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Article

Employee Engagement and Innovative Work Behavior: The Mediating Role of Knowledge-Sharing Behavior in the United Arab Emirates (UAE) Service Context

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Abstract: The aim of this study was to examine the mediating role of knowledge-sharing behavior (KSB) in the relationship between employee engagement and innovative work behavior (IWB). We collected 193 completed survey responses from employees working in the service sector in the United Arab Emirates (UAE). Drawing on social exchange theory (SET), we employed hierarchical regression to analyze the research framework and the mediation effect. The primary findings indicate a significant positive association between employee engagement and IWB, as well as between employee engagement and KSB. Additionally, there is a significant positive association between KSB and IWB. Furthermore, employee engagement has an indirect effect on IWB via the mediating role of KSB. We recommend further research and practical investigation into how employee engagement contributes to enhancing knowledge-sharing behavior and IWB, ultimately improving organizational performance.

Keywords: employee engagement; knowledge-sharing behavior (KSB); innovative work behavior (IWB); social exchange theory; United Arab Emirates (UAE)



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1. Introduction

Creativity and innovation, essential elements of modern business, are seen as pivotal to achieving organizational growth (Kwon and Kim 2020). Innovative work behavior (IWB) consists of exploring opportunities and generating new ideas in addition to applying changes, exploiting new knowledge, and enhancing processes for developing individual and organizational performance (De Jong and Den Hartog 2008). As organizations encounter increasingly turbulent environments, innovation becomes integral to the roles of all employees (Scott and Bruce 1994). As a result, individuals are highly encouraged to engage in IWB, which includes generating new and valuable ideas, sharing their own or others' ideas with co-workers, and implementing those ideas (Salam and Senin 2022).

The expertise and knowledge accumulated in a firm's life are generally developed by employees; thus, companies aiming to adapt to market changes and survive competition should extract and utilize these assets (Lee and Song 2020). Firms are developing knowledge management applications and promoting knowledge-sharing behavior (KSB) to maximize the expertise of their employees and thereby enhance overall performance (Lee and Song 2020). The effectiveness of knowledge management projects relies on the practice of KSB (Wang and Noe 2010). Thus, knowledge sharing is crucial in business, as it serves as a strategy to gain competitive advantages, outperform competitors, retain employees, boost productivity, and foster human capital development through creativity and innovation (Razak et al. 2016).

Employee engagement is considered a highly central topic in management, attracting attention from both researchers and professionals alike (Saks 2022). Employee engagement,

traditionally situated in the realm of human resource management, is now expanding into broader organizational contexts due to its beneficial effects in terms of various aspects, such as business, service, and operational effectiveness (Turner 2020). Engaged employees demonstrate strong commitment to their organization, showing no intention to leave while actively pursuing self-improvement, taking initiative, innovating, and maintaining high accuracy in their work (Schaufeli 2021).

Researchers have examined individual innovation through personality traits, outcomes, and actions (De Jong and Den Hartog 2008). We argue that empirical studies are needed in areas where numerous variables are combined to understand innovative behavior in different contexts. However, such studies specifically focused on the context of Arab countries are limited. The top-10 countries making an impact in the field of “innovative behavior” from 1961 to 2019 include the USA and China, which together account for approximately 27.92% of the research articles (Salam and Senin 2022). These data indicate that these two countries are leading the promotion of research on the topic of “innovative behavior”. Notably, none of the top-10 contributing countries are from the Arab world. Additionally, an examination of the literature on the determinants of IWB reveals that only a limited number of constructs have been examined, indicating that our understanding of the factors influencing IWB remains inadequate (Salam and Senin 2022). Furthermore, there are limited empirical studies examining the association between KSB and IWB, particularly within the service sector (Abukhait et al. 2019; Aldabbas et al. 2021).

This work aimed to investigate the influence of employee engagement and knowledge sharing on IWB in the UAE. It enhances the knowledge management and innovation management literature by exploring how work engagement can enhance individual KSB by improving the abilities, skills, and knowledge required for innovation in the context of service. Based on the research problem and objectives of this study, we formulate our main research question:

“Does knowledge-sharing behavior mediate the relationship between employee engagement and innovative work behavior?”

This work contributes to the literature by recognizing crucial antecedent factors, such as employee engagement and KSB, that may have an influence on employees in organizations, enabling them to create and effectively apply new ideas. One key challenge for organizations in the UAE and elsewhere is to understand how engagement can encourage employees to share their knowledge and motivate them toward IWB without leading to burnout, which can decrease their willingness to share knowledge and engage in innovation projects. Although IWB is widely believed to enhance long-term organizational effectiveness, the potential costs to individual workers who adopt innovative approaches have largely been overlooked (Janssen 2003). Thus, job resources serve to mitigate the impact of job demands by exerting buffering effects on stress (Kwon and Kim 2020).

