

High-Performance Work System and Innovative Work Behavior: The Mediating Role of Knowledge Sharing and Moderating Role of Inclusive Leadership

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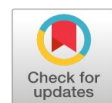
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Abstract: Employee innovative work behavior has long been studied as a source of gaining a competitive edge over others. Organizations spend millions on their HRM activities to enhance their profitability and performance. This research investigates the relationship among high-performance work systems (HPWS), Innovative work behavior, knowledge sharing, and inclusive leadership in faculty members of universities in Rawalpindi and Islamabad. Using the ability, motivation, and opportunity (AMO) framework under the theory of HPWS, our research hypothesizes that the AMO-enhancing practices of faculty members lead to better innovation performance through the mediating role of knowledge sharing. Inclusive leadership (IL) was a significant moderator on the relationship between Knowledge sharing (KS) and Innovative work behavior (IWB). Data were collected from the faculty members of universities in Rawalpindi and Islamabad. Convenience sampling were used for data collection, 356 questionnaires were correctly fulfilled by participants and SPSS software was used for statistical analysis and generating results. The results support the significant effect of AMO on innovative work behavior and the mediation of knowledge sharing between the AMO model and employee innovative work behavior. Further, the study's results illustrate that inclusive leadership significantly moderates the relationship between knowledge sharing and employee innovative work behavior. This research has implications for supervisors and managers of organizations to design HRM practices better to improve employees' creativity and innovation performance. By focusing on the routes that drive the strategic inputs of HR managers for successful goal implementation, the current study effort has enhanced the usefulness of HPWS research. The study emphasises the AMO theory, which asserts that when businesses view their workers as their most valuable assets, they are more likely to make investments that improve both individual performance and organisational levels as a whole. Employers may drive their staff to go above and beyond in achieving their goals by instilling in them a sense that they are the most vital part of the enterprise's operation through the application of HPWS.

Keywords: High-performance work system (HPWS), AMO framework, Innovative work behavior (IWB), Knowledge sharing (KS), Inclusive Leadership (IL).

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INTRODUCTION

Innovation is key to businesses capturing the competition and meeting the targets of continuous growth. Usually, research on factors that can affect the success and productivity of creativity has established the much more important aspect of a high-performance work system, especially that which can inspire workers and enhance the output. Due to the changing economic environment, globalization, and growing competing demands, innovative work behavior has become increasingly important (Woods et al., 2017) and an essential prerequisite for organizational survival (Hon & Lui, 2016; Kim & Koo, 2017; Li & Hsu, 2016).

Inclusive leadership creates a climate in which staff has a culture of inclusion. More sense of responsibility, more autonomy in decision making, and more accountability (Borman & Motowidlo; 1998), As well as assistance

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and Motivation, information, and feedback (Arnold, Arad & Rhoades 2000; Fatima, Majeed, & Saeed, 2017). by using implicit knowledge, skills abilities, and experience acquired by their coworkers or using the explicit company knowledge. Accordingly, it is expected that an organization that can foster common information-sharing activities among workers, groups, and within the organization would generate fresh and different ideas and that suggestions are useful for creating new business chances (Tuan, 2017). Inclusive proactive leadership practices, including employee information sharing, can enhance workplace success. The staff participant's actions can create a team-based job context as positive social position behavior and build a partnership between team members and leaders that contributes to profit performance.

Scholars emphasized assessing the absent relation between the high-performance work system and organizational performance (Jiang et al., 2013; Messersmith et al., 2011; Becker & Huselid, 2006). There is a lack of research concerning the impact of high-performance work system (HPWS) with a focus on the AMO model as recommended by (Bhatti, Zakariya, Vrontis, Santoro, & Christofi, 2020) on innovation performance in the Pakistani context.

This research, in general, bridged the gap in Pakistan and could facilitate managers in developing and improving their capacity to assess workers' loyalty and work satisfaction. Very few studies have been carried out on inclusive leadership in Pakistan, such as the impact of Inclusive Leadership on Employee Engagement in International Non-Government Organizations (Malik, Suleman & Arshad, 2017). Other studies were conducted in this context to explore the relationship between inclusive leadership, Leader-Member Exchange (LMX), and employee outcomes in Pakistan (Irshad & Bashir, 2020; Javed, Khan & Quratulain, 2018). Another study was conducted in the hotel industry of Pakistan, in which authors (Afsar, Masood, & Umrani; 2019) examined the impact of job crafting and knowledge sharing between transformational leadership (TL) and employee innovative work behavior. To fill this gap, the present research has attempted "to find out the relationship between high-performance work systems with AMO Model and innovative work behavior" in educational institutes of Pakistan. Further, the missing link in knowledge sharing as a mediator between high-performance work systems and employee innovative work behavior will also be evaluated. Moreover, the role of inclusive leadership will also be evaluated between knowledge sharing and employee innovative work behavior.

It has been observed in the past few years that education institutes face many challenges like integrating new technologies into classrooms, market saturation unprepared, and inability to understand new technologies. To cope with these challenges, education institutes try to adopt and implement innovative work systems that facilitate the maintenance of the high-performance level of teachers.

Lack of sufficient budget, failure of policy implementation, inadequate physical infrastructure, absence of teacher quality, leaderless teaching, poor management and supervision, and lack of uniformity are all issues that plague Pakistan's educational system (Louis, 1987). In Pakistan, there are few resources for teachers to receive training. Research suggests teachers should not use modern teaching and learning approaches and techniques. Information exchange is a major challenge in academia because universities are often confronted with increased faculty requests for sharing high-quality skills and skills.

The Ability, Motivation, and opportunity (AMO) theory (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Boxall & Purcell, 2003) has been widely recognized as a model for understanding the relationship between human resource management (HRM) and success. According to the AMO model, people perform well when they have the necessary skills, are sufficiently motivated, and have opportunities to engage in their work atmosphere (Boselie, 2010; Boxall & Purcell, 2003; Choi, 2014; Marn-Garca, Miralles, Garcia-Sabater & Perello-Marin, 2011; Marn-Garca, 2013; Raidén, Dainty & Neale, 2006).

This research would inform professionals about the importance of information exchange for organizational improvement. An organization will learn from this research how to hire, educate, and inspire managers and executives to act more like executive members and share work-related and beneficial relationships with the organization. This research would also aid companies in looking for an inclusive leadership style to enhance the work environment's information-sharing atmosphere and employee creative work behavior. HPWS is essential in corporate environments because it has features that encourage employees to keep their work and remain with their current employers.

LITERATURE REVIEW

Ability Enhancing HR Practices and Innovative Work Behavior

Ability enhancing-HR activities aim to strengthen the creative talent of staff members by improving the expertise, knowledge, and competencies needed. Capabilities are Designed related to the development of human awareness by Ability enhancing HR practices and analytical abilities, a major field of high-performance work system practices. This enhancement improves the skills of workers, which raises the degree of faith in organizational operations to boost the efficiency of innovation management (Zhou et al., 2010; Ali, Ahmad, & Saeed, 2018).

