

## EXPLORING THE LINK BETWEEN HIGH PERFORMANCE WORK SYSTEM AND INNOVATION WITH MEDIATING ROLE OF KNOWLEDGE SHARING

Dr. Lubaina Dawood Baig<sup>\*1</sup>, Saba Mir<sup>2</sup>, Nida Attique<sup>3</sup>

<sup>1</sup>Lecturer, Department of Management Sciences, Sardar Bahadur Khan Women's University, Quetta, Pakistan

<sup>2,3</sup>Department of Management Sciences, Sardar Bahadur Khan Women's University, Quetta, Pakistan

<sup>1</sup>lubainabaig02@gmail.com, <sup>2</sup>sabamirmir9@gmail.com, <sup>3</sup>azanaray4@gmail.com

DOI: <https://doi.org/10.5281/zenodo.19045491>

### Keywords

High performance work system, Innovation, Knowledge sharing and Quantitative Study

### Article History

Received: 17 January 2026

Accepted: 01 March 2026

Published: 16 March 2026

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Corresponding Author: \*

Dr. Lubaina Dawood Baig

### Abstract

This research is investigating the direct and indirect relation of high performance work system and innovation with mediating role of knowledge sharing. In this currently modern era it is important for faculty to be innovative in order to make their students creative and innovative. In this research positivism philosophy was employed while cross sectional method was used. By employing convenient sampling the data was collected through structured questionnaires from university's faculty. Results approved the direct and indirect relationship between high performance work system and innovation through knowledge sharing.



## INTRODUCTION

### Background of the Study

High-Performance Work System (HPWS) is crucial as it fosters a collaborative work environment that enhances employee involvement and productivity, ultimately driving innovation. The dependent variable, Innovation, is the primary outcome of interest, representing the development and implementation of new ideas, products, processes, or services that drive organizational growth and competitiveness. Knowledge Sharing acts as a mediator, facilitating the exchange of information and expertise among employees, which is essential for leveraging collective knowledge and expertise to fuel innovation. The relationship between HPWS and innovation is mediated by knowledge sharing, as HPWS encourages collaboration, autonomy, and empowerment, leading to increased knowledge

sharing, which in turn enhances innovation. Understanding this relationship provides valuable insights for organizations seeking to improve their innovative capacity.

### Problem Statement

In order for people to think in universities, an environment must be created in which ideas and thoughts can be expressed. The role of the university in the collections where creativity and innovation are essential, and the main factor is very important and sensitive because the university can promote and encourage the ability and talent of creativity and innovation in people, or their behavior and performance can Prevent this vital thing. The art of the creative in educational system is to use the creativity of others and find creative minds. The creative

educational system must create an environment where he can be creative and stimulate other people to be creative. This is an environment that is far from everyday work, and in a way, it delegates authority so that everyone can solve their own problems (Cummings, 2003)

Being a service that is secured by specialized institutions, education cannot be separated from the people who deliver this service, from their competencies and determination. Recently, both the in the academia and among Innovation is defined as the invention and implementation of practice, structure, techniques or process that is new to the highest level of development in the field and that is accomplished in order to contribute to reaching organization objectives (Birkinshaw, Hamel, Mol, 2008). Being compared to other types of innovations, innovation in educational system has the unique ability to operate radical and durable changes regarding the competitive edge (Hamel, Breen, 2010). Innovation in educational system implies holding and practising, determination and courage in taking responsibility for the implementation of changes that trigger progress and performance. With reference to innovation in education, this represents a deliberate activity, aiming to introduce novelty into a certain context; it is pedagogical because it aims to substantially improve students/pupils preparation by means of interaction and interactivity (Bécharde & Bécharde, 2001). The headmaster must plan his/her entire activity in accordance to the finalities of education in order to train children in the sense of political and social democracy, access to knowledge and a pedagogy that contributes to the development of personality (Palade, 2009). The reorganization of curriculum may be constituted as an innovative act, especially since it becomes necessary in the postmodern educational system, as a consequence of the commercialization of the informational offer. The decrease in the state involvement in organizing educational systems leads to a diminishing of the allocated budgets, along with decentralization. The stimulation of innovation may be supported by rewarding team

work. At the level of the higher educational system (Manea, 2015)