To gain deeper insights into our research question, we draw on social exchange theory (SET), a prominent theoretical perspective in business management within the social sciences (Cropanzano et al. 2017). This theory provides a framework for maximizing benefits while minimizing costs through influencing individual actions (Blau 1964). Social exchange associations consist of ongoing interactions that generate undefined commitments (Xanthopoulou et al. 2009). When employees are engaged within their organization, they are more likely to be encouraged to obtain desired outcomes such as KSB and IWB. The study is organized as follows: the next section includes a review of the literature and the formulation of hypotheses, followed by an explanation of the research methodology, results, discussion, limitations, and suggestions for future research.

2. Literature Review and Theoretical Framework

2.1. Literature Review

2.1.1. Employee Engagement

In the context of this study, we build from the cognitive perspective by suggesting that employees who have a high level of engagement toward their work will be highly

involved in generating creative behavior and have a greater overall focus on their work and its accomplishment. As such, several studies argue that individuals who are more engaged in their jobs are more likely to generate higher levels of IWB (Afsar et al. 2021).

Employee engagement is associated with a positive and constructive state of mind concerning work, which contributes to the overall development of the organization. It is an indication of the positive attitude that workers bring to their tasks (Saks 2022). Engaged employees can invest their best efforts into their work when they are dedicated and committed to this work (Van Tuin et al. 2021). Employee engagement is a significant force in an organization that reflects the degree of staff attitudes toward their work, particularly their dedication and proficiency in communicating with the organization. Generally, engagement is concerned with the level and quality of job performance. Additionally, engaged employees are significantly less inclined to depart from the organization (Malik and Garg 2020).

2.1.2. Knowledge Sharing

Organizations across various sectors are increasingly recognizing the benefits of knowledge sharing, with extensive research confirming its significant impact on achieving organizational goals and enhancing overall performance (Allassaf et al. 2020; Al-Kurdi et al. 2020). Allowing employees to benefit from the knowledge and expertise of others within an organization is known to provide valuable insights for managers and leaders. As such, this effect of knowledge sharing on employee engagement is a powerful and practical indicator and driver of sustainable business success. Researchers have recently highlighted knowledge sharing as social or interpersonal behavior in organizations (Arsawan et al. 2022). Knowledge sharing promotes a transparent organizational climate that, in turn, results in the effective exchange of conversational knowledge-sharing constructs, which are essential and should be supported in task performance (Khassawneh et al. 2022).

2.1.3. Innovative Work Behavior

The findings of empirical studies validate the conceptualization of innovation as a multifaceted phenomenon. Creativity was shown to be positively associated with the creation of novel products or services, the initiation of new business activities, and efforts to reduce costs (Nasifoglu Elidemir et al. 2020). However, assessments of the relationship between creativity and continuous improvement have been overlooked. The criteria developed for measuring creativity do not emphasize divergent thinking, which reflects a concern for novelty, originality, and the cognitive aspects of creativity (Al Hosani et al. 2023). These criteria instead focus on organizational interventions, i.e., routine work behaviors and innovative efforts, while paying limited attention to the quality of the relationship between management and employees (AlEsa and Durugbo 2022).

2.2. Theoretical Framework and Hypotheses Development

2.2.1. Relationship between Employee Engagement and Innovative Work Behavior

A comprehensive review of 34 studies shows that workers are most engaged when there is a balanced combination of moderate demands and sufficient resources, with IWB resulting from these nuanced interactions and engaged employees being more likely to exhibit innovation by employing coping strategies to address challenges (Kwon and Kim 2020). Work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al. 2002, p. 74). Employee engagement has become essential in today’s professional setting, not only due to its three dimensions (vigor, dedication, and absorption) but also because the synergy of these dimensions can significantly influence employees in achieving positive results (e.g., IWB). Definitions of employee engagement include both emotional and cognitive aspects, such as passion, fulfilment, self-confidence, empowerment, and optimistic attitudes (Turner 2020). It represents an individual’s optimal behavior that strengthens connections to their work and colleagues (Turner 2020). Work engagement also signifies healthy

functioning. Consequently, it encompasses the full range of outcomes (e.g., challenges and hindrances) arising from workload and can thus account for the impact of workload on employee innovativeness (Montani et al. 2020). Additionally, Saks (2019), in his revised model of engagement, confirms that engagement leads to positive consequences such as organizational citizenship behavior and job satisfaction. However, in this study, we argue that engagement will lead to positive outcomes for the individual employee (e.g., IWB).

