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Organizational Factors and Knowledge Sharing Behavior: Mediating Model of Knowledge Sharing Intention

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Abstract: This research investigates the mechanism of how organizational factors (including organizational climate, formalization, and centralization) impact knowledge-sharing behavior by considering knowledge-sharing intention as a mediator. After conducting online surveys and offline interviews, we utilized a quantities method with the PLS-SEM tool to examine the potential findings. This study's respondents were employees selected randomly from information technology enterprises in Vietnam; the final data set included 529 responses. The findings demonstrate that the organizational climate has a favorable link with knowledge-sharing behavior, whereas the remaining organizational factors, namely formalization and centralization, have a negative influence. Besides, this study found that knowledge-sharing intention plays a mediating role in these relationships. This research also provides some theoretical and practical implications, limitations as well as future research directions for further studies.

Keywords: Organizational Climate; Formalization; Centralization; Knowledge-sharing Behavior; Knowledge-sharing Intention.

1. Introduction

The advent of information technology has significantly transformed the way knowledge is obtained and shared across various fields, including its impact on knowledge-sharing practices among employees within organizations. Knowledge sharing is crucial in fostering innovation and creating new opportunities through continuous learning among employees (Lin, 2007). Knowledge workers who are responsible for exchanging valuable information during their professional duties must actively engage in knowledge sharing. Knowledge sharing behavior refers to the extent to which individuals within an organization actively share their knowledge with colleagues for professional purposes (Ryu et al., 2003). Successful knowledge-sharing practices enable businesses to adapt to changing environments and improve performance through innovation and timely product development.

Theoretical and empirical evidence have been provided to demonstrate the relationship between organizational factors such as centralization and formalization (Lee and Hong, 2014), organizational climate (Chen et al., 2012) and knowledge-sharing. The study is motivated by the relationship between employees' motivation to share knowledge and effective organizational knowledge management (Storey and Quintas, 2001). It focuses on examining the correlation between knowledge sharing intention and actual behavior within organizations, drawing from the theory of reasoned action (TRA) by Fishbein and Ajzen (1975) and the theory of planned behavior (TPB) by Ajzen (1991). These theories have been employed to investigate the relationship between intention and actual behavior in information spreading and have been influential in knowledge-sharing studies (Ryu et al., 2003; Bock et al., 2005; Reychav and Weisberg, 2010).

Prior research has provided a broader view of knowledge sharing in various contexts; however, there is a gap that no research has simultaneously considered the influence of organizational climate, centralization, and formalization on knowledge sharing behavior with the mediating role of knowledge sharing intention, particularly in developing countries like Vietnam. It is suggested extending research models to include individuals' actual knowledge-sharing behavior which means to investigate more into the mediating role of knowledge sharing intention in the relationship of organizational climate and knowledge sharing behavior (Bock et al., 2005). Another study of Mahmoudsalehi et al. (2012) gives a recommendation for future research to clarify the impact of formalization and centralization as independent variables on create, share and utility of knowledge with SEM approach.

The Vietnamese information technology (IT) industry has experienced significant growth, with numerous technology-based enterprises contributing to economic development. As the industry operates in a rapidly changing environment, knowledge sharing among employees plays a crucial role in enhancing productivity and innovation. However, previous research has encountered limitations in terms of survey range, data variability, and sample size, which have influenced the quality of research findings. This study aims to explore the relationship between organizational factors (organizational climate, formalization, and centralization), knowledge sharing behavior, and knowledge sharing intention in the Vietnamese IT industry by examining from various aspects, including the impact of organizational climate, formalization, and centralization on knowledge sharing behavior and intention, as well as the mediating role of knowledge sharing intention. The ultimate goal is to propose solutions that can improve the quality of knowledge sharing and foster better employee connections within the Vietnamese IT industry. Our research model is depicted in Figure 1.

