



Research article

The effects of knowledge sharing and person–organization fit on the relationship between transformational leadership on innovative work behavior

Niko Sudibjo^{*}, Ranggi Kanya Prameswari

Faculty of Education, Universitas Pelita Harapan, Indonesia

ARTICLE INFO

Keywords:

Transformational leadership
 Person–organization fit
 Knowledge-sharing behavior
 Innovative work behavior

ABSTRACT

Previous studies reveal a gap in the literature regarding the role of knowledge-sharing behavior and person–organization fit as mediating variables in assessing the impact of transformational leadership on innovative work behavior. Additionally, some studies show that transformational leadership and person–organization fit influence innovative work behavior, while other studies have found that they do not. This study investigates the effects of transformational leadership, person–organization fit, and knowledge-sharing behavior on teachers' innovative work behavior and explores the role of knowledge-sharing behavior and person–organization fit as mediator variables. The study utilizes the partial least squares (PLS)–structural equation modeling (SEM) method to analyze data from 260 private elementary school teachers in South Jakarta, Indonesia. The result showed that transformational leadership does not positively affect innovative work behavior directly; however, the effect of transformational leadership on innovative work behavior becomes positive through knowledge-sharing behavior. Person–organization fit and knowledge-sharing behavior are shown to affect innovative work behavior positively, although the mediating variable did not increase the effect of person–organization fit on innovative work behavior.

1. Introduction

Organizations rely on innovative behaviors to adapt to a changing environment to help them continue to build and maintain competitive advantages (Choi et al., 2016). This applies to all organizations, including educational institutions (Elrehail et al., 2018); therefore, it is crucial for teachers and schools to develop innovative work behavior (IWB).

According to Niesen et al. (2018), one way to make an organization more innovative is to stop relying solely on a research and development division for innovation and instead leverage all employees' innovative abilities. Purc and Laguna (2019) also emphasize the importance of employees' role in innovation by stating that employees are individuals who create and implement innovative solutions in an organization. Therefore, it is essential to examine the factors that develop and improve teachers' IWB.

Innovative behavior at work refers to the desire to create, generate, and implement new ideas to benefit individual, group, and organizational performance (Niesen et al., 2018). Leader has an essential role in motivating, guiding, and shaping employee behavior to encourage

innovative processes in organizations (Denti and Hemlin, 2012; Kim and Yoon, 2015; Overstreet et al., 2013).

Leadership is believed to be an important factor that affects IWB. Leadership that creates IWB is known as transformational leadership (TL), and as explained by Hansen and Pihl-Thingvad (2018) almost all research on IWB refers to TL as an antecedent of innovative behavior. Nonetheless, previous studies show mixed results regarding the effect of TL on IWB. Eisenbeiß and Boerner (2010) find a positive effect, while Basu and Green (1997) show a negative effect, whereas Jaussi and Dionne (2003) and Kahai et al. (2003) find no relationship between TL and IWB. The differences across these results indicate a gap in the research on the effect of TL on IWB.

Innovative behavior has also been examined from the perspective of the person–organization fit (POF). Various studies have analyzed how POF affects IWB, also with contradictory results. Huang et al. (2005) and Jin et al. (2016) stated that there was no significant effect, while Afsar et al. (2018) and Wojtczuk-Turek and Turek (2016) found that POF significantly influences IWB. The difference in these results suggests a research gap regarding the effect of POF on IWB.

^{*} Corresponding author.

E-mail address: niko.sudibjo@uph.edu (N. Sudibjo).

This study aims to address these inconsistencies in the existing literature regarding the effect of TL and POF on IWB. In addition, we analyze the role of knowledge sharing behavior (KSB) as a mediating variable between POF and IWB as this pathway has received little attention. Similarly, the role of POF as a mediating variable on the impact of TL on IWB also has not been explored. Thus, this study aims to determine the effect of TL, as well as POF and KSB as intervening variables on IWB.

2. Theoretical framework and hypotheses

2.1. Innovative work behavior

Innovation is the result of information and knowledge processing that focuses on a particular area (Ritala et al., 2015). There are two phases in the work innovation process: forming ideas and implementing those ideas (Niesen et al., 2018). Formation refers to the process of developing fresh ideas to address work-related problems or challenges. Implementing the new ideas includes adopting new processes within daily work activities.

Understanding the role of individuals or employees in IWB is reinforced by (De Jong and Hartog, 2010), who show that employees go beyond routine tasks formed in a group or organization to seek current technologies, advocate new ways to reach goals, undertake current work methods, and secure resources to support their original ideas. IWB involves a pattern of high-order thinking, identifying ongoing and future problems, seeking chances, and analyzing performance gaps as well as looking for current methods to address those gaps and problems (Afsar, 2016).

Employees who engage in IWB can immediately and appropriately acknowledge new work situations and provide original ideas to improve services and products (Afsar et al., 2018). Asurakkody and Shin (2018) suggest eight characteristics that indicate innovative behavior, namely, opportunity seeking, idea origination, idea hunt, idea transmission, idea advancement, idea winning, action, and overcoming challenges.

The presence of proper leadership is one of the factors that is believed to encourage IWB in organizations (Afsar et al., 2019; Raja et al., 2018; Sethibe and Steyn, 2017). Therefore, study on the type of leadership that encourages innovative behavior is needed.

