

High Performance Work Systems and Innovative Work Behavior: The Mediating Role of Knowledge Sharing in Vietnam's Logistics Sector

Khoa Dang Huynh¹ and Thuy Van Nguyen²

¹Foreign Trade University, HCM Branch, Ho Chi Minh City, Vietnam

²Ho Chi Minh University of Banking, Ho Chi Minh City, Vietnam

huynhdangkhoa.cs2@ftu.edu.vn (corresponding author)

thuynv@hub.edu.vn

<https://doi.org/10.34190/ejkm.24.2.4463>

An open access article under [CC Attribution 4.0](https://creativecommons.org/licenses/by/4.0/)

Abstract: This study examined how high-performance work systems (HPWSs) shape employees' innovative work behaviour through knowledge sharing in Vietnam's logistics sector. Building on the knowledge-based view, knowledge management literature, and the ability–motivation–opportunity (AMO) framework, we developed and tested a model in which HPWSs influence innovative work behaviour indirectly via knowledge sharing at the individual level of perception. A quantitative survey of 782 employees in Vietnam's logistics sector was conducted, and the data were analysed using structural equation modelling (SEM). The results indicate that HPWSs significantly enhance employees' willingness to share knowledge, and in turn, knowledge sharing strongly promotes innovative work behaviour. However, the direct effect of HPWSs on innovative work behaviour was not significant, which suggests that supportive human resource management (HRM) practices alone do not inherently foster innovation unless employees actively engage in knowledge sharing and application. Mediation analysis confirmed that knowledge sharing fully mediates the relationship between HPWSs and innovative work behaviour. These findings suggest that supportive HRM practices do not automatically foster innovation unless they activate knowledge-sharing processes among employees. The study contributes to the knowledge management literature by conceptualising knowledge sharing as a core transformation mechanism that converts HRM-enabled organisational conditions into innovative work behaviour. It also links strategic HRM and knowledge-based perspectives by showing that HPWSs become valuable for innovation when they facilitate the exchange, recombination and application of employee knowledge. The findings suggest that logistics managers should align HPWSs with practices and routines that encourage knowledge sharing and cross-functional knowledge exchange.

Keywords: High-performance work systems, Knowledge sharing, Innovative work behaviour

1. Introduction

Knowledge sharing is widely recognised as a central process in knowledge management that enables the transfer, integration, and recombination of knowledge across organisational members (Wang and Noe, 2010, Foss, Husted and Michailova, 2010, Serenko and Bontis, 2016). From the perspective of the knowledge-based view of the firm (KBV) (Grant, 2002), knowledge constitutes a strategic organisational resource, but its value depends on the extent to which it can be mobilised, exchanged, and applied within organisational systems. In this sense, knowledge sharing is not merely an interpersonal behaviour; rather, it represents a core knowledge process through which dispersed individual expertise is transformed into collective insight, problem-solving capacity, and innovation-related outcomes. Through knowledge sharing, employees access diverse expertise, refine insights, and transform dispersed knowledge into innovative ideas and practices. Empirical research consistently shows that knowledge sharing enhances organisational learning and facilitates innovative outcomes at both the individual and organisational levels (Radaelli et al., 2014, Le and Lei, 2019, Akram et al., 2020). However, while the positive consequences of knowledge sharing are well established, less clarity exists regarding the structural organisational conditions that systematically enable sustained knowledge sharing behaviours (Kianto, Sáenz and Aramburu, 2017).

Recent scholarship has begun to consider the broader systems that shape knowledge processes. High-performance work systems (HPWSs), which are designed to enhance employees' abilities, motivation, and opportunities (Jiang et al., 2012, Appelbaum, 2000), have been linked to innovation and performance outcomes. However, existing studies have primarily treated HPWSs as direct predictors of innovation, rather than as structural enablers of core knowledge processes. Furthermore, knowledge sharing research often emphasises individual or relational drivers, leaving the integration of human resource management system configurations and knowledge processes underdeveloped.

Addressing this gap, this study examined whether HPWSs foster innovative work behaviour through the mediating role of knowledge sharing among employees in Vietnam's logistics industry. By positioning knowledge sharing as the central knowledge management mechanism and HPWSs as an antecedent organisational enabler, this research advances the knowledge-based view of the firm and the knowledge management process by clarifying the knowledge-based pathway through which human resource management systems shape employee innovation.

2. Literature Review and Hypotheses

2.1 Knowledge Sharing

Knowledge sharing plays an important role in how organizations use what their members know to solve problems, improve work practices, and sustain performance over time. It is commonly understood as a social process through which employees exchange experiences, skills, insights, and work-related expertise (Yeboah, 2023, Castaneda and Cuellar, 2020). This view suggests that knowledge sharing should not be understood simply as the transfer of information from one person to another. Rather, it is an ongoing interaction that depends on employees' willingness to contribute what they know and to seek knowledge from others when facing work-related challenges. In this sense, knowledge sharing involves both knowledge donating and knowledge collecting, and its value lies in its capacity to turn individual knowledge into a resource that can be used collectively (Lin, 2007, Nguyen, Siri and Malik, 2022).

The effectiveness of knowledge sharing also depends on the kind of knowledge being exchanged. Explicit knowledge, such as formal procedures, reports, or documented guidelines, can usually be communicated through written language and organizational systems. Tacit knowledge, by contrast, is more personal and experience-based, and is therefore harder to articulate and transfer (Smith, 2001). This distinction is important because tacit knowledge often requires richer forms of interaction, such as face-to-face communication, mentoring, or informal discussion, where trust and mutual understanding can develop (Trong Tuan, 2012, Hau et al., 2013). In addition, employees may benefit from knowing not only what knowledge exists, but also who possesses particular expertise within the organization.

Prior studies have shown that knowledge sharing is shaped by both individual and organizational conditions (Yeboah, 2023). At the individual level, employees are more likely to share knowledge when they trust their colleagues, expect reciprocity, or believe that sharing will enhance their reputation and professional standing (Zhang and Jiang, 2015, Anand, Walsh and Moffett, 2019). At the organizational level, knowledge sharing is supported by open communication, supportive leadership, top management commitment, flexible structures, HRM practices and ICT technologies that make knowledge easier to access and disseminate (Podrug, Filipović and Kovač, 2017, Jeong, Lee and Kim, 2024). However, these conditions do not automatically guarantee sharing. Highly centralized structures, excessive control, weak interpersonal ties, or a lack of psychological safety may discourage employees from sharing what they know, particularly when the knowledge is tacit or strategically valuable. Under such conditions, employees may become more inclined toward knowledge hoarding and knowledge hiding (Oliveira, Curado and De Garcia, 2021).

When organizations create conditions that encourage employees to share knowledge, knowledge sharing can contribute to valuable organizational outcomes. It contributes not only to financial performance, such as profitability, market growth, and long-term viability, but also to non-financial outcomes, especially innovation capability (Yeboah, 2023). By allowing employees to combine different perspectives and experiences, knowledge sharing helps organizations generate new ideas, improve existing products and processes, and respond more effectively to complex problems. Nevertheless, the literature still pays more attention to the factors that enable knowledge sharing than to the barriers that prevent it. Less is also known about how different types of knowledge support different competencies across markets and organizational contexts (Santhoshe and Lawrence, 2023). Accordingly, greater attention is needed to the context-specific nature of knowledge sharing, especially in logistics, where the value of distributed operational knowledge depends on organizational conditions that facilitate its exchange as well as on the barriers that may lead employees to retain or conceal what they know (Pfohl, 2023).

