Pak. j. life soc. Sci. (2024), 22(2): 20467-20474 E-ISSN: 2221-7630;P-ISSN: 1727-4915

Pakistan Journal of Life and Social Sciences
www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2024-22.2.00154

RESEARCH ARTICLE

Enhancing Innovative Work Behavior via Training and Development: The Mediating Effect of Knowledge Sharing Practices

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ARTICLE INFO

Received: Oct 12, 2024

Accepted: Dec 18, 2024

Keywords

Training and Development

Knowledge Sharing

Innovative Work Behavior

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ABSTRACT

This research analyzes the influence of training and development on innovative work behavior mediated by knowledge sharing. The method used was quantitative causality. The sampling technique was convenience sampling. The population was 1.036 employees of the Indonesian Employment Social Security Administration. A total of 278 samples were selected based on certain criteria. The data was analyzed using SEM AMOS. The study's findings show that the Training and Development positively and significantly impacts Innovative Work Behavior, and Knowledge Sharing among employees. Furthermore, Knowledge Sharing significantly mediate the relationship between Training and Development and Innovative Work Behavior, indicating that these factors are crucial in fostering an innovative culture within the organization. This study provides theoretical and practical insights, particularly for organizations like BPJS Ketenagakerjaan, emphasizing the need for well-designed Training and Development programs that not only enhance technical skills but also promote psychological empowerment and knowledge sharing among employees, ultimately leading to greater innovation work behavior and improved organizational performance.

INTRODUCTION

In today's highly competitive & rapidly developing business environment, cultivating innovative work habits (Innovation Work Behavior) among employees is very crucial for the success & sustainability of the organization. Innovative work behavior (IWB), which is defined as the creation, promotion and realization of new insights in a comprehensive manner. Intentional work contexts enable organizations to adapt to market changes, increase efficiency, and maintain competitive advantage. However, growing such a conduit requires more than just individual creativity—it requires organizational tactics that facilitate skill development and knowledge exchange.

One of the most effective strategies for promoting IWB is a strong training and development (T&D) program. T&D not only increases employee competency and confidence, but also creates a culture of continuous learning that allows individuals to challenge the status quo and explore new approaches to tasks. Although the direct relationship between training and innovative behavior has been well documented, new research suggests that the impact of training on IWB may be strengthened by mediating factors, particularly knowledge sharing practices.

Knowledge sharing acts as an important procedure for transferring individual learning to collective organizational development. When employees develop the knowledge gained through training, they contribute to a collaborative environment where new insights are refined & discoveries develop. The practice of developing knowledge allows for cross-pollination, new insights, foster creativity, and encourage easy application of new skills acquired in ways that encourage discovery.

This research examines the role of knowledge sharing practices as a mediator between training and development efforts and innovative work behavior. By exploring these dynamics, this research aims to provide a comprehensive understanding of how companies can optimize their training investments to create an innovative workforce. Additionally, this research highlights the importance of building a collaborative culture that encourages individual learning and collective knowledge sharing.

These findings aim to provide actionable insights for organizations seeking to enhance innovative capabilities through strategic human capital development initiatives. In particular, this research highlights the synergistic effect of training, development, and knowledge sharing practices in creating innovative work environments that can meet the demands of ever-changing global markets.

MATERIALS AND METHODS

Research framework

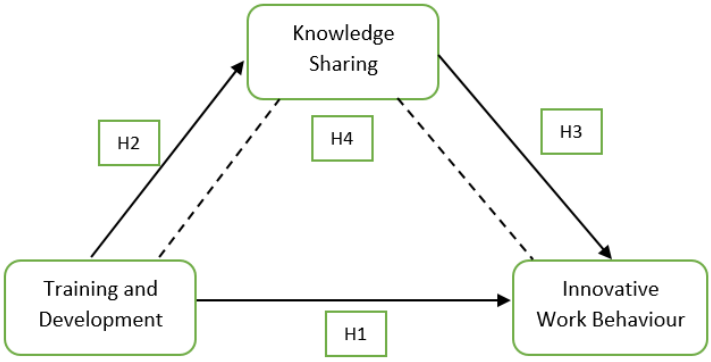

Figure 1: Research framework model

Based on Figure 1, it is known that this research examines the impact of training and development on innovative work behavior by involving knowledge sharing as a mediating / intervening variable that connects these two variables. So there are direct and indirect influences (marked with dotted lines).