Previous studies found that when individuals are highly engaged, they display greater IWB in the workplace (Afsar et al. 2021; Ali et al. 2022; Elamin et al. 2024; Ghani et al. 2023; Kim and Park 2017; Vithayaporn and Ashton 2019). An empirical study conducted on a sample of 180 respondents from the manufacturing sector in Pakistan found that employee engagement drives IWB (Ghani et al. 2023). A study of 372 senior employees across various industries in China found that employee engagement is positively linked to IWB, and employee engagement is considered an essential prerequisite for IWB (Ali et al. 2022). Another study found that engagement and innovation mutually enhance each other; specifically, IWB is influenced by having engaged employees, who are more likely to act innovatively. Furthermore, each employee's interactions with customers increase their likelihood of exhibiting IWB (Vithayaporn and Ashton 2019). An empirical study that gathered data from 381 participants working in multinational corporations in Saudi Arabia found that work engagement leads to higher IWB activities among employees, which can be explained by the SET norm of reciprocity (Afsar et al. 2021). Based on these previous discussions, the following hypothesis is proposed:

H1. *Employee engagement is positively related to innovative work behavior.*

2.2.2. Relationship between Employee Engagement and Knowledge-Sharing Behavior

Knowledge sharing can be defined as a culture in which employees are able to freely exchange their knowledge, ideas, perspectives, skills, and experiences (Ahmed et al. 2020; Kim and Park 2017; Joo et al. 2023). Engaged employees possess elevated levels of energy and enthusiasm toward their work (Ahmed et al. 2020). The literature on job design demonstrates that higher levels of engagement result in improved performance (e.g., knowledge sharing) (Martinez 2015). In general, engaged employees tend to be more productive and share knowledge within their organization (Fatima and Khan 2017).

Previous studies found that when individuals are highly engaged, they display greater KSB in the workplace (Ahmed et al. 2020; Chen et al. 2011; Fatima and Khan 2017; Rasheed et al. 2020; Wu and Lee 2020). A survey conducted with 139 respondents from two software firms in China revealed that task conflict enhanced psychological states and employee engagement, which subsequently led to increased KSB (Chen et al. 2011). An empirical study conducted with 302 knowledge employees from a leading telecommunications firm in South Korea found that work engagement is significantly related to knowledge sharing (Joo et al. 2023). A positive and significant association between employee engagement and knowledge-sharing behavior was found from a survey of 354 respondents from ICT sector organizations in Pakistan (Fatima and Khan 2017). When employees engage in knowledge sharing at work, it can benefit them personally. For instance, engaging in knowledge-sharing activities can enhance their self-affirmation and foster stronger associations with co-workers (Wu and Lee 2020). Based on these previous discussions, the following hypothesis is proposed:

H2. *Employee engagement is positively related to knowledge-sharing behavior.*

2.2.3. Relationship between Knowledge-Sharing Behavior and Innovative Work Behavior

Knowledge sharing involves transforming experiences, skills, and information into practical applications, such as innovation (Castaneda and Cuellar 2020). Previous studies found that when individuals exhibit KSB, they display greater IWB (Abukhait et al. 2019; Akram et al. 2020; Aldabbas et al. 2021; Islam et al. 2024; Kim and Park 2017; Yasir et al.

2023). Abukhait et al. (2019) surveyed a sample of 305 employees from the service sector in the UAE and found that knowledge sharing has a strong and significant impact on employee IWB. Similarly, from 340 surveys completed by employees working in the service sector in the UAE, Aldabbas et al. (2021) found that knowledge sharing positively and significantly influences IWB. A survey employed to gather data from 769 employees working in SMEs in Pakistan revealed that KSB has a positive association with IWB (Yasir et al. 2023). An empirical study involving 270 employees in the IT sector found a positive impact of knowledge sharing on employee IWB (Islam et al. 2024). Kmiecik (2021) found that knowledge sharing is significantly linked to idea generation. Survey responses from 345 employees in the Chinese telecommunications sector were gathered. The results indicate that KSB has a significant impact on IWB (Akram et al. 2020).

