

Fostering Knowledge Management Behavior through Knowledge-Oriented Leadership in Higher Education Institutions

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Abstract

Building upon JD-R Theory and KBV Theory, this study empirically investigates the relationship between knowledge-oriented leadership and knowledge management behavior with the moderating role of employee work attitude in higher education institutions of Pakistan. The population of the study was the faculty members of the higher education institution of Peshawar, Pakistan. The data was collected by 204 faculty members, as the teaching faculty is considered as the knowledge pillar in higher education institutions, therefore, this study has only collected data from the teaching faculty working in public, and private universities by close-ended questionnaires. For statistical analysis of the hypotheses, this study has applied Smart PLS 3.2. The results of the study reveal that knowledge-oriented leader significantly influences knowledge management behavior in higher education institutions, furthermore, this study finding reveals employee work attitude significantly moderates the relationship. This study also illustrates the implications, limitations, and future research directions for the practitioner and scholars.

Keywords: Employee Work Attitude, Higher Education Institutions, Knowledge Management Behavior, Knowledge oriented leadership

In today's knowledge-based economy, the focus of the organization has been shifted from tangible resources towards intellectual capital for gaining and sustaining competitive advantage (Siddiqi & Rasheed, 2023), knowledge is a highly valuable intellectual asset that enhances productivity for both individuals and organizations, fosters the creation of new knowledge, and crucial for the competitiveness and expansion of organizations (C. Y. Kim, 2021; Shamim et al., 2017). Therefore, it is vital for organizations today to continuously motivate and convince their employees to improve their knowledge behavior (Gürlek & Çemberci, 2020; Vendrell-Herrero et al., 2019). In a recent study, Chemin (2021) argued that high-ability and hard-working leaders can increase employee effort, knowledge-sharing, and performance. Like many other sectors, higher education institutions are also facing various challenges in regards to increased competition, globalization, technological advancement, and complex customer demands (Latif et al., 2021; Rehman & Iqbal, 2020; Sari, 2023). Moreover, higher education institutions are also facing immense pressure for added value and significance (Sahibzada, Jianfeng, Latif, & Sahibzada, 2020). The role of higher education institutions are always important in the economic growth and social development of a country, they are responsible for producing high intellects for the country (Trung & Van, 2020; Rehman & Iqbal, 2020). But in developing countries higher education institutions are facing additional challenges regarding global pressure of competition and ranking, funding issues from the government, lack of qualified faculty, inadequate resources, and outdated curricula (Chatterjee et al., 2020; Rehman & Iqbal, 2020; Sari, 2023; Trung & Van, 2020). Therefore, dealing with such intense challenges and improvement in knowledge management behavior of employees, the role of knowledge oriented leadership is crucial to examine (Gürlek & Çemberci, 2020; Latif et al., 2020; Rehman & Iqbal, 2020).

Knowledge-oriented leadership is recognized as a type of leadership that fits the needs of knowledge-intensive organizations, such as higher education institutions (Rehman & Iqbal, 2020). According to Naqshbandi & Jasimuddin (2018), knowledge-oriented leadership can be defined as "attitude or action, observed or imputed that prompts the creation, sharing, and utilization of new knowledge in a way that seems to bring a shift in thinking and collective outcomes". Knowledge oriented leadership plays a critical role in fostering knowledge management practices and shaping various variables on individual, team and organizational level such as project success (Latif et al., 2020), organizational performance (Chaithanapat et al., 2022; Sahibzada, Xu, et al., 2021), organizational innovative performance (Donate et al., 2022; Zia, 2020),

team learning & creativity (Men & Jia, 2021), employee creativity and innovation (Chaithanapat et al., 2022; Sun et al., 2020), employee engagement (Shamim et al., 2017), knowledge sharing (Shariq et al., 2019) etc. Prior researches suggest that knowledge-oriented leaders are individuals who prioritize knowledge creation, sharing, and utilization within their organizations (Muhammed & Zaim, 2020; Sahibzada, Xu, et al., 2021). These leaders understand the value of knowledge as a strategic asset and actively promote a culture of learning and knowledge exchange (Pellegrini et al., 2020; Sahibzada, Latif, et al., 2020).

For instance, studies have shown a positive association between knowledge-oriented leadership and employee creativity and innovation (Naqshbandi & Jasimuddin, 2018; Shamim et al., 2017). Knowledge-oriented leaders create an environment that encourages employees to explore new ideas, take risks, and think critically, thereby stimulating innovation within the organization (Donate & Sánchez de Pablo, 2015). Furthermore, knowledge-oriented leadership has been linked to higher levels of employee engagement and satisfaction (Malik et al., 2023). Leaders who emphasize knowledge sharing and provide opportunities for skill development and learning demonstrate a genuine concern for employee growth and development, leading to increased engagement and job satisfaction (Lee et al., 2020). Knowledge-oriented leaders' model and encourage knowledge management practices, fostering a culture where employees perceive knowledge sharing as valuable and beneficial for individual and organizational success (Gürlek & Çemberci, 2020; Latif et al., 2020; Rehman & Iqbal, 2020; Shamim et al., 2017). Leaders who prioritize knowledge-oriented approaches have the potential to enhance organizational learning, innovation, and knowledge utilization, ultimately contributing to organizational success and competitiveness in today's knowledge-intensive environments (Chaithanapat et al., 2022; Shamim et al., 2017; Zia, 2020).

In context of higher education (Rehman and Iqbal, 2020; Sahibzada et al., 2020) examined the effect of knowledge-oriented leadership on organizational performance and KM processes. Where (Donate & de Pablo, 2015) also addressed the issues related to the attitude of the leader/worker that needs to be explored as emphasized by (Sadeghia & Rad, 2017; Iqbal & Latif, 2018). On the other hand, though the many steps have been initiated by HEC, research activities are still inadequate in universities for which an effective KM is inevitable to meet the challenges of a knowledge-based economy (Sahibzada et al., 2020). Similarly, Shamim et al. (2019); Rehman & Iqbal (2020) emphasizes the importance of the KOL and KMB relationship in HEIs and recommend further research. Moreover, Shamim et al. (2019) stresses on further investigation into the moderating role of employee work attitude between KOL and KMB. Therefore, this study intends to examine the moderating effect of employee work attitude over the linkage between KOL and KMB in higher education sector of Pakistan.