Hypothesis

To answer the research questions, the hypothesis are as follows:

H1: Training and Development has a significant positive effect on Innovative Work Behavior

H2: Training and Development has a significant positive effect on Knowledge Sharing

H3: Knowledge Sharing have a significant positive effect on Innovative Work Behavior

H4: Knowledge Sharing as a Mediator in the indirect effect of Training & Development on Innovative Work Behavior

Population and sample

This study involved 1.036 employees of the Indonesian Employment Social Security Administration. A total of 278 samples were selected based on certain criteria employees at the Indonesian Employment Social Security Administration or BPJS Ketenagakerjaan. They were selected based on the following criteria: at least have participated in technical development and career development training in 2022.

Procedure and instrument

The method used was quantitative causality research. The sampling technique was convenience sampling. The questionnaire was distributed online using google form. The study was conducted for 17 months, from October 2022 to March 2024.

The research instrument uses a Likert scale of 1 to 4 to measure user attitudes, opinions, and perceptions. The research instrument, known for its reliability, consists of 3 variables. The total questionnaire is 34 items.

Data analysis

This study's analysis uses Structural Equation Modelling (SEM). The data was calculated using the SPSS and SEM AMOS software.

RESULTS

Sample

Based on the table, it shows that male respondents numbered 175 employees or 63% of the total respondents. Meanwhile, 103 employees were female respondents or 37%. Therefore, the distribution of respondents based on gender shows that the sample composition of male is greater than female. This shows that male respondents tend to be more dominant in contributing to innovative work behavior, training and development, and knowledge sharing, because male's roles in the context of this research may be more oriented towards these aspects. On the other hand, although the number of female respondents is smaller, they also have an important role in supporting innovative work behavior, training and development, and knowledge sharing, depending on the field of work or responsibility they carry out.

Table 1: Sample description (n=278)

Category	Description	Frequency	Percentage
Gender	Male	175	63%
	Female	103	37%
Age	26-35 years	139	50%
	36-45 years	69	25%
	46-55 years	35	12.5%
	>55 years	35	12.5%
Education	Doctoral Degree	70	25%
	Master Degree	104	37.5%
	Bachelor Degree	70	25%
	Senior High School	34	12.5%
Work Experience	1-5 years	70	25%
	6-10 years	104	37.5%
	10-15 years	70	25%
	>16 years	34	12.5%
Last time attended training	1-6 months	70	25%
	>6 months	208	75%
Type of training	Career	35	12.5%
	Technical	35	12.5%
	Refreshment	104	37.5%
	Certification	104	37.5%

Validity and reliability

The validity test was measured using the Product Moment formula. The item is declared valid if the r-count value > r-table and the significance value is < α (0.05). The r-table value is determined by df = N-2 with a significance level of 5%, so df is 278-2=276, and the r-table is 0.0989. Cronbach's Alpha value > 0.6 is said to be reliable. The results of the validity and reliability test of all research instruments were declared valid and reliable.

Table 2: Validity and reliability

Indicators		R-count	Sig.	Cronbach's Alpha
Training & Development				
TD1	I think the instructor provides material according to his field	0.818	0.000	0.938
TD2	I consider that the instructors come from practitioners who are experienced in their field	0.814	0.000	

TD3	I have a high enthusiasm for participating in training and development	0.831	0.000	
TD4	I took part in training and development of my own accord	0.826	0.000	
TD5	I assess training and development materials as relevant to current conditions	0.834	0.000	
TD6	I assess the material as relevant to daily work problems	0.822	0.000	
TD7	I consider learning methods to be practical, concrete and related to the reality of work	0.816	0.000	
TD8	I appreciate the training method in the form of case studies	0.809	0.000	
TD9	I understand the short-term goals of the training and development program and I am participating in	0.801	0.000	
TD10	I understand the long-term goals of the training and development that I participate in	0.813	0.000	
TD11	I assess the training and development that I participate in as having clear criteria	0.205	0.000	
TD12	I consider the training and development that I participate to have clear measurements	0.834	0.000	
Knowledge Sharing				
KS1	I think sharing knowledge among employees is a normal thing	0.822	0.000	0.965
KS2	I often share knowledge with colleagues who are in the same department	0.818	0.000	
KS3	I often share knowledge with colleagues in other departments	0.844	0.000	
KS4	I often share skills with colleagues who are in the same department	0.826	0.000	
KS5	I often share my skills with colleagues from other departments	0.849	0.000	
KS6	When I learn something new, I tell my colleagues who are in the same department	0.878	0.000	
KS7	When I learn something new, I tell my colleagues in other departments about it	0.889	0.000	
KS8	Colleagues want to share knowledge with me	0.877	0.000	
KS9	I want to share knowledge with colleagues	0.858	0.000	
KS10	Colleagues in the same department share the skills they have	0.846	0.000	
KS11	Colleagues in other departments share the skills they have	0.830	0.000	
KS12	When coworkers have learned something new, they tell me	0.855	0.000	