SET fundamentally describes an exchange of valuable resources, wherein two parties anticipate mutual benefits (Razak et al. 2016). Thus, knowledge sharing is a key factor that drives innovation, indicating that innovation relies heavily on effective knowledge sharing (Castaneda and Cuellar 2020). Furthermore, knowledge sharing has the potential to significantly enhance IWB, since it plays a key role in enhancing innovation culture, improving performance, and achieving a competitive edge (Arsawan et al. 2022). Based on the previous arguments, we formulate our third hypothesis:

H3. *Knowledge-sharing behavior is positively related to innovative work behavior.*

2.2.4. Mediating Role of Knowledge-Sharing Behavior

In this section, we delve into how employee engagement influences innovative work behavior (IWB), with a particular focus on the mediating role played by knowledge-sharing behavior (KSB) (Figure 1). Knowledge sharing is a widely discussed subject in business management, recognized for its advantages to both employees and employers alike (Islam et al. 2024). Because KSB is self-motivated, employees are more likely to exchange work-related ideas and expertise with their co-workers when they are committed to and passionate about their job (Kim and Park 2017). KSB is a culture of social interaction in which employees exchange knowledge, skills, and competencies (Fatima and Khan 2017).

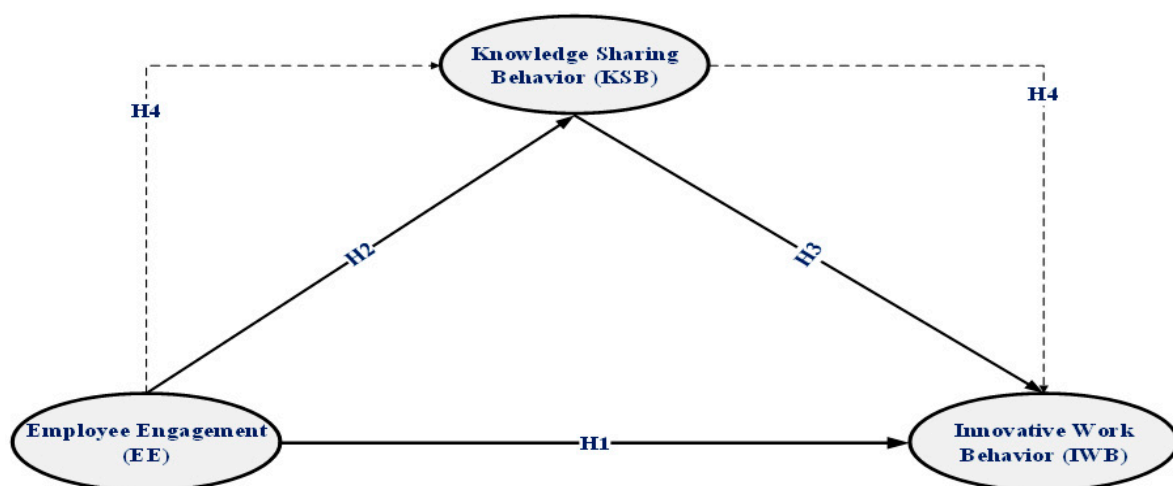


Figure 1. Hypothesized model.

An empirical study involving 389 employees from the UAE police administration revealed that knowledge sharing mediates the association between knowledge-oriented leadership and IWB (Gharama et al. 2020). In their empirical study, Fatima and Khan (2017) found that KSB mediates the association between work engagement and IWB. An empirical study based on 388 survey responses from Korean IT companies found that KSB significantly influences the association between employee engagement and IWB (Lee and Song 2020).

According to its principles, SET is a theory that explains individuals' rational behavior in assessing the potential rewards they might receive from social exchanges (Razak et al. 2016). Therefore, high levels of employee engagement may favor positive outcomes in organizations, such as KSB and IWB. KSB is frequently viewed as crucial for fostering IWB (Aldabbas et al. 2021). When management promotes knowledge sharing among employees, this fosters a climate of positive associations between employer and staff. This atmosphere encourages employees to engage in innovative behaviors and participate in additional innovation activities. Based on the previous arguments, we formulate our final hypothesis:

H4. *Knowledge-sharing behavior mediates the relationship between employee engagement and innovative work behavior.*

3. Methods

3.1. Approach

The research design was based on surveys and utilizes cross-sectional data. The use of cross-sectional data has become a prevalent method in recent research for evaluating causal associations (Wynen et al. 2020; Badru et al. 2024). In this work, a positivist approach was adopted in examining the connections between employee engagement, IWB, and the specified mediating variable of KSB.

