



# **The Mediating Effect of Knowledge Sharing Between Organizational Climate and Individual Innovative Behavior in UAE Organizations**

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## **ABSTRACT**

In the age of digitalization, globalization, and rapid changes, an innovative workforce is essential for success. A literature study indicates extensive research on the mediating role of knowledge sharing (KS) between organizational climate (OC) and innovative work behavior. This study examines the mediating role of knowledge sharing between organizational climate and innovative work behavior in United Arab Emirates (UAE) public institutions. The researcher will adopt a cross-sectional approach because measurement of sample behavior is done at a single point in time. The study collected a large amount of data to address knowledge sharing in the organizational climate and individual innovative behavior (IIB) in the UAE. Multiple regression analysis is adopted to analyze the data and presents the findings.

Keywords: organization climate (OC), individual innovative behaviour (IIB), innovation, knowledge sharing(KS)

## **1. Introduction**

In the age of digitalization, globalization, and rapid changes, an innovative workforce is essential for the organization's success. Hence, among the personnel, innovative work behavior in the organization has attracted the interest of organizational practitioners and researchers in management (Udin, 2022). Organizations must continue to emphasize innovation built from knowledge to survive in today's highly competitive business environment. Organizations can develop new values to advance their growth and development through knowledge sharing (KS) (Yu, Yu, & Yu, 2013). Ndah et al. (2017) defined innovation as "people creating value through implementing new ideas." Besides, innovation can be perceived as implementing a new idea. According to Kwan and Kim (2019), innovation implements radical and novel ideas. An organization's innovation capabilities are strongly dependent not only on the organization's policies but also on the skills and behaviors of the employees and the organizational climate (OC) that promote creativity (Mussner, Strobl, Veider, & Matzler, 2017), which is the generation of novel and useful ideas (Saether 2019).

Innovation culture necessitates collaboration and working together in exchange and sharing knowledge, experience, and ideas. Knowledge sharing is an essential process to promote innovation by exchanging ideas and discussing among the workforce to generate novel ideas (Ghazali, San Long, & Ghazali, 2014). The mediate role of knowledge sharing, Ghazali, San Long, and Ghazali (2014) studied the mediating effect of knowledge sharing on technological innovation and organization in private sector organizations. Akhavan et al. (2015) conducted an empirical study on knowledge sharing innovative behavior and organizational climate from a cross-level analysis perspective. Of all the previous studies, no research has been conducted in the mediating role of knowledge sharing between organizational climate and innovative work behavior. Relying on the idea that knowledge sharing and organizational climate can become keys to productiveness and innovation, this paper proposes that knowledge sharing mediate the relationship between innovative organizational climate and individual innovative behavior. Thus, appropriate related data must be collected, factors are identified, and impacts are examined and evaluated to propose reflections for managers in organizations.

## **2. Literature Review**

The literature synthesis is divided into sub-parts to separate the analysis of different issues such as individual innovation behavior, the influence of organizational climate on the individual innovation behavior, the importance of knowledge sharing role.

### **2.1 Individual Innovative Behavior (IIB)**

The concept of the IIB is important to characterize the particular employee's capability to influence the organization's performance. The attitude to work and perform daily activities can become important (Latif et al., 2017). Among the common examples, personal creativity can become a solid contribution

to positive transformations in teamwork. In the same way, it can lead to increased company productivity (Strobl et al., 2018). The detailed analysis proves that the importance of individual innovation behavior has a solid theoretical and empirical background. Even though individual innovation behavior is defined differently in various sources, many common qualities exist. Latif et al. (2017) defined individual innovation behavior (IIB) as an inherent component of daily organizational operations, where employees develop creativity and imagination to generate unique ideas that contribute to the overall growth. In another study, Strobl et al. (2018) defined IIB as a fundamental driver of corporate innovations. People are elements that create working teams. Therefore, the more innovative behavior they develop individually, the more contribution they can make to the overall achievements of an organization's strategic goals. Since IIB directly affects the attainment of strategic goals, its importance is highly valued in today's business world, as claimed by Latif et al. (2017), which makes it crucially important to investigate and renovate. When the development of the behavior is controlled and balanced, firms can ensure that the results will be constantly improved.