The term "Knowledge Is Power" has been ingrained in the corporate world, and it is seen as a vital strategic advantage for both firms and individual personnel. According to KBV theory (Grant, 1996) organizations must integrate their workers' knowledge into organizational know-how in order to achieve competitiveness and maximize performance. Employee knowledge may be decoded and converted into an intellectual asset for the company in such way (Khalique et al., 2020). According to the research (Cabrera & Cabrera, 2005; Cabrera, Collins, & Salgado, 2006), human elements are crucial for good knowledge management. As a result, the goal of this research is to discover the factors that are important for supporting workers' information management behavior, with an emphasis on the management style that can encourage desirable employees' behaviors, which can lead to KM behavior. Despite several studies identifying knowledge management as a critical success factor, it is still unknown how to develop, retain, share, and utilize knowledge in a company (Donate & Sánchez de Pablo, 2015). On the other side the JD-R theory (Tummers & Bakker, 2021) emphasize on job characteristics that can be divided into two categories: job demands and job resources. Job demands refer to the physical, psychological, social, or organizational aspects of a job that require effort and may be associated with certain costs, such as time pressure or high workload, whereas job resources, on the other hand, are the aspects of a job that help individuals achieve their goals, reduce job demands, and stimulate personal growth. Managers may have a significant impact on their staff' organizational learning practices (Nguyen & Mohamed, 2011). They may create a mental working atmosphere that encourages them to apply their knowledge management skills, allows them to learn from organizational assets, and allows them to contribute to the overall knowledge by sharing their own knowledge base (Crawford, Gould, & Scott, 2003; 2005; Politis, 2002). Donate and Sánchez de Pablo, (2015) looked at a leadership style that might encourage employees to participate in knowledge management. They developed a new knowledge-oriented leadership (KOL) style by combining the transactional and transformational leadership styles, which they observed had a good relationship with KM behavior. In this study, the KOL construct is expanded to incorporate

other leadership behaviors such as assisting, counseling, delegating, expanding information sharing, facilitating, and training. Provided that the current structure is only an amalgamation of transformational and transactional leadership styles, literature indicates that several additional behaviors, such as coaching and supporting, delegating and advising, and assisting, have the ability to influence KM behavior (Yang, 2010 & Singh, 2008). Because scholars believe that knowledge is the most significant source of sustainable competitive advantage (Shamim et al., 2017; Zack, McKeen, and Singh, 2009), it's necessary to establish a complete KOL construct to improve the effect on KM behavior.

By addressing gaps in the existing literature, this research makes significant contributions to knowledge in several ways. Firstly, it investigates the moderating effect of employee work attitude, which has been identified as an important factor but has been largely overlooked in previous studies. Secondly, this study incorporates established theories such as the knowledge base view (KBV) proposed by Grant (1996) and the Job Demand-Resource (JD-R) Theory (Bakker & Demerouti, 2014) enriches the body of knowledge by providing a more comprehensive understanding of the relationships under investigation. Third, this study contributes to the existing literature by conducting research in a developing city in Pakistan that has been facing significant challenges related to terrorism over the past two decades. This aspect addresses a limitation highlighted by (Rehman & Iqbal, 2020). This study provides valuable insights into how adverse conditions may influence the relationship between knowledge-oriented leadership and knowledge management behavior by examining the moderating role of employee work attitude in the context of a city affected by prolonged terrorism. By addressing these gaps and building on existing knowledge, this research expands our understanding of the dynamics between knowledge-oriented leadership, employee work attitude, and knowledge management behavior.

The relationship between these three areas is investigated in this study. This research provides and investigates a theoretical model that links leadership style, employee work attitudes, and employee knowledge management behavior. Furthermore, academics place a premium on knowledge sharing, but other KM behaviors such as storing, documenting, and applying require further investigation. This research looks at how to acquire, teach, document, and use knowledge. Following the extensive debate, we concluded that knowledge management should be investigated in relation to experience and understanding of leadership, with the moderating effect of workers' attitudes towards their occupation and leadership.

The findings of this study hold significant value for both academics and practitioners. The research contributes to the existing knowledge on knowledge-oriented leadership, knowledge management behavior, and employee work attitudes. It highlights the importance of establishing a supportive environment to cultivate positive attitudes toward knowledge management, particularly in the context of higher education. The study emphasizes the relevance of knowledge-oriented leadership and knowledge management as crucial practices that can effectively enhance the performance of higher education institutions. It underscores the need for these institutions to adopt procedures that facilitate information sharing and utilization. To achieve this, HEI deans and directors should prioritize enabling characteristics that promote effective information sharing and usage. This, in turn, will result in improved performance among students and faculty members.

On a theoretical ground this study has attempted to integrate the fragmented literature on KOL, KMB and EWA. This study has enrich the literature by including theories like Job Demand Resource theory (JD-R theory) by (Bakker & Demerouti, 2014; Tummers & Bakker, 2021), this theory assumes that employee behavior is influence by the interplay of Job demand and job resource, in the context of this study, leadership in an organization is considered as job demand that act as a driving force and foster supportive work environment by providing necessary resources, guidance and improves employees engagement in knowledge management behavior, which can be seen as knowledge resource. Also this study contributes to the knowledge based view (KBV) of (Grant, 1996), which emphasizes that knowledge resources of the organization are most premium for competitiveness and improved performance, in this study the knowledge leaders are considered as the most valuable resource of the organization, which significantly improve the knowledge behavior in an organization. Lastly, this study also contributes to the Path-Goal theory by House (1971), explains the contingent behavior of a leader which rely or depends upon the level of motivation and as well as performance of the subordinates.