3.2. Participants

This study, conducted using a cross-sectional methodology, aimed to examine the associations between the variables under investigation among employed individuals. Data collection in the Middle East region is often deemed challenging and associated with various methodological constraints (Elamin and Tlaiss 2015). Consequently, a convenience sample was utilized for this research. The survey was disseminated among individuals employed in the service sector of the UAE, which includes a diverse range of economic activities, such as commercial services, financial institutions, higher education, and government agencies. The survey was administered using an online platform, with distribution commencing in January 2024 and concluding in June 2024. Participation in the survey was voluntary, and all participants provided written, informed consent to partake in the study. A total of 350 surveys were distributed, and 215 responses were received, corresponding to a response rate of 61.4%. However, due to inconsistencies in response patterns and incomplete surveys, only 193 surveys were deemed suitable for inclusion in this study. This sample size is considered adequate for the statistical analyses required to test the study's hypotheses and draw meaningful conclusions.

3.3. Measurements

The questionnaire consisted of twenty-nine questions derived from relevant research and was divided into four categories: demographic information, employee engagement, KSB, and IWB. Employee engagement was the independent variable, while IWB was the dependent variable. KSB served as the mediator. Employee engagement was measured using the short version of the Utrecht Work Engagement Scale (UWES), developed by Schaufeli et al. (2002). This scale consists of nine items and has three sub-scales: vigor, dedication, and absorption. These items were combined into a single variable representing employee engagement. Each item in this section was rated on a 7-point Likert scale, ranging from 0 (never) to 6 (always). KSB was measured using four items adopted from the work of Lee (2001), also rated on a 7-point scale from 0 (never) to 6 (always). IWB was assessed using measures from Janssen (2000), which were based on Kanter's (1988) stages of innovation, including idea generation, idea promotion, and idea realization. These items were combined into a single variable for IWB, also measured on a 7-point scale from 0 (never) to 6 (always).

3.4. Procedures

In this study, one of the methods employed was back translation. This involved translating the questionnaire from English to Arabic, which was essential for non-English-speaking participants (Arabs) who completed the questionnaire, and then back to English to ensure its accuracy and validity. The translated content was reviewed for accuracy by two management professors. Various statistical analyses were used to evaluate the research findings. Descriptive statistics, including means, frequencies, and standard deviations, were first used to describe demographic data and general results. Hierarchical regression analysis was then applied to test the hypotheses, as it determines whether or not the variables significantly explain variance in the dependent variable after considering other variables. Additionally, mediation analysis was performed to assess if the mediator had a significant indirect effect on the dependent variable. The statistical software used for analyzing the quantitative data was SPSS, chosen for its customizable and reliable analytical capabilities.

4. Results

4.1. Sample Description

The dataset was analyzed using SPSS version 29.0. Table 1 provides a detailed breakdown of the study sample's demographics, including gender, nationality, age, organizational tenure, job rank, and educational level. As shown in Table 1, the sample consisted of one hundred and four males (53.9%) and eighty-nine females (46.1%). Of these participants, 53.4% were Emirati and 46.6% were non-Emirati. The majority of the participants were aged between 21 and 29 years (61.7%), with the remainder being over 30 years old. Additionally, Table 1 shows that 55.4% had less than 3 years of organizational tenure, and most were in entry-level positions. In terms of education, 88.6% of the participants had a bachelor's degree or lower, while only 11.4% held a master's or Ph.D. degree.

Table 1. Demographic profile of the research sample.

Variables	n (Total—193)	Frequency % (Total—100%)
Gender		
Male	104	53.9
Female	89	46.1
Nationality		
Emirati	103	53.4
Non-Emirati	90	46.6
Age		
21–29	119	61.7
30–34	34	17.6
35–39	20	10.4
40 and above	20	10.4
Organizational Tenure		
Less than 3 years	107	55.4
3—less than 6 years	41	21.2
6—less than 10 years	16	8.3
10 years and more	29	15.0
Job Rank		
Employee	128	66.3
Asst. Mgr./Supervisor/Chief Employee	19	9.8
General Manager	6	3.1
Senior Manager	3	1.6
Director	5	2.6
Other	32	16.6

Table 1. Cont.