IIB cannot exist without effective knowledge sharing and dissemination of the information within the organization. Wang and Xue (2017) noted that subjective well-being, a product of knowledge sharing, positively contributes to the development of innovative behavior. Employees cannot handle complex thinking processes on their own; therefore, collaborative communication supports and provides them with the ability to learn and generate unique ideas. The more they learn, the more ideas they can potentially generate (Wang & Xue, 2017). Oppositely, the absence of knowledge sharing, communication, and learning will limit individual innovation behavior. Wang and Xue (2017) proved the validity of these assumptions by studying 20 medium-size enterprises, which allowed them to identify that those organizations that encouraged extensive communication and knowledge sharing managed to establish stable conditions for the development of individual innovativeness. Various, the organizations, which had not promoted knowledge dissemination, majorly lacked stable and flexible changes both at individual and collective levels. IIB is directly correlated to the extent to which the knowledge is successfully shared and adopted across the organization.

It is important to remember that the significance of the factors that affect IIB varies in different firms. Nevertheless, Melhem et al. (2018) managed to find the common tendency for all 328 surveyed employees across different departments of 4- and 5-stars hotel groups. It turned out that the most influential factor was workplace happiness. In its turn, workplace happiness depended on good relationships between workers and executives, the absence of conflicts, good possibilities for daily development, strictly followed working time, abilities for growth and learning, and chances for promotion. As long as employees are happy, they will tend to share their IIB with others, thus promoting the general development of their teams (Melhem et al., 2018). More importantly, when workers are satisfied with their work conditions, they tend to create a good environment for collaboration that positively affects organizational performance.

## **2.2 Organizational Climate (OC)**

Organizational climate and innovations are interrelated concepts. Litwin and Stringer (1968) identified organizational climate as the sum of the perception of members of the organization concerning its internal norms and corporate culture (Litwin & Stringer, 1968). In addition, the scholars emphasize that OC is a distinctive characteristic that must unify the company members (Al Shobaki, Abu-Naser, Abu Amuna, & El Talla, 2018). OC can also be viewed as how an individual perceives the organization and shapes opinions regarding autonomy, structure, rewards, and support. In general, OC is the interaction of a person with an organizational environment, which guides individual behavior patterns. OC is a system that plays an integral role in adopting innovations. From the theoretical perspective, the innovative climate is the accumulation of cultures, values, and beliefs within the organizational environment that can foster the development of innovations (Grau, Goddard, Hall, Hazelkorn, & Tandon, 2017). Madhukar and Sharma (2017) cited Moos (1994), indicating the following factors of OC: workers' involvement, support, cohesion, autonomy, task orientation, clarity, managerial control, and innovation. However, OC can have a powerful effect on individual, collective and organizational innovations. Bibi et al. (2020) claim that OC can motivate employees to take actions and apply strategies on the individual level, thus generating ideas. Indeed, the climate must provide sufficient conditions for integrating the strategies, ensuring that individuals can correct their mistakes if necessary. On the collective level, OC positively affects team innovations by fostering a collaborative environment where all entities cooperate and develop strategies towards a shared goal. Lastly, an individual and collective commitment to innovations leads to the overall innovations-inclusive organizational culture, which positively affects the development and generation of ideas.

## **2.3 Knowledge Sharing (KS)**

Knowledge is a critically important element for any rapidly-growing, progressive organization. In organizations, the knowledge is usually subcategorized into individual and organizational knowledge. In general, individual knowledge is the understanding of some facts or processes. Organizational knowledge, in turn, is the accumulation of all individual-level shreds of knowledge that can bring some business value to the organization (Cheng, Huang & Kuo, 2015). However, to ensure that the employees accumulate information, it must be exchanged according to the particular procedure. Knowledge sharing is an integral element of adopting innovations and establishing an effective organizational climate. Lepik and Krigul (2014) claim that positive organizational changes are influenced by accelerated knowledge sharing. KS is the process of passing down the information by different entities such as individuals or departments.