Research Questions

1. Whether knowledge-oriented leadership has any significant effect on knowledge management behavior in HEIs?
2. Does employee work attitude have any moderating role between knowledge- management behavior (KMB) and knowledge-oriented leadership (KOL) in HEIs?

Theoretical background

This study is wrapped up with the multiple theories which include, Path Goal Theory, Knowledge-Based View, and Job Demand-Resource Theory. First, Path-Goal theory by House (1971) explains the contingent behavior of a leader which rely or depends upon the level of motivation and as well as performance of the subordinates. Path goal theory assumes four type of leadership behavior while managing subordinates, including supportive, directive, participative and achievement-oriented styles. The leadership behaviors are very crucial for the organization and encourages employees to actively participate in knowledge management behaviors (Gürlek & Çemberci, 2020; Rehman & Iqbal, 2020). Similarly, Shamim et al. (2019) concluded that knowledge-oriented leadership (KOL), the concept where the leader tends to organize their plans with the aim to improve organizational process as well as knowledge management behavior (KMB). In such scenario attitude of employees (EWA) is a matter of concern because, if the employee work attitude is not in alignment with a leader's directions it will cause change in the leader's behavior followed by change in overall organizational performance.

Second, the Knowledge Base View (KBV) by (Grant, 1996) argues that organization can produced excellent result compared to their competitor if they are proactive in managing knowledge. Similarly, many scholars argued that for effective management of knowledge resources the role of leadership are always very crucial (Gürlek & Çemberci, 2020; Latif et al., 2020; Naqshbandi & Jasimuddin, 2018). According to the resource-based view (Meso and Smith, 2000), the company's knowledge resources are among the valuable and difficult to imitate resources used to improve innovation performance (Gürlek & Çemberci, 2020).

The JD-R (Job Demands-Resources) theory proposed by (Tummers & Bakker, 2021) provides a framework for understanding the relationship between job characteristics, employee attitudes, and work-related outcomes. According to the theory, job characteristics can be classified into two categories: job demands and job resources (Bakker & Demerouti, 2014). Job demands encompass the aspects of a job that require effort and are associated with costs, such as time pressure or high workload. On the other hand, job resources refer to the aspects of a job that support employees in achieving their goals, reduce job demands, and facilitate personal growth. In the context of our study, employee work attitude can be considered as a job resource (Tummers & Bakker, 2021; Mauno et al., 2007). A positive work attitude reflects an individual's positive emotional and cognitive evaluation of their work, which can energize them and foster engagement in proactive behaviors. Conversely, a negative work attitude may deplete resources and hinder motivation and engagement (Donate et al., 2022; S. S. Kim, 2019). Furthermore, job resources, including employee work attitude, can act as buffers or moderators in the relationship between job demands, such as knowledge-oriented leadership, and work-related outcomes, such as knowledge management behavior. In this case, a positive work attitude can amplify the positive effects of knowledge-oriented leadership on knowledge management behavior, facilitating greater engagement in knowledge sharing and utilization. On the contrary, a negative work attitude may weaken the relationship between knowledge-oriented leadership and knowledge management behavior, potentially leading to reduced participation in knowledge-related activities. This provides insights into the mechanisms through which work attitudes influence the effectiveness of knowledge-oriented leadership in promoting knowledge management practices.

Knowledge-Oriented Leadership and Knowledge Management Behavior

Leadership is not usually associated with someone in a high-ranking job; it is required at all levels of the organization, and even those without a role can demonstrate it (Alharthi et al., 2020). It is certain that leadership is not an ethical ideal like the rest of us; a leader might be dishonest, greedy, bold, or cowardly, depending on the situation and the idea that all leaders are decent individuals blinds us to the truth of the human situation (Almatrooshi et al., 2020). According to Northouse (2018), four themes of leadership that are arising in the context of group, procedure, influence and group attainment (Almatrooshi et al., 2020). Viitala, (2004), defines leader as someone who has subordinates at any level of an organization. According to the literature on leadership, inspiration, communication, encouragement are some of the qualities of a leader (Ribiere and Sitar, 2003). A leader's ability to successfully communicate the organization's aim or expectation to employees is dependent on excellent communication (Viitala, 2004, Mohsenabad, & Azadehdel, 2016). However, when organizational objectives or goals are linked to knowledge, these factors are inadequate. Instead, to reap the benefits of knowledge extraction and research, organizations must be directed through a knowledge lens (Shariq et al., 2019). Also, in the

recent study conducted by (Siddiqi & Rasheed, 2023) the knowledge resource are proactive in creating value for the customers and improve competitiveness of the firm.

Skyrme (2000) coined the concept in a book titled "Establishing a Knowledge Strategy," this study does not really explain the qualities of a knowledge-oriented leadership in terms of performance, leaving some ambiguity. Donate and Guadamillas (2011) explains the relationship between information exploitation and exploration methods and company's innovation outcomes. They didn't define KOL, but they did use a six-item scale to assess it, five of which show transformational leadership and one transactional leadership style. Gharama et al, (2020), define knowledge-oriented leadership as one of the most significant leadership strategies in an organization, which is required for all personalities, traits, and management styles. Transformative and interactive styles of leadership have a favorable influence on workplace effectiveness and loyalty (Trung & Khalifa, 2019). The knowledge-oriented leaders focus on creative educational process and the consequences of subjective information exchange and implicit and explicit support over time. (Peet, 2012). Naqshbandi and Jasimuddin (2018) defines knowledge-oriented leadership as "an attitude or action, observed or imputed, that prompts the creation, sharing, and utilization of new knowledge in a way that seems to bring a shift in thinking and collective outcomes". In this study a knowledge-oriented leadership (KOL) is defined as an observable or attributed method or conduct that energizes the generation, distribution, and operationalization of creative information in order to affect a shift in thinking and shared results.