2.2. The relationships between transformational leadership (TL), innovative work behavior (IWB), and knowledge-sharing behavior (KSB)

Masood and Afsar (2017) propose that TL inspire their followers to help them achieve their entrepreneurial intentions by influencing their followers' creative behavior. Transformational leaders look beyond their followers' needs and try to raise awareness of important issues the organization faces. This type of leadership strives to reach its greatest potential by raising the standards and motivation of followers as well as the leaders themselves (Mokhber, 2015).

TL is a leadership style that can meet the millennial generation's needs because millennials tend to respond best to leaders who show honesty and integrity, which are behaviors displayed by a transformational leader (Holt, 2018). TL pursues transformation and change, encouraging employees to think and solve problems innovatively (IWB) (Afsar et al., 2018). Besides, transformational leaders encourage employees to take risks and support employees even when risk-taking has negative consequences (Khalili, 2016). Therefore, TL supports IWB.

Mittal and Dhar (2015) explained that TL can stimulate and support KSB in an organization. TL creates a work atmosphere of trust and mutual respect and can encourage employee participation in the decision-making process through information sharing activities (KSB) to support organizational success. When employees share information, they become more resourceful and have more materials to develop advance notions in the presence of TL (Afsar et al., 2019).

An organization's ability to manage its employees' knowledge-sharing (KSB) process affects the level of organizational innovation, such as the

rate of problem solving and the speed with which the organization adapts to a changing environment (Choi et al., 2016). Employees' knowledge sharing (KSB) distributes relevant knowledge and information to others and generates synergies in the organization as that knowledge continues to flow between peers and groups, increasing their competence and creating new knowledge to encourage innovation (IWB) (Lin et al., 2018).

Innovation in an organization requires a process of exploration to create, develop, and exchange organizational knowledge. It is essential that employees in an organization share knowledge (KSB) to build ideas that lead to innovation (IWB). KSB is defined as employees' desire to share information with their colleagues (Lin, 2007); it is an impetus for knowledge recipients to develop and apply new ideas (IWB) (Mura et al., 2013).

In the context of moderating effect, the study conducted by Afsar et al. (2019) found that KSB succeeded in moderating the effect of TL on IWB. In the context of Afsar's research, KSB plays the specific role in the form of contributing knowledge and gathering norms. Contributing and gathering knowledge are included in knowledge sharing practices and norms will encourage employees to have IWB under transformative leaders (Afsar et al., 2019; Mittal and Dhar, 2015). Bock et al. (2005) believe that knowledge sharing is an information exchange activity that includes providing feedback, discussing what went wrong, and identifying the best approach for completing a task. Therefore, exchanging knowledge among employees (KSB) will alleviate TL's effect on IWB. Therefore, the influence of TL on KSB will encourage an increase in IWB. This leads to the following hypotheses:

H1. Transformational leadership has a positive effect on teachers' innovative work behavior at school. TL→IWB

H2. Transformational leadership has a positive effect on teachers' knowledge-sharing behavior at school. TL→KSB

H3. Knowledge-sharing behavior has a positive effect on teachers' innovative work behavior at school. KSB→IWB

H4. Transformational leadership has a positive effect on teachers' innovative work behavior through knowledge-sharing behavior at school. TL→KSB→IWB

2.3. Relationships between person-organization fit (POF), knowledge-sharing behavior (KSB), and innovative work behavior (IWB)

POF is a concept that emphasizes the similarities between the personality, needs, and values of workers with the values and culture of the organization (Afsar et al., 2015). This conformity is demonstrated in two primary dimensions, first, the compatibility between the needs and goals of employees with the organization's ability to meet these needs and goals, and second, the compatibility between employee competencies and job requirements.

According to Schneider (1987), POF is the most appropriate interpretation of interactionism theory because if a person feels conformity with and can easily adapt to the organization, positive behavior is likely to result. However, if the opposite is true, negative behavior will likely emerge. By selecting members with a high level of conformity with the organization's values and goals, the organization can organize and cultivate its employees' abilities to imagine and seek new opportunities and can encourage the creativity that leads to employees' IWB.

According to Afsar and Badir (2016), POF is crucial to maintain flexibility, inspiration, and commitment, due to the relationship between a worker and an organization's values and goals. It is known that having a high POF is an excellent way for organizations to establish and remains competitive (Moynihan and Pandey, 2008). A strong POF positively affects work results, which is likely to increase employees' IWB (Afsar et al., 2018; Pudjiarti and Hutomo, 2020). The higher the level of conformity of employees with organizational values (POF), the higher their IWB, because employees will feel they have the

same values as the organization, which encourage them to commit and show good performance by looking for innovative ways to achieve organizational goals (Pudjiarti and Hutomo, 2020). Therefore, it is believed that POF affects IWB.