Variables	n (Total—193)	Frequency
		% (Total—100%)
Level of Education		
High School	23	11.9
Diploma	11	5.7
Bachelor's Degree	137	71.5
Graduate (Masters/Ph.D.)	22	11.4

4.2. Descriptive Results

To achieve the study's objective of examining employee engagement, KSB, and IWB among UAE service employees, a descriptive analysis was conducted. Table 2 presents a summary of the mean scores, standard deviations, Pearson intercorrelations, and reliability scores for the study variables. The findings indicated a high overall level of employee engagement, with a mean score of 4.62. Similarly, the level of KSB was also high, reflected by a mean score of 4.54. Furthermore, the results show that employees had a positive response to IWB, with a mean score of 4.57. This analysis highlights the strong perceptions of employee engagement, active knowledge sharing, and a favorable attitude toward IWB among employees in the UAE service sector. The reliability of the responses was confirmed through Cronbach's alpha values, demonstrating strong consistency for each construct. The reliability coefficients for employee engagement ($\alpha = 0.963$), KSB ($\alpha = 0.863$), and IWB ($\alpha = 0.961$) all indicate robustness (see Table 2).

Table 2. Means, standard deviations, and intercorrelations among study variables.

Variables	M	SD	1	2	3
Employee Engagement	4.62	1.18	−0.963		
Knowledge-Sharing Behavior	4.54	1.05	0.756 ***	−0.863	
Innovative Work Behavior	4.57	1.1	0.836 ***	0.742 ***	−0.961

Notes: *** $p < 0.001$.

The results offer preliminary support for the hypotheses, particularly H1, H2, and H3. The observed correlations are statistically significant at the 0.001 level among the variables examined in the study. The statistical test used for the initial hypothesis was Pearson correlation. As shown in Table 2, the analysis reveals a positive correlation between employee engagement and IWB ($r = 0.836$, $p < 0.001$) as well as between employee engagement and KSB ($r = 0.756$, $p < 0.001$). These findings lend support to the first and second hypotheses. Additionally, there was a strong positive association between KSB and IWB ($r = 0.742$, $p < 0.001$), further substantiating the H3 hypothesis.

4.3. Hypotheses Testing

To examine the association between employee engagement and IWB (H1), a hierarchical regression technique was performed in two stages. The first step involved entering control variables related to demographics, such as age, organizational tenure, job rank, and level of education, into the analysis. Subsequently, in the second step, the variable of employee engagement was introduced. The outcomes of this analysis are presented in Table 3. The hierarchical regression analysis revealed that diversity management is an effective predictor of IWB. As depicted in Table 3, employee engagement accounts for an average of 71.9% of the variance in IWB. It was found that employee engagement significantly influences IWB ($\beta = 0.818$, $p < 0.001$). Furthermore, upon introducing employee engagement in step 2, there was a notable 0.615 change in R^2 ($F(5,187) = 99.406$, $p < 0.001$). These results, derived from examining the linear association between employee engagement and IWB, fully support H1.

Table 3. Results for hierarchical regression testing of the relationship between employee engagement and innovative work behavior.

Criterion Variables Predictors	Innovative Work Behavior ΔR^2	β
Age		−0.223
Organizational Tenure		0.163
Job Rank		−0.052
Level of Education		−0.009
Step 2:	0.615 ***	
Employee Engagement		0.818 ***
N	193	
Adjusted R ²	0.719	
Equation F-value	99.406 ***	

Notes: β , standardized beta. *** $p < 0.001$.

To examine the correlation between employee engagement and KSB (H2), a hierarchical regression technique was carried out in two stages. Control variables related to demographics, such as age, organizational tenure, job rank, and level of education, were initially included in the analysis. Subsequently, in the second step, the employee engagement variable was introduced. The outcomes of this analysis are summarized in Table 4. The hierarchical regression analysis revealed that employee engagement effectively predicts knowledge-sharing behavior. As demonstrated in Table 4, employee engagement accounts for an average of 63.8% of the variance in knowledge-sharing behavior. It was found that employee engagement significantly influences knowledge-sharing behavior ($\beta = 0.694$, $p < 0.001$). Furthermore, upon introducing employee engagement in the second step, there was a substantial 0.443 change in R^2 ($F(5,187) = 68.558$, $p < 0.001$). These results, derived from exploring the linear association between employee engagement and knowledge-sharing behavior, fully support H2.

Table 4. Results from hierarchical regression testing of the relationship between employee engagement and knowledge-sharing behavior.

Criterion Variables Predictors	Knowledge-Sharing Behavior ΔR^2	β
Step 1: Controls	0.204	
Age		−0.267
Organizational Tenure		0.02
Job Rank		−0.084
Level of Education		−0.037
Step 2:	0.443 ***	
Employee Engagement		0.694 ***
N	193	
Adjusted R ²	0.638	
Equation F-value	68.558 ***	

Notes: β , standardized beta. *** $p < 0.001$.