Innovative Work Behavior				
IWB1	I pay attention to problems that are not part of my daily work	0.837	0.000	0.896
IWB2	I love looking for things that can be improved	0.862	0.000	
IWB3	I enjoy looking for new working methods, techniques or instruments	0.865	0.000	
IWB4	I often produce creative ideas in finding solutions to problems in my work	0.852	0.000	
IWB5	I found a new approach to carrying out tasks	0.853	0.000	
IWB6	I get key members of the organization enthusiastic about innovative ideas	0.858	0.000	
IWB7	I try to support innovative ideas	0.850	0.000	
IWB8	I systematically introduce innovative ideas into work practices	0.847	0.000	
IWB9	I contribute to the implementation of new ideas into work practices	0.098	0.103	
IWB10	I try to develop new things into my work practice	0.168	0.005	

Goodness of fit

The research model's feasibility is measured by evaluating the output loading factor based on the Goodness of Fit (GoF) criteria. The modified structural model met the parameters and measurement criteria of Goodness of Fit (GoF). The following is a modified model.

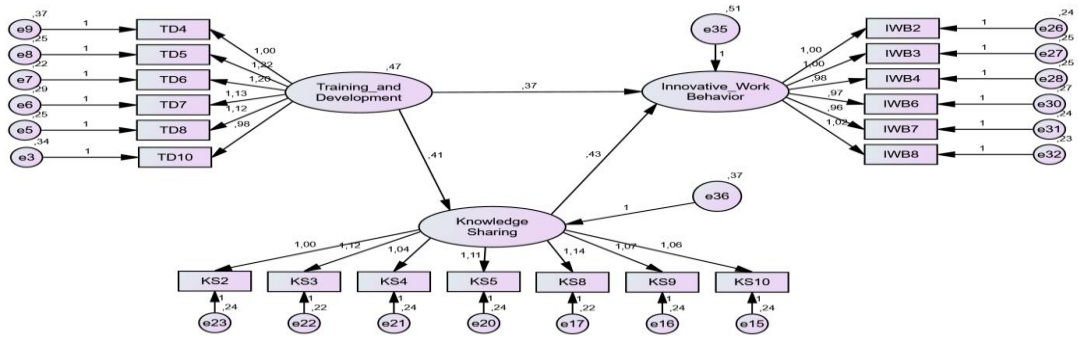

Figure 2: Model modification results

The table of fit summary shows that all criteria achieved a good fit. Here is the resume: CMIN/DF = 1.098; IFI = 0.997; TLI/NNFI = 0.996; CFI = 0.997; NFI = 0.963; RFI = 0.957; GFI = 0.943; AGFI = 0.927; and RMSEA = 0.019.

Table 3: Goodness of fit (GoF) summary

Goodness of fit	Match Level	Model Fit Summary Results	Note
Chi-Square (P-value)	P > 0.05	0,196	Good fit
RMSEA	≤ 0.080	0,019	Good fit
NFI	≥ 0.900	0,963	Good fit
NNFI/TLI	≥ 0.900	0,996	Good fit
CMIN/DF	≤ 2.000	1,098	Good fit
CFI	≥ 0.900	0,997	Good fit
IFI	≥ 0.900	0,997	Good fit
RFI	≥ 0.900	0,957	Good fit
SRMR	≤ 0.05	0,028	Good fit
GFI	≥ 0.900	0.943	Good fit

Goodness of fit	Match Level	Model Fit Summary Results	Note
AGFI	≥ 0.900	0.927	Good fit

Construct reliability and variance extracted

The research construct is declared valid and reliable in the SEM model if the construct reliability (CR) value is > 0.7 and the variance extracted (AVE) value is > 0.5. In this calculation, all indicators and variables of this research are declared valid and reliable.