2.2 Theoretical Background

From the knowledge-based view, knowledge is a strategically significant resource because it is embedded in individuals, routines, relationships, and organisational systems, and is therefore difficult to imitate or substitute (Grant, 2002). Yet knowledge creates value not through possession alone, but through a firm's capacity to mobilise, integrate, and apply dispersed expertise to problems and opportunities (Kogut and Zander, 1992,

Grant, 2002). This logic is central to employee innovation, since innovative work behaviour requires employees to access, recombine, and use knowledge in novel and useful ways. Knowledge sharing therefore functions as a key micro-foundation through which individual knowledge is converted into innovation-relevant resources (Chatterjee, Chaudhuri and Vrontis, 2022).

Complementing the KBV, the knowledge management process explains how knowledge becomes valuable within organizations. Knowledge management comprises interrelated processes of knowledge creation, acquisition, storage, access, dissemination, conversion, application, and protection (Antunes and Pinheiro, 2020, Kalpič and Bernus, 2006, Alavi and Leidner, 2001). Importantly, these processes cannot be reduced to technological repositories, because knowledge is created, interpreted, shared, and applied by human actors (Yeboah, 2023). As much organisational knowledge resides in individuals, knowledge sharing enables employees to externalise expertise, exchange experience, combine tacit and explicit insights, and transform individual knowledge stocks into collective knowledge flows (Nonaka, 1994, Antunes and Pinheiro, 2020). To ensure that knowledge management processes operate proactively and continuously, organisations increasingly invest in integrated HRM practices. HRM and knowledge management are therefore complementary because HR practices shape employees' skills, motivation, and behaviours, while employees remain the primary carriers and users of organisational knowledge (Minbaeva, Foss and Snell, 2009). Through the Ability–Motivation–Opportunity framework (Appelbaum, 2000), HR practices integrated into HPWSs enhance employees' ability to articulate know-how, strengthen their motivation to contribute knowledge, and provide opportunities for interaction through teamwork, participation, empowerment, and information sharing (Jiang et al., 2012, Bos-Nehles et al., 2023). Because knowledge sharing is effortful and context-dependent, such systems reduce perceived costs, support trust, and reinforce collective benefits (Razmerita, Kirchner and Nielsen, 2016, Siachou et al., 2021). Thus, HPWSs promote knowledge sharing as the mechanism through which human resource investments are translated into organisational knowledge flows and innovative work behaviour at the employee level within organisations.

2.3 HPWSs and Knowledge Sharing

HPWSs refer to coherent bundles of human resource practices designed to enhance employees' ability, motivation, and opportunity to contribute, typically through staffing and training systems, performance management and rewards, and participative work design (Huselid, 1995, Sun, Aryee and Law, 2007). In organisational settings, this matters because knowledge sharing is rarely automatic; knowledge flows can be fragile when withholding occurs, and employees' participation depends on whether the organisational arrangements reduce perceived costs and risks while increasing expected benefits (Razmerita, Kirchner and Nielsen, 2016, Siachou et al., 2021). By combining development practices, supportive performance management and rewards, and participative work design, HPWSs can lower barriers to exchange and build relational conditions (e.g. trust, cohesion, and social connections) that support effective internal knowledge flows (Evans and Davis, 2015, Mooradian, Renzl and Matzler, 2006, Cabrera, Collins and Salgado, 2006). Empirical evidence also links HPWSs to improved knowledge sharing and integration across units, as employees are encouraged to connect, exchange, and combine their knowledge resources (Bhatti et al., 2021, Michaelis, Wagner and Schweizer, 2015). Thus, by improving ability, motivation, and opportunity through specific human resource practices, HPWSs create the optimal conditions for knowledge sharing within organisations. Consequently, the following hypothesis is formulated:

H1: High-performance work systems positively influence knowledge sharing.

2.4 Knowledge Sharing and Innovative Work Behaviour

Innovative work behaviour refers to employees' intentional efforts to generate, promote, and implement new ideas in their work roles (Janssen, 2000, De Jong and Den Hartog, 2010). Because these processes require both new inputs and coordination with others, innovative work behaviour is difficult to sustain when employees rely only on their own experience or information from immediate coworkers. Knowledge sharing plays a core enabling role because it increases employees' access to diverse and non-redundant knowledge, supports the recombination of internal and external insights into novel solutions, and helps employees mobilise support to move their ideas forward (Popadiuk and Choo, 2006, Koruna, 2004). Beyond idea generation, knowledge sharing is also critical for the later stages of innovative work behaviour: during idea promotion, employees must translate and communicate ideas in a convincing way to different audiences (Caniëls, De Stobbeleir and De Clippeleer, 2014), and during idea implementation, to routinise the innovation in practice, they often need to integrate and coordinate different types of information across teams (Tucker, Nembhard and Edmondson, 2007). In this sense, knowledge sharing activates the type of cognitive elaboration processes that help

employees refine understanding and mobilise innovative behaviour. Recent empirical research has consistently found that employees who engage more actively in knowledge sharing exhibit more innovative work behaviour, including stronger idea generation and implementation (Pian, Jin and Li, 2019, Kmiecik, 2021, Wang et al., 2021, Arain et al., 2020). Thus, the following hypothesis is presented:

H2: Knowledge sharing positively influences innovative work behaviour.

2.5 HPWSs and Innovative Work Behavior

HPWSs can encourage employees' innovative work behaviour because they reflect a deliberate organisational investment in people through a coordinated set of human resource practices that shape what employees are able, willing, and enabled to do at work. When employees experience strong HPWSs, they are more likely to feel they have the ability to innovate, the motivation to invest effort in new ideas, and the opportunity to act. This logic is consistent with AMO-based evidence that human resource systems can be organised into ability-, motivation-, and opportunity-enhancing dimensions (Jiang et al., 2012). It is also consistent with research showing that employees' interpretations of HPWSs matter, because human resource systems send signals that shape employees' attitudes and discretionary contributions (Van De Voorde and Beijer, 2015). When employees perceive these human resource investments as supportive rather than purely control-oriented, they are more likely to reciprocate with extra-role contributions, such as proposing and implementing improvements (Kim, Kwon and Jung, 2023). Empirically, prior studies consistently report a positive association between HPWSs and innovative work behaviour (Arshad, Hassan and Azam, 2024, Escribá-Carda, Balbastre-Benavent and Canet-Giner, 2017, Ahmed et al., 2018, Do and Shipton, 2019). Thus, the following hypothesis is proposed:

H3: High-performance work systems positively influence innovative work behaviour.

2.6 The Mediating Role of Knowledge Sharing

From a knowledge management perspective, HPWSs are designed to strengthen employees' ability, motivation, and opportunity, but these resources translate into innovative work behaviour only when they are activated through knowledge flows in daily work. Knowledge sharing is the key conversion mechanism because it moves dispersed individual know-how into collective use, enabling others to access, integrate, and recombine knowledge for problem-solving and improvement purposes. This matters because knowledge exchange is effortful and context-dependent: employees participate more when the context reduces perceived costs and risks and increases expected benefits, whereas withholding behaviours can emerge when those conditions are absent (Razmerita, Kirchner and Nielsen, 2016). When knowledge exchange is constrained, innovation suffers. For example, evidence shows that supervisors' knowledge hiding reduces subordinates' innovative work behaviour partly through lower self-efficacy, which suggests that restricted knowledge access undermines confidence to innovate (Arain et al., 2020). Conversely, when knowledge sharing occurs, it supports both idea generation and implementation by broadening employees' access to diverse inputs and facilitating coordination, which suggests that different sharing behaviours relate to different stages of innovative work behaviour (Pian, Jin and Li, 2019). Therefore, knowledge sharing is necessary to carry the influence of HPWSs from strengthened AMO conditions into employees' innovative actions (Ahmed et al., 2018, Bhatti et al., 2021). Therefore, the following hypothesis is suggested:

H4: Knowledge sharing mediates the relationship between HPWSs and innovative work behaviour.