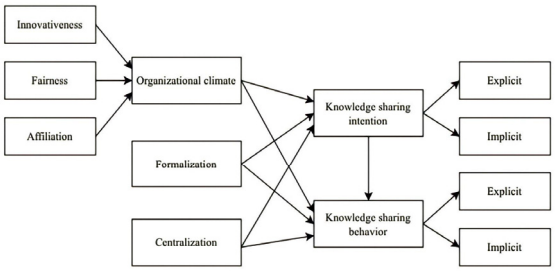


Figure 1. Research model

2. Theoretical Background and Hypothesis Development

2.1. Knowledge Sharing Behavior and Knowledge Sharing Intention

Knowledge sharing is the process of gathering and transmitting knowledge, which employees can contribute to the application of knowledge, innovation, and, ultimately, the organization's competitive advantage (Jackson et al., 2006). In the range of sharing information process, according to the primary theories, theory of reasoned action (Fishbein and Ajzen, 1975), the earlier stage of actual behavior is intention, which represents the future course of action to be happened (Castaneda et al., 2016). Ryu et al. (2003) also stated that individual knowledge-sharing behavior always commences with a behavioral intention.

According to Polanyi (1966), knowledge can be divided into two categories: explicit and implicit (tacit). While some types of implicit knowledge are either difficult or impossible to access, such as the cumulative experiences, creativity, and skills that individuals possess; explicit knowledge is available in the form of files, library collections, or databases (Nonaka and Takeuchi, 1996). It is generally acknowledged that conveying explicit knowledge is simpler than sharing tacit knowledge (Ipe, 2013).

According to the theory of reasoned action (TRA), intent can truly predict behavior. The relative strength of a person's desire to carry out an action and express behavior can be determined using behavioral intention related to the desire and willingness to share knowledge, which can also be used to predict behavior accurately (Wang and Noe, 2010). When predicting behavior, intention would be a very reliable variable (Ajzen, 1985). In the context of this research, knowledge-sharing intention is defined as the mental state of people who are willing to lend their expertise or resources to their coworkers in the business (Liu et al., 2013). Reychav and Weisberg (2010) showed that employees who are willing to share their tacit knowledge are likely to be willing to share their explicit knowledge in order to earn monetary and non-monetary benefits.

The theory of reasoned action (TRA) reflects the fact that a person's purpose to engage in a particular behavior, activity, or action determines their intended behavior (Fishbein and Ajzen, 1975). The best predictor of behavior is intention since action is generally determined by the purpose to act in a particular way. In TRA, Fishbein and Ajzen (1975) emphasized that the more frequently an action is to be intended, the more likely it is to be carried out. Multiple studies have applied this theory in their research to explain the relationship between intention and behavior of knowledge sharing.

Theory of planned behavior (TPB) basically a development of TRA that assesses perceived behavioral control (Ajzen, 1985). TPB defines a person's intention to engage in a specific behavior (Ajzen, 1985). The stronger the knowledge sharing intention, the more likely the knowledge sharing behavior to be performed. The intention should be clear and specific since it should be evident what the person wants to achieve and how it will be reflected in their behavior. Over the last few years, in the knowledge sharing field, several studies (Ryu et al., 2003) have applied TPB to analyze the relationship between intention and behavior to share knowledge.

Applying the above theories, the model had been used to examine the relationship between intention and actual behavior of knowledge sharing and has fulfilled as a root for empirical (Bock et al., 2005; Ryu et al., 2003) and theoretical (Reychav and Weisberg, 2010) studies that affect knowledge sharing.

2.2. Organizational Climate and Knowledge Sharing Behavior

Organizational climate is defined as a context connected with the ideas, feelings, and actions of the individual employee (Bock et al., 2005). It has a significant impact on how employees behave and is crucial for any organizational process improvement as well as widely recognized as an essential factor of knowledge sharing. Studies of Chin and Gopal (1995), Bock et al. (2005) developed the dimensions of organizational climate, including fairness (a climate that can build trust between employees), innovativeness (a climate that accepts failure and allows knowledge to flow freely) and affiliation (a climate characterized by pro-social norms, emphasized on connection between employees) to fit with the knowledge sharing concept.

