Research Paper

Knowledge Sharing Behavior, Team Climate, and Organizational Learning Culture as Predictors of Innovative Work Behavior

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Abstract

Innovative work behavior has become an important research topic in human resource management. In the current fast-paced environment, organizations have also been forced to rely more on people to innovate to stay ahead of the competition. Addressing theoretical and practical purposes, this study investigated the roles of knowledge-sharing behavior, team climate, and organizational learning culture in predicting innovative work behavior using a cross-sectional approach. A questionnaire was used to collect data from employees in a telecommunication company in Indonesia with 155 randomly selected samples. Participants were asked to rate themselves on knowledge-sharing behavior, team climate, organizational learning culture, and innovative work behavior. Regression analysis revealed that knowledge-sharing behavior, team climate, and organizational learning culture predicted employees' innovative work behavior, consistent with previous findings. These results contribute to the existing literature by providing evidence that individual, group, and organizational factors should always be considered when predicting innovative work behavior. This study recommends that knowledge-sharing behavior be the focus for people development across the company when it aims to improve innovative work behavior.

Keywords: *Innovative Work Behavior; Knowledge Sharing Behavior; Team Climate; Organizational Learning Culture*

INTRODUCTION

It is widely accepted that innovation is essential for organizations to achieve competitive advantage and organizational success (Anderson et al., 2014; Afsar et al., 2021). Innovation enables organizations to manage changes that involve the business environment, market, and customer demands (Tohidi and Jabbari, 2012). Innovation could be more crucial for some sectors in particular countries, such as the telecommunications industry in Indonesia. As a fast-paced industry that incorporates mobile phones as well as fixed and mobile broadband services, the telecommunications sector is among the fastest-growing ones in Asia. It contributes approximately 748.75 trillion Indonesian rupiahs to the GDP (Statista, 2023).

It is highly likely that the competition among mobile network operators in Indonesia will remain intense, which makes the firms' capability to provide excellent quality services to their customers the most important aspect of survival. The organization's ability to continuously innovate and improve its products, services, and processes relies heavily on whether the employees are both willing and able to innovate (de Jong and den Hartog, 2010). As previous studies indicated that employees' innovative behavior generates a positive impact on an organization's innovativeness, employees need to take part in innovative work behavior (IWB) to allow the companies to benefit from individual innovation (Scott and Bruce, 1994; Oukes, 2010). Considering the business dynamics of the telecommunications sector, firms within this industry would require people who willingly contribute to the development of innovative solutions (Yuan and Woodman, 2010; Messmann and Mulder, 2020). Although many studies examined a variety of drivers of IWB (Kmieciak, 2021; Al Derei and Fam, 2023; Lin, 2023), specific research in the telecommunications sector in Indonesia is still limited, which is why this study focuses on this particular sector.

The ongoing transformation to become a converged operator has generated many challenges

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for the participating company. One of the main challenges is that it requires its people to be innovative and be able to incorporate the agile way of working in their day-to-day activities. Since people's innovation is not something that can be built in one night, measuring the current state of people's innovative work behavior would allow the company to find its way forward. To ensure that its people are on the right track, an assessment is needed to set a baseline and craft effective strategies for improvement. As indicated by previous research conducted by Zennouche, Zhang, and Wang (2014), the determining factors that can either foster or hinder innovation can be categorized into three levels: individual, team, and organizational level. Thus, this research focuses on assessing innovative work behavior and its possible predictors: knowledge-sharing behavior, team climate, and organizational learning culture from the perspective of the employees. As a previous study found that there were some correlations between being a learning organization, the concept coined by Peter Senge in 1990, and practicing responsible innovation (Hansen et al., 2020), the proposed model in this research contributes to the literature by providing a wider insight on whether the link also applies in a telecommunication company in Indonesia.

LITERATURE REVIEW

As the focus of this study is to assess employees' innovative work behavior and its possible relationship with knowledge-sharing behavior, team climate, and organizational learning culture, the literature review part discusses these variables as well as introduces the research hypotheses.

Innovative Work Behavior (IWB)

West and Farr (1990) differentiated innovation from creativity by depicting creativity as the creation component of innovation while innovation itself incorporates both the creation and implementation of new ideas. Thus, according to Janssen (2000), innovative work behavior (IWB) is defined as the intentional creation, introduction, and implementation of new ideas within a work role, group, or organization to generate a positive impact on the individual, group, or organization's performance. Based on this definition, there are three dimensions of IWB: idea generation, idea promotion, and idea realization.

