve their potential through training, development, and mentoring. This model is presented in Figure 1.

Job Satisfaction

Job satisfaction is a positive emotional state from assessing one's work or work experience (Mustafa et al., 2021). Employee perceptions of job satisfaction are affective and cognitive evaluations of working experiences (Bysted, 2013). This evaluation involves certain aspects of work related to wages, promotion, work environment, supervision, and relationships with colleagues (Jameel & Ahmad, 2019). Therefore, job satisfaction is a multilayered combination of positive and negative feelings, values, and perceptions about various features of the job (Torlak & Kuzey, 2019). Previous studies have explained that high job satisfaction is often associated with increased employee performance, productivity, and commitment (Bysted, 2013; Torlak & Kuzey, 2019) and also work engagement (Ariyani & Hidayati, 2018). Furthermore, low job satisfaction also affects the psychological well-being of employees. Job satisfaction has several dimensions. According to Kozarevic et al. (2014), there are five dimensions of job satisfaction which include 1) the work itself, 2) wages and promotions, 3) working conditions, 4) colleagues, supervisors, and superiors, and 5) compatibility between work and personality. In addition, job satisfaction has a model that is divided into three, extrinsic, intrinsic, and personal. The model is presented in Figure 2.

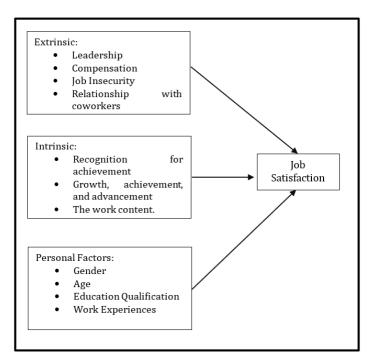


Figure 2. Model of Job Satisfaction

Source: Kozarevic et al. (2014)

Innovative Work Behavior

Innovative work behavior is an individual's contribution to developing an innovation, solutions and includes all physical and cognitive activities carried out by employees individually or jointly with the help of others to generate innovative ideas, explore most suitable opportunities, and produce a primary picture of an innovation (Messmann et al., 2018). According to De Jong & Den Hartog (2010), innovative work behavior is a series of behaviors regarding the introduction of various new ideas that are significant and useful to improve employee performance and organizational performance. These ideas are needed to deal with changes within the organization, such as creating new routines, simplifying work processes, and increasing internal and external cooperation (AlEssa & Durugbo, 2022). Innovative work behavior also has a model that is characterized as the intentional creation, introduction, and application of new ideas by individuals, groups, or organizations.

According to Pradhan and Jena (2019), the innovative work behavior among employees has a major influence on organizational survival and effectiveness, which ultimately leads to sustainable organizational development. The concept of innovative work consists of three different behaviors: idea generation, promotion, and realization (Messmann et al., 2018). Idea generation means generating new and useful ideas in any field. Promotion refers to the individual's ability to build supporters who can provide the strength to realize an idea. Finally, the realization of ideas refers to producing something or generating an innovation model that can ultimately be applied in work assignments and beneficial to groups or organizations.

Hypothesis Development

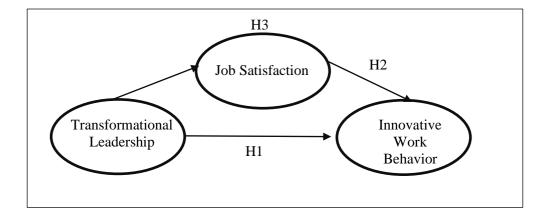


Figure 3. Research Model

The research model of this study is presented in Figure 3. Leaders who adopt a transformational leadership style tend to be seen as successful innovators and exhibit innovative work behavior to develop their followers and the organization's potential (Afsar et al., 2014). Transformational leaders also encourage their followers to challenge the status quo and intellectually stimulate them to seek innovative solutions to problems. Transformational leaders also inspire employees to strive creatively and improve their problem-solving and analytical skills for new ideas (Pradhan & Jena, 2019). Results from previous studies (e.g. Afsar et al., 2014; Feng et al., 2016; Gemeda & Lee, 2020; Pradhan & Jena, 2019; Reuvers et al., 2008; Sudibjo & Prameswari, 2021; Zainal & Matore, 2019) showed that transformational leadership has a significant effect on

innovative work behavior. Meanwhile, Pradhan (2015) states that there is no significant effect of transformational leadership on the employees' innovative work behavior. Sheehan et al. (2020) and Khan et al. (2019) are also in the same vein. They found that there is no significant effect of transformational leadership on the emergence of innovative work behavior of employees in an organization. This consistency led this study to develop the following hypothesis:

H1. Transformational leadership has a significant effect on innovative work behavior.