Individual members are expected to share information as a result of *fairness*. Employees are more likely to engage in sharing knowledge activities to become experts in an organization if they can create mutual trust with and fairness from their manager (Kim and Mauborgne, 1997). Besides, employees in an innovative environment are more willing to share information as well as creative ideas and techniques (Kim and Lee, 1995) and by encouraging employees to share their ideas and form collaborative relationships, an organizational climate that encourages staffs' collective and collaborative knowledge sharing can promote organizational learning. Therefore, the first hypothesis is proposed:

H1: Organizational climate has a positive relationship with knowledge sharing behavior.

2.3. Formalization and Knowledge Sharing Behavior

Formalization, one of significant organizational factors, refers to how standardized an organization's jobs are and how much employee behavior is governed by rules and procedures (Andrews and Kacmar, 2001). Robbins and Decenzo (2001) also implies that standardization would make it impossible for members to engage in alternative behaviors and remove their desire to engage in conversations about potential alternatives. There is less need for organizational members to discuss how work is done because tasks are preprogrammed by the organization. An organizational structure that prioritizes formalization, including rules, regulations, and control systems may act as a barrier to the development of

knowledge-sharing communities in an organization. Damanpour (1991) stated that low formalization allows for openness and flexibility, which encourages employees to share the knowledge as they may feel comfortable and have the variability. A lack of formal structure tends to make it easier for organizational members to engage and communicate with one another in order to generate knowledge. We, therefore, hypothesized that:

H2: Formalization has a negative relationship with knowledge sharing behavior.

2.4. Centralization and Knowledge Sharing Behavior

Centralization refers to the locus of decision-making power in the hierarchical relationship at the top level within an organization (Robbins and Decenzo, 2001). Centralization builds a non-participatory workplace, which discourages employees from communication, commitment, and involvement in activities and projects (Damanpour, 1991). Communication between subordinates and superiors fosters knowledge sharing, which leads to a less centralized organization promoting greater knowledge sharing behavior (Wang and Noe, 2010). Ali et al. (2019) also indicated that an organization with less centralization will promote communication and exchange information among organizational members, which leads to an increase in knowledge sharing practices. Organizations with less centralization appear to foster information sharing more effectively as centralized structures only allow for vertical communication, while less centralization allows for both vertical and horizontal communication flow. As a result, the third hypothesis is proposed:

H3: Centralization has a negative relationship with knowledge-sharing behavior.

2.5. Organizational Climate, Knowledge Sharing Intention, Knowledge Sharing Behavior

Studies of Chen et al. (2012) noted that good organizational climate can be positively associated with intention to involve in sharing knowledge, which places a strong emphasis on fairness, innovativeness, and affiliation significantly affects employee's knowledge sharing intention and behavior. In accordance with TRA (Ajzen and Fishbein, 1975), a person's purpose to engage in a particular behavior, activity, or action determines their intended behavior and in TPB, Ajzen (1985) stressed that the stronger the knowledge-sharing intention, the more likely the knowledge sharing behavior to be performed. Therefore, when the organizational climate positively affects the intention to share knowledge, the stronger the intention is, the more likely they are to engage in this behavior. Based on the above factors, the following hypotheses can be proposed:

H4: Knowledge-sharing intention mediates the positive relationship between organizational climate and knowledge-sharing behavior

2.6. Formalization, Knowledge Sharing Intention, Knowledge Sharing Behavior

Eze et al. (2013) indicated that less formalization will lead to a work environment which is less bureaucratic and more responsive to enable employees to express their ideas more freely, therefore, formal structure without allowing possibilities for flexibility may postpone achieving the intention of sharing knowledge. Lee and Hong (2014) also examined the relationship between organizational structure, knowledge sharing intention and knowledge sharing behavior. The more the desire to share, the more ability of employees to conduct sharing behavior. Therefore, when formalization negatively affects the intention to share knowledge, and the intention to share knowledge is likely to parallel the behavior, we hypothesized that:

H5: Knowledge sharing intention mediates the negative relationship between formalization and knowledge sharing behavior