Zennouche, Zhang, and Wang (2014) revealed in their study that the factors affecting innovation can be found at individual, group, and organizational levels. This notion is aligned with a study conducted in Thailand, which found that team climate, learning orientation, organizational supportiveness, and transformational leadership were crucial in developing IWB (Chatchawan et al., 2017). Another research carried out on university students in Indonesia found that there is a positive and significant relationship between proactive personality, as an individual factor, and IWB (Winarsih and Etikariena, 2020). As for this current study, three factors are assessed to examine the correlations with IWB, which include knowledge-sharing behavior, team climate, and organizational learning culture. Each of the three factors represents the individual, group, and organizational level.

Although IWB has been theoretically considered a multi-dimensional construct, common measures of IWB are mostly one-dimensional (Scott and Bruce, 1994; Wu and Wu, 2019; Winarsih and Etikariena, 2020). Janssen (2000) developed a multi-dimensional measure where items were specifically formulated for idea generation, idea promotion, and idea implementation. However, strong correlations were found among the three dimensions, and it was concluded that these items could best be combined and used as a single scale. A self-report questionnaire as a single source of data was also adopted in many previous studies instead of involving superior ratings and still showed high reliability (de Jong and den Hartog, 2010; Messmann and Mulder, 2020).

Knowledge Sharing Behavior (KSB)

Across the literature, knowledge sharing has been defined as activities of transferring or exchanging knowledge, resources, experience, or something advantageous from one person or group to another (Lee, 2001; Mustika et al., 2020). In the organizational context, knowledge-sharing behavior can be defined as the activities of sharing information and knowledge with co-workers across units, which include work experience, skills, expertise, and procedures for performing tasks that promote learning and improve employees' ability to achieve their objectives (Rohman et al., 2020; Zuhdi and Etikariena, 2022). Similar to knowledge management systems, successful implementation of knowledge-sharing processes can also help companies in enhancing their innovation capability (Lin, 2007), improving performance (Verburg and Andriessen, 2011; Henttonen et al., 2016), and lowering redundant learning efforts (Scarbrough, 2003).

Most of the previous studies that focused on knowledge-sharing behavior involve participants from various professions, such as university students (Zuhdi and Etikariena, 2022), academic staff members (Lotfi et al., 2016), and employees within various industries such as banking, hospitality, and telecommunications sector (Akram et al., 2020; Swanson et al., 2020; Mustika et al., 2022). A study on doctors and nurses in Thailand (Afsar, 2016) revealed that knowledge-sharing behavior acts as a partial mediator between person-organization fit and IWB. Similar findings were also found by Zuhdi and Etikariena (2022) in their study on college students in Indonesia, which shows that knowledge-sharing behavior has a partially mediating role in the relationship between openness to experience and IWB. Research that specifically explores knowledge-sharing behavior in Indonesia's telecommunications industry, however, is still limited. Thus, the current research aims to enhance the understanding of knowledge-sharing behavior within a telecommunications company. To examine the relationship between KSB and IWB in the present study, the following hypothesis is formulated:

H_1: Employees' knowledge-sharing behavior is significantly positively correlated with innovative work behavior.

Team Climate (TC)

Employees with different skills, perspectives, and backgrounds who work together as a team are more likely to generate new and useful products and processes (Xue et al., 2011). While any social network can generate influences on individual behaviors, research in social psychology reveals that stronger social influence takes place in work teams because individuals are likely to feel close to their work team and, thus, are more willing to comply with team norms (Fulk, 1993). Another study also discovered that team climate significantly affects people's perceptions, normative beliefs, and technology usage (Liang et al., 2010). In this research, therefore, team climate will be assessed to evaluate its possible correlations with IWB.