In the last few decades, the world of education has experienced a significant transformation due to technological advances and changing societal needs. Traditional, rigid and bureaucratic educational system often fails to meet these demands. An educational system that is not responsive to change can produce graduates who are not ready to face the challenges of the modern era (Sorby, 2023). Therefore, there is an urgent need to adopt more innovative and flexible management approaches to improve the quality of learning. Innovation in educational management includes various strategies and concepts aimed at creating a dynamic and effective learning environment. Creative approaches, such as the use of digital technology, student-centered teaching methods, and flexible curriculum development, are starting to be implemented to overcome the shortcomings of the traditional system (Singha et al., 2023). Research shows that educational institutions that adopt innovation tend to be better able to improve the quality of learning and graduates who are more competent and adaptive. However, the application of innovation in educational management is not free from challenges. Issues such as resistance to change, limited resources, and lack of support from various stakeholders often hamper this process. However, with a deeper understanding of the advantages and challenges faced, creative approaches in education management have great potential to revolutionize the education system and deliver higher quality learning (Shcherbyna & Eyvas, 2022). However, the implementation of these innovations is not always easy and is often faced with various challenges. For example, in implementing technology, there are several obstacles such as a lack of adequate infrastructure and the need for training for teaching staff. Meanwhile, in a student-centered approach, resistance from teachers who are used to conventional teaching methods can be an obstacle (Harikrishnan & Vikraman, 2024). Therefore, this change requires synergistic cooperation between various stakeholders, from

the government, and educational institutions, to society. Initiatives for innovation must be supported by appropriate policies, adequate funding, and comprehensive training programs to ensure their success (Amani & Sarmashq, 2024).

### Significance of the Study

Innovations in the educational system can significantly improve the quality of learning by creating a more dynamic and interactive environment. One of the main benefits is increased student engagement and motivation. By adopting methods such as gamification and flipped classrooms, students feel more motivated to actively participate in learning activities (Yang et al., 2023). Gamification, for example, adds a gaming element to education that makes it engaging and competitive, while the flipped classroom allows students to learn the material at their own pace and thus be better prepared to discuss and understand concepts in depth in class. The result is a more engaging and in-depth learning experience that can improve understanding and retention of material (Calegari & Fettermann, 2022). Educational innovations can also improve employees' skills and open new opportunities for collaboration and professional development. By implementing new methods and technology in teaching, teachers can continue to develop their professional skills and stay up to date with the latest developments in the system of education. This not only improves the quality of teaching but also builds a culture of collaborative and sustainable learning among educators. The ability to adapt to various new methods and technologies also allow teachers to adjust their teaching strategies according to their student's needs, which ultimately leads to an overall improvement in the quality of learning and educational outcomes (Hermawan & Sukoyo, 2023). Furthermore, applying the innovation in the educational system can also positively impact the operational efficiency of schools and educational institutions. With increasingly advanced technology, school management can use educational management information systems (EMIS) to automate various

administrative tasks (Mukwakungu et al., 2023). This includes attendance management, assessment, and reporting, which can be done more quickly and accurately through digital systems. This operational efficiency not only reduces the administrative workload for teachers and staff but also allows them to focus more on learning activities and curriculum "Development. As a result, we achieved a more streamlined and efficient administrative process." This process can support a more effective learning environment.

### Purpose of the Study

The purpose of the study is to investigate the relationship between high-performance work systems and innovation directly and indirectly through knowledge sharing as suggested by (yleniacurzi and filippoferrarini).

### Research Objectives

1. To determine the relationship between high-performance work systems and innovation.
2. To determine the relationship between high-performance work systems and knowledge sharing.
3. To determine the relationship between knowledge sharing and innovation.
4. To determine the indirect relationship between high-performance work systems and innovation through knowledge sharing.