2.7. Centralization, Knowledge Sharing Intention, Knowledge Sharing Behavior

Similar to formalization, few academics have studied how information-sharing intention affects the link between centralization and knowledge-sharing behavior. Lee and Hong (2014) also stated that organizational structure, which includes centralization, has a negative impact on employees' intentions to share knowledge, but there is a positive relationship between intentions and behaviors. Since a person's intention to engage in a particular behavior, activity, or action determines the desired behavior (Ajzen and Fishbein, 1975), it can be stated that the stronger the intention to share knowledge, the greater the probability it is that knowledge-sharing behavior will be conducted. Therefore, when centralization negatively affects the intention to share knowledge, the stronger the intention is, the more likely they are to engage in this behavior. Based on the above factors, the sixth hypothesis can be proposed:

H6: Knowledge-sharing intention mediates the negative relationship between centralization and knowledge-sharing behavior

3. Methodology

3.1. Sample and Data Collection

The author used a mix of two survey forms, a direct survey form and an online survey form via the Google Form tool, with the form including selected questions as the observed variables. The respondents of this study were employees selected randomly from information technology enterprises in Vietnam, especially companies based in Ha Noi city. We distributed the questionnaires to the target respondents (after employing a back-translated method from the original scales in English to Vietnamese). After collecting survey results, we collected a total of 543 samples, through preliminary screening retained 529 valid samples. The data was eliminated because respondents chose the same responses to all of the questions and some respondents had missing variables when answering the questions. Thus, the final data set included 529 responses.

Among 529 responses, females made up 54.3%, while males made up 45.7%. The bulk of respondents (53.1%) are under the age of 25. 72.6% have a bachelor's degree, whereas 21% have a master's degree. Of the 529 samples collected, 224 people have been with their current business for less than 1 year, accounting for the highest proportion with 42.3%. The second largest proportion (31.4%) are employees who have worked at the company for 1 to 3 years with 166 survey samples. The majority of respondents are working for private enterprises with 183 people, accounting for 35.3%%. Followed by those with limited liability companies accounted for 20.2% (107 people). In order to diversify the scale of the

enterprise, we decided to conduct surveys with employees in enterprise sizes ranging from under 50 to more than 300. The highest portion is small enterprises with 191 responses, accounting for 36.1%. With a slight difference, 177 employees are working in a company with a size from 50 to 100 people, which is the second highest portion making up 33.5%.

3.2. Measures

All constructs were assessed using a five-point Likert scale and the respondents rate the level of agreement from 1 (strongly disagree) to 5 (strongly agree).

Organizational climate was measured by a ten-item scale of three dimensions (fairness, innovativeness, and affiliation) which is a formative second-order factor built by Chin and Gopal (1995) was used to measure the working environment of employees. Sample items included "I trust the project manager's evaluation to be good" (fairness), "Our team encourages suggesting ideas for new opportunities" (innovativeness), and "Members in our team maintain close ties with each other" (affiliation). Cronbach's alpha values of these dimensions were all above 0.7, specifically fairness: 0.718, innovativeness: 0.747, and affiliation: 0.770.

Formalization was measured using a scale containing six items developed by Willem and Buelens (2007) and Patnayakuni et al. (2006) to indicate the degree to which an organization's jobs are standardized and how much employee behavior is restricted by rules and procedures. A sample of this scale inculded "Formal procedures determine how we work together in the organization". Cronbach's alpha for formalization scale was 0.839.

The scale to measure centralization was a three-item scale developed by Germain (1996) and Andrews and Kacmar, (2001) to assess the locus of decision-making power in the hierarchical relationship at the top level within an organization. A sample item is "Employees have the autonomy to do their work" and Cronbach's alpha for the centralization scale was 0.730.

To measure knowledge sharing intention, authors used a seven-item scale developed by Bock et al. (2005) and adopted by Reychav and Weisberg (2010), including two dimensions, such as explicit knowledge sharing intention and implicit knowledge sharing intention considered as reflective factors to measure the mental condition of those who are eager to share their skills or resources with their business colleagues. Sample items included "I will share my work reports and official documents with members of my organization more frequently in the future" (explicit knowledge sharing intention), and "I intend to share my experience, know-how, and personal working tips with other organization" (implicit knowledge sharing intention). Cronbach's alpha of explicit knowledge-sharing intention was 0.721 and the implicit knowledge-sharing intention was 0.775.