Knowledge oriented leadership is a collaborative endeavor inside a company that evaluates, improves, and adopts a new way of thinking in order to achieve collective objectives (Mehmood and Hussain, 2017). Knowledge-oriented leadership, empower organizations to completely engage employees to knowledge related activities and assist their efforts in improving organizational performance (Donate et al., 2022) . Numerous researches show that knowledge-oriented leadership is essential for growing organizational knowledge, organizing, managing, and creating understanding (Lakshman and Parente, 2008; Donate and de Pablo, 2015; Mohsenabad and Azadehdel, 2016). Furthermore, multiple studies have recognized the relevance of KOLs in obtaining, developing, distributing, changing, and utilizing organizational information, besides highlighting their varied roles, such as organizers, inventors, and role models (Naqshbandi and Jasimuddin, 2018; Donate and de Pablo, 2015). A knowledge-oriented leader also encourages knowledge, aids with exercise, places an emphasis on informed employee inspiration, and offers motivations for developing a system for exchanging, archiving and using organizational data (Williams and Sullivan, 2011). Yahya and Goh, (2002), underline the significance of leadership and organization in developing an organizational culture conducive to efficient knowledge management strategies. Knowledge-based management, according to Ahmed and Wang (2007); Winter and Zollo (2002), becomes the association's driving capability, speeding the development, diffusion, and knowledge application in the company. Various studies have established that good leadership is required for effective management of organizational knowledge (Kant and Singh, 2009). Yang (2010) asserts that leaders' mentorship, facilitation, and innovative attitudes have a significant influence on the creation and maintenance of KM behavior. Second, the leadership of a business should encourage knowledge-oriented people to learn and utilize information. In this way, they can achieve both corporate and individual creative goals (Rivière and Sitar, 2003). KOL denotes KM that plays a significant role in the organization in discovering and capturing opportunities for innovation. According to this point of view, executives with a focus on information must advocate for the expansion of knowledge management tools and programs for either knowledge extraction or information research. To achieve successful KM procedures, it is necessary to establish a successful KOL style, inspiration, communications, and personnel. (Donate and de Pablo, 2015).

Recent researches on Knowledge-oriented leadership have emphasized over leadership role in effective management of knowledge (creation, utilization & sharing etc.) (Donate & Sánchez de Pablo, 2015; Sadeghi & Rad, 2018; Sahibzada, Jianfeng, Latif, Shafait, et al., 2020; Shamim et al., 2017). The study conducted by (Donate & Sánchez de Pablo, 2015) have confirmed that leadership role in the knowledge based firms are crucial for effective knowledge management and innovation. The strong knowledge-oriented leadership drives the organization to consistently invest in knowledge resources for the creation of new knowledge which leads to better performance, innovation and competitive advantage. Furthermore, knowledge-oriented leadership not only encourages employee to effectively use the current organizational knowledge but motivates subordinates to engage in the knowledge related activities for the development of new knowledge. In another study Shamim et al. (2017) highlights that the knowledge oriented leadership are the most effective leadership style in hospitality industry which encourages employee towards creative thinking, affective commitment and work engagement and also motivate them to be involved in knowledge management practices. The study conducted in French MNCs by Naqshbandi and

Jasimuddin (2018) finds that Knowledge oriented leaders encourages innovative behaviors through knowledge management capabilities. The study conducted in Turkey by (Gürlek & Çemberci, 2020) and in Pakistan by (Latif et al., 2020) finds that KOL is essential for project success and organizational performance. The study conducted in higher education sector by (Rehman & Iqbal, 2020; Sahibzada et al., 2021) focuses on innovation, KM processes, worker satisfaction and productivity and Organizational performance are the antecedents of Knowledge oriented leadership.

H1: knowledge-oriented leadership significantly impact knowledge management behavior in higher education institutions in Peshawar, Pakistan.

The Moderating effect of Employee Work Attitudes

Attitudes reflect feelings about something, which can be positive or negative, whereas behaviors are usually followed by attitudes (Robbins & Judge 2018). Attitude is the way of thinking while behavior refers to the actions (Shamim et al., 2017). Schola have discovered that employee work attitudes, especially those of effective commitment (Allen and Meyer, 1990), work engagement (Kahn, 1990), and creative self-efficacy (Tierney and Farmer, 2002), are precursors of many behavioral outcomes (Slåtten & Mehmetoglu, 2011; Hashim & Tan, 2015; Aryee et al., 2012; Demirovi et al., 2020). Affective commitment refers to a worker's emotional attachment to a firm (Allen & Meyer, 1990), those with a high level of emotional commitment in the job are devoted to their employers and regard the company's goals as their own (Mahdi, Mohd, & Almsafir, 2014). Between the employer and the employee, there is an emotional bond (Ashman & Winstanley, 2006) and it is crucial for addressing employees' basic psychological needs at work and generating positive attitudes (Rivkin, Diestel, & Schmidt, 2015). Mentoring and chances for skill development, particularly in the case of knowledge workers, can have an impact on affective commitment (Jayasingam & Yong, 2013).