### Research Questions

1. Does high performance work system Affect innovation?
2. Does a high-performance work system relate to knowledge sharing?
3. Does knowledge sharing influence innovation?
4. Does knowledge sharing relate to the relationship between high-performance work systems and innovation?

### Literature Review

#### Innovation

The first and seminal definition of innovation was proposed by Schumpeter (1934). He associated it with economic development and defined it as a new combination of productive

resources. His work defined five specific cases: introduction of new products, new production methods, exploration of new markets, conquering new sources of supply, and new ways of organizing business. (Hidalgo & Albors, 2008) Understanding how to manage innovation successfully is crucially important in a time when innovation is an almost obligatory survival strategy (“innovate or die” (Drucker, 1999)) that at the same time is very risky because it may lead to the demise of a company (Olleros, 1986; Tellis and Golder, 1996). Innovation processes describe the activities that are performed at each stage of the development of an innovation. Innovation management is the governance and organization of these innovation processes. Research and development (R&D) management can be considered a broader term than innovation management since it contains invention processes as well as innovation processes. Niosi (1999, p. 117) provides a concise description of the successive generations: The first generation brought the corporate R&D laboratory. The second generation adapted project management methods to R&D. The third brought internal collaboration between different functions in the firm. The fourth adds routines designed to make more flexible the conduct of the R&D function through the incorporation of the knowledge of users and competitors. Various others have identified different numbers of generations. Both Rothwell (1994) and Amidon Rogers (1996) distinguish five generations, while Miller (2001), Liyanage et al. (1999) and Niosi (1999) identify four generations, and Cooper (1994) three. The historical development of innovation makes us curious about what will be the next development. Even an author like Henry Chesbrough, who is generally seen as the embodiment of the fourth generation, admits that his concept of Open Innovation is not the only available option for every company or industry. (Ortt & Van Der Duin, 2008)

### High Performance Work System

Considering employees as a key source of competitive advantage, strategic human resource management is gaining increasing importance in

knowledge-based economies and rapidly changing environments (Prieto and Santana 2012; Sun et al. 2007). As valuable, rare and inimitable assets for organizations because of their firm-specific, socially complex, and path-dependent characteristics, human resource practices help firms obtain sustainable competitive advantages (Collins and Clark 2003). Among the broad concepts of strategic human resources, high-performance work systems stand out as reflecting the basic philosophy and practices of strategic human resource management and shaping the attitudes, skills, and behaviors of staff by discovering and utilizing knowledge, thereby achieving organizational goals (Chen 2009; Collins and Clark 2003). Employees are considered the key carriers of HPWS. Based on the social exchange literature, HPWS can formulate an exchange relationship between an organization and employees and bring more returns for the organization (Xiao and Björkman 2006). Through skill training, career planning, and knowledge improvement, employees can feel the support of their organization and a strong sense of identity with their position. Consequently, HPWS enhances organizational commitment and relationships among employees and subsequently influences the attitude and behavior of employees (Gittell et al. 2009). As a result, the message that HPWSs convey to employees is one of expectations of increased performance that primarily benefit the company and only incidentally, as a byproduct, the employees (Kroon et al., 2009). High-performance work systems (HPWS) have been extensively discussed despite their brief history. As there is no agreement on the definition of this concept, it can generally be regarded as an organic combination of a series of coordinating and cooperating human resource management practices to enhance individual and organizational performance (Snell and Bohlander 2010).