Knowledge-sharing behavior was measured by using a sixteen-item adopted by Bock et al., 2005 including two dimensions, such as explicit knowledge-sharing behavior and implicit knowledge-sharing behavior considered as reflective factors was utilized to evaluate group behaviors that promote learning and improve members' ability to achieve goals through exchanging knowledge, skills, and experience across departments or organizations. Scale items contained "I frequently share work reports and official documents with members of my organization" (explicit knowledge sharing behavior), and "I frequently share knowledge of know-where or know-whom with other organizational members" (implicit knowledge sharing behavior). Cronbach's alpha values for these dimensions are all above 0.8 (explicit knowledge-sharing behavior: 0.880, and implicit knowledge-sharing behavior: 0.889).

3.3. Data Analysis

In this research, quantitative analysis was performed using PLS-SEM, specifically the SMARTPLS 4.0 software package. The main reason explained is that SMARTPLS have built in for the use of both reflective and formative scales, which correspond to this study. PLS-SEM is a non-parametric method that does not require normally distributed data. It is worthwhile noting that PLS-SEM can handle well even with a small sample size, which is applicable to the number of survey samples distributed by the authors. As a result, PLS-SEM with a two-step analytical approach was chosen to evaluate both the measurement model and the structural model. The measurement model was assessed in the first stage by executing an algorithm in SMART PLS 4.0; the structural model was then validated. Bootstrap resampling approach (randomly 5,000 subsamples) was used to evaluate the theoretical model and proposed hypothesis.

4. Results

4.1. Common Method Variance

Common method variance is a problem when respondents answer the items in a single questionnaire at the same time or the implication of data in different factors but quite similar (Podsakoff and Organ, 1986). Harman's single factor test is a popular tool for detecting common method variance. The authors conducted a Harman test by EFA analysis on SPSS software. The results showed that the percentage of variance value of the first factor in the Extraction Sums of Squared Loadings column equals 47.025% < 50%, indicating that there is no common method variance in this survey. Thus, the data set is reliable and can be used for further hypothesis testing.

4.2. Measurement Model Evaluation

Table 1 shows the validity and reliability tests for first-order constructs. All objects had factor loadings greater than 0.5. Cronbach's Alpha values for first-order constructs ranged from 0.718 (fairness) to 0.889 (implicit knowledge sharing behavior). All first-order constructs' Composite Reliability (CR) values surpassed 0.7, with the smallest CR at 0.842 (fairness) and the highest CR at 0.912 (implicit knowledge sharing behavior). The AVE values were all greater than 0.5, ranging from 0.544 to 0.664. As a result, all first-order constructs met the standards for reliability and validity for establishing higher-order constructs and structural model analysis. (Hair et al., 2019; Ringle et al., 2020).

To handle the second-order hierarchical latent variables, including organizational climate, knowledge sharing intention, and knowledge sharing behavior, we used the repeated indicators approach proposed by Becker et al. (2012). After processing the second-order model, the model returns to the basic first-order model, the second-order latent variables turn into first-order latent variables, the first-order latent variables become observed variables, the author evaluates the new measurement model. Table 2 shows the validity and reliability testing of several factors. These constructs' Cronbach's Alpha coefficients varied from 0.730

(centralization) to 0.924 (knowledge sharing behavior), demonstrating internal consistency. The Composite Reliability (CR) and Average Variance Extracted (AVE) values were compared to Fornell and Larcker (1981) standards of 0.7 and 0.5, respectively. The results showed that all CR and AVE values met the acceptable parameters. The Fornell and Larcker criterion was used to examine the discriminant validity of the constructs, which states that the square root of the average variance retrieved by a construct must be larger than the correlation between the construct and any other construct. In this study, Fornell and Larcker results ranged from 0.759 to 0.964, all of which met the requirement. As a result, the measuring model demonstrated both reliability and validity.