In the management literature, commitment appears to be a predictor of knowledge management behavior in a number of research e.g., Hashim and Tan (2015) find a positive association between commitment and the desire to share knowledge. Certain leadership styles, such as transformational leadership and leader effectiveness have been proven to affect employee work commitment (Avolio et al., 2004; Van et al., 2014). Previous research hasn't looked at leadership, emotional commitment, and knowledge management (KM) behavior as a whole and found that transformational, and transactional leadership styles promote commitment, which can lead to improved KM behavior (Shamim et al., 2017; Tian et al., 2020)

Learning-oriented personnel are more likely to actively share information in the hopes of achieving their learning goal through an enlarged pool of collective knowledge and a reciprocal positive spiral of knowledge sharing (Sari, 2023). The way employees perceive and respond to leadership behaviors is influenced by their work attitudes (Tian et al., 2020), thereby shaping their engagement in knowledge management practices (Naqshbandi & Jasimuddin, 2018; Sahibzada, Xu, et al., 2021; Shamim et al., 2017). When employees possess positive work attitudes, they are more likely to be receptive to knowledge-oriented leadership practices, leading to increased engagement in knowledge management behaviors ((Donate et al., 2022). Such positive attitudes may create a favorable environment for knowledge sharing, collaboration, and proactive knowledge management efforts. Conversely, employees with negative work attitudes may exhibit reduced responsiveness to knowledge-oriented leadership, potentially attenuating the impact of leadership on knowledge management behavior (Yilmaz, 2013). The negative attitudes may hinder employee motivation, engagement, and willingness to actively participate in knowledge management initiatives (Kim, 2021). The effect of individual knowledge management on an individual's own creativity is uncertain, unlike the more consistent advantages of group information exchange (Sadeghi & Rad, 2018). Finally, from the above-mentioned arguments along with supporting sources it has been clearly evident that the relationship between Knowledge oriented leadership, Knowledge management behavior, and Employee work attitude has been assessed in variety of dimensions includes (Sahibzada et al., 2020; Rehman et al., 2020; Shahzad et al., 2021); Shamim et al., 2017; Alosaimi et al., 2016; Rhee et al., 2017; Gopinath, 2020; Donate & Sánchez 2015). However, moderating effect of EWA in the linkage between KOL and KMB has not been established particularly in HEI Pakistan, and as suggested by number of scholars employee work attitude can act as a crucial moderating variable in the relationship between knowledge-oriented leadership and knowledge management behavior and need investigation (Sahibzada et al., 2021; Rehman & Iqbal, 2020; Shamim et al., 2017). Therefore, considering employee work attitude as a moderating variable allows for a nuanced understanding of how the relationship between knowledge-oriented

leadership and knowledge management behavior varies based on employees' attitudes towards their work.

H₂: Employee work attitude significantly moderates the association between knowledge-oriented leadership (KOL) and knowledge management behavior (KMB) in higher education institution in Peshawar, Pakistan.

Figure 1.

Schematic diagram depicting the relationship between Knowledge Oriented Leadership and Knowledge Management Behavior with the Moderating variable Employee Work Attitude.

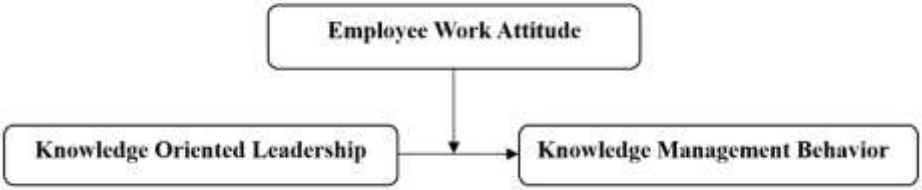


Table 1.*Tabulated Summary of Literature Review*

Author (Year)	Independent	Mediator	Moderator	Dependent	Country	Context	Findings
Donate et al. (2022)	Knowledge Oriented Leadership	Task Management Conflict, Deceptive knowledge hiding	N/A	Innovation Capabilities	Spain	Hospitality industry	The relationship among KOL and task management conflict was found negatively significant. Furthermore, task management conflict and mediates the relationship between KOL and DKH. A serial mediation was also supported by the result, the finding reveals TMC and DKH serially mediates the link between KOL and ID.
Chaithanapat et al. (2022)	Knowledge Oriented Leadership	Customer Knowledge Management, Innovation Quality	Competitive intensity	Marketing performance, financial performance, operational performance	Thailand	Small and Medium enterprises	The finding of the study indicates a positive relationship between KOL and CKM, IQ. Also, the results reveal that CKM mediates the relationship between KOL and IQ. Also, the moderating role of CI was found significant.
Sahibzada et al. (2021)	Knowledge Oriented Leadership, Trust, environmental uncertainty, KM Process	N/A	N/A	Knowledge Worker Productivity	Pakistan	Higher Education Institutions	The results show that there are significant impacts of the trust, knowledge-oriented leadership, environmental uncertainty on KM processes and KWP
Gürlek & Çemberci (2020)	Knowledge oriented leadership	Knowledge management capacity, innovation performance	N/A	Organizational Performance	Turkey	Technology Development Firms	KOL was found significantly related to KMC, IP and OP. Also KMC and IP mediates the relationship between KOL and OP. Serial mediation was also found significant in the study.
Latif et al. (2020)	Knowledge oriented	N/A	N/A	Project Success	Pakistan	IT Companies	The result of the findings supports the relationship between KOL and KM processes as

		leadership, Entrepreneurial Orientation, KM Processes						well as Project success. But the KM process were found insignificant in a relationship to PS
Rehman et al. (2020)		Knowledge oriented leadership	Knowledge management processes, innovation	N/A	Organizational performance	Pakistan	Higher Education Institutions	The results indicate that knowledge-oriented leadership has direct and positive effect on organizational performance. Moreover, the findings reveal that KM processes and innovation partially mediate the effect of knowledge-oriented leadership on organizational performance
Sahibzada et al. (2020)		Knowledge oriented leadership, processes	Knowledge worker productivity	N/A	Organizational performance	China	Higher education institutes	KOL have positive significant effect on KM processes and KM processes have a positive significant effect on knowledge worker productivity which ultimately enhance organizational performance
Zia (2020)		Knowledge oriented leadership	Knowledge Management Behavior	Employee Goal Orientation (Learning & Performance Orientation)	Project-based Innovation Performance	Pakistan	Software development firms	The findings of the study reveals a significant connection between KOL and Project-based Innovative performance. Moreover, the relationship among KOL and KMB was also found significant. Also KMB was also found significant mediator between KOL and Project-based Performance.
Shariq et al. (2019)		Knowledge oriented leadership	Employee Goal Orientation (Learning & Performance)	Emotional Intelligence	Knowledge Sharing	Pakistan	Pharmaceutical Industry	The relationship among KOL and TKS was positively significant, while the KOL and EKS was found insignificant. Similarly, ELO mediates the relationship among KOL, EKS and TKS, while EPO was found insignificant between KOL, TKS and EKS. Also, the moderation was found insignificant in the study.
Naqshbandi et al. (2018)		Knowledge oriented	Knowledge management	N/A	Inbound innovation,	France	Multinational Companies	The results indicate that higher levels of knowledge-oriented leadership can lead to