Furthermore, POF is believed to affect KSB, which is the active exchange of shared ideas, experiences, and knowledge among colleagues to produce sustainable shared knowledge (KSB) that is useful to the organization (Razak et al., 2016). KSB involves confidence in the knowledge possessed and trust in personal and collegial relationships and their influence on the positive feelings produced by sharing interactions (Holste and Fields, 2010). POF is an important element because the suitability of an individual for an organization can encourage ease of adaptation with colleagues and external actors (Schneider, 1987). If an organizational culture that embraces KSB and encourages employees to discuss their ideas with colleagues is carried out continuously, it will result in a better fit between the values of the employees and those of the organization (POF) (Afsar et al., 2018). It is posited that POF will increase confidence in knowledge sharing interactions (KSB) among organizational members. The research of Wahyudi et al. (2019) confirmed the positive effect of POF on KSB.

There is a relationship between POF and IWB and between POF and KSB, making the three variables interrelated so that they can be studied simultaneously. Afsar et al. (2015) found that KSB succeeded in increasing the influence between POF and IWB. Employees who have high value congruence with the organization (POF) will demonstrate IWB when they have space to share knowledge (KSB) with their colleagues in the organization (Afsar et al., 2015). This leads us to the following hypotheses:

H5. Person–organization fit has a positive effect on teachers' innovative work behavior at school. POF→IWB

H6. Person–organization fit has a positive effect on teachers' knowledge-sharing behavior at school. POF→KSB

H7. Person–organization fit has a positive effect on the teachers' innovative work behavior through knowledge-sharing behavior at school. POF→KSB→IWB

2.4. Relationship between transformational leadership (TL), person-organization fit (POF), knowledge-sharing behavior (KSB) and innovative work behavior (IWB)

As explained in the introduction, this study aims to fill the research gap regarding the role of POF and KSB as a mediating variables from TL to IWB. Previous research found that TL had a positive effect on POF (Lim et al., 2019). TL is directly in touch with employees' affective attachment to work and perceptions of the organization's vision, mission, and values (Lim et al., 2019). Krishnan (2002) explained that TL is closely related to POF because TL focuses on personal and organizational values. A leader is said to be transformative when they can jointly increase values and motivation to work together. Therefore, it is believed that TL affects POF.

Furthermore, as shown in the previous section, it was explained that when employees feel they have the same values as the organization (POF), they will be encouraged to think creatively and innovatively (IWB) to achieve organizational goals (Afsar et al., 2018; Pudjiarti and Hutomo, 2020). Therefore, it is believed that there is a positive effect between TL and IWB mediated by POF.

In addition, POF was also found to affect KSB because when employees feel they have the same values as that of organization (POF), they will feel comfortable and safe to share information (KSB) with their colleagues (Schneider, 1987). Therefore, it is believed that there is a positive effect between TL and KSB mediated by POF.

The positive effect of TL on POF as found by Krishnan (2002) and the success of KSB in mediating the effect of POF on IWB as found by Afsar et al. (2015) makes these four variables interesting to study simultaneously to fill in the gap in the literature. TL affects POF because

transformational leaders are closely related to the values of employees and the organization, while POF affects KSB because, with value conformity, employees become comfortable sharing knowledge. In addition, knowledge-sharing activities are a booster for POF to increase IWB. Therefore, it is believed that there is a positive effect between TL on IWB mediated by POF and KSB. This leads to the following hypotheses:

H8. Transformational leadership has a positive effect on teachers' person–organization fit at school. TL→POF

H9. Transformational leadership has a positive effect on teachers' innovative work behavior through person–organization fit at school. TL→POF→IWB

H10. Transformational leadership has a positive effect on teachers' knowledge-sharing behavior through person–organization fit at school. TL→POF→KSB

H11. Transformational leadership has a positive effect on teachers' innovative work behavior through person–organization fit and knowledge-sharing behavior at school. TL→POF→KSB→IWB

3. Methodology

This study examines teachers from 19 private elementary schools in South Jakarta, Indonesia. The schools' names are not mentioned to maintain confidentiality. The sample size used in this study is 260 teachers, obtained from the convenient sampling technique that was used because data was collected during the Covid-19 pandemic and therefore depended on the teachers' willingness to complete the questionnaire. The amount of data is small but sufficient to represent the population because each school studied is represented by at least 10 teachers (each school has approximately 40 teachers). Questionnaires with the total number of teachers being less than 10 per school were not used in this study. The data were then bootstrapped to 500 samples using Smart-PLS 3.2.9 software to obtain estimates of the suitability of the sampling distribution and population standard errors to ensure that the sample data represents the population (Hair et al., 2014). We used a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

A quantitative analysis of the data was conducted using the partial least squares (PLS)–structural equation modeling (SEM) method. This approach was deemed suitable to the conditions of the research data; conventional sample data was used because the PLS-SEM method does not require a classical assumption test (Hair et al., 2014). The PLS-SEM method was chosen also because of the latent nature of the variables precluding direct measurement (Bartholomew et al., 2011). As such, the variables studied are measured using indicators developed from existing theories. The latent variables that are the focus of this study are transformational leadership as an exogenous variable, person–organization fit as both an exogenous and endogenous variable, knowledge-sharing behavior as a mediator, and innovative work behavior as an endogenous variable.

Data analyses using the PLS-SEM method are divided into two parts, namely, an outer model and an inner model. In the outer model stage, the analysis is focused on validity testing through factor loading tests and average variance extracted (AVE) and reliability testing using composite reliability and Cronbach's alpha. At the inner model stage, data analysis is focused on multicollinearity, determinant coefficient, and hypothesis testing.