Table 1. First-order constructs validity and reliability

Constructs		Cronbach's Alpha (>0.70)	Composite Reliability (>0.70)	AVE (>0.50)
Organizational climate	Innovativeness	0.747	0.856	0.664
	Fairness	0.718	0.842	0.639
	Affiliation	0.770	0.853	0.592
Knowledge sharing intention	Implicit knowledge sharing intention	0.775	0.856	0.598
	Explicit knowledge sharing intention	0.721 0.889	0.843 0.912	0.592 0.563
Knowledge sharing behavior	Implicit knowledge sharing intention	0.880	0.905	0.544
	Explicit knowledge sharing intention	0.747	0.856	0.664

Table 2. Second-order constructs validity and reliability

Constructs	Cronbach's Alpha (>0.70)	Composite Reliability (>0.70)	AVE (>0.50)	Inner VIF	Fornell-Larcker criterion			
					Formalization	Centralization	Knowledge sharing intention	Knowledge sharing behavior
Formalization	0.816	0.872	0.576	3.528	0.759			
Centralization	0.730	0.847	0.649	2.914	0.753	0.806		
Knowledge sharing intention	0.864	0.936	0.880	4.577	-0.799	-0.762	0.938	
Knowledge sharing behavior	0.924	0.964	0.930	N/A	-0.820	-0.780	0.885	0.964

4.3. Measurement Assessment of Organizational Climate

We generated a superordinate second order component utilizing the factor scores of first order variables (fairness, innovativeness, and affiliation) because our research model incorporates a second order factor (organizational climate). Table 3 displays the weights of formative indicators associated with organizational climate elements. Weights are estimated based on the overall model in component-based structural equation modeling, which provides significant insight into the meaningfulness of the formative indicator and its relative importance in the context of the nomology.

Table 3. Formative indicator weights

	Original sample (O)
Innovativeness -> Organizational climate	0.371
Fairness -> Organizational climate	0.383
Affiliation -> Organizational climate	0.352

4.4. Structural Model Evaluation and Hypotheses Testing

The author used a bootstrapping approach with 5000 resamples to analyze the structural model in order to test the hypothesized mediation model. To test the hypotheses about mediation effects, the model was evaluated using R2 values (explained variance), f2 values (effect sizes), Q2 value (the model's predictive capacity), path coefficients, t-values, p-values, and the 95% confidence interval (CI) (Hair et al., 2019).

The results showed the R2 value for knowledge sharing behavior was 0.850, suggesting a high degree of explained variance and a high level of Q2, showing that the proposed model has strong predictive potential. The R2 value for knowledge sharing intention was also 0.781. The change in R2 when a certain exogenous component was removed from the model was assessed by effect sizes (f2). Small, medium, and big correspond to f2 threshold values of 0.02, 0.15, and 0.35, respectively (Cohen and Diamant, 2019). The effect sizes of organizational climate on knowledge sharing behavior (f2 =0.141) were small, which was in the same level with the effect size of formalization (f2 =0.051) and centralization (f2 =0.028).

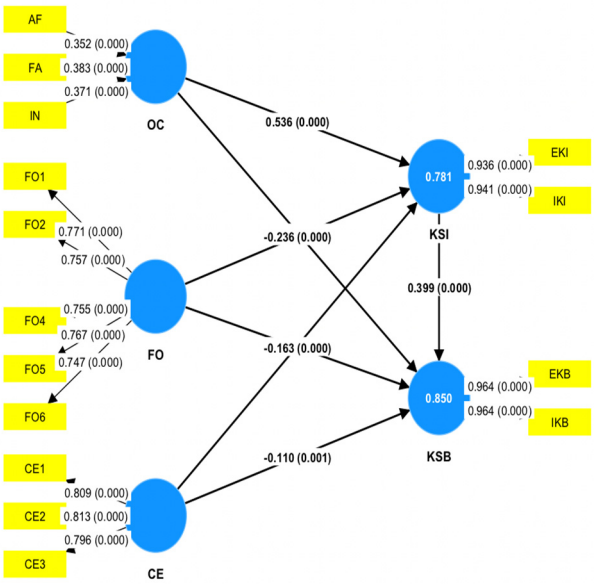


Figure 2. Result of testing mediation model

Table 4 summarizes the path coefficients for direct effects, indirect effects, and the total effect of structural model estimation. The results showed a significant main effect of organizational climate on knowledge sharing behavior (b = 0.530, t=15.119, p=0.000), a significant effect of formalization on knowledge sharing behavior (b = -0.258, t=7.618, p=0.000), and centralization on knowledge sharing behavior (b = -0.179, t=5.117, p=0.000), supporting hypothesis 1, hypothesis 2, and hypothesis 3.