While previous studies argue that HPWSs and digital technology complement each other in promoting innovation, the way the two interact in practice is still unclear. Research on the “dark side” of HPWSs (Behraves et al., 2020;

Kloutsiniotis et al., 2021) suggests that the relationship between HPWSs and organizational innovation may be more complicated than expected, especially in digitally transforming firms (Parker and Grote, 2022). Accordingly, scholars and practitioners have called for more insights into the precise nature of the potential synergies between HPWSs and digital technology on organizational innovation (Kim et al., 2021; Minbaeva, 2021; Zheng et al., 2020). As has been emphasized, research in this area is important, because it can help to bridge the research-practice divide (Minbaeva, 2021) thereby ensuring the long-term viability and sustainability of the organization and its employees. This paper addresses this issue starting from the primary research question: How do digital technologies moderate the relationship between HPWSs and innovation in the firm? Drawing on signaling theory (Connelly et al., 2011), we interpret HPWSs in terms of the messages an organization sends to employees to inform them about the behavior that is expected, supported, encouraged, and rewarded in line with the strategic goals of the firm, as well as to signal the employee-related philosophy of the firm (i.e. employee well-being orientation or employee-exploitation orientation (Wang et al., 2020; Curzi & Ferrarini, 2023).

### Knowledge Sharing

Knowledge sharing in strategic management has been shaped by numerous contributions over time, with each new perspective building on or expanding earlier theories to offer a deeper understanding of knowledge flow, innovation, and competitive advantage within organizations (Shannon, Weaver 1949). Pioneers in this domain, laying the groundwork with their communications theory, which emphasized the challenges of transmitting information effectively. Their framework focused on factors such as message quality and context, which directly impacted how knowledge was transferred between individuals and organizations. Moving forward, (Rogers, 1983) Introduced the Diffusion of Innovations, providing insights into how new technologies and ideas are adopted by individuals and groups, and highlighted the barriers that

hinder knowledge adoption, thus framing early discussions on knowledge sharing in the context of technological innovation. In 1991, Nonaka advanced the conversation with his Knowledge Creation Theory, which distinguished between tacit and explicit knowledge and underscored the importance of social interactions in knowledge creation and sharing, thus linking knowledge sharing to organizational innovation and competitive advantage. Following this, (Birkinshaw, Morrison 1995). found that organizational structures that promote knowledge sharing across subsidiary boundaries lead to greater innovation, emphasizing how the design of an organization can facilitate or inhibit knowledge flow. In 1996, Szulanski extended this notion with his work on "sticky knowledge," highlighting the difficulties organizations face when transferring best practices due to knowledge being deeply embedded in organizational culture, routines, and tacit knowledge, which resists sharing. Also, in 1996, Grant identified knowledge as the most strategically important resource an organization possesses, stressing its central role in value creation and long-term success, and underscoring the need for organizations to leverage knowledge effectively. In 1997, Teece, Pisano, and Shuen introduced the concept of dynamic capabilities, proposing that firms must be able to absorb and integrate external knowledge in order to sustain a competitive advantage, thus positioning knowledge sharing as a core element of strategic adaptability. (Argote, Ingram 2000). further developed the concept by introducing "knowledge packages," or knowledge embedded in organizational routines, skills, and systems, which could be recreated in other parts of the organization to enhance overall capabilities. (McEvily, Zaheer 1998) showed that knowledge flows more effectively in close-knit networks, such as strategic alliances, where embedded relationships facilitate the exchange of knowledge. (Birkinshaw, Nobel 1999) focused on the role of information technology in enabling the sharing of specialized expertise, especially beyond central management, and argued that local knowledge could significantly contribute to

strategic decision-making. (Cummings, 2003).took a broader view, suggesting that effective knowledge sharing also involves managing relationships, addressing contextual factors, and ensuring the creation of an organizational structure that facilitates knowledge flow. More recent research has continued to refine and expand the concept of knowledge sharing. In 2009, Grant argued further that knowledge is not only a resource but also a dynamic and evolving process that is co-created and shared within the context of social interactions. (Foss, Pedersen 2012) emphasized the importance of knowledge sharing in the context of global networks and multinational corporations, identifying how different cultural contexts and knowledge-sharing practices across regions could influence innovation and competitive advantage. More recently Andreeva & Kianto (2020) focused on the impact of organizational culture on knowledge sharing, arguing that an open, collaborative culture was essential for effective knowledge flow. 2023, knowledge sharing in strategic management had become a multifaceted concept, with scholars like Chen and Huang emphasizing the importance of integrating knowledge-sharing mechanisms with digital transformation, as organizations increasingly rely on technology for global collaboration. These milestones reflect how knowledge sharing has evolved from early ideas about information transmission and technological adoption to a sophisticated understanding of knowledge as a strategic resource that requires effective mechanisms, organizational structures, relational dynamics, and a culture of collaboration to drive innovation, adaptability, and sustained competitive advantage in the modern organizational landscape.