One of the crucial factors for successful team innovation is developing a supportive team climate. According to the literature, team climate is defined as a collective property of the team that represents its shared perceptions of organizational policies, practices, and procedures (Anderson and West, 1998). A study conducted by Rahmi and Indarti (2019) on creative teams in several radio and television broadcasting institutions in Indonesia found that team climate moderates the relationship between cognitive diversity and knowledge sharing, which is aligned with other studies that indicate team climate could either stimulate or discourage team members from sharing knowledge (Cheung et al., 2016; Tang and Naumann, 2016). To empirically explore team climate, an instrument called the Team Climate Inventory (TCI) was adopted in this study based on four factors, which include team vision, participative safety, task orientation, and support for innovation (Anderson and West, 1998). To investigate the possible correlations between team climate and

innovative work behavior, the following hypothesis is drawn up for this current research:

H_2: Team climate is significantly positively correlated with innovative work behavior.

Organizational Learning Culture (OLC)

In today's dynamic and turbulent environment, the term organizational learning culture (OLC) has become crucial. Organizations with a strong OLC usually have the capacity to effectively incorporate the workforce into a new structure that enables the organizations to move forward through continuous learning (Cummings and Worley, 2009). By building a culture of knowledge sharing, a transforming company can improve employees' capability and thrive on it. The terms "organizational learning culture" and "learning organization" have been used interchangeably in many research for a long period of time (Islam et al., 2015). A Harvard Business Review article defined a learning organization as "an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights" (Garvin, 1993, p. 80). The OLC, on the other hand, is a form of organizational culture that encourages the acquisition of information and the distribution of learning, as well as supports continuous learning and its application to business improvements (Bates and Khasawneh, 2005).

To successfully build an OLC, leaders must create an environment where the behaviors and practices that are related to continuous development are actively encouraged. With regard to the aims of this current study, OLC becomes crucial for organizational innovation since the culture enables the company to anticipate and adapt to the dynamics of a changing environment (Wang and Ellinger, 2011). Many studies have confirmed that companies with a learning culture generate positive impacts such as enhancing workers' job satisfaction (Egan et al., 2004), lowering the rate of their turnover intention (Joo and Park, 2010), improve organizational profitability (Rebelo and Gomes, 2017), and generate a better customer satisfaction (Pantouvakis and Bouranta, 2013). Similar to the previous studies, OLC in this research was also measured using a self-report questionnaire since it aimed to assess employees' views on how they perceive the learning culture. To investigate the possible correlations between OLC and innovative work behavior in the participating company, the following hypothesis will be explored in this research:

H_3: Organizational learning culture is significantly positively correlated with innovative work behavior.

Conceptual Framework

Since the ongoing transformation has forced PT. Telko Selular, to be innovative, assessments are needed to set a baseline and craft effective strategies for improvement. As mentioned previously, the determining factors of innovation can be categorized into three levels: individual, team, and organizational level. Knowledge-sharing behavior was chosen over the other individual factors since it is the most relevant within the context of PT. Telko Selular stresses the importance of sharing knowledge activities. Moreover, team climate was selected as the possible determinant at the group level over others since it has been found to be one of the strongest predictors of innovation (Zennouche et al., 2014). Finally, organizational learning culture was picked because it is evident that how organizations provide a safe environment for learning and innovation would directly impact innovative behavior (Li and Zheng, 2014). A set of self-report questionnaires, which includes all three constructs, was used as a single data source since the main objective was to gather employees' views on how these factors affect their innovative behavior. The variables involved and the hypotheses of this research are summarized in Figure 1.

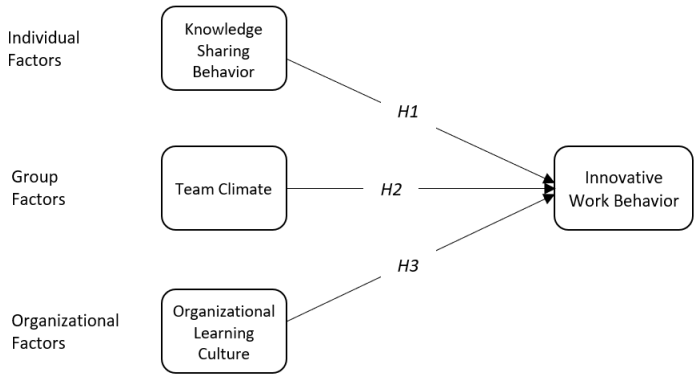

Figure 1. Illustration of the Relationship between Study Variables

RESEARCH METHOD

As the primary objective of this study was to examine the relationship between variables, explanatory research using surveys was adopted as a research strategy due to its practicality for study participants as well as its accuracy in assessing information (Zikmund et al., 2009). Surveys are also a popular and common strategy in business and management research since it allows the collection of standardized data from a large population in a highly economical way, making it possible for comparison and analysis using both descriptive and inferential statistics (Saunders et al., 2012). This study adopted a cross-sectional survey to examine the association between variables at a particular time as well as to compare the outcomes between participants. Data were collected in April 2023 using self-report questionnaires, which enabled the participants to answer the questions by completing the questionnaire themselves at any time at their own pace. A convenience sampling technique was adopted to recruit the most accessible participants during the data collection process.