	leadership	capability		outbound innovation	open innovation			
(Sadeghi & Rad, 2018)	Knowledge oriented Leadership	Knowledge Management Practices	N/A	Innovative Performance	Iran	Government Sector		enhanced KM capability and improved open innovation outcomes. That is, knowledge-oriented leadership has a direct, positive impact on KM capability and open innovation. Also, KM capability is found to mediate the linkage between knowledge-oriented leadership and open innovation The results reveal positive influence of KOL on KM practices and Organizational innovation. Furthermore, partial mediation was found among KOL and OI by KM practices.
Shamim et al. (2017)	Knowledge oriented leadership	Employee Work Attitude (Creative Self Efficacy, Affective Commitment, Work Engagement)	N/A	Knowledge Management Behavior	United Kingdom	Hospitality Industry		The result of the study finds KOL are significantly associated with KMB and EWA. Furthermore, mediating effect of EWA was also found significant in the relationship of KOL and KMB.
Donate et al. (2015)	Knowledge oriented leadership	Knowledge management practices	N/A	Innovation performance	Spain	Technology companies		Results show that, although KM practices themselves are important for innovation purposes, the existence of this kind of leadership encourages the development and use of KM exploration (i.e., creation) and exploitation (i.e., storage, transfer, and application) practices

Research Methodology

Data and Procedure

This study is based on quantitative research technique and followed deductive approach, closed ended questionnaires were used for data collection. Before sending out questionnaires to respondents, we had a team of experts review them, including professors from five different universities. Based on their insightful feedback, we made some changes specific to the context to the final version of the questionnaires. Afterward the questionnaire was floated in all public and private sector universities of Peshawar. As the population of this study includes all public and private sector universities in District Peshawar, KP, that offer business management programs and are recognized by the Higher Education Commission (HEC) Pakistan. The unit of analysis for the study were individuals teaching in these universities including Associate Lecturers, Lecturers, Assistant Professors, Associate Professors and Professors. Faculty members were chosen primarily for data collection because of their critical role as knowledge repositories and influential contributors within Higher Education Institutions (HEIs). Furthermore, as Peshawar is one of the most affected regions by terrorism, and experienced disruptions in many aspects of human life, including business and education. Universities, as knowledge hubs, play an important role in promoting knowledge and developing human capital for the future, making them an appropriate setting for studying knowledge management behavior. The non probability sampling technique was adopted and convenience sampling method were used for data collection, the rationale behind choosing this sampling were the COVID 19 pandemic, and due to the closures of universities we were unable to randomly select the participants from the population. To calculate sample size, we used the Daniel Soper calculator, which is specifically designed for structural equation modelling. The minimum sample size required for this study was 150 samples (Soper, 2023), but many scholars argued that a large sample size is always preferable, so we approached approximately 400 faculty members for this study. The questionnaire was distributed to the respondents through personal visits and the link of google forms were also shared on different social media platforms in different universities faculty groups. The period for data collection were three months and we have received 251 responses in such period. After carefully analyzing the questionnaire, we have discarded 40 incomplete or irrelevant responses and for final data analysis 204 questionnaires were kept.

Instrumentation

This study is based on survey method where close ended questionnaire with seven-point Likert scale were used to measure the variables, ranging from "1" represents "Strongly Disagree" to "7" representing "Strongly Agree". The questionnaire consists of four main parts. The first part was about respondents' profile. The second part of the questionnaire consist of six items of knowledge oriented leadership adapted by (Donate & Pablo, 2015). The third part of the questionnaire were comprised with the nine items of employee work attitude adapted from (Shamim et al., 2017). Similarly, the fourth part of the questionnaire were consisted with twelve items of knowledge management behavior which were also adapted from (Shamim et al., 2017). For this study, a cross-sectional design was used to collect data from a single respondent all at once. For data analysis SPSS 23.0 and SMART PLS 3.2 were used.

Table 2.

Source of measurement items

Construct	DIMENSIONS	No.	Source
Knowledge management Behavior		12	Shamim et al. (2017)
Knowledge-Oriented leadership.		6	Donate and Pablo (2015)
	Creative self- efficacy	3	
Employee work Attitude	Affective- Commitment	3	Shamim et al. (2017)
	Work-Engagement		

Data Analysis and Results

Respondents' Profile

The first part of the data was comprised of demographic information which includes question like age, gender, qualification, designation and sector etc. the results of the responses

were summarized in table 3. The rationale for reporting demographic information is to verify the diversity of the chosen sample and also to overcome biases.

Table 3.
Respondent's Profile

		Sample Size: 204			
Age		Gender		Qualification	
24-30 years	34.3%	Male	75.5%		
MPA/MA/MSc	8.9%				
31-35 years	28.9%	Female	24.5%		MS/MPhil
	57.8%				
36-40 years	23.5%				PhD
	22.5%				
41-45 years	7.4%	Sector			Other
	10.8%				
46-50 years	3.4%	Private	83.1%		
51-55 years	1.0%	Public	16.9%		
61-65 years	1.5%				
Designation					
Lecturer	56.8%				
Assistant Professor	27.5%				
Associate Processor	5.4%				
Processor	10.3%				

Measurement Model Assessment

According to Hair et al. (2019), the first step in PLS-SEM for reflective model is the examination of factor loadings which need to be equal to 0.70 or above for ensuring the reliability of the constructs. In the second step the composite reliability and Cronbach's Alpha values were checked, for composite reliability the value between 0.70 to 0.95 consider to be the good and for Cronbach Alpha the value above 0.70 are satisfactory. In our study all the values of composite reliability meet the criteria.