Employees who satisfied with their work are expected and can be eager to apply a new ways of working to accomplish their jobs (Mustafa et al., 2021). Satisfied employees tend to be passionate and eager to contribute more to the organization. In contrast, Hootegem et al. (2019) find that employees who feel insecure at work tend to withdraw and refuse to involve in organization. Previous studies (e.g., Mustafa et al., 2021; Rosdaniati & Muafi, 2021) state that job satisfaction has a positive effect on innovative work behavior. However, the studies of Coetzer et al. (2018) and Bysted (2013) regarding the job satisfaction found a distinct result. They found that there is a significant effect of employees' job satisfaction and innovative work behavior. Therefore, to examine this relationship, this study develops the following hypothesis:

H2. Job satisfaction has a significant effect on innovative work behavior.

The study conducted in educational institutes of Pakistan found that leadership behaviors negative feedback, role modeling, inspiration, creativity, encouragement/support, and participation-oriented leadership style were positively related to employees' optimistic emotional state in job execution (Torlak & Kuzey, 2019). A transformational leader is able to influence followers by connecting their self-concept to the mission of the organization or group, addressing and modifying their values and self-esteem. Transformational leadership is a leader who prioritizes change and innovation (McMurray et al., 2013). Leader orientation like this will increase employee satisfaction at work. It occurs because transformational leadership encourages employees' intellectual growth to participate in innovation. Ozturk et al. (2021) also stated that when a leaders prioritize the needs of their followers and their professional growth, employees become emotionally involves and engaged in their work. Therefore, employees will be satisfied with their jobs and the influence of transformative leaders will influence the way employees work. The inspirational motivation dimension possessed and carried out by transformational leaders can make employee to think differently, work enthusiastically and eager to contribute more for organization (Montani et al., 2018). Therefore, this study develops the following hypothesis:

H3. Transformational leadership has a significant effect on innovative work behavior, with job satisfaction as mediation.

RESEARCH METHOD

The population in this study were teachers at senior high schools and vocational high schools in the western, northern, and southern suburbs of Bandung, Indonesia. The sampling technique used in this study was purposive sampling to ensure that the respondents involved were following the research objectives (Saunders et al., 2018). The criteria used were high school and vocational high school teachers who have worked at the school for at least one year.

This study used an online survey to collect data. The researchers first visited the school and coordinated with the vice principal to obtain permission and access to contact respondents. Using a Google Form link, the researchers distributed questionnaires to teachers through the Vice Principal. There were 212 teachers who participated in the study. Furthermore, respondents were categorized based on gender, age, marital status, employment status, last education, and length of

time working as a teacher at the school. Most respondents were female (55.9%), and most ages were in the age range >25-30 years (32.3%). Furthermore, in general, the respondents were married, worked full time, and many of them were at the bachelor's degree level (82.9%).

In relation to this study, the variables used are the independent variables, namely transformational leadership (x), the mediating variable of job satisfaction, and the dependent variable, namely innovative work behavior (y). In this study, transformational leadership consists of seven questions adapted from Bass et al. (2003) and Hargis et al. (2011) cited from Jensen et al. (2019). One of the questions is: "My leader concretizes a clear vision for the future of the organization". Innovative work behavior consists of 10 questions adapted from De Jong & Den Hartog (2010). The question sample is: "I make other teachers enthusiastic about innovative ideas." Furthermore, job satisfaction consists of 3 questions adapted from (Bowling & Hammond, 2008). One of the questions is: "Overall, I feel satisfied with my job." In total, there are 20 questions using a 5-point Likert scale.

FINDINGS AND DISCUSSION Validity and Reliability Test

In this study, the validity test was divided into two, namely Convergent Validity containing a loading factor and Average Variance Extracted (AVE), which was carried out using SmartPLS software version 3.2.9. In detail, the Convergent Validity and Average Variance Extracted (AVE) data are presented in Table 1. Furthermore, the reliability test is divided into two, namely Composite Reliability, which measures the actual reliability value of a variable, and Cronbach's Alpha which measures the lowest value (lower bound) of the reliability of a variable. The standard for Composite Reliability value is > 0.7 and the Cronbach's Alpha value is > 0.7 (Saunders et al., 2018). In detail, Composite Reliability and Cronbach's Alpha data are presented in Table 1.