4. Results

4.1. Respondents' profile

The characteristics of the teachers who participated in the study differ in terms of gender, age, education background, and teaching experience as presented in Table 1.

Table 1. Descriptive data results.

No.	Description	Characteristic	Total	Percentage
1.	Sex	Male	81	31%
		Female	179	69%
2.	Age	20–29	106	41%
		30–39	112	43%
		40–49	33	13%
		≥50	9	3%
3.	Educational background	Three-year diploma	7	3%
		Bachelor's	202	78%
		Master's	51	20%
4.	Years of teaching experience	1–3	67	26%
		4–6	71	27%
		7–9	79	30%
		10–12	32	12%
		≥13	11	4%

4.2. Measurement model (outer model)

To assess whether this research instrument is suitable for use, it is necessary to test its validity and reliability. As requirements for PLS-SEM, validity and reliability tests are classified in the outer model test. An outer model analysis describes how each indicator relates to its latent variables. Outer model testing in this study analyzes convergent validity, discriminant validity, AVE, and reliability using composite reliability and Cronbach's alpha as presented in Table 2.

A convergent validity test of reflexive indicators can be obtained from the loading factor values for each construct. The rule of thumb is that loading factor value must be higher than 0.7 (Hair et al., 2014). The loading factor construct values in this study ranged 0.703–0.873, thus indicating that it met the threshold value of 0.7. The convergent validity test also tests the AVE, which is the average value of the squared load of the indicators associated with the construction. The rule of thumb used to measure AVE is 0.50 or higher (Hair et al., 2014). The data obtained through our questionnaire was analyzed using the Smart-PLS application, and 28 statements were declared valid, meeting the generally accepted threshold value for a construct's AVE of at least 0.50. With regard to the average choice of respondents' answers, all items are in option 4, indicating agreement with each questionnaire statement.

A reliability test was conducted to determine whether the research instruments are of sufficient quality. Two reliability tests were used: Cronbach's alpha and composite reliability. The rule of thumb for both reliability tests is 0.7 (Hair et al., 2014). The results of the Cronbach's alpha and composite reliability tests are presented in Table 2. The results show that all of the constructs have reliability scores greater than 0.7, indicating that they meet the threshold value for both alpha and composite reliability.

A discriminant validity test ensures that each construct is unique and different from the other constructs under study. The discriminant validity test was performed by testing the square root of the AVE with the correlation of latent variables. In particular, the square root of the AVE for each construct must be higher than the highest correlation value with the other constructs. Based on the results shown in Table 3, each variable's item fulfills the discriminant validity test because the square root of the AVE value for each construct is higher than that of the other constructs (Hair et al., 2014). Therefore, we conclude that the TL, IWB, KSB, and POF constructs have good discriminant validity.

4.3. Structural model (inner model)

Inner model testing relies on the variance inflation factor (VIF), R-square, and path coefficient values obtained from Smart-PLS.

Multicollinearity testing is carried out to ensure that there is no significant collinearity between the exogenous variables. The result shows that the VIF values that connect exogenous variables are below the threshold value of 5.00 (Hair et al., 2014), and thus, the constructs studied are not multicollinear as presented in Table 4.

The following test is the determinant coefficient test that determines the accuracy of the model's predictive value, which is calculated as a quadratic correlation between the actual and predictive values of certain endogenous constructs. The determinant coefficient represents the combined effect of the exogenous variables on the endogenous variables, whose range is 0–1. The higher the value, the more accurate the predictions of this research model (Hair et al., 2014). In this study, the IWB, KSB, and POF variables are endogenous. The R-square values obtained are shown in Table 5.

The results of the suitability tests shown in Table 5 indicate that 55% of the IWB variable is explained by the TL variable, the POF variable, and the KSB, while other unknown variables explain the remaining 45%. For the KSB variable, 50% is explained by the TL variable and the POF variable, while other unknown variables explain the remaining 42%. Lastly, 56% of the POF variable is explained by the TL variable, and other unknown variables explain the remaining 44%.

Hypothesis testing is done to assess the relationship between the latent variables studied. In this study, hypothesis testing was carried out through bootstrapping by looking at the value of the path coefficient, as summarized in Table 6.

The resulting research model with the path coefficients is shown in Figure 1:

Structural Equation Model

$$POF = 0.752TL + 0.436$$

$$KSB = 0.293TL + 0.464POF + 0.499$$

$$IWB = -0.187TL + 0.444POF + 0.513KSB + 0.447$$

5. Discussion

All of the path coefficients obtained between the exogenous and endogenous variables are positive except for path from TL to IWB, which has a negative coefficient of -0.187 (T-stat = 2.210, P = 0.013). This is in contrast to the majority of existing studies, which found that TL has a positive effect on IWB. However, several previous studies also show that TL has a negative effect on IWB, including Basu and Green (1997); Bednall et al. (2018); Jaussi and Dionne (2003); Sethibe and Steyn (2017).

The negative effect of TL on IWB found in this study is likely because TL is perceived to be low among the survey respondents. This is consistent with Bednall et al. (2018), who proposed that TL exists at different levels, namely low, medium, and high, and further explained that TL at a low level tends to have a negative linear relationship with IWB, whereas a high level of TL tends to have a positive relationship with innovative behavior.