Human resource practices of "training and development" have substantially impacted innovative work behavior. In contrast, several researchers have analyzed training and development, including job enhancement activities and expertise (Bysted & Jespersen, 2014; Spiegelaere et al., 2012).

Training might be used to strengthen the cognitive mechanisms of creative job activities and generate learning programs that can strengthen the skills of the task activities. Entrepreneurs typically struggle with a lack of resources, experience, and formal processes; they find it challenging to devote additional money to staff development.. Bysted and Jespersen (2014) concluded that the correlation between private and public corporations varies and that the influence of training and development activities on innovative work behavior in the private sector is much higher than in public companies.

Multiple research has shown that training and development can be beneficial for workers, as it enhances manager and worker connection and strengthens the team spirit, professional skills, and overall work awareness and productivity of the workforce, which are used to participate in innovative work behavior (Prieto & Pérez-Santana; 2014; Farid et al., 2021). In light of the theoretical discussion, we hypothesize that:

H1: There is a positive relationship between Ability enhancing HR practices (AE- HR) on Innovative Work Behavior.

Motivation Enhancing HR Practices and Innovative Work Behavior

Motivation-enhancing HR activities include rewards, performance-based compensation, work-life balance, and giving feedback which aims to maximize the willingness of workers to invest in the production of innovations and evaluate such concepts for enhancing job operations (Shin et al., 2016; Zada et al., 2022). Innovative work behavior (IWB) is favorably impacted by compensation because workers who believe their contributions are reasonably compensated and obligated to give back with additional monetary efforts. The company's pay expectations can contribute to a source of responsibility to give employee-specific information and feedback or creative ideas for change (Ramamoorthy et al., 2005; Khan et al., 2021).

Numerous studies observed the negative correlations between incentives and IWB (Dorenbosch et al., 2005; Sanders et al., 2010), while the strong positive association between financial and non-financial rewards and Innovative work behavior was also noticed by other researchers. Although Janssen (2000) also suggested that this reciprocal arrangement involves expectations of effort-reward equality because when workers feel reasonably compensated for their input, they will respond positively to IWBs. Research suggests that people who can manage and balance work-life concerns will focus positively on the workplace (Alegre & Pasamar 2018; Saeed et al., 2022). Effective satisfaction with job and family requirements facilitates workers positively with psychological Motivation, which allows them to learn and create innovative approaches and produce and execute suggestions (Yasir & Majid, 2019). Therefore, the greater the degree of work-life pressure workers face, the more likely they are to believe that the organization values less for them (Abstein & Heidenreich, 2014; Khan et al., 2022), which leads to less involvement in workplace development activities. The ability, motivation, and opportunity (AMO) model, which emphasises the successful implementation of HRPs in the form of motivation enhancement through incentives and pay, serves as the foundation for the current hypothesis. Retaining people that are inventive and perform well is the largest issue for businesses since their contributions to the cost-effectiveness model help to lower replacement costs. The motivation, dedication, and job happiness of an employee determine whether they remain or go, thus SMEs must work to keep employees through maintaining individualised connections. In order to engage their staff and encourage creative behaviour, SMEs must concentrate on creating a sense of belonging and empowerment by creating a performance management system that is reward-based. Concerning existing research, we hypothesize the following:

H2: There is a positive relationship between Motivation enhancing HR practices and innovative work behavior

Opportunity Enhancing HR Practices and Innovative Work Behavior

The organization plans OE-HR practices that allow staff to demonstrate advanced knowledge and practical actions. Wide job descriptions, flexible task arrangements, work teams, staff engagement, and information-sharing opportunities are common examples of these strategies. Opportunity enhancing-HR activities include enhancing skills, abilities, and behavior in a job, which is strongly correlated with worker job engagement in innovation (Jiang et al., 2012). OE-HR activities aim to stimulate workforce abilities to encourage practical autonomy to execute innovatively (Wojtczuk-Turek & Turek, 2015; Khan et al., 2023).

Autonomous and empowered workers are to decide once again how they learn to write their skilled work activities the more they participate in IWB. Bysted and Jespersen (2014) showed that autonomy is an effective activity in Human Resources for several IWB aspects because it relates to producing ideas and implementing ideas substantially positively. Feedback has been observed as an abundant source of knowledge about how responsibilities are performed and how much staff productivity is suitable to achieve the targeted goals. Regarding this, the staff can more easily identify challenges and openings through suggestions. Also, workers will be skilled in introducing more productive and reliable operating methods and equipped with this knowledge (Ullah et al., 2021). As IWB requires a complicated sequence of activities, it may enable workers to participate actively in those difficult behaviors by acquiring multiple perspectives. Only Knol and van Linge (2009) examined in their survey that feedback positively and significantly impacts IWB. Employee participation in activities targeted at developing and executing ideas is the only way for innovation to happen. Management must thus understand how IWB may be molded and stimulated. The ability of employees to innovate at a high level depends on the supporting environment in which they may increase their knowledge, skills, and capacities to take advantage of possibilities while remaining motivated. Regarding the earlier arguments, we hypothesize the following:

H3: There is a positive relationship between opportunity-enhancing HR practices on innovative work behavior.

Ability-Enhancing HRM Practices and Knowledge Sharing

Ability-enhancing Human Resource activities for knowledge sharing can involve presenting skills practice, self-study, collaboration, or coaching (Jackson et al., 2006). The main point is that training will support addressing several knowledge-sharing limitations, for example, the absence of incentives for beginners, poor learning potential, and adaptation capacity (Rhodes et al., 2008; Saeed et al., 2022). Businesses require taking on within and outside training sessions to improve their workers' skills, experience, and competencies. Implementing different training programs will prepare staff to acquire new knowledge and skills, enhance their perspective and provide them with creative thoughts and abilities. In the sense of knowledge sharing, T&D is relevant when workers can share information, suggestion, opinion, and thoughts during formal and informal training sessions (Ipe, 2003; Khan et al., 2022). On the other hand, if sufficient training opportunities are not provided, organizations face difficulties maintaining their workers according to new trends and technologies (Darwish et al., 2016).

Selectively recruiting and hiring an employee with the proper expertise, capacity, environment, and mindset is important for working teams to combine learning content (Cabrera & Cabrera, 2005; Grandori & Soda, 1995). Currie and Kerrin (2003) emphasized the importance of the selection process by explaining that if the selection and recruitment procedure is transparently held, it encourages staff to share information by collecting extremely capable and recognizable participants in their company. When there is the family presence and other ties in the companies' recruiting culture due to the presence of different people from different communities and backgrounds who appear to favor and facilitate people of similar relatives and backgrounds, it suggests the occurrence of favoritism. Rao (2012) concluded that favoritism is promoted by the desire for personal connections in companies, which leads to the biasedness of members in recruiting, promotion, training, and development, respectively. Based on these considerations, the following hypothesis is proposed:

H4: There is a positive relationship between Ability-enhancing HRM practices and knowledge sharing.