Knowledge sharing is crucial for organizational success as it enables firms to leverage internal expertise, enhance innovation, and adapt to changing environments. By facilitating the transfer of both tacit and explicit knowledge, organizations can improve decision-making, increase efficiency, and foster continuous learning. Knowledge sharing also supports the

development of dynamic capabilities, allowing firms to absorb external knowledge and maintain a competitive advantage (Teece&Shuen, 1997). Moreover, organizations with structures that promote collaboration and knowledge flow tend to be more innovative and perform better in rapidly changing markets (Birkinshaw& Morrison, 1995).

### **High-Performance Work System and Innovation**

Researchers have focused particularly on defined as systems of interconnected practices designed to enhance employee knowledge and abilities, motivation to perform, and the opportunity to contribute to the achievement of organizational goals (Appelbaum et al., 2000; Jiang, et al., 2012). Offering a more nuanced understanding of the role of employee participation in firms seeking to benefit from the positive synergistic effects of HPWSs and digital technology on organizational innovation. 1 High-performance work systems, digital technology, and innovation HPWSs, as a coherent system of interrelated HRM practices designed to develop employee skills, motivation, and opportunities to contribute to organizational performance (Jiang, et al., 2012). High-performance work systems (HPWSs) (Chowhan et al., 2017; Seeck and Diehl, 2017) ). First, while this study supports the dominant assumption of positive synergistic effects between HPWSs and digital technology on innovation, it challenges the notion that the combined use of HPWSs and digital technology is always positive for innovation, by highlighting the fact that the competing perspective (i.e. negative synergistic effects) is also plausible. Second, by providing theoretical and empirical evidence that both positive and negative synergistic effects are supported with different levels of employee participation, we cast light on an important boundary condition for understanding when each perspective becomes more prominent. Third, the paper contributes to the emerging body of research which points to a closer integration between HPWSs and employee participation as a way towards a genuine mutual gains perspective on HPWSs (Guest, 2017),

which is key to enhancing innovation (Bhatti et al., 2021; Chowhan et al., 2017). Accordingly, it is assumed that HPWSs are indicative of the firm commitment to the development and well-being of its employees, leading them to reciprocate with behavior (knowledge sharing, creative and innovative work behaviors) that enhances the innovative performance of the firm (Bhatti et al., 2021; Bos-Nehles and Veenendaal, 2019). In this sense, HPWSs practices aimed at enhancing the employees' skills and competences (e.g. training), while also motivating them (e.g. rewards, performance appraisal and intrinsic motivation practices) and providing them with the opportunity to take risks, experiment and to share their knowledge (e.g. job autonomy and information sharing) signal that innovative work behaviour, creativity and knowledge sharing are organizationally valued forms of behaviour by which employees can contribute to the innovative capacity of the firm (Bhatti et al., 2021; Bos-Nehles and Veenendaal, 2019). -Previous studies have argued that HPWSs relate to innovation through the positive influence on employee attitudes (e.g. job satisfaction, hope and psychological capital more broadly) (Behraves et al., 2020.; Elrehail et al., 2021). In addition to HPWSs, contemporary organizations are increasingly harnessing the potential of digital technology (e.g. social media, mobile devices, robots or analytics) to significantly innovate their processes, products, services and business models (Ayoko, 2021; Minbaeva, 2021) f HPWSs and digital technology gives rise to positive synergies that "make an organization better able to sense changes in the environment and gain a competitive advantage" For instance, opportunity-enhancing practices (e.g. job autonomy and information sharing) and ability enhancing practices (e.g. continuous training) can make work more challenging, while practices enhancing motivation (e.g. performance appraisal and pay-for-performance schemes) may put pressure on employees to work more intensively (Kloutsiniotis et al., 2021). Accordingly, scholars and practitioners have called for more insights into the precise nature of the potential synergies between HPWSs and digital technology on