According to Cai and Shi (2020), the knowledge can be transferred through mentorship, guided experience, paired work, cooperation, practice community, and collective thinking. In the present day, the process of KS is significantly easier than it used to be due to the availability of a great number of technological resources such as social media that simplifies communication at all levels of the organization. On average, it requires two times less time to pass the message than ten years ago (Cai & Shi, 2020). In light of this fact, KS can be characterized as a contemporary model of communication that

connects different entities into the communication net, through which information can be disseminated. Many more definitions of KS that characterize the process can be found. However, one of the essential features that make knowledge sharing distinctive from the similar notion of knowledge transfer is that the individual always knows well the recipient of the information (Cheng, Huang & Kuo, 2015).

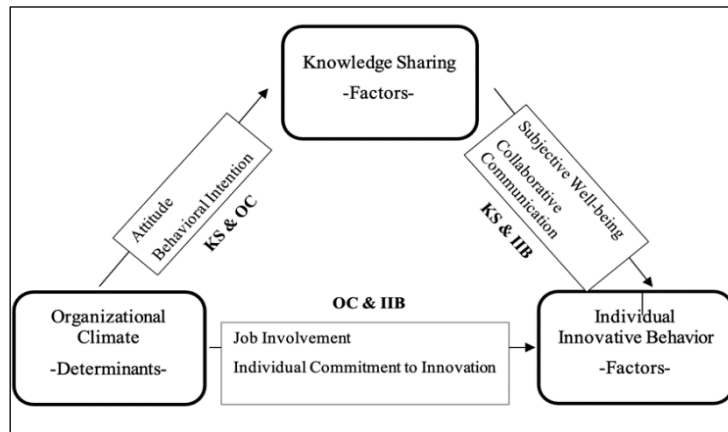


Fig. 1 - Framework for the Relationship between OC and IIB and the Mediating Effect of KS.

### 3. Methodology

The study applied a cross-sectional approach because measurement of sample behavior is done at a single point in time. The study adopts primary data to answer research objectives by using a causal research study. The researcher adopted a survey for this particular study because of its association with the deductive method. The study collected a large amount of data to address knowledge sharing in the organizational climate and individual innovative behavior in the UAE. The researcher adopted a questionnaire approach to collect primary data, while secondary data was gathered from reputable publications, including journals, books, government reports, and quality press. Concerning quantitative data analysis, the researchers have to deal with the numbers of different kinds. Three foundation principles for quantitative data analysis exist determination of the questions for an examination, identification of assessment techniques, and description of the methods to conduct deep-level analysis of the data (Albers, 2017). All of these principles were applied to the present research. At first, the surveys were designed for each cluster of participants. Secondly, liker-scales and multiple-choice questions were created to collect and classify the data. Finally, the critical thinking approach was taken to analyze the research results. Concerning data analysis, multiple regression was suitable for this research as the approach makes it practical to understand how far an outcome variable can be anticipated when all predictors are known.

### 4. Results

The current study aimed at analyzing the relationship between organizational climate (OC) and individual innovative behavior (IIB) in UAE Organizations. It was critical to identify the determinants of OC that affect IIB and illustrate the significance of knowledge sharing (KS) as a mediator between OC and IIB. To attain these goals, the research recruited 140 respondents.

On IIB, participants admitted a low level of innovativeness, as neither of the Mean results exceeded the measurement, indicating a positive evaluation of IIB. Participants were either unsure or did not consider that they obtained innovativeness. The highest scores were obtained by items indicating cooperativeness ( $M = 2.96$ ;  $SD = 1.33$ ) and availability of resources in the organization ( $M = 2.95$ ;  $SD = 1.26$ ). This means that the organization obtains the necessary resources for innovativeness. The items with the lowest scores were related to support of new ideas by management ( $M = 2.15$ ;  $SD = 1.26$ ) and respect by leadership of creativity ( $M = 2.18$ ;  $SD = 1.31$ ).