Motivation-Enhancing HR Practices and Knowledge Sharing

Compensation and rewards are significant aspects of Motivation enhancing HR practices concerning knowledge sharing based on the programs implemented by companies. When companies regulate basic appraisal requirements

to create a relationship between workers' success with their involvement in knowledge sharing and implementation, workers may be encouraged to work hard on Knowledge Management techniques. Numerous types of research indicate that individual reward systems may limit the exchange of data among coworkers, which also narrows down the information transfer activities in a company (Quinn et al., 1996; Khan et al., 2022). Goh (2002) stated that sometimes Workers are hesitant to exchange information and knowledge with each other. Further, sometimes people retain their information as a tool for job success to stay competitive with their coworkers. So, this mechanism acts against a company's culture of information exchange. Hence, to boost up information sharing activities among coworkers of firms, the firm should develop a new compensation and reward structure method that emphasizes group-based performance instead of individual (Yahya & Goh, 2002; Zada et al., 2022). Similarly, team-based designs and the opportunity to collaborate with other company members significantly affected employee information sharing (Hansen, 1999; Khan et al., 2022).

Danish and Usman (2006) determine that when an employee faces biases in incentives and appreciation in a company, it reduces the exchange of information among workers by affecting the behavior of their level of enthusiasm and passion. Moreover, organizations can value those employees who bring creativity to work activities, risk-taking Ability, and problem-resolution skills to promote the sharing and exchanging of information. Employees will make more effort to perform Knowledge Management operations if they know that the organization rewards them for acquiring and exchanging information through bonuses and salaries (Ahmadi & Abzari 2018). In sum, we hypothesize that:

H5: There is a positive relationship between Motivation-enhancing HRM practices and knowledge sharing.

Opportunity-Enhancing HR Practices and Knowledge Sharing

Dixon (2000) and Wu et al. (2007) showed in their research that knowledge-sharing behavior (KSB) and opportunity-enhancing HR practices could include teamwork, giving flexible time at work activities to sharing knowledge, employee job rotation, staff involvement in decision-making, workable job design and organization environment layout.

Flexibility at the workplace could contribute to employee participation and understanding, giving workers more opportunities and encouraging them to play a part in decision-making. Task rotation and Flexible work design offer abundant opportunities for workers to connect and gain more knowledge from coworkers (Ortega, 2001; Zada et al., 2022). This promotes the exchange of information utilizing an organization's collective and group environment of coordination and loyalty (Collins & Smith, 2006). It has also been noticed in the research of Chiang, Shih, and Hsu (2014) that it is beneficial for companies to introduce job work rotation and team information sharing to introduce job work rotation, which discovers new opportunities for teams to create a shared memory framework.

Support empowerment opportunities for staff to explore and utilize the organization's information for better performance (Hasani & Sheikhesmaeili, 2016; Khan et al., 2022). Participatory leadership engages workers in the decision-making mechanism that strengthens their creative ideas and information, which they utilize to accomplish works tasks and responsivity (Sanchez et al. 2015). We, therefore, hypothesize that:

H6: There is a positive relationship between opportunity-enhancing HRM practices and knowledge sharing.

Knowledge Sharing and Innovative Work Behavior

Sharing knowledge is a feature that helps people to share unique work information and turn it into significant strength. Although workers exchange information effectively, information can be collected, and staff is encouraged to foster creative work activities. Holub (2003) concludes that the transmission of information infirm will be high, and employees will respond quickly and creatively when knowledge-sharing activities are encouraged. For the innovation process, additional information and data are mandatory (Spender, 1996), and workers must collaborate, gain and communicate data to introduce the Innovative behavior (Thornhill, 2006). Knowledge exchange is used to create organizational creativity (Lin, 2006).

Enhancing activities in firms related to information sharing contributes to development and progress in introducing new operating approaches, new systems, and methods and evolving conventional processes. Helping companies share expertise is an important aspect of shaping the company's creativity (Qammach, 2016). Thus the following hypothesis is proposed:

H7: Knowledge sharing is positively related to innovative work behavior.

Knowledge Sharing Mediates Relationship Between AE-HR Practices and IWB

Lepak et al. (2006) indicated that Ability enhancing-HR activities improve the awareness, expertise, and abilities required to build individual-level skills to perform outside repetitive tasks that can ultimately promote the creative actions of workers (Preenen et al., 2017).

Several kinds of research indicate that group learning provides more benefits than person-based learning. Learning is another basic principle behind training and growth practices, which is why organizations expend valuable money on encouraging the exchange of information. Besides, major companies in developing countries invest significant money in building a system of knowledge sharing that facilitates workers' creativity and innovative thinking capability. To put it another way, as a return on investment (ROI), companies spend on growth processes to improve employees' expertise and capacities with the knowledge that impacts employees' creative practices, which is also the aim of knowledge-sharing practices. Hence, it is proposed that:

H8: knowledge sharing mediates between ability-enhancing HR practices and innovative work behavior.

Knowledge Sharing Mediates Relationship Between ME-HR Practices and IWB

Businesses need motivated employees to make better sacrifices to initiate improvement and creativity to generate innovative outcomes (Hadjimanolis, 1999). Motivation seems to have a significant influence on the Ability of workers to adopt emerging technology (Fagan et al., 2008), share knowledge with coworkers (Reinholt et al., 2011), and Risks and observations carried out that are specifically related to greater imagination and innovation (Xiaomeng & Bartol, 2010). Hotho and Champion (2011) suggest that businesses must build techniques and procedures for people management such as collaboration, communication, and confrontations among staff. This will provide staff with an internal motivation to do innovative ideas.

Therefore, it is expected that as managerial encouragement is given to employees and colleagues support in the form of knowledge sharing towards their creative thoughts, their optimistic mood states are improved, leading to higher levels of innovative actions (Madjar, 2005). Thus, it is proposed that:

H9: knowledge sharing mediates between Motivation enhancing HR practices and innovative work behavior.

Knowledge Sharing Mediates Relationship between OE-HR Practices And IWB

Flexible opportunities for job creation, autonomy, and engagement further promote inventiveness and innovation in firms by allowing workers to examine new or strengthen current technology, procedures, and equipment. This will perform their roles flexibly rather than sticking to tightly defined tasks (Baggen et al., 2016).

The HR department has been recommended to highlight team-based job designs so employees can become more creative. Some technology-based experiments have shown that cooperation is vital in promoting creativity. For example (Claver et al., 1998) determined that teamwork, autonomy, and a tendency towards technical advancement are part of the HR framework required to create an innovative culture. Workers in companies who have a strong cooperative channel and social encouragement are much more invented and productive in the workplace than those who are not in such cooperative organizations environment. The West Review (2002) confirms that creativity and innovation in project teams rely on how these functional teams are driven and controlled. Team coordination, teamwork, and dispute resolution are all important components of teams with an expectation of creativity (Beer & Eisenstat, 2000; McDonough, 2000). Thus, this study proposes the following hypothesis:

H10: knowledge sharing mediates between opportunity-enhancing HR practices and innovative work behavior.