We evaluated the indirect impacts to test the mediation hypotheses. According to hypothesis 4, knowledge sharing intention mediates the link between organizational climate and knowledge sharing behavior. The findings revealed a significant indirect relationship between organizational climate and knowledge sharing behavior through knowledge sharing intention (b=0.214, t=8.420, p=0.000<0.05; % CI [0.166;0.266]), indicating that hypothesis 4 was supported. Similarly, hypothesis 5 stated that knowledge sharing intention acts as a mediator for the relationship of formalization and knowledge sharing behavior, showing that the indirect relationship between formalization and knowledge sharing behavior via knowledge sharing intention was significant (b=-0.094, t=4.819, p=0.000; % CI [-0.135;-0.058]), supporting hypothesis 5. Hypothesis 6 was also supported with the results of (b=-0.069, t=4.130, p=0.000; % CI [-0.103; -0.037]), indicating the mediating role of knowledge sharing intention in the relationship between centralization and knowledge sharing behavior.

Furthermore, even in the presence of knowledge sharing intention, the direct effect of organizational climate on knowledge sharing behavior (b=0.316, t=8.157, p=0.000), formalization on knowledge sharing behavior (b=-0.163, t=4.734, p=0.000) and centralization on knowledge sharing behavior (b=-0.110, t=3.450, p=0.001) was significant. As a result, knowledge sharing intention partially mediates the positive relationship between organizational climate and knowledge sharing behavior and the negative relationship between formalization and knowledge sharing behavior as well as the negative link between centralization and knowledge sharing behavior.

Table 4. Results of structural model evaluation

	Relationship	Path Coeff	SD	T-value	p-values	95% CI		Remarks
						LLCI	UPCI	
	Total Effect							
H1	Organizational climate -> Knowledge sharing behavior	0.530	0.035	15.119	0.000	0.461	0.598	Significant
H2	Formalization -> Knowledge sharing behavior	-0.258	0.034	7.618	0.000	-0.324	-0.190	Significnat
H3	Centralization -> Knowledge sharing behavior	-0.179	0.035	5.117	0.000	-0.248	-0.110	Significant
	Organizational climate -> Knowledge sharing intention	0.536	0.040	13.410	0.000	0.457	0.614	Significant
	Formalization -> Knowledge sharing intention	-0.236	0.042	5.581	0.000	-0.319	-0.155	Significant
	Centralization -> Knowledge sharing intention	-0.173	0.037	4.620	0.000	-0.244	-0.098	Significantt
	Direct Effect							
	Organizational climate -> Knowledge sharing behavior	0.316	0.039	8.157	0.000	0.241	0.393	Significant
	Formalization -> Knowledge sharing behavior	-0.163	0.035	4.734	0.000	-0.231	-0.094	Significant
	Centralization -> Knowledge sharing behavior	-0.110	0.032	3.450	0.001	-0.174	-0.049	Significant
	Indirect Effect							
H4	Organizational climate -> Knowledge sharing intention -> Knowledge sharing behavior	0.214	0.025	8.420	0.000	0.166	0.266	Significant
H5	Formalization -> Knowledge sharing intention -> Knowledge sharing behavior	-0.094	0.020	4.819	0.000	-0.135	-0.058	Significant
H6	Centralization -> Knowledge sharing intention -> Knowledge sharing behavior	-0.069	0.017	4.136	0.000	-0.103	-0.037	Significant

5. Discussion and Implications

This study investigates the relationships between organizational factors and knowledge sharing behavior within the Vietnamese IT industry, with a particular focus on the mediating role of knowledge sharing intention. The findings contribute to the existing literature on knowledge sharing, climate, and organizational learning, as well as knowledge management, by offering insights into the unique factors that encourage and facilitate knowledge sharing among IT professionals in a developing country context. The study revealed that the organizational climate, encompassing aspects like fairness, innovativeness, and affiliation, significantly influences both knowledge sharing behavior and intention, which aligns with the findings of previous researchers (Bock et al., 2005). Notably, positive organizational climates create an environment conducive to knowledge-sharing behavior, and intention. Such a supportive climate encourages employees to openly discuss and share their expertise, actively seeking knowledge from colleagues, thereby enhancing the overall knowledge-sharing culture.