As of March 2023, the participating company employed 1,510 permanent and direct-contract employees. Direct-contract employees are contract workers whose employment is managed directly by the company instead of a third-party outsourcing firm. Initial contact was started with the person in charge of the Human Capital Directorate to obtain permission to conduct this study. After approval was granted, the online questionnaires were distributed to all permanent and direct-contract employees through emails. To ensure that all participants had sufficient work experience within the company to be able to answer the questions accurately, the new hires who were in their first three months were excluded from this study. Moreover, the top management were also excluded from this study, leaving only 1,404 employees eligible to participate. The original English version of each scale that has been used in previous studies was administered to allow the expatriates in the participating company also to take part in this study.

Since the data is quantifiable, all the responses that have been collected were compiled and processed using the IBM SPSS version 29 software to perform descriptive statistics and hypothesis testing analysis. Although there were 192 responses submitted to the survey platform, only 155 responses with complete information were included for further analysis. The hypothesis testing involved correlation as well as simple and multiple linear regression analysis to examine the relationships between the predictors and innovative work behavior.

The IWB questionnaire, which consists of nine items, was used to measure employees' opinions on their innovative work behavior. This tool was developed by Janssen (2000) and originally consisted of three dimensions of IWB, which were idea generation, idea promotion, and idea implementation. However, it was later adopted as a one-dimensional scale in many previous

studies (de Jong and den Hartog, 2010). These nine items measured the extent to which employees engage in innovative work behavior, with a scoring range of 1 (never) to 5 (always) as indicators. This instrument has an adequate consistency with a Cronbach's alpha of 0.89 when used for Indonesian college students (Winarsih and Etikariena, 2020) and 0.94 with Irish manufacturing employees as the research participants (Ramamoorthy et al., 2005). High scores on this scale represent employees' high engagement in IWB.

The Knowledge Sharing Behavior scale, which consists of seven items, was used to assess employees' perception of how frequently they demonstrate knowledge-sharing behavior at work. This instrument was developed by Chennamaneni (2006) based on varied theoretical concepts of knowledge-sharing behavior discussed in previous research. The scale was originally used a 7-point Likert scale from 1 (very infrequently) to 7 (very frequently). However, a 5-point Likert scale was adopted in the current study to conform to the other instruments included in the survey. Previous studies recorded a range of Cronbach's alpha of 0.92 to 0.93 for this scale (Chennamaneni, 2006), which showed high reliability.

The short version of the Team Climate Inventory (TCI), which consists of 14 items, was adopted to measure employees' perception of the climate of their existing team or work unit. The original version of TCI was developed by Anderson and West (1998) with 61 items, including 12 items for "vision," 23 items for "participative safety," 17 items for "task orientation," and eight items for "support for innovation." The 14-item version was constructed by Kivimäki and Elovainio (1999), which still allowed a fair distribution for the four dimensions from the original version. Since the instrument can also be used as a full-scale measurement of team climate, this study used TCI as merely a one-dimensional scale. According to previous studies, the full-scale was reported to have a Cronbach's alpha of 0.91 for the Bahasa Indonesia version (Antonio et al., 2021) and 0.95 for the English version (Primus and Jiang, 2019), which indicated a high reliability. This instrument has a 5-point response scale from "strongly disagree" to "strongly agree", in which higher scores suggest a more desirable team climate.