In the third step, convergent validity is assessed to confirm that all items of the constructs used in the study are distinct from each other and that each item represents a different aspect of the construct. Convergent validity is measured using Average Variance Extracted (AVE), which should ideally be 0.50 or higher. Upon examining Table 4, it can be observed that the AVE values are above 0.50, indicating that convergent validity has been established.

In the fourth and last step of measurement model, the discriminant validity is assessed, discriminant validity shows how each construct in the measurement model is distant from other construct. Discriminant validity can be measured through two different methods, one is Fornell and Larcker criterion and other is through HTMT. In our study we have used (Fornell & Larcker, 1981) criterion to assess discriminant validity. The result of table 5 confirms that the construct shares more variance with its indicators than the other constructs, so discriminant validity is also established.

Table 4.
Convergent Validity and Reliability (N = 204)

Construct	Item	Loading	AVE	CR	Cronbach's Alpha
Knowledge Oriented Leadership (KOL)	KOL1	0.792	0.650	0.918	0.892
	KOL2	0.831			
	KOL3	0.863			
	KOL4	0.817			
	KOL5	0.786			
	KOL6	0.745			
Knowledge Management Behavior (KMB)	KMB1	0.761	0.527	0.917	0.898
	KMB2	0.779			
	KMB3	0.848			
	KMB4	0.745			
	KMB5	0.751			

	KMB6	0.571			
	KMB7	0.599			
	KMB10	0.629			
	KMB11	0.777			
	KMB12	0.752			
	AC1	0.798	0.608	0.933	0.919
	AC2	0.799			
	AC3	0.766			
	CS1	0.717			
	CS2	0.812			
Employee Work Attitude (EWA)	CS3	0.748			
	WE1	0.854			
	WE2	0.749			
	WE3	0.763			

Structure Model Assessment

After gaining satisfactory results from measurement model, the next step is to test the hypotheses by using structural equation modeling. According to Hair et al. (2019), before testing the hypothesis, collinearity must be examined for ensuring non-biasness of regression results. For the purpose we have verified that all the values of VIF were under 3. Also, we have assessed the R^2 value which were 0.65 between KOL and KMB. Also, F^2 value were analyzed for each construct, the value for F^2 for EWA and KMB relation is 0.14, KOL and KMB were 0.13 and for moderating variable the value was 0.07 and as per (Cohen, 1988) the rule of thumb for F^2 value are 0.02 represent small, 0.15 shows medium and 0.35 depicts large effect size.

Table 5.

Discriminant Validity

Variables	EWA	KMB	KOL
Employee work attitude (EWA)	0.780		
Knowledge management Behavior (KMB)	0.753	0.726	
Knowledge oriented leadership (KOL)	0.726	0.724	0.806

Note: AVE is given in boldface along the diagonals. ***p < .000.

After mandatory assessment of R^2 and F^2 values, we have moved towards testing of our hypotheses. With 5000 bootstrap re-sampling the direct effect on KOL and KMB was assessed as out H_1 . The result of H_1 reveals a positive significant relationship among KOL and KMB ($B=0.317$, t -value=5.21, P -value=0.00), the T - value should be 1.96 or more for a significant relationship, similarly P -value should be under 0.05 for significant result. As shown in table 6, the relationship was found significantly positive among KOL and KMB.

Table 6.

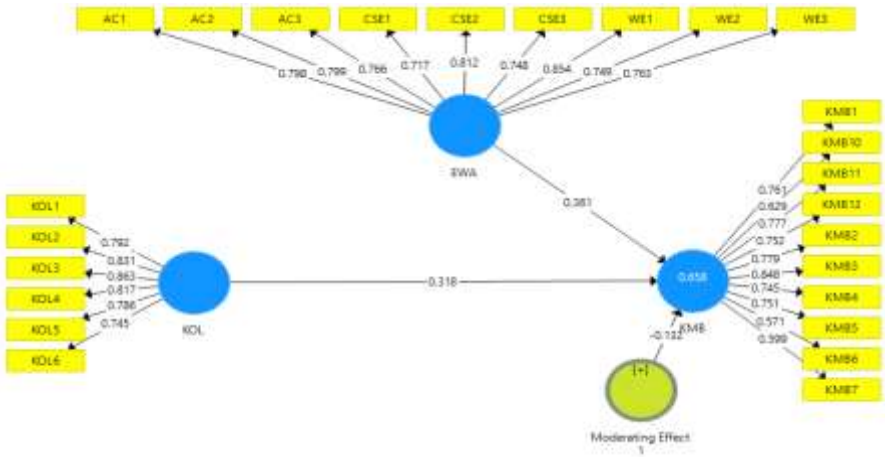
Representing Hypothesis testing

Direct effect	Beta	t-Value	p-value	Hypotheses	Decision
KOL -> KMB	0.317**	5.21	0.000	H_1	Support
Moderation Effect	Beta	t-value	p-value	Hypotheses	Decision
KOL*EWA -> KMB	-0.133**	3.621	0.000	H_2	Support

For assessing our H_2 , we have analyzed the moderation result, the regression result shows ($B = -1.33$, t -value = 3.621 P -value = 0.00) which shows significantly negative impact. Furthermore, we have conducted the slope analysis as shown in figure 3, which reveals that EWA dampens the positive relationship between KOL and KMB. The result indicates that when the EWA

is low, the impact of KOL and KMB is much stronger as compared to high EWA. Similarly, if the employee work attitude is high then the KOL and KMB is not much stronger.