Table 4: Construct reliability and variance extracted

No.	Variabel	Indicator	Standard Loading Factor	Standar Loading^2	Measurement Error (1-Standard Loading^2)	Construct Reliability	Variance Extracted
1	Training & Development	TD4	0,750	1,000	0,034	**0,993**	**0,962**
		TD5	0,860	0,740	0,027		
		TD6	0,870	0,757	0,025		
		TD7	0,820	0,672	0,030		
		TD8	0,840	0,706	0,026		
		TD10	0,760	0,578	0,032		
		∑	**4,900**	**4,452**	**0,174**		
		∑2	**24,010**				
2	Knowledge Sharing	KS2	0,081	0,007	0,023	**0,994**	**0,963**
		KS3	0,850	0,723	0,022		
		KS4	0,820	0,672	0,023		
		KS5	0,840	0,706	0,024		
		KS8	0,850	0,723	0,022		
		KS9	0,830	0,689	0,024		
		KS10	0,830	0,689	0,023		
		∑	**5,101**	**4,207**	**0,161**		
		∑2	**26,020**				
3	Innovative Work Behavior	IWB2	0,870	1,000	0,025	**0,994**	**0,969**
		IWB3	0,860	0,740	0,025		
		IWB4	0,860	0,740	0,025		
		IWB6	0,850	0,723	0,027		
		IWB7	0,860	0,740	0,024		
		IWB8	0,880	0,774	0,024		
		∑	**5,180**	**4,716**	**0,150**		
		∑2	**26,832**				

Hypothesis test

Hypothesis testing on the structural model was carried out by conducting p-value significance test. The hypothesis is acceptable if the p-value < 0.05 and the t-value ≥ 1.96.

Table 5: Hypothesis testing results

	Estimate	S.E.	C.R.	P	Note
Knowledge Sharing <--- Training and Development	,408	,065	6,303	0,000	Accepted
Innovative Work Behaviour <--- Training and Development	,373	,080	4,672	0,000	Accepted
Innovative Work Behaviour <--- Knowledge Sharing	,433	,081	5,360	0,000	Accepted
Note: If p-value < 0,05, then accepted and if t ≥ 1,96 is significant (+/-)					

DISCUSSION AND CONCLUSION

Discussion

The effect of training and development on innovative work behavior (hypothesis 1)

Hypothesis 1 in this study states that training & development has a positive and significant effect on innovative work behavior, the results of the analysis in this study show that the p value of the effect of training & development on innovative work behavior < 0.001, t of 4,672 and a positive path coefficient of 0.000, because the value < 0.05, t > 1.96, and the coefficient on the path is positive, the hypothesis is accepted and it can be concluded that training & development has a positive effect on innovative work behavior.

Training & development (T&D) has been shown to significantly encourage innovative work behavior (IWB) in various organizational contexts. A study conducted by Zreen et al. (2020) in the higher education sector shows that T&D plays an important role in improving employee IWB. Innovation-focused training enables employees to develop the creative skills required to generate and implement new ideas in the workplace. Similarly, research by Akour et al. (2020) found that orientation towards innovation and training focused on innovation development had a positive impact on employees' innovative behavior, which in turn increased the development of new services. These results are consistent with the findings of this study that T&D has a positive influence on IWB.

The effect of training and development on knowledge sharing (hypothesis 2)

Hypothesis 2 in this study states that training & development has a positive and significant effect on knowledge sharing, the results of the analysis in this study show that the p value of the effect of training & development on knowledge sharing is < 0.001, t is 6,303 and the positive path coefficient is 0.000 because the value < 0.05, t > 1.96, and the coefficient on the positive path, the hypothesis is accepted and it can be concluded that training & development has an effect on knowledge sharing.

The effect of T&D on knowledge sharing has been widely documented in the literature. Othman and Durmaz (2022) assert that well-structured training encourages a work environment that supports knowledge sharing, which is critical for innovation in organizations. Knowledge sharing enables faster and more effective dissemination of knowledge and experience among employees, increasing the organization's collective capacity to innovate. This study supports the finding that T&D has a positive influence on knowledge sharing.

The effect of knowledge sharing on innovative work behavior (hypothesis 3)

Hypothesis 3 in this study states that knowledge sharing has a positive and significant effect on innovative work behavior, the results of the analysis in this study show that the p value of the effect of knowledge sharing on innovative work behavior is < 0.001, t is 5,360 and the positive path coefficient is 0.000, because the value < 0.05, t > 1.96, and the coefficient on the positive path, the hypothesis is accepted and it can be concluded that knowledge sharing has an effect on innovative work behavior.

Knowledge sharing (KS) plays an important role in facilitating innovative work behavior (IWB) in various organizations. Research by Nguyen et al. (2020) shows that KS, which includes knowledge donation and knowledge collection, has a significant impact on IWB. They found that knowledge collection has a stronger influence on IWB compared to knowledge donation, which shows the importance of collecting knowledge from coworkers to encourage innovation in the workplace. This research is consistent with the results showing that KS contributes positively to IWB, reinforcing the importance of knowledge sharing culture in supporting organizational innovation.