On OC, participants showed a low level of organizational climate. The highest scores were obtained by items related to the access to resources in case of high workload ( $M = 2.72$ ;  $SD = 1.27$ ) and opportunities for training ( $M = 2.67$ ;  $SD = 1.39$ ). Such results refer to the possibility that organizations have some resources for their employees on-demand. The items with the lowest scores were related to relationships with superiors ( $M = 1.96$ ;  $SD = 1.27$ ) and the ability of superiors to listen to the employees ( $M = 2.15$ ;  $SD = 1.28$ ).

Participants also showed a low level of knowledge sharing (KS). Items that scored the highest related to rewards for knowledge sharing ( $M = 2.76$ ;  $SD = 1.24$ ) and opinions of colleagues regarding knowledge sharing ( $M = 2.53$ ;  $SD = 1.19$ ). These results could indicate that knowledge sharing exists as a topic for conversation in the organization. Items scored the lowest referred to the evaluation of personal knowledge sharing ( $M = 2.09$ ;  $SD = 1.25$ ), effort to share knowledge in future ( $M = 2.11$ ;  $SD = 1.24$ ), and possibility to share knowledge to solve problems ( $M = 2.12$ ;  $SD = 1.13$ ).

#### 4.1 Regression Analysis

As the analysis shows, OC and IIB are significantly correlated ( $p = 0.00$ ;  $p \leq 0.05$ ), which means that the level of OC in the organization corresponds with the level of IIB in it (Table 1).

**Table 1 - Regression (OC and IIB)**

Regression Statistics	
Multiple R	0,288647
R Square	0,083317
Adjusted R Square	-0,00835
Standard Error	0,225087
Observations	12

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0,046049	0,046049	0,908899	0,362883
Residual	10	0,506643	0,050664		
Total	11	0,552692			

	Coefficients	Standard Errors	t Stat	P-value	Lower 95%	Upper 95,0%
Intercept	2,978366	0,60057	4,959234	0,000571	1,640213	4,316519
IIB	-0,22055	0,231338	-0,95336	0,362883	-0,736	0,294904

#### 4.2 Factor Analysis

As Table 2 shows, KS does not serve as a mediator in the relationship between OC and IIB ( $p = 0.07$ ;  $p \geq 0.05$ ).

**Table 2 - Factor Analysis (KS vs. OC and IIB)**

ANOVA: Single Factor SUMMARY				
Groups	Count	Sum	Average	Variance
KS	12	28,3	2,358	0,043
OC	12	28,91	2,409	0,05
IIB	12	30,97	2,581	0,086

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0,326	2	0,163	2,735	0,079589	3,284918
Within Groups	1,968	33	0,06			
<b>Total</b>	<b>2,294</b>	<b>35</b>				

Table 3 shows no correlation between OC and IIB ( $p = 0.12$ ;  $p \geq 0.05$ ). This means that H1 is rejected, as OC and IIB are not correlated.

**Table 3: Factor Analysis (OC and IIB)**

SUMMARY				
Groups	Count	Sum	Average	Variance
OC	12	28,91	2,409167	0,050245
IIB	12	30,97	2,580833	0,086063

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0,176817	1	0,176817	2,594378	0,121499	4,30095
Within Groups	1,499383	22	0,068154			
<b>Total</b>	<b>1,6762</b>	<b>23</b>				

No correlation was found in relationship between KS and OC ( $p = 0.56$ ;  $p \geq 0.05$ ) (Table 9). As this result shows, H2 is rejected, as KS and OC are not correlated.