The OLC survey, which comprises six items, was used to assess workers' perception of the degree to which the company values employee learning. This scale was developed by Lee (2018) based on some conceptual definitions of organizational learning culture discussed in previous studies. It initially consisted of 11 items and was later reduced to six items after a series of psychometric assessments such as reliability tests, item content validation, and scale dimensionality using exploratory and confirmatory factor analysis. During construction, the survey was originally administered using a 6-point response scale ranging from 1 (strongly disagree) to 6 (strongly agree). However, a 5-point response scale was used to match the other scales in the current study. This survey had an adequate internal consistency reliability with a Cronbach's alpha of 0.88.

FINDINGS AND DISCUSSION

Male participants represented a larger proportion, with 72.9%, compared to only 27.1% of female participants in this study. The significant difference in gender distribution was expected since the existing demographic profile of the company workforce is dominated by males, who make up 70.6% of the population. In regard to age groups, the largest proportion was dominated by participants whose age group was 31-40 years old, at 41.3%, followed by the group of 41-50 years old, with only a slight difference in percentage, 38.7%. This number was also aligned with the current employee profile that consists of 45% people within the age group of 31-40 years old and 38.2% people belonging to the group of 41-50.

Validity and Reliability of Instruments

First, Confirmatory Factor Analysis (CFA) was performed to check the items' dimensionality. CFA was chosen instead of Exploratory Factor Analysis (EFA) since the instruments used in the present study were already developed based on the theoretical concepts and had been adopted as instruments in previous studies. The CFA computation adopted principal components analysis with varimax rotation to extract the factors. The values generated by the KMO test results were 0.88 and above for each scale, which was good as it is greater than the reference value of 0.8 (Cerny and Kaiser, 1977), indicating that factor analysis was useful for these variables. This output is aligned with Bartlett's test results, which showed a statistically significant value for all four scales (p < 0.001).

Cronbach's alpha coefficient was computed to assess the reliability of each of the four instruments. Since CFA has been carried out in the previous step, the results are also used to measure the composite reliability (CR) as well as the convergent and construct validity through the average variance extracted (AVE). *Table 1* provides a summary of the validity and reliability results for each scale. As can be observed from the table, all the measurements used in this study have Cronbach's alpha of 0.89 or higher, indicating an adequate internal consistency as it exceeds the widely acceptable value of 0.70 (Nunnally, 1978).

Furthermore, the results showed that composite reliability (CR) ranged from 0.91 to 0.95, which was above the 0.60 CR threshold value and therefore suggested an adequate internal consistency reliability (Hair et al., 2019). This output verified the satisfactory Cronbach's alpha coefficient obtained from the previous calculation. The factor loadings of each scale's individual items also showed decent results with a value of 0.61 or higher, providing evidence of the construct validity of the instruments. As shown in the table above, the average variance extracted (AVE) values of the four instruments ranged from 0.53 to 0.68, which also exceeded the 0.5 cut-off value defined by Hair and his colleagues (2019) for an acceptable level of convergent validity. Based on the results, it is sufficient to conclude that the four scales adopted in the present study have adequate reliability and validity.

Hypothesis Testing

As an initial examination, means, standard deviations, and intercorrelations among study variables are presented in *Table 2*. To test the three hypotheses, a two-tailed Pearson's correlation test was carried out to assess whether employees' innovative work behavior is positively related to knowledge-sharing behavior, team climate, and organizational learning culture. As can be seen in the table, the mean score of IWB was fairly high (M = 3.92, SD = 0.61), which indicated employees' considerably high tendency to show innovative work behavior. Likewise, participants' KSB mean score was also relatively high (M = 3.95, SD = 0.70), suggesting a moderately high propensity to share their knowledge at work.

Table 1. Validity and Reliability of the Instruments

Items	Factor loadings	Cronbach's alpha	CR	AVE
Innovative Work Behavior (IWB)				
IWB1	0.61	0.89	0.91	0.53
IWB2	0.73			
IWB3	0.75			
IWB4	0.69			
IWB5	0.65			
IWB6	0.77			

Items	Factor loadings	Cronbach's alpha	CR	AVE
IWB7	0.82			
IWB8	0.82			
IWB9	0.70			
Knowledge Sharing Behavior (KSB)				
KSB1	0.74	0.90	0.93	0.65
KSB2	0.74			
KSB3	0.77			
KSB4	0.85			
KSB5	0.89			
KSB6	0.79			
KSB7	0.83			
Team Climate Inventory (TCI)				
TCI1	0.62	0.95	0.95	0.60
TCI2	0.80			
TCI3	0.74			
TCI4	0.72			
TCI5	0.80			
TCI6	0.81			
TCI7	0.79			
TCI8	0.73			
TCI9	0.81			
TCI10	0.83			
TCI11	0.82			
TCI12	0.76			
TCI13	0.75			
TCI14	0.81			
Organizational Learning Culture (OLC)				
OLC1	0.80	0.90	0.93	0.68
OLC2	0.82			
OLC3	0.85			
OLC4	0.87			
OLC5	0.84			
OLC6	0.78			