The study results support the second hypothesis, namely that TL positively affects KSB as indicated by a positive path coefficient value of 0.293 (T-stat = 2.881, P = 0.001). This is consistent with Choi et al. (2016), Le and Lei (2017), Lin et al. (2018), and Irianto and Sudibjo (2019), who state a similar hypothesis, namely that TL has a positive effect on KSB. According to Choi et al. (2016), TL supports learning activities and knowledge sharing, and provides intellectual stimulation that helps employees to develop alternative solutions to existing problems. Similarly, teachers felt that actions taken by those in leadership positions encourage and provide opportunities for collaboration between teachers. KSB is supported when leadership provides information sources that can hone teachers' intellectual abilities at work.

The results of testing H3 indicate that KSB positively affects IWB as indicated by a positive path coefficient value of 0.513 (T-stat = 7.219, P

Table 2. Factor loading, reliability, and AVE test results.

Construct	Factor loading	M	SD	Cronbach's α	AVE	Composite reliability (CR)
Transformational Leadership				0.919	0.673	0.935
Leaders can clearly explain the vision and mission of the organization to employees.	0.819	3.981	0.676			
Leaders can invite employees to work together to work for the vision of the organization's mission.	0.835	3.815	0.737			
Leaders demonstrate integrity in their work.	0.867	4.085	0.707			
Leaders show behavior that is in accordance with the values adopted by the organization.	0.805	3.831	0.740			
Leaders show responsibility to make improvements in the organization.	0.842	3.873	0.801			
Leaders provide opportunities for employees to work together.	0.779	4.085	0.745			
Leaders encouraged me to work with other employees.	0.792	4.127	0.653			
Person–Organization Fit				0.911	0.653	0.929
I fit into the work environment within this organization.	0.759	4.000	0.780			
I know the purpose of this organization.	0.821	4.038	0.695			
I align with the purpose of this organization.	0.826	3.988	0.665			
I am willing to follow what the organization does to achieve its goals.	0.716	3.792	0.767			
I am aware of the values embraced by the organization.	0.873	4.012	0.604			
I believe in the values of this organization.	0.841	3.988	0.710			
I make a positive contribution to the organization.	0.810	4.092	0.656			
Knowledge-Sharing Behavior				0.900	0.626	0.921
I often acquire new knowledge from coworkers.	0.782	4.338	0.691			
I often share the knowledge I have with colleagues.	0.819	4.204	0.657			
Knowledge exchange between individuals is very likely to occur within this organization.	0.808	4.438	0.668			
There are many opportunities to exchange knowledge with colleagues.	0.802	4.050	0.724			
Technology plays an important role in the exchange of knowledge between colleagues.	0.783	4.115	0.664			
Management plays an important role in the exchange of knowledge.	0.703	3.931	0.741			
When I gain new knowledge, I want to learn more and develop it.	0.831	4.085	0.602			
Innovative Work Behavior				0.906	0.639	0.925
I am aware of the challenges faced by the organization.	0.775	3.869	0.738			
I am interested in new information or ideas required to get a solution.	0.837	4.115	0.563			
I process new information or ideas that I acquire to support the success of the organization.	0.843	3.885	0.652			
I can systematically explain my ideas to other leaders and employees.	0.792	3.635	0.686			
I attempt to invite other employees to try the ideas I propose.	0.750	3.508	0.710			
I have implemented a new idea that I got as part of daily life at my work.	0.789	3.831	0.634			
I implement new ideas that I get from others in my daily work.	0.804	3.865	0.576			

Table 3. Discriminant validity test results.

	Innovative Work Behavior	Knowledge-Sharing Behavior	Person–Organization Fit	Transformational Leadership
IWB	0.799			
KSB	0.696	0.791		
POF	0.653	0.684	0.808	
TL	0.475	0.641	0.752	0.820

Bold values indicate the square root of each construct's AVE which should be greater than its highest correlation with any other construct

= 0.000). This result is consistent with Afsar (2016), Masood and Afsar (2017), Bednall et al. (2018), and Wahyudi et al. (2019), who found that KSB has a positive influence on IWB. Knowledge sharing plays a vital role because it is an employee-specific behavior that facilitates innovation (Bednall et al., 2018). Most teachers exchange knowledge between individuals; they both obtain new knowledge from and share their knowledge with their colleagues.

POF was found to have a positive effect on IWB, as indicated by a positive path coefficient value of 0.444 (T-stat = 5.446, P = 0.000). Moreover, the results of testing H6 show that the POF positively affects

KSB, as indicated by a positive path coefficient value of 0.464 (T-stat = 6.108, P = 0.000). This is consistent with Afsar (2016) and Wahyudi et al. (2019), who found a positive influence of POF on KSB. The teachers in this study have a relatively high level of conformity with their organizations, based on the data obtained. The suitability of organizational values, characteristics, and objectives can motivate the teacher to bring about positive behavior. In addition, a sense of belonging to the work environment can strengthen social bonds between teachers. Because KSB is a social interaction, teachers' strong social ties support the KSB of the teachers. However, the mediating

Table 4. Multicollinearity test results.

Exogenous Variable	VIF		
	IWB	KSB	POF
Knowledge-Sharing Behavior (KSB)	2.019		
Person–Organization Fit (POF)	2.736	2.302	
Transformational Leadership (TL)	2.475	2.302	1.000

Table 5. Coefficient determinant test results.