To examine the association between KSB and IWB (H3), a hierarchical regression technique was conducted in two stages. Control variables related to demographics, including age, organizational tenure, job rank, and level of education, were initially included in the analysis. Subsequently, in the second step, the KSB variable was introduced. The findings of this analysis are summarized in Table 5. The hierarchical regression analysis revealed that KSB significantly contributes to IWB. As indicated in Table 5, KSB accounted for an average of 54.8% of the variance in IWB. It was observed that KSB has a substantial impact on IWB ($\beta = 0.751$, $p < 0.001$). Furthermore, upon introducing KSB in the second step, there was a notable 0.448 change in R^2 ($F(5,187) = 47.537$, $p < 0.001$). These results, derived from examining the linear association between KSB and IWB, strongly support H3.

Table 5. Results from hierarchical regression testing of the relationship between knowledge-sharing behavior and innovative work behavior.

Criterion Variables Predictors	Innovative Work Behavior ΔR^2	β
Step 1: Controls	0.111	
Age		−0.076
Organizational Tenure		0.116
Job Rank		−0.005
Level of Education		0.054
Step 2:	0.448 ***	
Knowledge-sharing behavior		0.751 ***
N	193	
Adjusted R ²	0.548	
Equation F-value	47.537 ***	

Notes: β , standardized beta. *** $p < 0.001$.

Finally, the mediating effect of KSB on the association between employee engagement and IWB (H4) was examined using Baron and Kenny's (1986) four-step approach for establishing mediation. The outcomes are outlined in Table 6. In the first step, it was revealed that employee engagement significantly and positively predicts IWB ($\beta = 0.818$, $p < 0.001$). Moving to the second step, employee engagement and KSB showed a positive and robust association ($\beta = 0.694$, $p < 0.001$). Upon entering it into the regression model in the third step, KSB was observed to have a significant impact on IWB ($\beta = 0.214$, $p < 0.01$). However, the β coefficient for the relationship between employee engagement and IWB is reduced yet significant, experiencing a substantial decline ($\beta = 0.670$, $p < 0.001$). Ultimately, the results for the fourth step confirm that KSB partially mediates the connection between employee engagement and IWB. To support this mediation model, the Sobel (1982) test was conducted. The calculated Sobel test statistic of 3.17 exceeds the critical value of 1.96, confirming significance at the 95% confidence interval. This indicates that KSB significantly mediates the relationship between employee engagement and IWB ($z = 3.17$, $p < 0.01$). These findings lend support to the fourth hypothesis (H4).

Table 6. Results from hierarchical regression testing of the mediating effect of employee engagement in the relationship between diversity management and innovative work behavior.

Criterion Variable Predictor	Knowledge-Sharing Behavior β	Innovative Work Behavior β
Step 1:		
Employee Engagement	0.694 ***	0.818 ***
Adjusted R ²	0.638 ***	
Step 2:		
Employee Engagement		0.670 ***
Knowledge-Sharing Behavior		0.214 **
Adjusted R ²		0.734 ***
ΔR^2		0.631
F for ΔR^2 (Steps 1 and 2)		228.262 ***

Notes: β , standardized beta. ** $p < 0.01$; *** $p < 0.001$.

5. Discussion

This work examines the impact of employee engagement on IWB, particularly through KSB. Drawing on SET, we investigated how employee engagement influences IWB. We also examined the mediating effect of KSB on the association between employee engagement and IWB. For testing our first hypothesis, the impact of employee engagement on IWB was assessed, with a significant link found between employee engagement and IWB. This finding aligns with previous studies (Afsar et al. 2021; Ali et al. 2022; Ghani et al. 2023;

Kim and Park 2017; Vithayaporn and Ashton 2019) and is consistent with SET, which emphasizes the importance of employee engagement toward IWB. Employees who are actively engaged often demonstrate innovative behavior by utilizing coping strategies to effectively address challenges (Kwon and Kim 2020).

Our second hypothesis posited that employee engagement positively influences KSB. Our findings are consistent with previous studies (Ahmed et al. 2020; Chen et al. 2011; Fatima and Khan 2017; Rasheed et al. 2020; Wu and Lee 2020). Therefore, these significant findings support our assertion that increased engagement fosters a sense of reciprocity among employees, encouraging them to share knowledge with other co-workers, ultimately leading to enhanced KSB. Employee engagement has been extensively studied within the framework of SET, which provides a solid theoretical foundation (Saks 2019). The dedication and energy of employees are not generated in isolation; they are often influenced by leaders who motivate them to become more engaged in their work. When employees are encouraged and engaged in their roles, they exert additional effort, resulting in greater efficiency and enhanced KSB.