organizational innovation (Kim et al., 2021; Minbaeva, 2021 Haar et al., 2022 Accordingly HPWSs and digital technology give rise to positive synergies that "make an organization better able to sense changes in the environment and gain a competitive advantage" (Kaushik and Mukherjee, 2022, it may be that digital technology undermines the positive message conveyed by HPWSs, reducing job satisfaction and employees' commitment towards innovative behavior (Curzi and Ferrarini, 2023).

### **High-Performance Work System and Knowledge Sharing**

the connection between HPWS and knowledge-sharing behavior. Knowledge-sharing behavior, a crucial component of organizational effectiveness, involves the exchange of information, skills, and expertise among employees. This behavior is influenced by various individual and organizational factors, including the HPWS and organizational support employees perceive (Wang & Noe, 2010). It also has a positive effect on employee behaviors such as job performance, organizational citizenship behavior, creativity, and voice behavior (Messersmith et al., 2011). However, knowledge is a crucial element for organizations seeking to achieve and maintain a competitive advantage in today's rapidly changing business environment (Mahdi et al., 2011). Additionally, knowledge is a valuable asset that can help organizations innovate, create value, and differentiate themselves from their competitors (Mahdi et al., 2011). Sharing knowledge among employees is crucial for promoting organizational innovation and achieving a competitive advantage, particularly in unpredictable and fast-changing environments (Reinholt et al., 2011). the significant influence knowledge has on creating value-added products and services (which in turn greatly affects a company's competitive advantage ( Mahdi et al., 2011). Prior research on HPWS indicated that HPWS is not limited to enhancing employees' perceptions and attitudes such as organizational identification, affective commitment, and job satisfaction (Andersén&Andersén, 2019; Liu et al., 2020); Mowbray et al., 2021 HPWS encourage

employees to participate in knowledge-related behaviors, such as knowledge-sharing behavior (Abbasi et al., 2021; Bhatti et al., 2021). HPWS impacts employees' knowledge-related behaviors (Abbasi et al., 2021; Bhatti et al., 2021) when HPWS influences knowledge-sharing behavior and identifying the mediating and moderating factors that enhance the positive results of HPWS (Abbasi et al., 2021; Bhatti et al., 2021). HPWS has failed to recognize the critical role of leadership in reinforcing the favorable impacts of HPWS (Chang, 2016; Iftikhar et al., 2021; Vasilaki et al., 2016). In other words, HPWS may influence the degree of employee knowledge sharing behavior by affecting the extent of employee's POS. Furthermore, this study emphasizes the importance of leadership in explaining the influence of HPWS in an organization. Among various leadership styles, we hypothesize that coaching leadership can act as a positive moderator by reinforcing the favorable impacts of HPWS on POS. Coaching Leaders provide their followers with constructive feedback, help them identify areas for improvement, and support them in their efforts to learn and grow (PeláezZuberbuhler et al., 2020; . Theory by illustrating how perceived support within organizations acts as a precursor to the social exchanges that facilitate knowledge sharing. This adds to the growing body of literature that views organizational support as a critical element in the social exchange processes that underpin cooperative behaviors within workplaces ((Jeong et al., 2024)