Table 1. Validity and Reliability Test

Variable	Indicators	Outer	AVE	Composite	Cronbach's
variable	muicators	Loadings and Cross	AVE	Reliability	Alpha
	**************************************	Loadings	0.005	0.050	0.06
	KT1	0,924	0,835	0,972	0,967
	KT2	0,928			
Transformational	KT3	0,930			
Leadership (X1)	KT4	0,859			
	KT5	0,905			
	KT6	0,914			
	KT7	0,933			
Job Satisfaction (X2)	KK1	0,893	0,826	0,904	0,790
	KK3	0,925			
	PKI10	0,841	0,713	0,957	0,950
	PK12	0,847			
	PKI3	0,831			
Innovative Work Behavior (Y)	PKI4	0,839			
	PKI5	0,842			
	PKI6	0,821			
	PKI7	0,842			
	PKI8	0,867			
	PKI9	0,866			

Source: Data processed by SmartPLS, 2022

After the purification process, several questions had to be removed from further testing

because they did not meet the standards. The data presented in Table 1 shows that all the question items have met the requirements. The instruments in this study met the Convergent Validity requirements, seen from the outer loading values of all indicators > 0.7 and the Average Variance Extracted (AVE) value > 0.5. The results of Cross Loadings in Table 1 show that the correlation value of the construct with the indicators is greater than the correlation value with the other constructs. Thus, the construct or latent variable has a good discriminant validity. The results also show the Composite Reliability values for all constructs above 0.7. As a result, all constructs are reliable. Furthermore, the construct is declared reliable if Cronbach's Alpha value is >0.7 (Saunders et al., 2018) and it can be concluded that in this study all the Cronbach's Alpha is reliable (the values are >0.7). The instruments in this study have also fulfilled the discriminant validity requirements, which can be seen from the results of the Fornell Larcker Criterion in Table 2. The table shows that the results of the Fornell Lacker Criterion for each construct already have the highest value for each latent variable tested with other latent variables (Table 2). It can be concluded that each indicator can be predicted well by each latent variable, and the numbers that are not in bold are the correlation values between constructs and other constructs.

Table 2. Fornell Lacker

	X1 (TL)	X2 (JS)	Y (IWB)
X1 (TL)	0,914		
X2 (JS)	0,732	0,909	
Y (IWB)	0,774	0,771	0,844

TL: Transformational Leadership; JS: Job Satisfaction; IWB: Innovative Work Behavior Source: Data processed by SmartPLS, 2022

Structural Model Test

This study's structural model test (Inner Model Test) consists of R-Square, Predictive Relevance, Model Fit, Path Coefficient, and T-Statistic (Bootstrapping) values. The result showed that innovative work behavior is influenced by job satisfaction and transformational leadership by 69%. Meanwhile, 31% is influenced by other factors not explained in this study. Then, X2 (job satisfaction) is influenced by transformational leadership by 53.5%, while 46.5% is influenced by other factors not explained in this study.

Model Fitness

Model fitness test aims to know how well the model is examined in this study. As the NFI results demonstrate, a high NFI value indicates a better-fit model (Saunders et al., 2018). In this study, the resulting NFI is 87.9%. Based on this study, we can conclude that the model is a good fit. Furthermore, hypothesis testing in this study was carried out with Path Coefficients and T-Statistics (Bootstrapping) using the SmartPLS 3.2.9 version for Windows software presented in Table 3. In this study, all variables are in the range 0 to 1, which means there is a positive influence. The T-Statistics in this study also show that all relationships have a significant effect because the z-score is> 1.96.

Table 3. Structural Model Test

The Path	Path	T Statistics	P	Conclutio
	Coefficients	(O/STDEV)	Values	n
X1 (TL) -> Y (IWB)	0.452	6.746	0.000	Positif and
				significant

X2 (JS) -> Y (IWB)	0.440	6.826	0.000	Positif
				and
				significant
X1 (TL) -> X2 (JS) -> Y	0.322	6.809	0.000	Positif
(IWB)				and
				significant

TL: Transformational Leadership; JS: Job Satisfaction; IWB: Innovative Work Behavior Source: Data processed by SmartPLS, 2022