On the other hand, the research also identified a negative association between formalization and knowledge sharing behavior and intention, consistent with previous studies conducted by Chen and Huang (2007). This suggests that low formalization leads to relatively unstructured job behaviors and greater individual autonomy in dealing with relevant tasks. The insignificant relationship of formalization and knowledge sharing activities indicates that focusing on formal structure without allowing possibilities for flexibility may be unable to achieve the significant benefits of knowledge sharing activities.

Furthermore, centralization was found to have a negative impact on knowledge sharing behavior and intention. A centralized decision-making structure, where knowledge dissemination is coordinated from top to bottom, fosters a unified knowledge-sharing approach throughout the organization. Our findings support other earlier studies by Wang and Noe (2010) that found that knowledge sharing increased in a less centralized structure, as it provides a friendly environment which increases the chance for the staff interactions and more knowledge sharing practice suggesting that managers can increase knowledge sharing by creating a less centralized structure that supports communication among employees as knowledge sharing can increase when it is embedded in the daily work routines and shared in informal meetings in open workspaces (Ali et al., 2019). To contextualize and enhance the significance of the research findings, a comparison was made with previous relevant studies. Lin (2007) explored the connection between knowledge sharing and firm innovation capability, underscoring the importance of knowledge sharing within organizations for fostering innovation. This aligns with our study, as it highlights the role of organizations in promoting knowledge sharing behavior among IT professionals to enhance their innovative capabilities.

The findings of this study inform practitioners in several practical ways and can help them implement interventions in their organizations. First, given the positive effect of organizational climate on knowledge-sharing behavior, organizations should make significant efforts to develop and enhance the environment within their organizations. Innovativeness has the highest positive effect on knowledge sharing behavior and knowledge sharing intention, organizations should drive more innovation. Providing relevant training programs and actively implementing innovative systems. For example, emphasis should be placed on cultivating and supporting different groups in the human resources team. An important task in the innovation process is to create an environment that allows individuals to be creative and to disagree, as well as to support them psychologically when they must. In addition, the findings of the study show that the effects of fairness and affiliation on knowledge-sharing behavior and are stronger. If organizations foster a supportive climate in knowledge sharing, employees are more likely to repay them by being more engaged in sharing their knowledge.

Second, another practical recommendation is that organizations need to pay attention to maintaining and strengthening employees' knowledge-sharing behavior, which is positively influenced by organizational efforts (for example, leader support and supportive organizational climate). Centralization vs formalization has a negative effect on knowledge sharing behavior and knowledge sharing intention, which means to improve knowledge sharing behavior and knowledge sharing intention, organizations should decentralize and less formalize. For example, daily operations and decision-making power are delegated by top management to middle-and lower-level managers -- and sometimes even team members in order to foster an autonomy culture. Instead of giving orders vertically, leaders should consult with employees for input. Besides, it is also the leader who should learn, need to learn, not only expertise to improve skills or management skills, but the core is to learn to accept change, learn to adapt, learn to be flexible in the new age or learn to think open-mindedly.

The study has achieved the research objective of the influence of the organizational environment on knowledge sharing behaviors and intentions. However, this study still has certain limitations that warrant further investigation. Firstly, the cross-sectional nature of the research design and data collection at a single point in time restricts the ability to establish causal relationships among the variables. To gain a better understanding of causality, future studies could employ a longitudinal design to examine the temporal relationships between the variables. Secondly, the study did not consider the control variable, hereinafter is age, experience, and company size. Therefore, the direction for future research may put control variables as especially influential factors. Finally, knowledge management as well as the intention and behavior of knowledge sharing is one of the typical and significant topics for research and organizational development. However, within the framework of this research paper, the authors only focus on organizations in the IT field. Therefore, the future research can explore, analyze other specific fields or research in more extensive areas.

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