Based on the above discussion, the proposed theoretical model is presented in Figure 1:

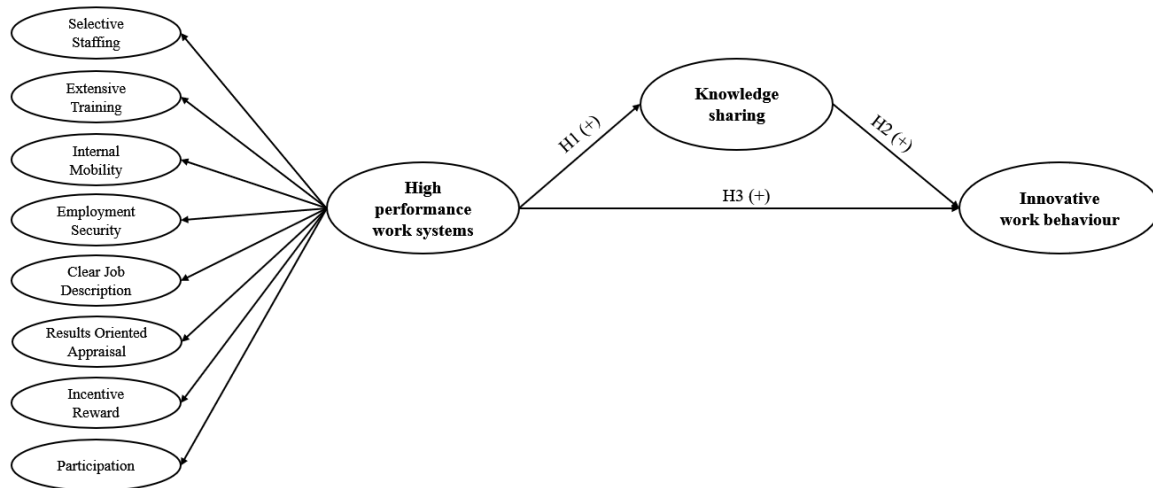


Figure 1: Research model (Source: authors' own)

3. Methodology

3.1 Sample and Data Collection

In this study, a quantitative approach was adopted to examine the research hypotheses. The data were collected through a structured questionnaire, with measurement scales adapted from prior validated studies to ensure the reliability and validity of the instrument. Stratified sampling was utilised to ensure that the sample represented the logistics industry in Vietnam (Groves et al., 2009). The sample proportions were based on official statistics from Vietnam's Ministry of Industry and Trade (2023) and General Statistics Office, as of 31 December 2021. Within each group, respondents were randomly selected from logistics firms to participate in the survey.

The questionnaire was developed in English based on validated measurement scales from prior studies and then translated into Vietnamese by two lecturers in the business field. To enhance linguistic accuracy and conceptual equivalence, the Vietnamese version was subsequently back-translated into English. To ensure consistency and content validity, both versions were then reviewed by two lecturers and a manager in the logistics and supply chain sector, following recommended translation procedures (Bracken and Barona, 1991). The finalised questionnaire was distributed directly via the alumni network of the university where the authors are affiliated, targeting alumni currently employed in the logistics sector. All the participants received clear information about the study's objectives and procedures, and their rights, including the right to withdraw at any time without consequences. Written informed consent was obtained prior to participation. To address ethical requirements, the study maintained strict confidentiality and anonymity procedures: no identifying information was collected for analysis, the participants' responses were securely stored, and the data were used solely for research purposes. After collection, the completed questionnaires were screened for completeness and response consistency before being included in the final dataset.

A total of 782 respondents, representing multiple departments in Vietnam's logistics industry, were analysed. Most of the respondents had a university degree (80.8%) as their highest level of education, followed by an intermediate or college-level diploma (10.2%), or a postgraduate qualification (8.6%). The dominant occupational groups were business and market development (21%), information and data management (11.6%), and import/export documentation and customs clearance (9.1%). In terms of work experience, 42.8% had been employed for 3–5 years and 36.4% for 1–3 years, indicating a relatively stable and experienced workforce. Most participants reported their monthly income as 10–50 million VND. These demographic features reflect the sector's demand for highly qualified and experienced professionals and support the sample's suitability for advanced statistical analysis (Hair et al., 2019, Tabachnick, Fidell and Ullman, 2018).

3.2 Measures

All the construct measures employed a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

HPWSs were measured using a multidimensional scale adapted from Sun, Aryee and Law (2007), which comprises eight human resource management practice bundles: selective staffing (SS1 – SS4), extensive training

(ET1 – ET4), internal mobility (IM1 – IM5), employment security (ES1 – ES2), clear job description (JD1 – JD3), results-oriented appraisal (RO1 – RO3), incentive reward (IR1 – IR2), and participation (PA1 – PA3). Cronbach’s alpha = 0.910.

Knowledge sharing was measured using an 8-item scale developed by Van Den Hooff and De Ridder (2004). Cronbach’s alpha = 0.921. This scale captures two key dimensions: knowledge donating, which reflects the act of providing one’s knowledge to others (KS1 – KS4), and knowledge collecting, which involves seeking and acquiring knowledge from colleagues (KS5 – KS8).

IWB was measured using a 10-item scale developed and validated by De Jong and Den Hartog (2010). Cronbach’s alpha = 0.940.

3.3 Data Analysis

Several tests were conducted to examine our proposed model. Descriptive statistics were used to assess the demographic characteristics and general nature of the data. The reliability of the measurement scales was evaluated using Cronbach’s alpha. An exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were then conducted to assess the factor structure and model fit, while convergent and discriminant validity were also examined. To test the hypotheses and estimate the direct and indirect effects, structural equation modelling (SEM) was performed using AMOS.

4. Findings

4.1 Exploratory Factor Analysis (EFA)

EFA was used to assess the underlying structure of the measurement scales. The EFA results and scale reliability are summarised in Table 1. The EFA results showed that the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.948, which indicated that the data had excellent suitability for factor analysis. Bartlett’s Test of Sphericity was significant ($p = 0.000$), confirming that the correlation matrix was not an identity matrix and that the dataset was appropriate for factor extraction. Ten factors were extracted with eigenvalues greater than 1, which collectively accounted for 69.91% of the total variance. This value was well above the commonly accepted minimum threshold of 50% for social science research (Hair et al., 2019), and demonstrated that the extracted factors adequately represented the underlying structure of the dataset. The factor loadings for all the retained items were above 0.4, providing strong item reliability and substantial contributions of the observed variables to their respective latent constructs (Nunnally and Bernstein, 1994). Moreover, the items loaded cleanly onto their intended factors without significant cross-loadings, indicating a clear and consistent measurement structure.

Overall, these findings provided robust evidence of the measurement model’s internal consistency and construct validity. Consequently, all the items were retained for subsequent analyses.