Hypotheses Testing

An analysis of transformational leadership and innovative work behavior shows positive results with a significant level of 0.000. Therefore, the findings in this study support the previous studies (e.g. Afsar et al., 2017; Feng et al., 2016; Gemeda & Lee, 2020; Pradhan & Jena, 2019; Pundt, 2015; Reuvers et al., 2008; Sudibjo & Prameswari, 2021; Zainal & Matore, 2021). Transformational leadership influences innovative work behavior because transformational leadership encourages change, thereby encouraging employees to think and solve problems innovatively (Afsar et al., 2017). Gemeda & Lee (2020) explain that transformational leadership can influence employees' innovative work behavior because this leader's behavior encourages subordinates to initiate new ideas and abandon old ways of doing things. Then, the role of the transformational leader is to balance the followers' need and desire. When employees feel that their needs are fulfilled, they tend to contribute more and open with news idea. In the context of schools, teachers are currently facing many changes due to changes in the learning process, such as the use of technology in the teaching and learning process. Consequently, the principal's role in encouraging teachers to think innovatively is very important. By utilizing the four elements of transformational leadership (idealized influence, inspiring motivation, intellectual motivation stimulation, and individual concern), the principal should be accessible to help the teachers solve their task-related challenges. For example, intellectual stimulation, this stimulation indirectly increases the intellectual capacity and exploratory thinking of teachers while at the same time encouraging teachers to be more creative in generating new and authentic ideas, which will undoubtedly encourage teachers to have innovative work behaviors. Innovative work behavior in teachers can also be attributed to inspirational motivation by the principal. For example, a school principal who motivates teachers and convinces them to carry out their assigned tasks properly will bring out the self-confidence and creativity of teachers, which will increase and stimulate innovative work behavior in teachers (Zainal & Matore, 2021).

Results from the test of the effect of job satisfaction on innovative work behavior are positive with a significant effect. 0.000. Therefore, the findings in this study support the studies of Mustafa et al. (2021) and Niu (2014). Teacher's job satisfaction refers to teachers' affective and cognitive reactions to their profession as well as to their current work environment (Liu et al., 2021). Job satisfaction affects innovative work behavior because employees who are satisfied with their jobs will be intrinsically motivated to be able to generate, promote, and implement ideas that are considered useful. When teachers are satisfied with their jobs, they are involved and eager to find ways to improve their performance (Parilla et al., 2022) and will be more receptive to new innovative ideas. High job satisfaction makes teachers more receptive to new ways of working and motivates them to make more suggestions to improve their performance (Mustafa et al., 2021).

A testing of the impact of transformative leadership on innovative work behavior, mediated by job satisfaction, yielded positive results on the sig. 0.000. Therefore, the findings in this study support the studies of Kouni et al. (2018), Mustafa et al. (2021), and Tanjung et al. (2020). Transformational leadership inspires and encourages employees to demonstrate expected success, leading to higher levels of job satisfaction. This type of leader is critical in fostering positive

behavior, willingness to overcome obstacles, and openness to new ways of working. Then, transformational leadership can motivate employees to achieve maximum performance and is expected to enhance the followers' job satisfaction (Reuvers et al., 2008). This behavior aligns with the dimensions of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. When employees are driven by inspirational motivation from leaders, they tend to focus on their work because they believe the organization is supporting them. Individualized consideration is the attitude of leaders who accept ideas or suggestions from employees regarding work and for the leaders themselves. In this way, employees will achieve a sense of satisfaction at work. Furthermore, in line with social exchange theory which reveals that when leaders and organizations show they care about their employees, those same employees are more likely to reciprocate by giving the organization favorable feedback. Therefore, employees who think the leader will provide moral and intellectual support will tend to reciprocate by providing the best performance, innovating, and focusing on things that support the company (Kouni et al., 2018).

CONCLUSIONS

This study found a significant effect of transformational leadership on innovative work behavior, with job satisfaction as a mediating variable. Based on the discussion above, transformational leadership creates employees' capacity to work innovatively. When employees are led by leaders who apply transformational leadership behavior dimensions (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration), employees will be able to implement new ways of working and deal with challenges at work. Employees who are more satisfied with their jobs will be more motivated to get involved in the organization and promote new ideas to help them perform better. Transformational leaders tend to pay attention to employees' needs and desires when leading employees. Employees consequently feel that the company cares about them. The ability of workers to work creatively will improve due to this circumstance.