Note. CR = Composite Reliability; AVE = Average Variance Extracted

Each of the remaining two variables, TC and OLC, demonstrated a rather high score as well, which indicated employees' positive perception of their current team environment (M = 4.17, SD = 0.60) and the degree of support provided by the organization on learning (M = 4.21, SD = 0.66). The intercorrelations provided in the table revealed that KSB was significantly positively correlated with IWB (r = 0.78, p < 0.01), providing support for *hypothesis 1*. Moreover, there was also a statistically significant positive correlation between TC and IWB (r = 0.54, p < 0.01). Therefore, *hypothesis 2*, which asserted that team climate is positively correlated with innovative work behavior, is supported by the data. Finally, it is noticeable that OLC was significantly positively correlated with IWB (r = 0.45, p < 0.01), allowing support for *hypothesis 3*. The relationship between IWB and the three independent variables that have been explored using statistical analysis is illustrated in *Figure 2* below.

Table 2. Means, Standard Deviations, and Intercorrelations (N = 155)

Variables	*M*	*SD*	1	2	3	4
1. IWB	3.92	0.61	-			
2. KSB	3.95	0.70	0.78*	-		
3. TC	4.17	0.60	0.54*	0.52*	-	
4. OLC	4.21	0.66	0.45*	0.43*	0.78*	-

*Note. *p < 0.01, two-tailed. IWB = Innovative Work Behavior; KSB = Knowledge Sharing Behavior; TC = Team Climate; OLC = Organizational Learning Culture*

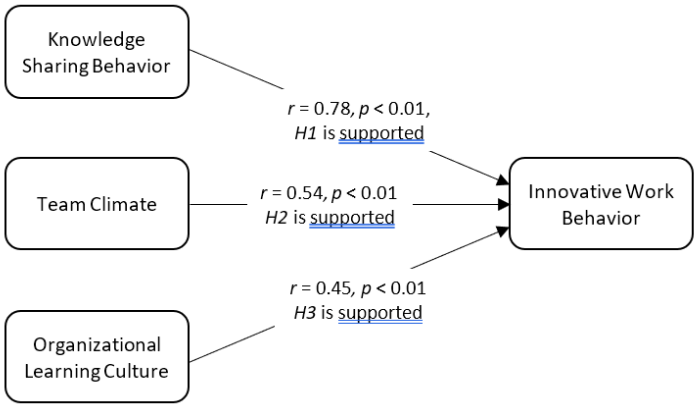

Figure 2. Summary of Hypotheses Testing between Study Variables

Since it is evident that there is a linear relationship between IWB and each of the three variables, a simple and multiple linear regression was performed to assess whether each of the independent variables would predict innovative work behavior. As illustrated in *Table 3*, the results of the simple linear regression indicated that knowledge-sharing behavior significantly predicted IWB, in which knowledge-sharing behavior accounted for 61.2% of the variance in IWB (F(1,153) = 241.54, p < 0.001, R_2 = 0.612). Moreover, the findings revealed that team climate was also a significant predictor of IWB, in which team climate explained 29.4% of the variance in IWB (F(1,153) = 63.76, p < 0.001, R_2 = 0.294). Similar to KSB and TC, it was apparent that organizational learning culture significantly predicted IWB, although organizational learning culture accounted for only 20.6% of the variance in IWB (F(1,153) = 39.68, p < 0.001, R_2 = 0.206).