Table 1: Exploratory factor analysis results

	IWB	DONA	COL	IM	ET	SS	JD	PA	RO	IR	ES
IWB3	0.839										
IWB8	0.836										
IWB9	0.802										
IWB10	0.797										
IWB1	0.784										
IWB2	0.773										
IWB6	0.762										
IWB5	0.741										
IWB7	0.736										
IWB4	0.711										
KS7		0.873									
KS8		0.667									
KS5		0.576									

	IWB	DONA	COL	IM	ET	SS	JD	PA	RO	IR	ES
KS6		0.546									
KS2			0.786								
KS1			0.436								
KS4			0.429								
KS3			0.396								
IM1				0.792							
IM5				0.788							
IM2				0.768							
IM4				0.758							
IM3				0.690							
ET3					0.812						
ET4					0.810						
ET1					0.774						
ET2					0.759						
SS3						0.827					
SS2						0.791					
SS1						0.758					
SS4						0.721					
JD2							0.837				
JD3							0.792				
JD1							0.742				
PA2								0.790			
PA1								0.779			
PA3								0.766			
RO1									0.873		
RO2									0.769		
RO3									0.693		
IR1										0.849	
IR2										0.691	
ES1											0.770
ES2											0.671

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)	0.948
Sig. of Bartlett's Test of Sphericity	0.000
Cumulative %	69.909
Eigenvalues	1.076

Note: N = 782

4.2 Confirmatory Factor Analysis (CFA)

CFA was used to validate the measurement model. The results in Table 2 demonstrate that the model achieved a good fit to the data, as indicated by multiple fit indices: $\chi^2(889) = 1414.916$ ($p < 0.001$), $\chi^2/df = 1.592$, GFI = 0.925, TLI = 0.971, CFI = 0.973, RMSEA = 0.028. These values meet or exceed commonly accepted thresholds (CFI/TLI > 0.90, RMSEA < 0.06), supporting the adequacy of the measurement model (Hair et al., 2019, Hu and Bentler, 1999).

Table 2: The CFA goodness-of-fit statistics for the final models

Test	Acceptable cut - off value	Tested value for final model
Absolute Fit Measures		
Chi-Square		1414.916
P-value	< 0.001	0.000
Chi-Square/df	< 3	1.592
GFI	> 0.9	0.925
CFI	> 0.9	0.973
TLI	> 0.9	0.971
RMSEA	< 0.08	0.028

Table 3 reports the standardised regression weights (factor loadings) and associated significance levels for the observed variables within the measurement model. All the observed indicators loaded significantly onto their respective latent constructs, as evidenced by p-values consistently below 0.001 (***). These results, along with elevated critical ratio (CR) values, indicate that the relationships between the observed indicators and their associated constructs were robust and not due to random sampling variation (Hair et al., 2019).

Most items displayed loadings above the commonly recommended threshold of 0.70, which provides strong support for the convergent validity of the constructs. For instance, KS8 (0.828), ET4 (0.822), and SS1 (0.819) showed particularly high associations with their respective latent variables. Several items, such as ES1 (0.684) and IR1 (0.711), had slightly lower loadings. However, these values are acceptable within the context of social sciences research, especially when dealing with multidimensional constructs or newly refined scales (Fornell and Larcker, 1981).

Overall, these findings confirm that the items represented their intended constructs well, thereby supporting the reliability and convergent validity of the measurement model.

Table 3: Regression weights and factor loadings for measurement items

Latent Construct	Item	Factor loading	S.E.	C.R.	p-value	Latent Construct	Item	Factor loading	S.E.	C.R.	p-value		
Knowledge sharing (KS)	DONA	KS1	0.778	-	-	-	High performance work system (HPWSs)	SS	SS3	0.806	-	-	-
		KS2	0.733	0.042	21.539	***			SS2	0.771	0.042	22.439	***
		KS3	0.758	0.044	22.442	***			SS1	0.819	0.038	23.970	***
		KS4	0.727	0.044	21.335	***			SS4	0.724	0.043	20.870	***
	COL	KS5	0.784	-	-	-		ET	ET3	0.807	-	-	-
		KS6	0.797	0.041	21.539	***			ET4	0.822	0.048	24.459	***
		KS7	0.809	0.041	22.442	***			ET1	0.758	0.040	22.207	***
		KS8	0.828	0.044	21.335	***			ET2	0.787	0.040	23.261	***

Regarding the AVE values, the majority of the constructs exceeded the commonly accepted threshold of 0.50, indicating that each construct accounted for an adequate level of variance explained by its measurement items. Two exceptions were the two dimensions of knowledge sharing – knowledge donating (AVE = 0.562) and knowledge collecting (AVE = 0.647) – which slightly fell below ideal discriminant standards when compared against their squared correlations with other constructs. Nevertheless, both constructs retained high CR values (0.896 and 0.880, respectively), and their item loadings were significant, which supports their retention in models involving multidimensional constructs within social science research contexts (Fornell and Larcker, 1981).

Discriminant validity was also demonstrated. For most constructs, the square root of the AVE exceeded the inter-construct correlations, suggesting that each construct was more closely associated with its own indicators than with those of other constructs. The only notable exception was the association between knowledge donating (VAVE = 0.750) and knowledge collecting (VAVE = 0.805), where the intercorrelation (0.966) surpassed both AVE square roots. This high correlation is theoretically plausible given that both constructs represent dimensions of knowledge sharing and, in practice, are often conceptually intertwined.

In sum, the results presented in Table 4 offer support for the convergent and discriminant validity of the measurement model, confirming the suitability of the constructs for subsequent structural equation modelling.

Table 4: Convergent and Discriminant Validity

	IR	RO	PA	JD	SS	ET	IM	CR	AVE	MSV	MaxR (H)	IM	ET	SS	JD	PA	RO	IR	ES	DONA	COL	IWB		
IR	0.784	0.834	0.825	0.834	0.862	0.872	0.873																	
RO	0.648	0.626	0.612	0.626	0.610	0.630	0.579																	
PA	0.280	0.252	0.224	0.252	0.279	0.243	0.208																	
JD	0.830	0.835	0.829	0.842	0.866	0.874	0.875																	
SS	0.358***	0.456***	0.388***	0.359***	0.332***	0.441***	0.761																	
ET	0.373***	0.433***	0.407***	0.307***	0.427***	0.794																		
IM	0.467***	0.431***	0.384***	0.417***	0.781																			
CR	0.490***	0.502***	0.315***	0.791																				
AVE	0.352***	0.460***	0.782																					
MSV	0.482***	0.791																						
MaxR (H)	0.805																							

		CR	AVE	MSV	MaxR (H)	IM	ET	SS	JD	PA	RO	IR	ES	DONA	COL	IWB
ES	0.704	0.544	0.246	0.715	0.302***	0.365***	0.400***	0.494***	0.353***	0.452***	0.426***	0.738				
DONA	0.837	0.562	0.934	0.838	0.388***	0.493***	0.527***	0.397***	0.473***	0.482***	0.518***	0.496***	0.749			
COL	0.880	0.647	0.934	0.881	0.371***	0.489***	0.520***	0.408***	0.433***	0.478***	0.529***	0.461***	0.966	0.805		
IWB	0.940	0.612	0.428	0.942	0.235***	0.222***	0.406***	0.222***	0.283***	0.238***	0.366***	0.271***	0.654	0.610***	0.782	

The structural equation model demonstrated an adequate overall fit to the data, as indicated by the following fit indices: $\chi^2 = 1414.916$, $df = 889$, $\chi^2/df = 1.592$, $GFI = 0.925$, $TLI = 0.971$, $CFI = 0.973$, $RMSEA = 0.028$. All the indices met or exceeded the recommended thresholds ($TLI, CFI > 0.90$, $RMSEA < 0.08$), supporting the suitability of the model for hypothesis testing (Hair et al., 2019).