This study contributes to the literature on innovative work behavior by examining the relationship between transformational leadership and creative work behavior, focusing on the moderating effect of job satisfaction. By exploring the motivational influence of transformational leadership on innovative work behavior, this study adds to our understanding of the factors that drive employees to engage in innovative behaviors in the workplace. Additionally, by considering the potential mediation effect of job satisfaction, the study sheds light on the role of employees' optimistic emotional state. This study expands the existing knowledge base and provides valuable insights for researchers and practitioners interested in fostering innovative work behavior.

LIMITATION & FURTHER RESEARCH

This study has limitations in terms of the sample. Even though this study involved at least what was required, the sample size of 212 was still relatively small. Therefore, future studies may involve more samples because a larger size will have a more significant impact. Another limitation is related to the method of data collection. This study only uses surveys to acquire data. Therefore, the researcher could not confirm the finding to the respondent. Future research should consider another survey method, for example interview or observation.

As a theoretical implication, this study provides a new understanding of the important role of leadership style in creating innovative work behavior, especially in the school environment (teachers), which is currently facing many demands for change. Meanwhile, practically this study provides several important suggestions for school management. First, school principals should focus on the four dimensions of transformational leadership: idealized influence, intellectual

stimulation, inspirational motivation, and individual consideration. Second, the principal should be oriented to the relationship with the teachers. This is considered necessary because the teacher's perception of leader behavior is the main element in creating job satisfaction.