Moderating Effect of Inclusive Leadership

In the workplace environment, people who trust each other seem to feel mentally comfortable in freely addressing difficulties and challenges, joining forces, and exchanging and incorporating particular suggestions and detailed knowledge. Accordingly, McLean (2005) states that when an open discussion, communication in a supportive work atmosphere, and positive trust relationship exist, workers will become freer to take risks and bring unique ideas and concepts. So as the actions of positive supervisors are supposed to improve the employee IWB, likewise, actions on the worker's role, coworkers are expected to have related results (Shelley et al., 2004). Also, leaders serve as mediators in innovative behavior by which leaders screen and select the ideas from employees and will be further created and introduced to top management (Janssen, 2005; Renkema et al., 2018).

In the organization, leaders play a significant part. They have a specific rank and influence in the work

environment, which allows them to exchange expertise and work experience with their subordinates. To illustrate (Wang & Noe, 2010) stated that Individuals, i.e., leaders, should share their job-relevant concepts, tasks, skills, background know-how, and feedback to support others and cooperate in developing ideas or processes and apply them in a field. Bandura (1997) showed that leaders who share knowledge at the workplace could guide subordinates to participate in practices of knowledge sharing. Additionally, these practices positively impact subordinates' inventive results (Dong et al., 2017; Hu & Zhao, 2016; Gilson et al., 2013). Che et al. (2019) indicate that information obtained from different channels at the workplace, including leaders, would improve the creative performance of their subordinates. Workplace innovation necessitates a lot of help from company culture and the environment. The leader has to present himself as a reform maker in the organization's work climate. Employees see a system that is inclusive and conducive to adopting innovation due to a leader's enthusiasm for new ideas. From this rationale, this study proposes that:

H11: Inclusive leadership moderates the relationship between knowledge sharing and innovative work behavior such that the relationship between knowledge sharing and innovative work will be stronger for high-inclusive leadership than low.

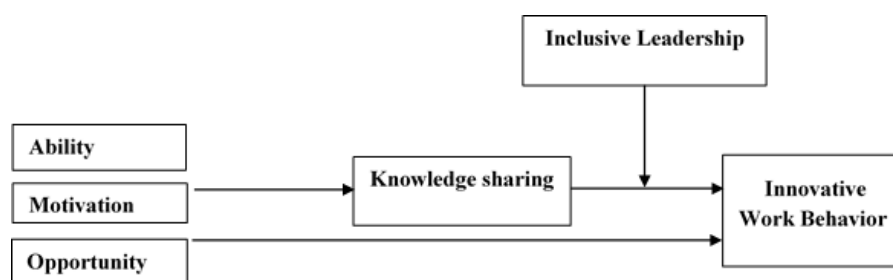


Figure 1: A conceptual framework displaying the relationships

RESEARCH METHODOLOGY

This study was quantitative, so we used positivist research philosophy. Data were gathered numerically for quantitative research. This research design consisted of descriptive analysis and hypothesis testing survey approach because it is the only study design with different advantages (Babbie, 2004). Convenient sampling techniques were used in all those educational institutes that were part of our research. Questionnaires were sent to the faculty members of institutes through various contact people, personal, and internet distribution (email). Approximately 35-40 universities are located in the region of Rawalpindi and Islamabad. According to HEC University, wise Full-Time Faculty members are approximately 8500-9500. Although the expected population is 9500-10000 and according to the table of (Krejcie & Morgan 1970), the sample size for our study was 356. Out of a total of 1300 questionnaires distributed, 425 questionnaires were received. Only 356 questionnaires were correctly fulfilled by participants, based on which results were computed. The direct hypothesis was analyzed through linear regression; the mediation and moderation hypothesis was tested through Hayes Process Macros (2017). Other studies have also used Process macros for moderation and mediation analysis (e.g., Irshad, 2021; Rubbab et al., 2022).

Scales Used

The questionnaires were used to collect the relevant data to complete this research. Items in questionnaires were measured at a five-point Likert scale in which the lowest value, 1, is "Strongly Disagree" and 5, "Strongly Agree." The language for the scale was English, and other researchers have used the English language for collecting data having no issue understanding the respondents (e.g., Majeed et al., 2020; Qasim, Rizvi, & Irshad, 2020). Cronbach alpha of all scales is shown in Table 1.

Table 1: Scale and reliabilities

Variable	Cronbach α	No. of Items
AE-HR	.85	7
ME-HR	.84	6
OE-HR	.84	8
IWB	.92	9
KS	.88	4
IL	.90	8

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, IWB=Innovative work behavior, KS=Knowledge sharing, IL=Inclusive leadership

High-performance work systems: We investigated educational institutes' HPWS activities using the AMO system. We used the AMO system scale developed by Tian et al. (2016). Employee views of HRM activities were measured using a 1–5 Likert scale and 23 elements based on previous literature (Kehoe & Wright, 2013; Liao et al., 2009; Sun et al., 2007; Tian et al., 2016 & Zacharatos et al., 2005). We classified these activities into three domains Ability, Motivation, and opportunity-enhancing HR practices. Based on previous studies using the AMO system of HRM (Jiang et al., 2012; Kehoe et al., Wright, 2013; Subramony, 2009). Reliability for Ability enhancing HR for this study was .85. Reliability for Motivation enhancing HR for this study was .84. Reliability for opportunity-enhancing HR for this study was .84.

Knowledge sharing: Knowledge sharing was assessed following Kang et al. (2008) as four questions in the questionnaire. A sampling item is like "I am willing to share knowledge by performing tasks. I am willing to share knowledge or methods learned from training". The reliability for the scale of knowledge sharing for this study was .88

Inclusive leadership: Inclusive leadership was measured with nine items adopted from Carmeli et al. (2010). Sampling items are like "My manager is open to hearing new ideas. My manager is available for consultation on problems". The reliability of this scale for this study was .88

Innovative work behavior: According to Janssen (2000), IWB involves three consecutive steps in personal innovation: idea creation, idea promotion, and idea implementation. Nine items of three dimensions adapted from Janssen (2000) were used to measure innovative work behavior. Sampling items are like "I create new ideas for difficult issues. I generate original solutions for problems". The reliability of this scale was .90

Correlation Analysis

Pearson correlation was performed to assess the correlation between study variables. The results of the correlation are shown in Table 2. Results show that AE-HR is significantly related to knowledge sharing ($r=.53, p<.01$) and innovative work behavior ($r=.71, p<.01$). ME-HR is significantly related to knowledge sharing ($r=.40, p<.01$) and innovative work behavior ($r=.63, p<.01$). OE-HR is significantly related to knowledge sharing ($r=.55, p<.01$) and innovative work behavior ($r=.73, p<.01$). KS was significantly related ($r=.78, p<.01$) to innovative work behavior.