The results of the path analysis are presented in Table 5. Of the three hypothesised relationships, two were found to be statistically significant, offering partial support for the proposed structural model. Firstly, HPWSs exhibited a strong and significant positive influence on knowledge sharing ($\beta = 0.744$, $p < 0.001$), indicating that employees who perceived higher levels of HPWSs were more likely to engage in knowledge sharing. Secondly, knowledge sharing also showed a significant positive effect on innovative work behaviour ($\beta = 0.705$, $p < 0.001$), indicating that individuals who actively shared knowledge were more likely to demonstrate innovative work behaviour. In contrast, the direct effect of HPWSs on innovative work behaviour was not statistically significant ($\beta = -0.083$, $p = 0.183$).

Table 5: Results of the structural equation model

Hypotheses	Hypotheses path	B	β	SE	CR	p-value	Conclusion
H1	HPWSs → KS	0.838	0.744	0.055	1	***	Supported
H2	KS → IWB	0.715	0.705	0.063	2	***	Supported
H3	HPWSs → IWB	-0.095	-0.083	0.073	0.5	0.183	Rejected

4.3 Mediation Effects of Knowledge Sharing

To assess the mediating role of knowledge sharing between HPWSs and innovative work behaviour, the bootstrapping approach was employed using AMOS. Bootstrapping is a nonparametric resampling procedure that avoids the assumption of normality in the sampling distribution (Preacher and Hayes, 2008). This method repeatedly draws resamples from the dataset to estimate indirect effects, thereby generating an empirical approximation of the distribution of $a \times b$, which is subsequently used to build confidence intervals. In this study, the bootstrapping procedure was performed with 5000 resamples and a 90% confidence interval level (Mackinnon, Lockwood and Williams, 2004).

The results of the structural equation model (Table 5) indicated that HPWSs had a strong positive effect on knowledge sharing ($\beta = 0.744$, $p < 0.001$), and knowledge sharing significantly influenced innovative work behaviour ($\beta = 0.705$, $p < 0.001$). However, the direct effect of HPWSs on innovative work behaviour was not statistically significant ($\beta = -0.083$, $p = 0.183$). Further evidence was provided through the mediation analysis

(Table 6). The indirect effect of HPWSs on innovative work behaviour via knowledge sharing was both positive and significant ($\beta = 0.599$, $p = 0.001$), with the bias-corrected confidence intervals (0.491–0.740) excluding zero, thereby confirming the mediating role of knowledge sharing. Consequently, H4 was accepted. This result indicates that, in this study, knowledge sharing fully mediated the relationship between HPWSs and innovative work behaviour.

Table 6: Mediation analysis for HPWSs, KS, and IWB

Hypotheses	Hypotheses path	Indirect estimate	Bias-corrected confidence intervals		P-value	Conclusion
			Lower	Upper		
H4	HPWSs→KS→IWB	0.599	0.491	0.74	0.001	Accepted

5. Discussion and Conclusion

Grounded in a knowledge management perspective, this study examined whether knowledge sharing served as the central mechanism through which HPWSs translated into employees’ innovative work behaviour in Vietnam’s logistics industry. First, the strong linkage between HPWSs and knowledge sharing reinforces the view that human resource systems shape the conditions under which knowledge flows emerge and stabilise (Bhatti et al., 2021, Michaelis, Wagner and Schweizer, 2015). As coherent bundles of ability-, motivation-, and opportunity-enhancing practices, HPWSs provide structural and relational infrastructures that reduce the perceived risks and opportunity costs associated with sharing. This aligns with the social dilemma perspective, which posits that employees engage in knowledge exchange when contextual arrangements minimise personal costs and strengthen expected collective benefits (Razmerita, Kirchner and Nielsen, 2016). It also resonates with evidence suggesting that knowledge hiding is sensitive to organisational antecedents and can undermine collective outcomes when structural support is weak (Siachou et al., 2021).

Second, the positive association between knowledge sharing and innovative work behaviour corroborates previous findings that knowledge exchange functions as a micro-foundation of innovation by expanding access to non-redundant expertise and enabling recombination and coordination (Pian, Jin and Li, 2019, Kmiecik, 2021, Wang et al., 2021). Knowledge sharing expands access to non-redundant expertise and facilitates recombination and coordination, which ultimately strengthens innovative work behaviour, especially when sharing occurs through both donating and collecting knowledge in ongoing work interactions (Pian, Jin and Li, 2019). This interpretation is also consistent with evidence that constrained knowledge flows undermine innovation-related behaviours; when knowledge is withheld, employees lose access to inputs that support confident experimentation and implementation, and innovative behaviour declines (Arain et al., 2020).

Third, the non-significant direct effect of HPWSs on innovative work behaviour departs from studies that report a straightforward positive relationship (Escribá-Carda, Balbastre-Benavent and Canet-Giner, 2017, Do and Shipton, 2019, Ahmed et al., 2018). However, rather than contradicting these studies, the present findings refine them. The full mediation pattern suggests that HPWSs contribute to innovative work behaviour only through the specific knowledge-flow channel they activate. In other words, HPWSs may strengthen employees’ ability, motivation, and opportunity, but these resources remain potential rather than actual drivers of innovation unless they are mobilised through day-to-day knowledge exchange. Therefore, knowledge sharing operates as the key conversion mechanism that moves dispersed know-how into collective use and enables access, integration, and recombination for problem solving and improvement (Bhatti et al., 2021). Because knowledge exchange is effortful and context-dependent, employees share more when organisational conditions reduce perceived costs and risks and increase expected benefits; in contrast, unfavourable conditions can trigger withholding and knowledge hiding, which ultimately restrict knowledge access (Razmerita, Kirchner and Nielsen, 2016). Once activated, knowledge sharing supplies the diverse inputs and coordination needed for both idea generation and implementation, and different sharing behaviours can support different stages of innovative work behaviour (Pian, Jin and Li, 2019).

5.1 Theoretical Implications

The results of this research contribute to the knowledge-based view and knowledge management literature by reinforcing the view that knowledge is an important resource for innovation and that innovation depends on the knowledge created and shared within organizations. By examining employees in Vietnam’s logistics industry, this study provides further evidence that knowledge sharing is important for innovative work behaviour in a context where employees need to coordinate information, experience, and operational know-how across different logistics activities (Pfohl, 2023). More importantly, the finding of full mediation suggests that

knowledge sharing is the main process through which HPWSs influence innovative work behaviour. HPWSs can create favourable conditions by improving employees' ability, motivation, and opportunity to exchange knowledge, but these conditions alone do not directly lead to innovative work behaviour. Employees become more innovative when they actually share knowledge with others, combine different sources of knowledge, and apply this knowledge to solve problems and improve work processes. In this respect, this study conceptualises knowledge sharing as a core transformation mechanism that converts HRM-based organisational conditions into innovative action. This finding extends existing HRM, knowledge management, and innovation research by showing that the key issue is not only whether HPWSs are implemented, but also whether they are able to activate knowledge sharing among employees. Thus, the study adds to previous research by identifying knowledge sharing as the point at which HRM practices become useful for innovation. Without knowledge sharing, the effect of HPWSs on innovative work behaviour does not appear to materialise.