Table 3. Results Summary of Simple Linear Regression Analysis (N = 155)

Variables	*B*	*β*	R^2	F
Knowledge Sharing Behavior	0.68	0.78*	0.61	241.54*
Team Climate	0.56	0.54*	0.29	63.76*
Organizational Learning Culture	0.42	0.45*	0.21	39.68*

Note. *p < 0.001. B = Unstandardized coefficient; β = Standardized coefficient; R^2 = Coefficient of determination; F = Significance test of regression models

When using a simple linear regression analysis, knowledge-sharing behavior showed the highest R square among the three predictors. *Table 4* displays the two models of multiple regression analysis carried out using the forced entry method to examine the collective contribution of all predictors. The first model included only the predictors, whereas in *model 2*, the demographic variables of this study, gender and age group, were added as control variables to investigate whether the effect of the predictors would remain observable when these demographic factors were controlled.

Table 4. Results Summary of Multiple Regression Analysis (N = 155)

Model and Variables	B	β	R^2	F
Model 1: Predictors only			0.64	88.95**
Knowledge Sharing Behavior	0.59	0.68**		
Team Climate	0.17	0.17*		
Organizational Learning Culture	0.02	0.03		
Model 2: Gender and age group included as control variables			0.65	54.58**
Knowledge Sharing Behavior	0.60	0.69**		
Team Climate	0.18	0.18*		
Organizational Learning Culture	0.01	0.01		
Male *(dummy)*	0.13	0.09		
Millennials *(dummy)*	0.00	0.00		

Note. *p < 0.05 and **p < 0.001

The results of *model 1* indicated that there was a significant collective effect of KSB, TC, and OLC on innovative work behavior (F(3,151) = 88.95, p < 0.001) since these predictors accounted for 63.9% of the explained variability in IWB. The regression coefficient for each predictor in the model suggested that knowledge-sharing behavior (β = 0.68, p < 0.001) and team climate (β = 0.17, p < 0.05) contributed significantly to innovative work behavior. On the contrary, organizational learning culture did not show significant contributions to the model. *Model 2*, in which gender and age group (millennials were participants within the age group of 21 to 40 years old) were included as control variables, generated an almost similar *R* square value *to Model 1*. This result suggested that in *model 2*, the three predictors, along with gender and age group, collectively influenced IWB (F(5,149) = 38.74, p < 0.001). However, it also showed that when the two control variables were included in this model, KSB and TC were the only variables that significantly contributed to variability in IWB, while OLC accounted for nearly 0% of the variance.

One of the main findings discovered in this study was that knowledge-sharing behavior predicted innovative work behavior. Employees who perceived themselves as showing frequent knowledge-sharing behavior also reported more frequency of innovative work behavior. This result is consistent with previous research asserted that knowledge-sharing behavior predicted innovative work behavior in Iranian high-tech companies (Akhavan et al., 2015), mediated the relationship between other constructs such as person-organization fit (Afsar, 2016) and openness to experience (Zuhdi and Etikariena, 2022) and innovative work behavior. In addition to the alignment with these previous findings, one of the three dimensions of innovative work behavior explained in Janssen's (2000) conceptual definition is idea promotion, which usually involves sharing new ideas with co-workers to obtain their support. Therefore, the results of this current study proved that the act of sharing knowledge, ideas, or information is indeed a strong indicator of displaying innovative work behavior.

The next key outcome that has been revealed in the primary analysis was that team climate influenced employees' innovative work behavior, in which those who perceived a positive team climate within their work units reported more frequent innovative work behavior. This outcome supported a content analysis study on factors affecting innovation (Zennouche et al., 2014) that found team climate as one of the group factors that can either foster or hinder individual innovation. Also, it is aligned with the results obtained in previous studies that initially developed and adopted the Team Climate Inventory, which confirmed team climate as one of the determinant factors of innovative work behavior (Scott and Bruce, 1994; Anderson and West, 1996, Chatchawan, et al.,

2017). It is worth mentioning, however, that despite the possibility of administering the TCI as a unidimensional scale, it originally consisted of four dimensions. One of the dimensions is support for innovation, which might be the strongest factor in predicting innovative work behavior.

The final key finding that can be derived from the hypothesis testing was that organizational learning culture predicted innovative work behavior, so workers who had a positive opinion of organizational learning culture reported more frequent innovative work behavior. Despite having limited literature that examined the relationship between organizational learning culture and innovative work behavior, this result is aligned with many previous studies. It was discovered that organizational learning culture was positively associated with technical innovation in Spanish employees (Sanz-Valle et al., 2011), played a critical role as a mediator in company culture and organizational innovation relationship in Iranian companies (Abdi et al., 2018), as well as moderated the relationship between leader–member exchange and innovative behavior on manufacturing workers in Korea (Jung et al., 2021). Referring to the content analysis research conducted by Zennouche, Zhang, and Wang (2014) also included organizational culture as one of the influencing factors of innovation, which is consistent with the results of the current study.