REFERENCES

- Afsar, B., Badir, Y. F., Saeed, B. Bin, & Hafeez, S. (2017). Transformational and transactional leadership and employee's entrepreneurial behavior in knowledge–intensive industries. *International Journal of Human Resource Management*, 28(2), 307–332. https://doi.org/10.1080/09585192.2016.1244893
- Afsar, B., Badir, Y., & Saeed, B. (2014). Transformational leadership and innovative work behavior. *Industrial Management and Data Systems*, 114(8), 1270–1300. https://doi.org/10.1108/IMDS-05-2014-0152
- Alamri, M. (2023). Transformational leadership and work engagement in public organizations: promotion focus and public service motivation, how and when the effect occurs. *Leadership and Organization Development Journal*, 44(1), 137–155. https://doi.org/10.1108/LODJ-12-2021-0544
- AlEssa, H. S., & Durugbo, C. M. (2022). Systematic review of innovative work behavior concepts and contributions. In *Management Review Quarterly* (Vol. 72, Issue 4). Springer International Publishing. https://doi.org/10.1007/s11301-021-00224-x
- Ariyani, N., & Hidayati, S. (2018). Influence of transformational leadership and work engagement on innovative behavior. *Etikonomi*, 17(2), 275–284. https://doi.org/10.15408/etk.v17i2.7427
- Baharuddin, M. F., Masrek, M. N., & Shuhidan, S. M. (2019). Innovative Work Behaviour of School Teachers: a Conceptual Framework. *IJAEDU- International E-Journal of Advances in Education, October*, 213–221. https://doi.org/10.18768/ijaedu.593851
- Bass, B. M. (1985). Leadership and Performance Beyond Expectations. Free Press.
- Bass, B. M. & Avolio, B. J. (1994). *Improving Organizational Effectiveness through Transformational Leadership*. Sage.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218. https://doi.org/10.1037/0021-9010.88.2.207
- Bowling, N. A., & Hammond, G. D. (2008). A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behavior*, 73(1), 63–77. https://doi.org/10.1016/j.jvb.2008.01.004
- Bysted, R. (2013). Innovative employee behaviour: The moderating effects of mental involvement and job satisfaction on contextual variables. *European Journal of Innovation Management*, 16(3), 268–284. https://doi.org/10.1108/EJIM-09-2011-0069
- Calumno, F. J. V, Yazon, A. D., Tan, C. S., Bandoy, M. M., & Buenvinida, L. P. (2022). Regression of Self-care Practices on Reducing Burnout among Public High School Teachers of Laguna, Philippines. *Organization and Human Capital Development*, 1(2), 76–90. https://doi.org/10.31098/orcadev.v1i2.1092
- Carmeli, A., Meitar, R., & Weisberg, J. (2006). Self-leadership skills and innovative behavior at work. International Journal of Manpower, 27(1), 75-90. https://doi.org/10.1108/01437720610652853
- Coetzer, A., Inma, C., Poisat, P., Redmond, J., & Standing, C. (2018). Job embeddedness and employee enactment of innovation-related work behaviours. *International Journal of Manpower*, *39*(2), 222–239. https://doi.org/10.1108/IJM-04-2016-0095
- 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
- De Jong, J., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), 41–64. https://doi.org/10.1108/14601060710720546
- Feng, C., Huang, X., & Zhang, L. (2016). A Multilevel Study of Transformational Leadership, Dual Organizational Change and Innovative Behavior in Groups. *Journal of Organizational Change Management*, 29(6), 855–877. https://doi.org/10.1108/JOCM-01-2016-0005
- Gemeda, H. K., & Lee, J. (2020). Leadership styles, work engagement and outcomes among information and communications technology professionals: A cross-national study. *Heliyon*, 6(4), e03699. https://doi.org/10.1016/j.heliyon.2020.e03699
- Gupta, R., Seetharaman, A., & Maddulety, K. (2020). Critical success factors influencing the adoption of digitalisation for teaching and learning by business schools. *Education and Information Technologies*. https://doi.org/10.1007/s10639-020-10246-9
- Haleem, A., Javaid, M., Asim, M., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*(May), 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
- Hootegem, A. Van, Niesen, W., & De Witte, H. (2019). Does job insecurity hinder innovative work behaviour? A threat rigidity perspective. *Creativity and Innovation Management*, *28*(No 1), 19–29.
- Jameel, A. S., & Ahmad, A. R. (2019). The effect of Transformational Leadership on Job Satisfaction among Academic Staff. *In The 34th International Business Information Management Association (IBIMA) Conference: 13-14 November 2019, Madrid, Spain., November.* https://doi.org/10.31219/osf.io/vc9dq
- Khan, A. M., Jantan, A. H. Bin, Salleh, L. B. M., Dato'Mansor, Z., Islam, M. A., & Hosen, S. (2019). The impact of transformational leadership effects on innovative work behavior by the moderating role of psychological empowerment. *Journal of Reviews on Global Economics*, 8(December), 925–938. https://doi.org/10.6000/1929-7092.2019.08.79
- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of Fundamental and Applied Sciences*, 8(3), 452. https://doi.org/10.4314/jfas.v8i3s.192
- Kouni, Z., Koutsoukos, M., & Panta, D. (2018). Transformational Leadership and Job Satisfaction: The Case of Secondary Education Teachers in Greece. *Journal of Education and Training Studies*, 6(10), 158. https://doi.org/10.11114/jets.v6i10.3451
- Kozarevic, E., Peric, A., & Delic, A. (2014). Job Satisfaction of Banking Sector Employees in the Federation of Bosnia and Herzegovina. *Economia: Seria Management*, 17(1), 30–49.
- Laguna, M., Walachowska, K., Gorgievski-Duijvesteijn, M. J., & Moriano, J. A. (2019). Authentic leadership and employees' innovative behaviour: A multilevel investigation in three countries. *International Journal of Environmental Research and Public Health*, 16(21). https://doi.org/10.3390/ijerph16214201
- Li, H., Sajjad, N., Wang, Q., Ali, A. M., Khaqan, Z., & Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: Test of mediation and moderation processes. *Sustainability (Switzerland)*, 11(6). https://doi.org/10.3390/su11061594
- Mansoor, A., Abdul Wahab, S., & Jahan, S. (2021). Stimulation of innovative behavior through the inclusive leaders and engaged workers. *Business: Theory and Practice*, *22*(2), 249–255. https://doi.org/10.3846/btp.2021.13363
- McMurray, A. J., Islam, M. M., Sarros, J. C., & Pirola-Merlo, A. (2013). Workplace Innovation in a Nonprofit Organization. *Wiley Online Library*.
- Messmann, G., Mulder, R. H., & Palonen, T. (2018). Vocational education teachers' personal network