Variable	R-Squared
Innovative Work Behavior	0.553
Knowledge-Sharing Behavior	0.501
Person–Organization Fit	0.564

variables in this study provided some interesting findings. KSB was found to have a positive mediating effect between POF and IWB; however, the value of the mediating role is smaller than the direct effect of POF on IWB as indicated by a positive effect value of 0.238 (T-stat = 4.062, P = 0.000). Thus, KSB is not needed to increase the influence of POF on employees' IWB.

TL is found to positively affect POF, as indicated by a positive path coefficient value of 0.752 (T-stat = 24.095, P = 0.000). This result is in accordance with studies conducted by Raja et al. (2018) and Lim et al. (2019), who also found that TL has a positive effect on POF. According to Raja et al. (2018), Transformational leaders are seen by their followers as trustworthy individuals who can provide support to create a feeling of security and comfort that allows employees to better adjust to an organization.

According to Lim et al. (2019), the positive influence of TL is due to managers articulating and conveying values that are visionary, appealing, and congruent with employees' values. The teachers in this study feel that leaders can articulate a clear vision and mission, as shown by the responses to items stated in the descriptor (Table 2). Most teachers believe their goals match the organization's goals, that they understand and believe in the values adopted by the organization and are willing to follow the methods the organization uses to achieve its goals.

An interesting finding arises from POF, which is found to increase the effect of TL on KSB with a coefficient of 0.349 (T-stat = 5.516, P = 0.000), higher than the direct effect, in H2. Other interesting findings were obtained from the mediating variables in this study. KSB was found to have a positive mediating effect on the impact of TL on IWB, with a value of 0.150 (T-stat = 3.112, P = 0.001). The positive mediating impact of POF with respect to the impact of TL for on IWB was even stronger, with a value of 0.334 (T-stat = 5.091, P = 0.000). However, the effect of TL on IWB as mediated through POF and KSB is only 0.179 (T-stat = 3.827, P = 0.000). These values are higher than the direct effect of TL on

Table 6. Hypothesis testing results.

Hypothesis Code	Path	Path Coefficient (β)	Sample Mean (M)	STDEV	T Statistics	P-value	Decision
H ₁	TL → IWB	-0.187	-0.178	0.085	2.210	0.013	Not supported
H ₂	TL → KSB	0.293	0.294	0.102	2.881	0.001	Supported
H ₃	KSB → IWB	0.513	0.503	0.071	7.219	0.000	Supported
H ₄	TL → KSB → IWB	0.150	0.145	0.048	3.112	0.001	Supported
H ₅	POF → IWB	0.444	0.442	0.081	5.446	0.000	Supported
H ₆	POF → KSB	0.464	0.462	0.076	6.108	0.000	Supported
H ₇	POF → KSB → IWB	0.238	0.234	0.059	4.062	0.000	Supported
H ₈	TL → POF	0.752	0.751	0.031	24.095	0.000	Supported
H ₉	TL → POF → IWB	0.334	0.333	0.066	5.091	0.000	Supported
H ₁₀	TL → POF → KSB	0.349	0.348	0.063	5.516	0.000	Supported
H ₁₁	TL → POF → KSB → IWB	0.179	0.177	0.047	3.827	0.000	Supported

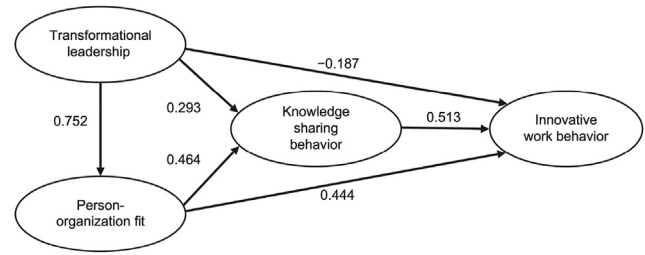


Figure 1. Research model results.

IWB, which indicates that TL in an educational setting, and perhaps more generally, must be accompanied by KSB and a good POF to increase employees' IWB.

6. Conclusions and suggestions for further research

6.1. Conclusion

The analysis of TL, POF, KSB, and IWB conducted in this study leads to several conclusions. First, TL does not have a positive effect on IWB among the teachers. Second, TL and POF have a positive effect on KSB. Therefore, improvements in TL as well as teachers' perceptions of POF can increase teachers' KSB. Third, TL has a positive effect on POF. Therefore, we conclude that improvements in TL have a positive influence on teachers' perceptions of POF. Finally, KSB and POF both have a positive effect on IWB. Thus, organizations should seek to increase KSB and employees' perceptions of a strong POF to increase IWB among the teachers.

6.2. Practical implications

Based on the results of this study, several managerial implications emerge for practical application of leaders in related educational organizations. The results demonstrate that KSB has the greatest influence on IWB. Consequently, it is important for educational leaders to focus on building KSB to increase IWB; for example, conducting professional development opportunities, seminars, and workshop that involve teachers sharing knowledge as trainers or speakers. In addition, because POF is shown to have an important influence on bridging the relationship of TL to IWB, educational organizations that endeavor to apply a transformational leadership style must pay special attention to POF to improve IWB. This is vital considering that TL was identified as causing a negative effect on IWB. An example of a strategy to increase POF is Human Resource Department (HRD) ensuring that accepted teachers match the school's vision and mission and share the same values when conducting recruitment.