5.2 Practical Implications

The full mediation pattern observed here means that, in Vietnam's logistics industry, HPWSs will translate into employee innovation only if they encourage employees to engage consistently in knowledge donating and knowledge collecting in day-to-day operations. Practically, managers should treat knowledge sharing as a core operational output of HPWSs, because it is the mechanism that makes dispersed operational know-how accessible for recombination and coordinated implementation, which is essential for innovative work behaviour in interdependent logistics processes.

First, HPWS design should be evaluated and adjusted through a knowledge-flow lens. Training and development should explicitly build employees' capacity to articulate tacit operational know-how, document lessons learned, and convert fixes into reusable guidance, while performance management should make knowledge contribution and knowledge seeking visible and rewarded, to ensure that sharing becomes part of normal performance, rather than discretionary extra work. At the work design level, firms should institutionalise structured interaction opportunities, where cross-functional knowledge can circulate during execution and exception handling. Evidence from a global logistics provider shows the practical value of deliberately addressing knowledge sharing practices as a work system issue, rather than leaving sharing to informal communication (Wong and Davison, 2018).

Second, managers should actively reduce the costs and risks that discourage knowledge exchange. Knowledge sharing requires time, effort, and trust, and employees are more likely to participate when perceived risks and opportunity costs are lowered (Razmerita, Kirchner and Nielsen, 2016). This is particularly important when the work environment in the logistics sector is time-pressured and error-sensitive, and employees may avoid sharing to protect themselves from blame or reputational loss (Pfohl, 2023). Practical actions include building psychologically safe norms for raising exceptions, discussing failures and clarifying reciprocity expectations, and making supervisor support visible in how leaders respond to questions, mistakes, and improvement suggestions.

Third, logistics firms should embed knowledge sharing into operational improvement routines so that shared knowledge consistently converts into implemented innovation. Because knowledge exchange facilitates recombination and coordination across innovation stages, organisations should institutionalise routines that turn dispersed know-how into actionable changes, such as structured after-action reviews for service failures, cross-team problem-solving huddles for recurring bottlenecks, and lightweight mechanisms to capture and reuse solutions across teams (Wang et al., 2021). This matters because constrained knowledge access can suppress innovative work behaviour, while active knowledge flows provide the inputs and confidence needed for experimentation and implementation (Arain et al., 2020).

5.3 Limitations and Future Research

This study has several limitations that should be considered in future research. First, the model focused on a single mediator, knowledge sharing, to explain how HPWSs relate to innovative work behaviour. Although this focus was theoretically aligned with knowledge management and strongly supported by the resulting full mediation pattern, future research can incorporate additional knowledge management mediators that capture later stages of the knowledge-to-innovation chain, such as knowledge integration, knowledge application, knowledge reuse, knowledge hiding, and absorptive capacity. Including multiple mediators would provide a more comprehensive account of how human resource management system configurations are converted into innovation through interconnected knowledge processes.

Second, the empirical context is limited to Vietnam's logistics industry. Logistics is theoretically appropriate due to operational interdependence and dispersed expertise, but the same mechanism may vary across industries

with different knowledge regimes and coordination demands. Future studies should replicate the model in other sectors and countries to examine whether the full mediation pattern holds under different institutional and technological conditions.

Third, the cross-sectional survey design limits causal inference. Future research could adopt multi-wave time-lagged designs and multi-source assessments of innovative work behaviour, such as supervisor ratings or objective improvement outcomes, to better capture the temporal sequence and reciprocity through which HPWSs shape knowledge sharing, and knowledge sharing subsequently shapes innovative behaviour.

AI statement: The authors declare that no generative artificial intelligence (AI) tools were used in the creation or preparation of this manuscript.

Ethics statement: This study employed anonymous self-administered questionnaires. Participation was entirely voluntary, and respondents completed the questionnaires based on their own willingness. Thus, it was not necessary to apply for ethical approval for research involving animal or human subjects.

Conflict of interest statement: The authors declare that they have no conflicts of interest associated with the publication of this research.

References

- Ahmed, F., Hassan, A., Ayub, M. U. & Klimoski, R. J., (2018), "High commitment work system and innovative work behavior: The mediating role of knowledge sharing", *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 12, 29-51. <https://hdl.handle.net/10419/188334>
- Akram, T., Lei, S., Haider, M. J. & Hussain, S. T., (2020), "The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing", *Journal of Innovation & Knowledge*, 5, 117-129. <https://doi.org/10.1016/j.jik.2019.10.001>
- Alavi, M. & Leidner, D. E., (2001), "Knowledge management and knowledge management systems: Conceptual foundations and research issues1, 2", *MIS quarterly*, 25, 107-136. <https://doi.org/10.2307/3250961>
- Anand, A., Walsh, I. & Moffett, S., (2019), "Does humility facilitate knowledge sharing? Investigating the role of humble knowledge inquiry and response", *Journal of Knowledge Management*, 23, 1218-1244. <https://doi.org/10.1108/JKM-06-2018-0353>
- Antunes, H. D. J. G. & Pinheiro, P. G., (2020), "Linking knowledge management, organizational learning and memory", *Journal of innovation & knowledge*, 5, 140-149. <https://doi.org/10.1016/j.jik.2019.04.002>
- Appelbaum, E. (2000), *Manufacturing advantage: Why high-performance work systems pay off*, Cornell University Press.
- Arain, G. A., Bhatti, Z. A., Hameed, I. & Fang, Y.-H., (2020), "Top-down knowledge hiding and innovative work behavior (IWB): a three-way moderated-mediation analysis of self-efficacy and local/foreign status", *Journal of Knowledge Management*, 24, 127-149. <https://doi.org/10.1108/JKM-11-2018-0687>
- Arshad, B., Hassan, H. & Azam, A., (2024), "The impact of employees' experience of high-performance work systems on innovative behavior in professional service firms", *Frontiers in Psychology*, 14, 1324474. <https://doi.org/10.3389/fpsyg.2023.1324474>
- Bhatti, S. H., Zakariya, R., Vrontis, D., Santoro, G. & Christofi, M., (2021), "High-performance work systems, innovation and knowledge sharing: An empirical analysis in the context of project-based organizations", *Employee Relations: The International Journal*, 43, 438-458. <https://doi.org/10.1108/ER-10-2019-0403>
- Bos-Nehles, A., Townsend, K., Cafferkey, K. & Trullen, J., (2023), "Examining the Ability, Motivation and Opportunity (AMO) framework in HRM research: Conceptualization, measurement and interactions", *International Journal of Management Reviews*, 25, 725-739. <https://doi.org/10.1111/ijmr.12332>
- Bracken, B. A. & Barona, A., (1991), "State of the art procedures for translating, validating and using psychoeducational tests in cross-cultural assessment", *School psychology international*, 12, 119-132. <https://doi.org/10.1177/0143034391121010>
- Cabrera, A., Collins, W. C. & Salgado, J. F., (2006), "Determinants of individual engagement in knowledge sharing", *The International Journal of Human Resource Management*, 17, 245-264. <https://doi.org/10.1080/09585190500404614>
- Caniëls, M. C., De Stobbeleir, K. & De Clippeleer, I., (2014), "The antecedents of creativity revisited: A process perspective", *Creativity and Innovation Management*, 23, 96-110. <https://doi.org/10.1111/caim.12051>
- Chatterjee, S., Chaudhuri, R. & Vrontis, D., (2022), "Knowledge sharing in international markets for product and process innovation: moderating role of firm's absorptive capacity", *International Marketing Review*, 39, 706-733. <https://doi.org/10.1108/IMR-11-2020-0261>
- De Jong, J. & Den Hartog, D., (2010), "Measuring innovative work behaviour", *Creativity and innovation management*, 19, 23-36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Do, H. & Shipton, H., (2019), "High-performance work systems and innovation in Vietnamese small firms", *International Small Business Journal*, 37, 732-753. <https://doi.org/10.1177/0266242619863572>
- Escribá-Carda, N., Balbastre-Benavent, F. & Canet-Giner, M. T., (2017), "Employees' perceptions of high-performance work systems and innovative behaviour: The role of exploratory learning", *European Management Journal*, 35, 273-281. <https://doi.org/10.1016/j.emj.2016.11.002>