### Knowledge Sharing and Innovation

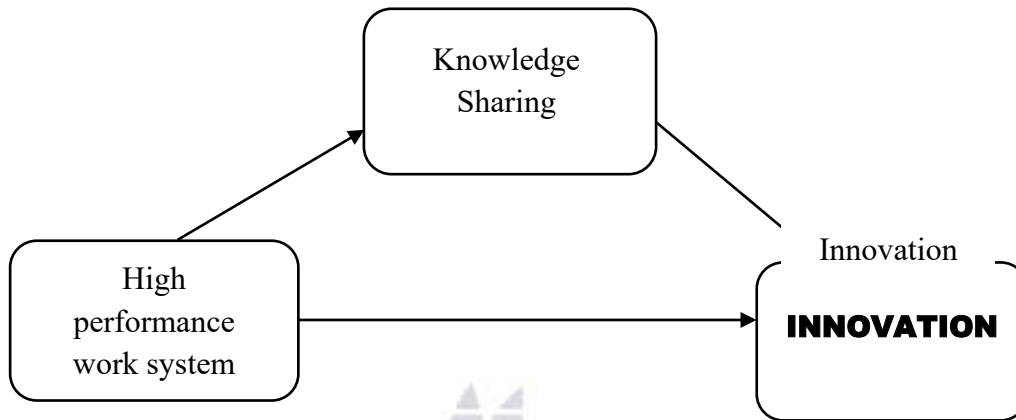
The consistent impact of KM is seen in the consistent development which increases the organization's capacity to deliver goods or services that are sustainable, reliable, and successful. Haig (2010), confirmed there is a relationship between information sharing, team culture and service innovation success. Haig (2010) also confirmed, stemming from a report for the Malaysian government, that information exchange capability and employees' creativity capability are closely related to their ethics, values, and work culture. In the end, we have concluded that

information organization structure, work structure, incentive schemes, employer support, and company culture were the three of the four study's knowledge sharing enablers. The goal of exchanging information is best realized when there is a relationship between organizational vision and its overall capabilities. To foster creativity, clarity in structure and purposes is always needed. Also, a vibrant creative community is important for creativity. It is therefore essential to have (and demonstrate) a serious intent to encourage innovations, in addition to providing the right infrastructure The amount of training and education provided to workers is dependent on the degree to which their organizations are achieving research results reported by Shanker et al. (2017) conclude that in this regard that acquiring information and knowledge sharing go hand in hand with each other, moreover, they are equally important. Thus, workers must be inspired and encouraged to innovate through creativity. and Their innovation goals. (Ismail, 2021 suggested that the informal processes of learning and experience-based knowhow create various types of information that contribute to different modes of creativity since this type of unstructured learning stimulates the practice of mobilizing tacit awareness and innovation in problem-solving and learning. With KM impacts, solving market issues may help develop new goods or services that can improve client connections and ensure organizational development overall. Casini et al.suggested that KM affects transparent innovation activities by strengthening how the organization operates with its collaborators, and modifying how it administers and develops work procedures and processes. As organizations need to exchange and use all the information possible, the latter influence organizational success reciprocally. KM thus impacts through inter-organizational effects taking place between and across multiple business units. Innovation is the discovery and application of new concepts, the use of new methods, or the introduction of new goods or services. The researchers have identified the concept of creativity as —the effective application of new concepts within the

company. Some firms have taken the view that creativity happens by finding and using fresh resources to one's advantage, whilst others believe that it will happen by allowing creative use of those already available. During several experiments on behavioral, social, educational, and creativity, the researchers began looking into the issue of resource-based philosophy and the

concept of information sharing to discover the essential aspects of organizations that contribute to effective knowledge sharing. The variables that support information sharing can be divided into three groups: technical, personal, structural, and cultural. Many of these aspects can influence work enablement and performance.

**Conceptual Framework**



**Hypothesis**

1. There is a significant relationship between high performance work system and innovation.
2. There is a significant relationship between high performance work system and knowledge sharing.
3. There is a significant relationship between knowledge sharing and innovation.
4. There is a significant mediating effect of knowledge sharing on the relationship between high-performance work systems and innovation.

**Methodology**

This study employed a quantitative survey design to investigate the relationship between high-performance work systems and innovation, through knowledge-sharing among SBK women university employees. A cross-sectional approach was used to collect the data at a single point. The targeted faculty of Sardarbahadur Khan Women's University. A Non probability sampling technique was used to select 279 participants.