**Table 4 - Factor Analysis (KS and OC).**

<b>ANOVA: Single Factor SUMMARY</b>						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
KS	12	28,3	2,358333	0,042597		
OC	12	28,91	2,409167	0,050245		
<b>ANOVA</b>						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0,015504	1	0,015504	0,333992	0,569187	4,30095
Within Groups	1,021258	22	0,046421			
Total	1,036763	23				

According to Table 5, correlation between KS and IIB is observed ( $p = 0.04$ ;  $p \leq 0.05$ ). H3 is supported, as KS and IIB are correlated.

**Table 5 - Factor Analysis (KS and IIB)**

<b>ANOVA: Single Factor SUMMARY</b>						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
KS	12	28,3	2,358333	0,042597		
IIB	12	30,97	2,580833	0,086063		
<b>ANOVA</b>						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0,297038	1	0,297038	4,617408	0,042912	4,30095
Within Groups	1,415258	22	0,06433			
Total	1,712296	23				

### 4.3 Hypothesis Testing

According to Table 6, t-test shows a significant correlation between KS and IIB in one-tail analysis ( $p = 0.01$ ;  $p \leq 0.05$ ) and two-tail analysis ( $p = 0.02$ ;  $p \leq 0.05$ ).

**Table 6 - T-Tests**

	<b>OC</b>	<b>IIB</b>	<b>KS</b>	<b>OC</b>	<b>KS</b>	<b>IIB</b>
Mean	2,409167	2,580833	2,358333	2,409167	2,358333	2,580833333
Variance	0,050245	0,086063	0,042597	0,050245	0,042597	0,086062879
Observations	12	12	12	12	12	12
Pearson Correlation	-0,28865		-0,45946		0,325989	
Hypothesized Mean Difference	0		0		0	
df	11		11		11	
t Stat	-1,42451		-0,47863		-2,58093	
P(T<=t) one-tail	0,091023		0,320785		0,012774	
t Critical one-tail	1,795885		1,795885		1,795885	
P(T<=t) two-tail	0,182046		0,641571		0,025548	
t Critical two-tail	2,200985		2,200985		2,200985	

## 5. Discussion

According to the study results, the UAE companies failed to support individual innovative behavior (IIB) among their employees. They also do not provide adequate organizational culture (OC) for the employees to feel safe, grow, and develop professionally. Knowledge sharing (KS) is not encouraged in the companies as well, according to the current findings. The current study did not find a significant interrelation between OC and IIB, KS, and OC. However, KS and IIB were associated with each other. The current results did not support many of the earlier scholarly studies from the scholarly literature perspective. Many previous studies recognized the associations among IIB, OC, and KS by implying that these variables are interdependent. Some of them claimed that KS mediates the relationship between OC and IIB.

However, the study did not produce the same results. Odoardi et al. (2010) claim that innovative behavior is the set of actions carried out by people to embrace the picked development. It is also impressive that cutting-edge habits apply to the generation of concepts and the growth of key developments. Development climate is a particular innovation-friendly atmosphere, in which all entities of the companies make collective or individual efforts to take on the developments (Odoardi et al., 2010). Akram et al. (2018) insurance claim that the success of KS within the organization is directly associated with the influence of KS on IIB.

Nonetheless, the effect is present only when KS is considered a bilateral process. To be extra specific, the collection of knowledge is as crucial as its distribution. What is more, Cook et al. (2017) affirm that according to the Theory of Social Exchange, individuals are more likely to understand if they can collect knowledge from various other resources within the company. If the expertise is given away profitably, KS is most likely to be efficient. However, the interconnection between KS and IIB proved that innovations and knowledge sharing are interrelated. The findings of previous studies were mostly not supported by the current research.

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## 6. Conclusion

The results showed no connection between IIB and OC, KS and OC, while KS and IIB are linked. UAE companies failed to support individual innovative behavior (IIB) among their employees and provide adequate organizational culture (OC) for the employees to feel safe, grow, and develop professionally. However, the findings showed that the UAE companies have poor KS, IIB, and OC, which do not support their employees or executives.

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