Table 2: Scale and reliabilities

Variable	Mean	SD	AE	ME	OE	KS	IL	IWB
AE-HR	3.3	.87	1	.73**	.75**	.53**	.68**	.71**
ME-HR	3.2	.94		1	.76**	.40**	.64**	.63**
OE-HR	3.4	.80			1	.55**	.67**	.73**
KS	3.9	.90				1	.64**	.78**
IL	3.7	.89					1	.79**
IWB	3.7	.84						1

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, IWB=Innovative work behavior, KS=Knowledge sharing, IL=Inclusive leadership

Hypothesis Testing

Direct Hypothesis

Table 3 indicates that ability-enhancing HR practices significantly impact innovative work behavior ($= .71, p < 0.05$). Motivation-enhancing HR practices significantly impact innovative work behavior ($= .63, p < 0.05$). Opportunity-enhancing HR practices positively and significantly impact innovative work behavior ($= .73, p < 0.05$). Results show that Ability, Motivation, and opportunity-enhancing HR practices will increase innovative work behavior; hence H1, H2 & H3 are supported. The greater AE-HR, ME-HR, and OE-HR practices among employees, the more frequent the improvements to innovative work behavior. Previous research has revealed that training and learning can support workers by enhancing teamwork, innovative job skills, and overall career awareness and capabilities, which can all be extended to innovative work behavior (Prieto & Pérez-Santana, 2013). Previous researches show when workers get an indication from their firm's incentive scheme that their additional activities will be appreciated and acknowledged; workers will see Innovative work behavior as having more significance and merit. Equality of performance-based compensation is considered to be significant for workers to respond positively to Innovative work behavior (Janssen, 2000). Similarly, increasing corporate engagement enhances an individual's job autonomy, which affects creative work actions. Employee control helps them develop new strategies to discover more productive methods to do their work.

Table 3: Direct effect of IV on DV

Hypothesis	β	p	Status
H1: AE-HR→IWB	.71	.000	Supported
H2: ME-HR→IWB	.63	.000	Supported
H3: OE-HR→IWB	.73	.000	Supported

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, IWB=Innovative work behavior, KS=Knowledge sharing, IL=Inclusive leadership

Table 4 specifies that Ability-enhancing HR practices positively and significantly impact knowledge sharing ($= .53, p < 0.05$). Table 4 specifies that Motivation-enhancing HR practices positively and significantly impact knowledge sharing ($= .40, p < 0.05$). R square change shows that ME-HR practices could bring only a 16.4% change in Knowledge sharing. Table 4 specifies that opportunity-enhancing HR practices positively and significantly impact knowledge sharing ($= .55, p < 0.05$). The above results show that this study supported H4, H5 and H6. People's efforts to display community involvement actions, such as sharing information with peers, are motivated by the honesty of incentives, which indicates to workers that the company trusts them.

Table 4: Direct effect IV on mediator

Hypothesis	β	R^2	ΔR^2	p	Status
H4:AE-HR→KS	.53	.53	.29	.000	Supported
H5:ME-HR→KS	.40	.40	.16	.000	Supported
H6:OE-HR→KS	.55	.55	.31	.000	Supported

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, KS=Knowledge sharing

Chiang, Shih, and Hsu (2014) illustrate that providing employees with task-rotating experience opportunities to build a strong memory structure is especially helpful for information sharing. Based on the above, we conclude that opportunity-enhancing HR activities can facilitate team knowledge-sharing.

The results specify that employee knowledge sharing positively and significantly impacts innovative work behavior ($= .78, p < 0.05$). The above results show that this study supported H7.

Table 5: Direct effect of the mediator on DV

Hypothesis	β	p	Status
H7: KS→IWB	.78	.000	Supported

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, KS=Knowledge sharing

Mediation Hypothesis

The results show that the p-value fall below 0.05 ($=.68; p=.000 < 0.05$), which indicates that KS mediates the relationship between the AE-HR and the IWB. The above table shows that employee knowledge sharing positively mediates between ME-HR and IWB ($=.56; p=.000 < .05$). Association between OE-HR practices and IWB with mediating role of KS is also significant ($=.76; p=.000 < 0.05$). Moreover, results also show that all hypothesis values of LLCI & ULCI are in the same direction, illustrating that mediation exists in H8, H9 & H10 hypotheses. Mediation analysis was analyzed by Hayes (2017) process macros model 4. Organizations should motivate their employee about upcoming technologies and the pleasures of making knowledge-sharing relationships among coworkers.

Table 6: Mediation analysis

Hypothesis	β	S.E	p	LLCI	ULCI	Status
H8:AE-HR →KS→ IWB	.68	.03	.000	.61	.75	Supported
H9: ME-HR →KS→IWB	.56	.03	.000	.49	.63	Supported
H10:OE-HR→KS→IWB	.76	.03	.000	.69	.84	Supported

Notes: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, IWB=Innovative work behavior, KS=Knowledge sharing, Se = Standard Error, LL = Lower Limit, UL = Upper Limit, CI = Confidence Interval.

Moderation Analysis

Table 7 indicates that the overall model was significant. Table 7 also indicates the impact of IL ($=-.46$, and $p=.000 < 0.05$), which is significant, and KS ($=.40$ and $p=.000 < 0.05$), which is also significant. The interaction term between KS and IL ($=-.04$, $p=.021 < 0.05$). Model 1 of Hayes (2017) process macros was employed for moderation analysis. According to Bai et al. (2016), 'The way a leader acts is necessary to promote employee information sharing and individual innovation. Further, the moderation graph in figure 2 also shows that inclusive leadership strengthens the positive effect of knowledge sharing on innovative work behavior.

Table 7: Moderation analysis

Hypothesis	β	S.E	p	LLCI	ULCI	Status
KS→IWB	.40	.04	.000	.31	.48	Supported
IL→IWB	.46	.04	.000	.55	.55	Supported
Int_1 KSxIL→IWB	.04	.02	.021	.08	.01	Supported

Note: AE-HR=Ability enhancing Human resource, ME-HR=Motivation enhancing human resource, OE-HR=Opportunity enhancing human resource, IWB=Innovative work behavior, KS=Knowledge sharing, IL=Inclusive leadershipSe = Standard Error, LL = Lower Limit, UL = Upper Limit, CI = Confidence Interval.

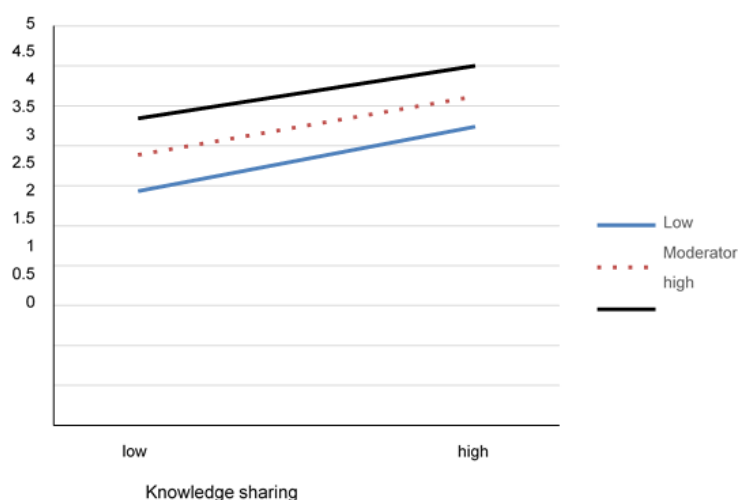


Figure 2: MOD Graph: Moderation of Inclusive leadership between knowledge sharing and innovative work behavior

DISCUSSION AND CONCLUSION

This study aimed to analyze the effect of High-performance HR practices (AMO Framework) on IWB in the universities of Rawalpindi and Islamabad in Pakistan. Further, this study also checked the mediation effect of knowledge sharing between AMO Framework and IWB and the moderating effect of Inclusive leadership between Knowledge sharing and innovative work behavior. Data was collected from teachers working in the universities of Rawalpindi and Islamabad to achieve the research objectives. With the help of a framework, 11 hypotheses were conceptualized. The first 3 hypotheses aimed to Examine the effect of Ability, Motivation, and opportunity-enhancing HR practices on Innovative work behavior (DV). The results of the study support the hypothesis. HPWS has a significant and positive relationship with KSB.