To summarize, the key theoretical contribution of this research is the evident influence of knowledge-sharing behavior, team climate, and organizational learning culture, each representing individual, group, and organizational factors to innovative work behavior. It is important to highlight that when these three factors are combined, knowledge-sharing behavior is the one that consistently shows a significant impact. Lastly, the present study empirically analyzes the predictors within the Indonesian context, specifically in a telecommunication company, which has been explored only to a limited extent. As for business practices, the research findings provide some insight into the importance of building a work environment that encourages learning as well as knowledge sharing. Similar to what was found by many previous studies, when there is enough room for employees to grow, sufficient organizational support perceived by employees, and wide opportunities for implementing work-life balance, not only could it improve employee performance but also foster a culture that encourages innovation (Umamy, 2021; Cornelis & Febriansyah, 2023; Rahmatika & Saragih, 2023).

CONCLUSIONS

The first key finding of the current study is that knowledge-sharing behavior is positively related to innovative work behavior in such a way that the more frequently knowledge-sharing behavior is displayed, the more frequently employees' innovative work behavior would be observed. This result supports the study hypothesis and is also aligned with previous research. Also, it is evident that team climate is positively related to innovative work behavior, in such a way that the more team climate is perceived positively, the more frequently employees' innovative work behavior would be demonstrated. This result also supports the research hypothesis and is consistent with previous findings on this topic. Lastly, organizational learning culture is positively related to innovative work behavior in such a way that the more learning culture is perceived positively, the more frequently workers' innovative behavior would be displayed. Similarly, this outcome supports the study hypothesis and is also in line with the relevant previous studies. When the three predictors are combined, it is evident from the results that they collectively influence innovative work behavior. However, when the other two factors were held constant, only knowledge-sharing behavior and team climate contributed significantly to the variability of workers' innovative behavior. In summary, it is important for researchers and managers always to consider both individual factors and contextual factors when assessing as well as developing strategies to improve employees' innovative work behavior.

LIMITATION & FURTHER RESEARCH

There are several limitations in this study that could be addressed and used as a reference for future research. Firstly, the use of convenience sampling in only a single company might affect the generalizability or external validity of the findings. Therefore, caution should be taken when applying the results beyond the current setting. Besides, there were a small number of participants in the present study, so employees in a few directorates, for instance, were not represented equally. A relatively low response rate could be due to some degree of employees' resistance toward surveys since the top management of the company usually performs follow-up actions on the annual employee survey results. Despite the informed anonymity and confidentiality of the survey, employees might feel uneasy about the possible consequences they might receive and thus be hesitant to disclose their opinions.

Moreover, the use of a self-administered questionnaire as a single data collection method led to some limitations in building thorough explanations of the findings since there was no further information to elaborate on. The adoption of the Likert scale might also increase the occurrence of social-desirability bias and tendencies to choose a neutral answer. The next thing that should be noted is the use of a cross-sectional instead of a longitudinal study. Collecting data at a single point in time, although faster and easier, usually generates a relatively weak internal validity since it can only explain correlations between variables without any causal inferences. Finally, the use of English in the survey might have an impact on how the participants built an understanding of the survey items since it was not in their native language, which led to possible misinterpretations.

Taking the limitations mentioned above into consideration, examining the predictors or other constructs as possible mediators or moderators might generate more comprehensive results to explain the relationships among study variables. As for the research methodology, adopting a longitudinal study and administering the survey to more than one company would be advisable as it would allow the results to be applied in a wider context. Should the replication of this study be conducted in companies with only Indonesian employees, administering the questionnaire in Bahasa Indonesia might be considered for future research to ensure an accurate understanding of the items. Furthermore, to enhance the number of responses in future studies, offering rewards such as e-wallet vouchers or reducing the number of survey items is recommended to make the process more attractive and less time-consuming for participants. Lastly, future researchers might also consider adopting a mixed method to investigate innovative work behavior further by conducting interviews or focus group discussions, which would generate a different source of information.

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