6.3. Limitation and suggestions for future research

This study has several limitations. First, the concept of strategic trust was not accommodated in the research model. Therefore, it could be beneficial to include this consideration in the model for future study for a more thorough result. Second, this study focuses on gaps identified in previous studies, one of which is inconsistent research findings regarding the influence of TL on IWB. As such, this study does not offer comprehensive results regarding the influence of alternative leadership styles on IWB. Further research to examine other leadership styles that can support IWB is recommended. Third, although KSB was found to improve the effect of TL on IWB, the mediator failed to increase the influence of POF on IWB. Further research could examine mediating variables that are potentially better to increase the effect of the exogenous variables on the endogenous variables. Another suggestion is to investigate the potential influence of variables apart from those used in this study on teachers' IWB. Finally, we propose that this research model also be applied in other school levels and cultural or national contexts to have more comprehensive implications in the field of educational management.

Declarations

Author contribution statement

Niko Sudibjo: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Ranggi Kanya Prameswari: Conceived and designed the experiments; Performed the experiments; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement

Data included in article/supplementary material/referenced in article.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

Supplementary content related to this article has been published online at <https://doi.org/10.1016/j.heliyon.2021.e07334>.

References

Afsar, B., 2016. The impact of person-organization fit on innovative work behavior: the mediating effect of knowledge sharing behavior. *Int. J. Health Care Qual. Assur.* 29 (2), 104–122.

Afsar, B., Badir, Y., 2016. The mediating role of psychological empowerment on the relationship between person-organization fit and innovative work behaviour. *J. Chin. Hum. Resour. Manag.* 7 (1), 5–26.

Afsar, B., Badir, Y., Khan, M.M., 2015. Person–job fit, person–organization fit and innovative work behavior: the mediating role of innovation trust. *J. High Technol. Manag. Res.* 26 (2), 105–116.

Afsar, B., Cheema, S., Saeed, B.B., 2018. Do nurses display innovative work behavior when their values match with hospitals' values? *Eur. J. Innovat. Manag.* 21 (1), 157–171.

Afsar, B., Masood, M., Umrani, W.A., 2019. The role of job crafting and knowledge sharing on the effect of transformational leadership on innovative work behavior. *Person. Rev.* 48 (5), 1186–1208.

Asurakkody, T.A., Shin, S.Y., 2018. Ariyasinghe & so young shin. Innovative behavior in nursing context: a concept analysis. *Asian Nurs. Res.* 12 (4), 237–244.

Bartholomew, D.J., Knott, M., Moustaki, I., 2011. *Latent Variable Models and Factor Analysis: A Unified Approach*. Wiley.

Basu, R., Green, S.G., 1997. Leader–member exchange and transformational leadership: an empirical examination of innovative behaviors in leader–member dyads. *J. Appl. Soc. Psychol.* 27 (6), 477–499.

Bednall, T., Rafferty, A., Shipton, H., Sanders, K., Jackson, C., 2018. Innovative behaviour: how much transformational leadership do you need? *Br. J. Manag.* 29 (4), 796–816.

Bock, G., Zmud, R.W., Kim, Y., Lee, J., 2005. Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Q.* 29 (1), 87–111.

Choi, S., Kim, K., Ullah, S.M.E., Kang, S., 2016. How transformational leadership facilitates innovative behavior of Korean workers. *Person. Rev.* 45 (3), 459–479.

De Jong, J., Hartog, D.D., 2010. Measuring innovative work behaviour. *Creativ. Innovat. Manag.* 19 (1), 23–36.

Denti, L., Hemlin, S., 2012. Leadership and innovation in organizations: a systematic review of factors that mediate or moderate the relationship. *Int. J. Innovat. Manag.* 16 (3), 1240007.

Eisenbeiß, S.A., Boerner, S., 2010. Transformational leadership and R&D innovation: taking a curvilinear approach. *Creativ. Innovat. Manag.* 19 (4), 364–372.

Elrehail, H., Emeagwali, O.L., Alsaad, A., Alzghoul, A., 2018. The impact of transformational and authentic leadership on innovation in higher education: the contingent role of knowledge sharing. *Telematics Inf.* 35 (1), 55–67.

Hair Jr., J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., 2014. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE.

Hansen, J.A., Pihl-Thingvad, S., 2018. Managing employee innovative behaviour through transformational and transactional leadership styles. *Publ. Manag. Rev.* 21 (6), 918–944.

Holste, J.S., Fields, D., 2010. Trust and tacit knowledge sharing and use. *J. Knowl. Manag.* 14 (1), 128–140.

Holt, S., 2018. Engaging generation Y: the millennial challenge. In: Marques, J., Dhiman, S. (Eds.), *Engaged Leadership* (Marques J., Dhiman S. Springer, Cham, pp. 211–222.

Huang, M.P., Cheng, B.S., Chou, L.F., 2005. Fitting in organizational values: the mediating role of person-organization fit between CEO charismatic leadership and employee outcomes. *Int. J. Manpow.* 26 (1), 35–49.