Knowledge sharing as a mediator in the indirect effect of training & development on innovative work behavior (hypothesis 4)

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.408	Sobel test:	4.06978747	0.04340866	0.00004706
b	0.433	Aroian test:	4.0401783	0.04372678	0.00005341
s_a	0.065	Goodman test:	4.10005731	0.04308818	0.0000413
s_b	0.081	Reset all	Calculate		

Figure 3: Sobel test calculation

Hypothesis 4 in this study states that knowledge sharing can mediate the indirect effect of training & development on innovative work behavior. The results show that the p value of the Sobel test results

is 0.000, because the p value < 0.05 and t value is 4.069 > 1.96, it is concluded that knowledge sharing can significantly mediate the effect of training & development on innovative work behavior. The nature of mediation is partial mediation because without being mediated by knowledge sharing, training & development can also directly affect innovative work behavior.

Knowledge sharing (KS) also serves as a significant mediator in the indirect effect of T&D on IWB. Nugroho (2023) found that KS plays an important mediating role between transformational leadership and IWB, suggesting that a work environment that encourages KS amplifies the positive impact of T&D programs on innovative behavior. This study supports the finding that SL can significantly mediate the effect of T&D on IWB, and highlights the importance of encouraging a knowledge sharing culture to achieve better innovative outcomes.

CONCLUSION

This study confirms that training & development (T&D) plays a crucial role in enhancing innovative work behavior (IWB) in BPJS Ketenagakerjaan. The results of the analysis show that T&D has a positive and significant influence not only on IWB, but also on knowledge sharing, which in turn strengthen innovative workplace behavior. Knowledge sharing proved to be significant mediators in the relationship between T&D and IWB, although the nature of the mediation was partial, suggesting that T&D also directly contributes to IWB without the need to be mediated by other variables. Overall, this study emphasizes the importance of investing in T&D programs that focus not only on developing technical skills, but also on strengthening confidence and collaboration capabilities among employees.

REFERENCES

Abun, F. D., & Macaspac, L. G. (2023). Promoting Work Behavior Through Knowledge Sharing and Innovation.

Afrinanda, C., Nurdasila, & Halimatussakdiah. (2022). Training & Development's Impact on Employee Innovative Work Behavior in PT Telkom Banda Aceh.

Akour, I. A., Bourini, I., & Abukhait, R. (2020). Investigating the Impact of Technology and Training on Service Innovation.

Asurakkody, T. A., & Kim, S. H. (2020). Effects of Knowledge Sharing Behavior on Innovative Work Behavior among Nursing Students: Mediating Role of Self-leadership.

García, P., Hernández, M., & García, M. (2021). Impact of Professional Development Programs on Self-Efficacy and Job Performance.

Hassan, R., & Ali, M. I. (2021). Impact of Managerial Coaching on Innovative Work Behaviors through Affective Supervisory Commitment: Moderating Role of Self-efficacy.

Islam, T., Zahra, I., & Rehman, S. (2022). How Training & Development Encourages Knowledge Sharing and Innovation.

Islam, T., Zahra, I., Rehman, S., & Jamil, S. (2022). How Knowledge Sharing Encourages Innovative Work Behavior through Occupational Self-Efficacy? The Moderating Role of Entrepreneurial Leadership.

Martínez, M., Gil, F., & García, M. (2021). Proactive Problem-Solving and Innovation: The Role of Self-Efficacy.

Nguyen, T., Tran, N., Doan, X., & Nguyen, H. (2020). The Impact of Knowledge Sharing on Innovative Work Behavior in Vietnam.

Nugroho, R. (2023). Knowledge Sharing as a Driver for the Rise of Innovative Work Behavior.

Othman, M. A., & Durmaz, O. (2022). Exploring the Effect of Organizational Culture on Knowledge Sharing Behavior.

Park, J., Lee, K., & Lee, J. (2021). The Role of Training and Development in Enhancing Innovative Work Behavior.

Putri, D. A., & Etikariena, A. (2022). The Relationship between Knowledge Sharing Behavior and Innovative Work Behavior through Innovation Self-Efficacy as Mediator.

Rahman, M., Islam, M., & Khalil, M. (2020). Role of Training and Development in Enhancing Self-Efficacy and Innovative Capabilities.

Suh, H., Lee, J., & Kim, S. (2021). Training and Development's Role in Enhancing Knowledge Sharing.

Tan, A. B. C., van Dun, D. H., & Wilderom, C. (2023). Innovation Training and Leadership Impact on Self-Efficacy and Role Identity.

Zreen, A., Farrukh, M., & Kanwal, N. (2020).