- at school as a resource for innovative work behaviour. *Workplace Learning*, *30*(3), 174–185. https://doi.org/http://dx.doi.org/10.1108/JWL-08-2017-0069
- Montani, F., Dagenais-Desmarais, V., Giorgi, G., & Gregoire, S. (2018). A conservation of resources perspective on negative affect and innovative work behaviour: The role of affect activation and mindfulness. *Journal of Business and Psychology*, *33*(1), 123–139.
- Mustafa, M., Coetzer, A., Ramos, H. M., & Fuhrer, J. (2021). Exploring the effects of small- and medium-sized enterprise employees' job satisfaction on their innovative work behaviours: the moderating effects of personality. *Journal of Organizational Effectiveness*, 8(2), 228–250. https://doi.org/10.1108/JOEPP-07-2020-0133
- Niu, H. J. (2014). Is innovation behavior congenital? enhancing job satisfaction as a moderator. *Personnel Review, 43*(2), 288–302. https://doi.org/10.1108/PR-12-2012-0200
- Ozturk, A., Karatepe, O. M., & Okumus, F. (2021). The effect of servant leadership on hotel employees' behavioral consequences: Work engagement versus job satisfaction. *International Journal of Hospitality Management*, 97(June), 102994. https://doi.org/10.1016/j.ijhm.2021.102994
- Park, Y. K., Song, J. H., Yoon, S. W., & Kim, J. (2014). Learning organization and innovative behavior: The mediating effect of work engagement. *European Journal of Training and Development*, 38(1–2), 75–94. https://doi.org/10.1108/EJTD-04-2013-0040
- Parilla, E. S., Abadilla, M. E., Villanueva, H., & Tarrazona, N. (2022). The Impact of Working from Home on Selected Employees' Job Performance in the Philippines During the COVID-19 Pandemic. *Organization and Human Capital Development*, 1(1), 62–77. https://doi.org/10.31098/orcadev.v1i1.900
- Parthasarathy, J., & Premalatha, T. (2017). Impact of collective-efficacy and self-efficacy on the innovative work behaviour of teachers in the nilgiris district, tamil nadu. *International Journal of Indian Psychology*, *5*(1). https://doi.org/10.25215/0501.019
- Pradhan, S. (2015). The effect of transformational leadership and work values on job outcomes (Unpublished Doctoral dissertation). *Indian Institute of Technology Kharagpur, Kharagpur*.
- Pradhan, S., & Jena, L. K. (2019). Does Meaningful Work Explains the Relationship Between Transformational Leadership and Innovative Work Behaviour? *Vikalpa, 44*(1), 30–40. https://doi.org/10.1177/0256090919832434
- Puentedura, R. R. (2014). Learning, Technology, and the SAMR Model: Goals, Processes, and Practice. *Iste*, 1–20.
- Pundt, A. (2015). The relationship between humorous leadership and innovative behavior. *Journal of Managerial Psychology*, 30(8), 878–893. https://doi.org/10.1108/JMP-03-2013-0082
- Reuvers, M., Van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational leadership and innovative work behaviour: Exploring the relevance of gender differences. *Creativity and Innovation Management, 17*(3), 227–244. https://doi.org/10.1111/j.1467-8691.2008.00487.x
- Rosdaniati, R., & Muafi, M. (2021). The influence of workplace happiness and innovative work behavior on job satisfaction mediated by work engagement. *International Journal of Research in Business and Social Science* (2147- 4478), 10(7), 186–198. https://doi.org/10.20525/ijrbs.v10i7.1457
- Saunders, M, Lewis, P., Thornhill, A., Genot, E. J. (2018). Research Methods for Business Students. In *Synthese* (Vol. 195, Issue 5).
- Sheehan, M., Garavan, T. N., & Morley, M. J. (2020). Transformational leadership and work unit innovation: A dyadic two-wave investigation. *Journal of Business Research*, *109*(November 2018), 399–412. https://doi.org/10.1016/j.jbusres.2019.10.072

- Slåtten, T., & Mehmetoglu, M. (2015). The Effects of Transformational Leadership and Perceived Creativity on Innovation Behavior in the Hospitality Industry. *Journal of Human Resources in Hospitality and Tourism*, 14(2), 195–219. https://doi.org/10.1080/15332845.2014.955557
- 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), e07334. https://doi.org/10.1016/j.heliyon.2021.e07334
- Tanjung, B. N., Rahman, Y., Budiyanto, Badawi, Suryana, A. T., Sumar, W. T., Mufid, A., Purwanto, A., & Warto. (2020). The influence of transformational leadership, job satisfaction and organizational citizenship behavior on the performance of Islamic school teachers. *Systematic Reviews in Pharmacy*, *11*(7), 539–546. https://doi.org/10.31838/srp.2020.7.78
- Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*, 68(2), 276–295. https://doi.org/10.1108/IJPPM-05-2018-0182
- Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66–85. https://doi.org/10.5465/amp.2012.0088
- Zainal, M. A., & Matore, M. E. E. M. (2019). Factors influencing teachers' innovative behaviour: A systematic review. *Creative Education*, 10(12), 2869–2886. https://doi.org/10.4236/ce.2019.1012213