- Evans, W. R. & Davis, W. D., (2015), "High-performance work systems as an initiator of employee proactivity and flexible work processes", *Organization Management Journal*, 12, 64-74. <https://doi.org/10.1080/15416518.2014.1001055>
- Fornell, C. & Larcker, D. F., (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of marketing research*, 18, 39-50. <https://doi.org/10.1177/002224378101800104>
- Foss, N. J., Husted, K. & Michailova, S., (2010), "Governing knowledge sharing in organizations: Levels of analysis, governance mechanisms, and research directions", *Journal of Management studies*, 47, 455-482. <https://doi.org/10.1111/j.1467-6486.2009.00870.x>
- Grant, R. M., (2002), "The knowledge-based view of the firm", *The strategic management of intellectual capital and organizational knowledge*, 17, 133-148.
- Groves, R. M., Fowler Jr, F. J., Couper, M. P., Lepkowski, J. M., Singer, E. & Tourangeau, R. (2009), *Survey methodology*, John Wiley & Sons.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E., (2019). *Multivariate data analysis*. Cengage Learning EMEA.
- Hau, Y. S., Kim, B., Lee, H. & Kim, Y.-G., (2013), "The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions", *International journal of information management*, 33, 356-366. <https://doi.org/10.1016/j.ijinfomgt.2012.10.009>
- Hu, L. T. & Bentler, P. M., (1999), "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural equation modeling: a multidisciplinary journal*, 6, 1-55. <https://doi.org/10.1080/10705519909540118>
- Huselid, M. A., (1995), "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of management journal*, 38, 635-672. <https://doi.org/10.5465/256741>
- Janssen, O., (2000), "Job demands, perceptions of effort-reward fairness and innovative work behaviour", *Journal of Occupational and organizational psychology*, 73, 287-302. <https://doi.org/10.1348/096317900167038>
- Jeong, J., Lee, J. & Kim, B.-J., (2024), "The relationship between high-performance work system and knowledge sharing behavior via perceived organizational support: the moderating role of coaching leadership", *Current Psychology*, 43, 23082-23102. <https://doi.org/10.1007/s12144-024-06051-z>
- Jiang, K., Lepak, D. P., Hu, J. & Baer, J. C., (2012), "How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms", *Academy of management Journal*, 55, 1264-1294. <https://doi.org/10.5465/amj.2011.0088>
- Kalpič, B. & Bernus, P., (2006), "Business process modeling through the knowledge management perspective", *Journal of knowledge management*, 10, 40-56. <https://doi.org/10.1108/13673270610670849>
- Kianto, A., Sáenz, J. & Aramburu, N., (2017), "Knowledge-based human resource management practices, intellectual capital and innovation", *Journal of business research*, 81, 11-20. <http://dx.doi.org/10.1016/j.jbusres.2017.07.018>
- Kim, S., Kwon, J. & Jung, D., (2023), "Going beyond the firm perspective: what do employees think of high-performance work systems (HPWS)?", *Asian Business & Management*, 22, 2106-2134. <https://doi.org/10.1057/s41291-023-00243-4>
- Kmiecik, R., (2021), "Trust, knowledge sharing, and innovative work behavior: empirical evidence from Poland", *European Journal of Innovation Management*, 24, 1832-1859. <https://doi.org/10.1108/EJIM-04-2020-0134>
- Kogut, B. & Zander, U., (1992), "Knowledge of the firm, combinative capabilities, and the replication of technology", *Organization science*, 3, 383-397. <https://doi.org/10.1287/orsc.3.3.383>
- Koruna, S., (2004), "Leveraging knowledge assets: combinative capabilities—theory and practice", *R&D Management*, 34, 505-516. <https://doi.org/10.1111/j.1467-9310.2004.00358.x>
- Le, P. B. & Lei, H., (2019), "Determinants of innovation capability: the roles of transformational leadership, knowledge sharing and perceived organizational support", *Journal of knowledge management*, 23, 527-547. <https://doi.org/10.1108/JKM-09-2018-0568>
- Lin, H. F., (2007), "Knowledge sharing and firm innovation capability: an empirical study", *International Journal of manpower*, 28, 315-332. <https://doi.org/10.1108/01437720710755272>
- Mackinnon, D. P., Lockwood, C. M. & Williams, J., (2004), "Confidence limits for the indirect effect: Distribution of the product and resampling methods", *Multivariate behavioral research*, 39, 99-128. https://doi.org/10.1207/s15327906mbr3901_4
- Michaelis, B., Wagner, J. D. & Schweizer, L., (2015), "Knowledge as a key in the relationship between high-performance work systems and workforce productivity", *Journal of Business Research*, 68, 1035-1044. <https://doi.org/10.1016/j.jbusres.2014.10.005>
- Minbaeva, D., Foss, N. & Snell, S., (2009). *Bringing the knowledge perspective into HRM*. Wiley Online Library.
- Mooradian, T., Renzl, B. & Matzler, K., (2006), "Who trusts? Personality, trust and knowledge sharing", *Management learning*, 37, 523-540. <https://doi.org/10.1177/1350507606073424>
- Nguyen, T.-M., Siri, N. S. & Malik, A., (2022), "Multilevel influences on individual knowledge sharing behaviours: the moderating effects of knowledge sharing opportunity and collectivism", *Journal of Knowledge Management*, 26, 70-87. <https://doi.org/10.1108/JKM-01-2021-0009>
- Nonaka, I., (1994), "A dynamic theory of organizational knowledge creation", *Organization science*, 5, 14-37. <https://doi.org/10.1287/orsc.5.1.14>
- Nunnally, J. & Bernstein, I., (1994). *Psychometric Theory 3rd edition* (MacGraw-Hill, New York).
- Oliveira, M., Curado, C. & De Garcia, P. S., (2021), "Knowledge hiding and knowledge hoarding: a systematic literature review", *Knowledge and Process Management*, 28, 277-294. <https://doi.org/10.1002/kpm.1671>

Pfohl, H.-C., (2023), Management of the Logistics Function. "Logistics Management: Conception and Functions": Springer.