The next three hypotheses (H4, H5, H6), examined the effect of the AMO framework on Knowledge sharing. The findings also revealed the role of Knowledge sharing as a Mediator between AMO and Innovative work behavior; it was found that the KS greatly influenced the strength of the relationship between AMO model and IWB in the organization. The results of the current study also support this hypothesis. As differing Human resource activities have been related to Knowledge sharing, the results are consistent with Cheng et al. (2018) and Bhatti et al. (2020) research. Hypothesis 7 shows the relationship between knowledge sharing and innovative work behavior. The result of this hypothesis also accepts. This finding suggests that sharing information among workers who are starting to learn and engaging in behaviors that enable them to learn improves their knowledge development and new skills for innovation.

Hypothesis 8, 9, and 10 aimed to examine the AMO framework's impact on IWB with the mediating role of knowledge sharing. The results of the current research also supported our hypothesis. The findings indicate that when the level of knowledge sharing is higher, the effect of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR activities on Innovative work behavior is greater.

H11 shows that highly inclusive leadership strengthens the relationship between employee knowledge-sharing and innovative work behavior. Moderation hypotheses were analyzed by Hayes (2007), and the results of current research also supported our hypothesis. The findings show that how supervisors endorse and encourage community learning processes greatly impacts faculty members' involvement. As a result, people can commit to their firms more and are more likely to share fresh and creative ideas.

FUTURE RECOMMENDATIONS

This study emphasizes the importance of increased participation in HPWS practices to improve IWB. Market-based staffing, effective training, and participation in the decision-making process have all been shown to be more helpful in enhancing employees' IWB indirectly. This means that HR professionals should use effective recruiting and selection techniques to employ qualified applicants who will be mentored through specialized training programs to improve their skills and talents. HR managers may implement a system encouraging all workers to participate in

significant decisions by offering thoughts and unique ideas.

We recommend that managers promote inclusive leadership and knowledge sharing by highlighting openness, availability, and accessibility and providing opportunities for workers to talk about new thoughts and express their views. As a result, management must socialize and initiate activities to foster a strong connection with their workers. Our results further suggest that to improve employee creative job behavior, managers should increase supervisor understanding of the beneficial impact of inclusive leadership on employee behavior so that supervisors are more committed to using this form of leadership in the workplace.

LIMITATIONS

Due to the ease of inaccessibility to the respondents and time constraints, convenience sampling is used for data collection. First, the current research was cross-sectional; future research can be done longitudinal. The second limitation is that all of the variables were rated by the same group of workers (faculty members) in educational institutes in Pakistan; Future research can be done in high technology firms. The third limitation is that a single respondent obtains responses simultaneously; hence future studies can be done to see how team-based projects HR practice affects each variable. Fourth, this study used a four-construct model; future studies might use other constructs to see the differences in results. Fifth, the current study explored only one element of knowledge management as a mediator. In future research, other elements of knowledge management could also be examined.

REFERENCES

- Abstein, A., & Spieth, P. (2014). Exploring HRM metafeatures that foster employees' innovative work behaviour in times of increasing work-life conflict. *Creativity and Innovation Management*, 23(2), 211-225. <https://doi.org/10.1111/caim.12053>
- Ahmadi, A., Abzari, M., Nasr Isfahani, A., & Safari, A. (2018). High-performance, knowledge sharing and ICT skills. *Human Systems Management*, 37(3), 271-280. DOI: 10.3233/HSM-17169
- Alegre, J., & Pasamar, S. (2018). Firm innovativeness and work-life balance. *Technology Analysis & Strategic Management*, 30(4), 421-433.
- Ali, A., Ahmad, S., & Saeed, I. (2018). Ethical leadership and organizational citizenship behavior: mediating role of organizational justice: a case study of education sector. *Abasyn Journal of Social Sciences*, 11(2), 386-399.
- Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A. L., & Bailey, T. A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Baggen, Y., Lans, T., Biemans, H. J., Kampen, J., & Mulder, M. (2016). Fostering Entrepreneurial Learning OntheJob: evidence from innovative small and medium sized companies in Europe. *European Journal of Education*, 51(2), 193-209. <https://doi.org/10.1111/ejed.12171>
- Bandura, A. (1997). *Social foundations of thought and action*. Englewood Cliffs, NJ, 1986(23-28).
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal Of Leadership & Organizational Studies*, 9(1), 64-76.
- Beer, M., & Eisenstat, R. A. (2000). The silent killers of strategy implementation and learning. *Sloan Management Review*, 41(4), 29-40. doi.org/10.1177/107179190200900105
- Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. *International Journal of Manpower*
- Boxall, P. (2003). HR strategy and competitive advantage in the service sector. *Human Resource Management Journal*, 13(3), 5-20. doi.org/10.1111/j.1748-8583.2003.tb00095.x
- Bysted, R., & Jespersen, K. R. (2014). Exploring managerial mechanisms that influence innovative work behaviour: Comparing private and public employees. *Public Management Review*, 16(2), 217-241. <https://doi.org/10.1080/14719037.2013.806576>

- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal Of Human Resource Management*, 16(5), 720-735..
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260. <https://doi.org/10.1080/10400419.2010.504654>
- Che, T., Wu, Z., Wang, Y., & Yang, R. (2019). Impacts of knowledge sourcing on employee innovation: the moderating effect of information transparency. *Journal of Knowledge Management*.
- Chiang, Y. H., Shih, H. A., & Hsu, C. C. (2014). High commitment work system, transitive memory system, and new product performance. *Journal of Business Research*, 67(4), 631-640. <https://doi.org/10.1108/JKM-11-2017-0554>
- Choi, J. H. (2014). The HR–performance link using two differently measured HR practices.
- Claver, E., Llopis, J., Garcia, D., & Molina, H. (1998). Organizational culture for innovation and new technological behavior. *The Journal of High Technology Management Research*, 9(1), 55-68.
- Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of management journal*, 49(3), 544-560. <https://doi.org/10.5465/amj.2006.21794671>
- Danish, R. Q., & Usman, A. (2010). Impact of reward and recognition on job satisfaction and Motivation: An empirical study from Pakistan. *International Journal of Business and Management*, 5(2), 159.
- Darwish, T. K., Singh, S., & Wood, G. (2016). The impact of human resource practices on actual and perceived organizational performance in a Middle Eastern emerging market. *Human Resource Management*, 55(2), 261-281. <https://doi.org/10.1002/hrm.21664>
- Dixon, N. M. (2000). *Common Knowledge: How companies thrive by sharing what they know*. Harvard Business School Press.
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dualfocused transformational leadership. *Journal of Organizational Behavior*, 38(3), 439-458.
- Engen, M. L. V., & Verhagen, M. (2005). Onthejob innovation: The impact of job design and human resource management through production ownership. *Creativity And Innovation Management*, 14(2), 129-141. <https://doi.org/10.1111/j.1476-8691.2005.00333.x>
- Fagan, M. H., Neill, S., & Wooldridge, B. R. (2008). Exploring the intention to use computers: An empirical investigation of the role of intrinsic Motivation, extrinsic Motivation, and perceived ease of use. *Journal of Computer Information Systems*, 48(3), 31-37
- Farid, T., Iqbal, S., Saeed, I., Irfan, S., & Akhtar, T. (2021). Impact of supportive leadership during Covid-19 on nurses' well-being: The mediating role of psychological capital. *Frontiers in Psychology*, 12, 695091.
- Fatima, T., Majeed, M., & Saeed, I. (2017). Does participative leadership promote innovative work behavior: the moderated mediation model. *Business & Economic Review*, 9(4), 139-156.
- Gilson, L. L., Lim, H. S., Luciano, M. M., & Choi, J. N. (2013). Unpacking the crosslevel effects of tenure diversity, explicit knowledge, and knowledge sharing on individual creativity. *Journal Of Occupational And Organizational Psychology*, 86(2), 203-222. <https://doi.org/10.1111/joop.12011>
- Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. *Journal Of Knowledge Management*.
- Hadjimanolis, A. (1999). Barriers to innovation for SMEs in a small less developed country (Cyprus). *Technovation*, 19(9), 561-570.
- Hansen, M. T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44(1), 82- 111. <https://doi.org/10.2307/2667032>

- Hasani, K., & Sheikhesmaeili, S. (2016). Knowledge management and employee empowerment. *Kybernetes*.
- Hayes, A. F. (2017). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Holub, S. F. (2003). Knowledge sharing is a change-management exercise. *Tax Practice Management*, 34(6), 361-363.
- Hon, A.H. and Lui, S.S. (2016), "Employee creativity and innovation in organizations: review, integration, and future directions for hospitality research", *International Journal of Managerial Psychology*, Vol. 33 No. 1, pp. 29-42. DOI.org/10.1108/IJCHM-09-2014-0454
- Hotho, S., & Champion, K. (2011). Small businesses in the new creative industries: innovation as a people management challenge. *Management Decision*.
- Hu, B., & Zhao, Y. (2016). Creative self-efficacy mediates the relationship between knowledge sharing and employee innovation. *Social Behavior And Personality: An International Journal*, 44(5), 815-826.
DOI.org/10.2224/sbp.2016.44.5.815
- Irshad, M. (2021). The cascading effect of organizational identification through psychological entitlement: testing sequential mediation for positive and negative outcomes. [Unpublished doctoral dissertation]. Capital University of Science & Technology.
- Irshad, M., & Bashir, S. (2020). The dark side of organizational identification: a multi-study investigation of negative outcomes. *Frontiers in Psychology*, 11, 572478. DOI.org/10.3389/fpsyg.2020.572478
- Jackson, S. E., Chuang, C. H., Harden, E. E., & Jiang, Y. (2006). Toward developing human resource management systems for knowledge-intensive teamwork. In *Research In Personnel And Human Resources Management*. DOI.org/10.1016/S0742-7301(06)25002-3
- Janssen, O. (2000). Job demands, perceptions of effortreward fairness and innovative work behavior. *Journal Of Occupational And Organizational Psychology*, 73(3), 287-302.
- Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behavior. *Journal Of Occupational And Organizational Psychology*, 78(4), 573-579.
DOI.org/10.1348/096317905X25823
- Javed, A., Yasir, M., & Majid, A. (2018). Psychological factors and entrepreneurial orientation: Could education and supportive environment moderate this relationship?. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 12(2), 571- 597.
- Khan, J., Ali, A., Saeed, I., Vega-Muñoz, A., & Contreras-Barraza, N. (2022). Person–Job Misfit: Perceived Overqualification and Counterproductive Work Behavior. *Frontiers in Psychology*, 4133. DOI.org/10.3389/fpsyg.2022.936900
- Khan, J., Saeed, I., Ali, A., & Nisar, H. G. (2021). The mediating role of emotional exhaustion in the relationship between abusive supervision and employee cyberloafing behaviour. *Journal of Management and Research*, 160-178. <https://doi.org/10.29145/jmr/81/080107>
- Khan, J., Saeed, I., Fayaz, M., Zada, M., & Jan, D. (2023). Perceived overqualification? Examining its nexus with cyberloafing and knowledge hiding behaviour: harmonious passion as a moderator. *Journal of Knowledge Management*, 27(2), 460-484. <https://doi.org/10.1108/JKM-09-2021-0700>
- Khan, J., Saeed, I., Zada, M., Ali, A., Contreras-Barraza, N., Salazar-Sepúlveda, G., & Vega-Muñoz, A. (2022). Examining whistleblowing intention: The influence of rationalization on wrongdoing and threat of retaliation. *International journal of environmental research and public health*, 19(3), 1752. DOI.org/10.3390/ijerph19031752
- Khan, J., Usman, M., Saeed, I., Ali, A., & Nisar, H. (2022). Does workplace spirituality influence knowledge-sharing behavior and work engagement in work? Trust as a mediator. *Management Science Letters*, 12(1), 51-66. DOI: 10.5267/j.msl.2021.8.001