The third hypothesis posited that KSB positively affects IWB. Our findings are aligned with previous studies (Abukhait et al. 2019; Akram et al. 2020; Aldabbas et al. 2021; Islam et al. 2024; Kim and Park 2017; Yasir et al. 2023) indicating that KSB is a strong predictor of IWB. The flow of knowledge sharing within a firm facilitates the generation of more innovative ideas, leading to improved innovative performance (Jaaffar et al. 2024). When employees participate in knowledge sharing with each other, it creates a positive climate within the organization. This, in turn, will encourage those employees to direct this accumulated knowledge toward more innovative activities (e.g., IWB).

Finally, we hypothesized that KSB mediates the relationship between employee engagement and IWB. The results show a significant positive association between employee engagement and IWB through KSB. This supports previous findings that knowledge sharing mediates the association between employee engagement and IWB (Escribá-Carda et al. 2023; Fatima and Khan 2017; Lee and Song 2020). In our study, 73.4% of the variance in IWB was attributed to employee engagement and KSB. These results confirm the importance of employee engagement and KSB as crucial determinants of IWB.

6. Limitations and Future Studies

This work has several limitations that should be considered in guiding future research. While we considered knowledge sharing as an intervening variable between employee engagement and IWB, additional individual-level aspects could serve as mediating variables, potentially enriching the framework (e.g., psychological empowerment). Furthermore, our research focused on selected organizations, and industry-specific factors may limit the generalizability of our findings to other sectors, such as manufacturing.

Additionally, while we examined the role of knowledge sharing in mediating the relationship between employee engagement and IWB, various psychological factors could influence this association. For instance, the impact of KSB on IWB may depend on trust among co-workers, individual self-efficacy, and organizational factors, like the climate, for innovation. Future research should explore other significant determinants of employee IWB, such as bundles of HR practices and caring HRM practices (Saks 2022). In future studies, researchers could explore the impact of well-being on employee engagement and innovative behavior, which may offer deeper insights into the factors that drive both employee performance and innovation. Therefore, future studies should incorporate these and other relevant factors to foster innovative behavior in employees.

7. Conclusions

Although extensive research has been conducted on employee engagement, knowledge sharing, and IWB in Western countries, there is a notable gap in research within the Middle East context, including the UAE. This study offers empirical evidence on the

connections between employee engagement, KSB, and IWB in the UAE. Our findings indicate that KSB can facilitate the association between employee engagement and IWB.

From a theoretical viewpoint, this work enriches the current literature on employee engagement, KSB, and IWB in several ways. First, it provides empirical support for the validity of these three crucial constructs by assessing their relevance outside Western contexts, utilizing a sample from the UAE. Specifically, there has been limited examination of the association between employee engagement, KSB, and IWB in non-Western contexts, particularly in the Arab region. This research extends on existing knowledge by showing that employee engagement enhances knowledge sharing and IWB. Second, in our theoretical framework, knowledge sharing is considered an antecedent to both employee engagement and IWB, an outcome many firms strive to attain. We conclude that KSB is a crucial mediator in the relationship between employee engagement and IWB. Lastly, when the organization encourages teamwork in organizational activities and recognizes the importance of employee engagement, this significantly enhances the level of employee engagement, leading employees to reciprocate with increased commitment to their co-workers and therefore greater knowledge sharing and enhanced IWB.

There are several key implications for managers regarding how to maximize the advantages of IWB. First, organizational managers should recognize the value of employee engagement for enhancing KSB and IWB, given that employee engagement in the UAE exceeds the global average on the basis of scores (Aldabbas et al. 2023). Managers should promote strong ties among employees, as this can enhance cooperation, KSB, and problem solving. Second, managers should create challenging work for employees to leverage their engagement and IWB. Specifically, creativity and innovation pose risks, necessitating employees to adapt and behave in new ways (Qi et al. 2019). Therefore, managers should create an organizational culture that motivates and enables knowledge sharing among employees. This can be achieved by implementing regular team-building activities and creating collaborative workspaces that support communication and knowledge exchange. Third, managers should invest in training and development programs focused on enhancing both employee engagement and knowledge-sharing capabilities. These programs can include workshops on collaborative problem-solving and innovation techniques. Implementing these strategies is likely to increase employee engagement, knowledge sharing, and IWB.

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