Pian, Q. Y., Jin, H. & Li, H., (2019), "Linking knowledge sharing to innovative behavior: the moderating role of collectivism", *Journal of Knowledge Management*, 23, 1652-1672. <https://doi.org/10.1108/JKM-12-2018-0753>

Podrug, N., Filipović, D. & Kovač, M., (2017), "Knowledge sharing and firm innovation capability in Croatian ICT companies", *International Journal of Manpower*, 38, 632-644. <https://doi.org/10.1108/IJM-04-2016-0077>

Popadiuk, S. & Choo, C. W., (2006), "Innovation and knowledge creation: How are these concepts related?", *International journal of information management*, 26, 302-312. <https://doi.org/10.1016/j.ijinfomgt.2006.03.011>

Preacher, K. J. & Hayes, A. F., (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior research methods*, 40, 879-891. <https://doi.org/10.3758/BRM.40.3.879>

Radaelli, G., Lettieri, E., Mura, M. & Spiller, N., (2014), "Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects", *Creativity and innovation management*, 23, 400-414. <https://doi.org/10.1111/caim.12084>

Razmerita, L., Kirchner, K. & Nielsen, P., (2016), "What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication", *Journal of knowledge Management*, 20, 1225-1246. <https://doi.org/10.1108/JKM-03-2016-0112>

Santhosh, S. S. & Lawrence, L. N., (2023), "Understanding the implementations and limitations in knowledge management and knowledge sharing using a systematic literature review", *Current Psychology*, 42, 32427-32442. <https://doi.org/10.1007/s12144-022-04115-6>

Serenko, A. & Bontis, N., (2016), "Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding", *Journal of knowledge management*, 20, 1199-1224. <https://doi.org/10.1108/JKM-05-2016-0203>

Siachou, E., Trichina, E., Papasolomou, I. & Sakka, G., (2021), "Why do employees hide their knowledge and what are the consequences? A systematic literature review", *Journal of Business Research*, 135, 195-213. <https://doi.org/10.1016/j.ibusres.2021.06.031>

Smith, E. A., (2001), "The role of tacit and explicit knowledge in the workplace", *Journal of knowledge Management*, 5, 311-321. <https://doi.org/10.1108/13673270110411733>

Sun, L.-Y., Aryee, S. & Law, K. S., (2007), "High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective", *Academy of management Journal*, 50, 558-577. <https://doi.org/10.5465/amj.2007.25525821>

Tabachnick, B. G., Fidell, L. S. & Ullman, J. B. (2018), *Using multivariate statistics*, Pearson Boston, MA.

Trong Tuan, L., (2012), "Behind knowledge transfer", *Management Decision*, 50, 459-478. <https://doi.org/10.1108/00251741211216232>

Tucker, A. L., Nembhard, I. M. & Edmondson, A. C., (2007), "Implementing new practices: An empirical study of organizational learning in hospital intensive care units", *Management science*, 53, 894-907. <https://doi.org/10.1287/mnsc.1060.0692>

Van De Voorde, K. & Beijer, S., (2015), "The role of employee HR attributions in the relationship between high-performance work systems and employee outcomes", *Human resource management journal*, 25, 62-78. <https://doi.org/10.1111/1748-8583.12062>

Van Den Hooff, B. & De Ridder, J. A., (2004), "Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing", *Journal of knowledge management*, 8, 117-130. <https://doi.org/10.1108/13673270410567675>

Wang, S. & Noe, R. A., (2010), "Knowledge sharing: A review and directions for future research", *Human resource management review*, 20, 115-131. <https://doi.org/10.1016/j.hrmr.2009.10.001>

Wang, Z., Ren, S., Chadee, D., Liu, M. & Cai, S., (2021), "Team reflexivity and employee innovative behavior: the mediating role of knowledge sharing and moderating role of leadership", *Journal of Knowledge Management*, 25, 1619-1639. <https://doi.org/10.1108/JKM-09-2020-0683>

Wong, L. H. & Davison, R. M., (2018), "Knowledge sharing in a global logistics provider: An action research project", *Information & Management*, 55, 547-557. <https://doi.org/10.1016/j.im.2017.11.005>

Yeboah, A., (2023), "Knowledge sharing in organization: A systematic review", *Cogent business & management*, 10, 2195027. <https://doi.org/10.1080/23311975.2023.2195027>

Zhang, X. & Jiang, J. Y., (2015), "With whom shall I share my knowledge? A recipient perspective of knowledge sharing", *Journal of Knowledge Management*, 19, 277-295. <https://doi.org/10.1108/JKM-05-2014-0184>

Appendix: Measurement Items

1. HIGH-PERFORMANCE WORK SYSTEMS (HPWSs) - Adapted from Sun et al. (2007)	
SS	Selective staffing
SS1	Great effort is taken to select the right person.
SS2	Long-term employee potential is emphasized.
SS3	Considerable importance is placed on the staffing process.
SS4	Very extensive efforts are made in selection.

ET	Extensive training
ET1	Extensive training programs are provided for individuals in customer contact or front-line jobs.
ET2	Employees in customer contact jobs will normally go through training programs every few years.
ET3	There are formal training programs to teach new hires the skills they need to perform their job.
ET4	Formal training programs are offered to employees in order to increase their promotability in this organization.
IM	Internal mobility
IM1	Employees have few opportunities for upward mobility.
IM2	Employees do not have any future in this organization.
IM3	Promotion in this organization is based on seniority.
IM4	Employees have clear career paths in this organization.
IM5	Employees in customer contact jobs who desire promotion have more than one potential position they could be promoted to.
ES	Employment security
ES1	Employees in this job can be expected to stay with this organization for as long as they wish.
ES2	Job security is almost guaranteed to employees in this job.
JD	Clear job description
JD1	The duties in this job are clearly defined.
JD2	This job has an up-to-date description.
JD3	The job description for a position accurately describes all of the duties performed by individual employees.
RO	Results-oriented appraisal
RO1	Performance is more often measured with objective quantifiable results.
RO2	Performance appraisals are based on objective quantifiable results.
RO3	Employee appraisals emphasize long term and group-based achievement.
IR	Incentive reward
IR1	Individuals in this job receive bonuses based on the profit of the organization.
IR2	Close tie or matching of pay to individual/group performance.
PA	Participation
PA1	Employees in this job are often asked by their supervisor to participate in decisions.
PA2	Individuals in this job are allowed to make decisions.
PA3	Employees are provided the opportunity to suggest improvements in the way things are done.
2. KNOWLEDGE SHARING - Adapted from Van Den Hooff and De Ridder (2004)	
Knowledge donating	
KS1	When I have learned something new, I tell my colleagues about it.
KS2	I share the information I have with my colleagues.
KS3	I think it is important that my colleagues know what I am doing.
KS4	I regularly tell my colleagues what I am doing
Knowledge collecting	
KS5	When I need certain knowledge, I ask my colleagues about it.
KS6	I like to be informed of what my colleagues know.
KS7	I ask my colleagues about their abilities when I need to learn something.
KS8	When a colleague is good at something, I ask them to teach me how to do it.
3. INNOVATIVE WORK BEHAVIOUR - Adapted from De Jong and Den Hartog (2010)	
IWB1	I search out new working methods, techniques or instruments.
IWB2	I generate original solutions for problems.

IWB3	I find new approaches to execute tasks.
IWB4	I pay attention to issues that are no part of his daily work.
IWB5	I wonder how things can be improved.
IWB6	I make important organizational members enthusiastic for innovative ideas.
IWB7	I attempt to convince people to support an innovative idea
IWB8	I systematically introduce innovative ideas into work practices.
IWB9	I contribute to the implementation of new ideas.
IWB10	I put effort in the development of new things.