Irianto, J.S., Sudibjo, N., 2019. Teachers' knowledge sharing behavior from transformational leadership and self-efficacy's perspective. *Polyglotte: Jurnal Ilmiah* 15 (2), 255–269.

Jaussi, K.S., Dionne, S.D., 2003. Leading for creativity: the role of unconventional leader behavior. *Leader. Q.* 14 (4–5), 475–498.

Jin, M.H., McDonald, B., Park, J., 2016. Does public service motivation matter in public higher education? Testing the theories of person–organization fit and organizational commitment through a serial multiple mediation model. *Am. Rev. Publ. Adm.* 48 (1), 82–97.

Kahai, S.S., Sosik, J.J., Avolio, B.J., 2003. Effects of leadership style, anonymity, and rewards on creativity-relevant processes and outcomes in an electronic meeting system context. *Leader. Q.* 14 (4–5), 499–524.

Khalili, A., 2016. Linking transformational leadership, creativity, innovation, and innovation-supportive climate. *Manag. Decis.* 54 (9), 2277–2293.

Kim, S., Yoon, G., 2015. An innovation-driven culture in local government: do senior manager's transformational leadership and the climate for creativity matter? *Publ. Person. Manag.* 44 (2), 147–168.

Krishnan, V.R., 2002. Transformational leadership and value system congruence. *Int. J. Value Base. Manag.* 15 (1), 19–33.

Le, P., Lei, H., 2017. How transformational leadership supports knowledge sharing. *Chin. Manag. Stud.* 11 (3), 479–497.

Lim, S., Lee, K.H., Bae, K.H., 2019. Does person-organization fit mediate the relationship between affect-based work antecedents and public employee job satisfaction? *J. Publ. Nonprof. Aff.* 5 (2), 134–154.

Lin, H.-F., 2007. Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *J. Inf. Sci.* 33 (2), 135–149.

Lin, K.-J., Hsieh, Y.H., Lian, W.S., 2018. Knowledge sharing and personality traits moderated by transformational leadership. *Hum. Syst. Manag.* 37 (1), 67–80.

Masood, M., Afsar, B., 2017. Transformational leadership and innovative work behavior among nursing staff. *Nurs. Inq.* 24 (4), 1–14.

Mittal, S., Dhar, R.L., 2015. Transformational leadership and employee creativity: mediating role of creative self-efficacy and moderating role of knowledge sharing. *Manag. Decis.* 53 (5), 894–910.

Mokhber, M., 2015. *Leadership and Innovative Behaviors: the Key Drivers for Organizational Innovation*. Partridge Publishing.

Moynihan, D.P., Pandey, S.K., 2008. The ties that bind: social networks, person-organization value fit, and turnover intention. *J. Publ. Adm. Res. Theor.* 18 (2), 205–227.

Mura, M., Lettieri, E., Radaelli, G., Spiller, N., 2013. Promoting professionals' innovative behaviour through knowledge sharing: the moderating role of social capital. *J. Knowl. Manag.* 17 (4), 527–544.

Niesen, W., Van Hootegem, A., Elst, T.V., Battistelli, A., De Witte, H., 2018. Job insecurity and innovative work behaviour: a psychological contract perspective. *Psychol. Belg.* 57 (4), 174–189.

Overstreet, R.E., Hanna, J.B., Byrd, T.A., Cegielski, C.G., Hazen, B.T., 2013. Leadership style and organizational innovativeness drive motor carriers toward sustained performance. *Int. J. Logist. Manag.* 24 (2), 247–270.

Pudjiarti, E.S., Hutomo, P.T.P., 2020. Innovative work behavior: an integrative investigation of person-job fit, person-organization fit, and person-group fit. *Verslas Teorija Ir Praktika / Busin.: Theor. Pract.* 21 (1), 39–47.

Purc, E., Laguna, M., 2019. Personal values and innovative behaviour of employees. *Front. Psychol.* 10, 1–16.

- Raja, U., Bouckenoghe, D., Syed, F., Naseer, S., 2018. Interplay between P-O fit, transformational leadership and organizational social capital. *Person. Rev.* 47 (4), 913–930.
- Razak, N.A., Pangil, F., Zin, M.L.M., Yunus, N.A.M., Asnawi, N.H., 2016. Theories of knowledge sharing behavior in business strategy. *Procedia Economics and Finance* 37, 545–553.
- Ritala, P., Olander, H., Michailova, S., Husted, K., 2015. Knowledge sharing, knowledge leaking and relative innovation performance: an empirical study. *Technovation* 35, 22–31.
- Schneider, B., 1987. The people make the place. *Person. Psychol.* 40 (3), 437–453.
- Sethibe, T., Steyn, R., 2017. The impact of leadership styles and the components of leadership styles on innovative behaviour. *Int. J. Innovat. Manag.* 21 (2), 750015.
- Wahyudi, S., Udin, U., Ahyar, Y., Rahardja, E., 2019. Person-organization fit, knowledge sharing behaviour, and innovative work behaviour: a Self determination perspective. *J. Innov. Creat. Change* 4 (4), 145–161.
- Wojtczuk-Turek, A., Turek, D., 2016. The significance of perceived social-organization climate for creating employees' innovativeness. *Manag. Res. Rev.* 39 (2), 167–195.