- Khan, J., Usman, M., Saeed, I., Ali, A., & Nisar, H. (2022). Does workplace spirituality influence knowledge-sharing behavior and work engagement in work? Trust as a mediator. *Management Science Letters*, 12(1), 51-66. DOI: 10.5267/j.msl.2021.8.001
- Khan, J., Saeed, I., Zada, M., Nisar, H.G., Ali, A. and Zada, S. (2022), "The positive side of overqualification: examining perceived overqualification linkage with knowledge sharing and career planning", *Journal of Knowledge Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JKM-02-2022-0111>
- Knol, J., & Van Linge, R. (2009). Innovative behavior: The effect of structural and psychological empowerment on nurses. *Journal Of Advanced Nursing*, 65(2), 359-370. DOI.org/10.1111/j.1365-2648.2008.04876.x
- Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A conceptual review of human resource management systems in strategic human resource management research. *Research In Personnel And Human Resources Management*.
- Liao, E. Y., & Chun, H. (2016). Supervisor monitoring and subordinate innovation. *Journal of Organizational Behavior*, 37(2), 168-192.
- Lin, H. F. (2006). Impact of organizational support on organizational intention to facilitate knowledge sharing. *Knowledge Management Research & Practice*, 4(1), 26-35. DOI.org/10.1057/palgrave.kmrp.8500083
- Madjar, N. (2005). The contributions of different groups of individuals to employees' creativity. *Advances in developing human resources*, 7(2), 182-206. <https://doi.org/10.1177/1523422305274525>
- Majeed, M., Irshad, M., Fatima, T., Khan, J., & Hassan, M. M. (2020). Relationship between problematic social media usage and employee depression: A moderated mediation model of mindfulness and fear of COVID-19. *Frontiers in psychology*, 11, 557987.
- Malik, M. S., Suleman, F., Ali, N., & Arshad, F. (2017). An Empirical Analysis of Impact of Inclusive Leadership on Employee Engagement in International Non-Government Organizations (INGO's) of Punjab (Pakistan). *Int J Econ Manag Sci*, 6(441), 2. DOI: 10.4172/2162-6359.100044.
- McLean, L. D. (2005). Organizational culture's influence on creativity and innovation: A review of the literature and implications for human resource development. *Advances In Developing Human Resources*, 7(2), 226-246. <https://doi.org/10.1177/1523422305274528>
- Ortega, J. (2001). Job rotation as a learning mechanism. *Management science*, 47(10), 1361- 1370.
- Preenen, P.T., Vergeer, R., Kraan, K. and Dhondt, S. (2017), "Labour productivity and innovation performance: the importance of internal labour flexibility practices", *Economic and Industrial Democracy*, 38(2), 271-293.
- Prieto, I. M., & Pérez-Santana, M. P. (2014). Managing innovative work behavior: the role of human resource practices. *Personnel Review*.
- Prieto, I. M., & Pilar Pérez Santana, M. (2012). Building ambidexterity: The role of human resource practices in the performance of firms from Spain. *Human Resource Management*, 51(2), 189-211. <https://doi.org/10.1002/hrm.21463>
- Qammach, N. I. J. (2016). The mediating role of Knowledge sharing on relationship between IT capability and IT support as predictors of innovation Performance: An Empirical Study on Mobile Companies in Iraq. *Procedia Economics and Finance*, 39, 562-570. DOI. org/10.1016/S2212-5671(16)30300-8.
- Qasim, M., Rizvi, T. H., & Irshad, M. (2020). Impact of ethical leadership on task performance and organizational citizenship behavior: moderating role of islamic work ethics. *Journal of Management and Research*, 7(2), 166-193. DOI: <https://doi.org/10.29145/jmr/72/070206>
- Quinn, J.B., Anderson, P. and Filkenstein, S. (1996), "Managing professional intellect: making the most of the best", *Harvard Business Review*, Vol. 74 No. 2, pp. 71-80.
- Raidén, A. B., Dainty, A. R., & Neale, R. H. (2006). Balancing employee needs, project requirements and organisational priorities in team deployment. *Construction Management and Economics*, 24(8), 883-895. DOI.org/10.1080/01446190600647191

- Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardessai, R. (2005). Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity and innovation management*, 14(2), 142-150.
- Rao, M. S. (2012). Soft leadership: Make others feel more important. *Leader to Leader*, 2012(64), 27-32.
- Reinholt, M. I. A., Pedersen, T., & Foss, N. J. (2011). Why a central network position isn't enough: The role of Motivation and Ability for knowledge sharing in employee networks. *Academy of Management Journal*, 54(6), 1277-1297. DOI.org/10.5465/amj.2009.0007
- Renkema, M., Meijerink, J., & Bondarouk, T. (2018, July). Routes of Employee-Driven Innovation: How HRM Supports Emergence. In *Academy of Management Proceedings*. DOI.org/10.5465/AMBPP.2018.16237abstract
- Rhodes, J., Lok, P., Hung, R. Y. Y., & Fang, S. C. (2008). An integrative model of organizational learning and social capital on effective knowledge transfer and perceived organizational performance. *Journal of workplace learning*.
- Rubbab, U. E., Naqvi, S. M. M. R., Irshad, M., & Zakariya, R. (2022). Impact of supervisory delegation on employee voice behavior: role of felt obligation for constructive change and voice climate. *European Journal of Training and Development*, (ahead-of-print). DOI.org/10.1108/EJTD-01-2022-0006
- Saeed I, Khan J, Zada M, Zada S, Vega-Muñoz A and Contreras-Barraza N (2022) Linking Ethical Leadership to Followers' Knowledge Sharing: Mediating Role of Psychological Ownership and Moderating Role of Professional Commitment. *Front. Psychol.* 13:841590. DOI: 10.3389/fpsyg.2022.841590
- Shin, S. J., Jeong, I., & Bae, J. (2016). Do high-involvement HRM practices matter for worker creativity? A cross-level approach. *The International Journal of Human Resource Management*, 29(2), 260-285. DOI.org/10.1080/09585192.2015.1137612
- Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17(S2), 45-62. DOI.org/10.1002/smj.4250171106
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high-and low- technology regimes. *Journal Of Business Venturing*, 21(5), 687-703. DOI.org/10.1016/j.jbusvent.2005.06.001
- Ullah, R., Zada, M., Saeed, I., Khan, J., Shahbaz, M., Vega-Muñoz, A., & Salazar-Sepúlveda, G. (2021). Have you heard that—"GOSSIP"? Gossip spreads rapidly and influences broadly. *International journal of environmental research and public health*, 18(24), 13389. DOI.org/10.3390/ijerph182413389
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115-131
- Wojtczuk-Turek, A., & Turek, D. (2015). Innovative behaviour in the workplace: The role of HR flexibility, individual flexibility and psychological capital: the case of Poland. *European Journal of Innovation Management*. DOI.org/10.1108/EJIM-03-2014-0027
- Xiaomeng, Z, Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic Motivation, and creative process engagement. *Academy Of Management Journal*, 53(1), 107-128.
- Yasir, M., & Majid, A. (2019). Boundary integration and innovative work behavior among nursing staff. *European Journal of Innovation Management*, 22(1), 2-22..
- Zada, M., Zada, S., Khan, J., Saeed, I., Zhang, Y. J., Vega-Muñoz, A., & Salazar-Sepúlveda, G. (2022). Does servant leadership control psychological distress in crisis? Moderation and mediation mechanism. *Psychology research and behavior management*, 607-622.
- Zada, S., Khan, J., Saeed, I., Jun, Z. Y., Vega-Muñoz, A., & Contreras-Barraza, N. (2022). Servant leadership behavior at workplace and knowledge hoarding: a moderation mediation examination. *Frontiers in Psychology*, 13. DOI: 10.3389/fpsyg.2022.888761
- Zada, S., Khan, J., Saeed, I., Wu, H., Zhang, Y., & Mohamed, A. (2022). Shame: Does It Fit in the Workplace? Examining Supervisor Negative Feedback Effect on Task Performance. *Psychology Research and Behavior Management*, 2461-2475.

Zhou, H., Dekker, R., & Kleinknecht, A. (2010). The impact of labour flexibility and HRM on innovation. In *Innovation In Business And Enterprise: Technologies And Frameworks* . DOI: 10.4018/978-1-61520-643-8.ch011