**Data Collection**

Data was gathered from 1<sup>st</sup> October 2024 to 20<sup>th</sup> October 2024. Hundred self-administrative questionnaires were distributed and 67 were returned. The response rate was 73%.

Results

Table 1: Demographic

Variable	Frequency	Percentage
<b>Age</b>		
30-35	81	29
35-40	181	65
40-45	17	6
<b>Education</b>		
MS/M-Phil	258	92
PhD	21	8

The results of demographic showed that maximum faculty members lie between the age of 35 o 40 (65%). While 92% of the faculty is

having MS/MPhil degree while only 8% of the respondents were having doctorate degree.

Table 2: Descriptive Statistics

Variables	Min	$\alpha$	Mean	SD	HPWS	KS
High performance work system	1	0.879	4.56	0.16		
Knowledge sharing	1	0.776	3.39	0.33	.56***	
Innovation	2	0.891	4.15	0.41	.77***	.69**

The results of first order correlation showed the strong positive relationship between high performance work system and innovation (r=0.77, p<.001).while moderate positive association was revealed between high

performance work system and knowledge sharing and likewise between knowledge sharing and innovation (r=0.56, p<.001; r=0.69, p<.005 respectively).

Table 3: Direct and Indirect Relationships

Variables	b	se	Bootstrap LLCI	Bootstrap ULCI
<b>Direct Effect</b>				
H1 HPWS →INN	.67***	.012		
H2 HPWS →KS	.43**	.034		
H3 KS →INN	.45**	.048		
<b>Indirect Effect</b>				
H4 HPWS →KS →INN	.231*	.061	.011	.217

\* R=\*\*\*p<.001

Note: HPWS= High Performance Work System, KS= Knowledge Sharing and INN= Innovation Above demonstrated results (Table 3) showed

that all the study hypothesis are accepted and statistically significant.

### Discussion

The findings of this study indicate that High-Performance Work Systems (HPWS) have a significant positive effect on knowledge sharing among employees. Hypothesis 1 was empirically tested and accepted, confirming that supportive HR practices enhance employees' willingness to exchange knowledge. (Castaneda & Cuellar, 2020)

Furthermore, the results demonstrate that HPWS promotes innovation both directly and indirectly through knowledge sharing. This suggests that knowledge sharing acts as an important mediating mechanism through which HPWS contributes to organizational innovation. Overall, the study reinforces the view that well-designed HR practices create an environment conducive to collaboration, learning, and innovative outcomes (Bhatti et al., 2020).

### Limitations and Future Directions

The findings of this study should be interpreted in light of several limitations. First, the study adopted a cross-sectional research design, which limits the ability to establish causal relationships among high performance work systems, knowledge sharing, and innovation. Longitudinal studies may provide deeper insights into how these relationships evolve over time. Second, the data were collected using a convenience sampling technique from university faculty, which may restrict the generalizability of the results. The sample may not fully represent faculty members from different types of universities, disciplines, or regions. Furthermore, this study relied on self-reported data collected through structured questionnaires, which may be subject to response bias and social desirability bias. Participants may not always provide completely accurate responses. Therefore, future research should consider using larger and more diverse samples, applying probability sampling techniques, and employing longitudinal research designs to enhance the accuracy and generalizability of the findings.

### Conclusion

This study explored the direct and indirect relationship between high performance work

systems and innovation, with the mediating role of knowledge sharing among university faculty. The findings indicate that high performance work systems have a significant relationship with innovation and knowledge sharing. The results further reveal that knowledge sharing significantly influences innovation and plays an important mediating role in the relationship between high performance work systems and innovation.

In the context of modern higher education, these findings highlight the importance of effective work systems that encourage collaboration, learning, and information exchange among faculty members. By promoting knowledge sharing practices, universities can enhance innovative teaching and research outcomes. This study contributes to the existing literature by providing empirical evidence on the role of knowledge sharing as a key mechanism linking high performance work systems to innovation in the higher education sector.

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