Figure 2.
Depicting Moderation Analysis



Discussion, Conclusion and Future Research Directions

Discussion

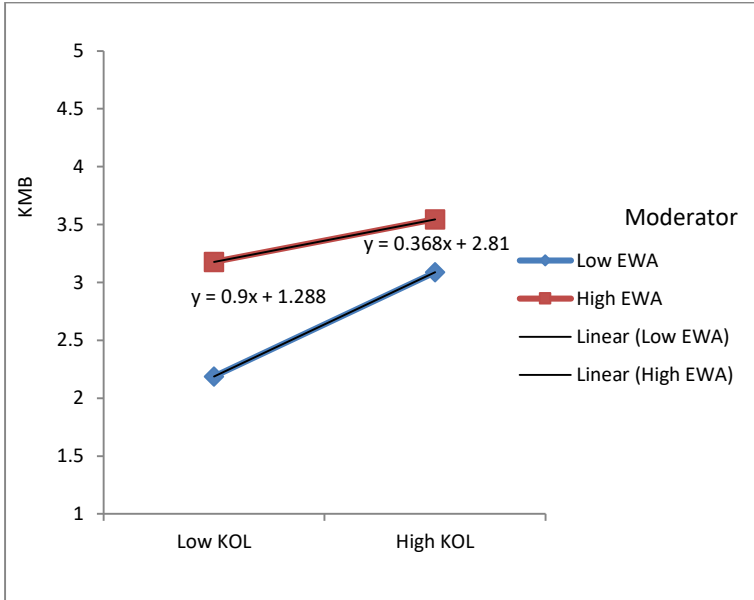
The objective of this study is to fill the knowledge gap in the literature by addressing relationship of Knowledge Oriented leadership (KOL), Employee Work Attitude (EWA) and Knowledge Management Behavior (KMB) in the Higher Education Institution of Pakistan (HEIs). By addressing such gaps this study have looked in to direct relationship of KOL and KMB under the KBV theory (Grant, 1996) and also considered EWA as a moderator under the JD-R Theory of (Bakker & Demerouti, 2014) on the call of (Chaithanapat et al., 2022; Iqbal et al., 2019; Sahibzada et al., 2021a; Sahibzada et al., 2021b; Shamim et al., 2017). The results of this study reveals that the role of Knowledge Oriented leadership play significant role in enhancing the behavior of knowledge workers and effectively contributes in creating knowledge management behavior atmosphere in Higher Education Institution.

By empirically test the relationships, we have tested the hypothesis 1 through which we have checked the relationship between knowledge oriented leadership and employees' knowledge management behavior in higher education institutions, the finding reveal that knowledge oriented leaders are proactive in creating a knowledge management behavior among employee and encourage them to create, store, share and utilize the knowledge resources effectively, the findings of the study are in line with the prior studies of (Rehman & Iqbal, 2020; Gürlek & Çemberci, 2020; Shamim et al., 2017; Donate & Pablo, 2015) also this finding contributes to KBV literature which assumes knowledge resources are the most premium for the organization and effectively utilization of such resources can create competitiveness and higher performance for the organization.

Assessing hypothesis 2, the results reveal that employee work attitude significantly moderates the relationship of knowledge-oriented leadership and knowledge management behavior. An inverse moderating effect of EWA was found which means that, if the Employee showing low work attitude towards their job, the role of KOL will be significant in promotive positive work attitude and improve performance. The results show that employees who are dedicated, engaged in their work, and have a positive sense of their own creative potential are in better psychological positions to engage in knowledge management behavior. These findings are in line with the research which suggests that actions are typically followed by attitudes, and that various attitudes are powerful moderators of different behaviors in relation to different variables at work (Harrison et al., 2006; Robbins et al., 2013). Under the lens of JD-R theory (Bakker & Demerouti, 2014; Tummers & Bakker, 2021), this study verified that for effective job related outcomes and desired organizational behavior, job demand such as leadership support and job resources such as positive employee work attitude can facilitate engagement and proactive

knowledge management behavior. The relationship of employee work attitude was found significant with knowledge management work behavior in the study of (Shamim et al., 2017).

Figure 3.
Depicting the Moderating effect of Employee Work Attitude



Conclusion

Finally, this study demonstrates how KOL may aid in improving employee KM behavior. It also looks at how work attitudes influence the KOL-KM behavior link. This study presents empirical evidence that has significant implications for educational management and academics. It also adds to the corpus of knowledge by putting the KOL construct to the test, which was created by Donate and Sánchez de Pablo (2015) and is now being used by others (Shamim, 2017). In the education sector, examining the role of KOLs in predicting KM behavior is crucial. Investigating creative self-efficacy and work engagement as predictors of knowledge management behavior among educational employees for the first time in higher education, employee work attitudes (affective commitment, creative self-efficacy, and work engagement) are discussed as moderators in the link between KOL and KM behavior. Researchers in higher education focus mostly on knowledge sharing, which is only one aspect of KM behavior; other activities such as recording and applying require more investigation. This research looks at the entire concept of knowledge management.

Theoretical Implications

This research has several theoretical and practical ramifications. On a theoretical point, this study contributes to the literature by examining the relationship between knowledge oriented leadership and knowledge management behavior, as well as the moderating role of employee work attitude in the relationship, which has not been studied extensively in prior researches. In addition, this research contributes to JD-R and KBV theories. The Job Demands-Resources (JD-R) theory contends that certain job demands might result in unfavorable consequences such as burnout and job dissatisfaction, while job resources such as employee engagement and employee wellbeing provide advantageous outcomes. In the context of this study, knowledge-oriented leaders are viewed as an organizational asset who efficiently manage job demands and provide employee resources by facilitating knowledge sharing and knowledge acquisition, hence enhancing knowledge management behavior. Therefore, the leadership of an organization should prioritize the creation of a work environment that influences employee attitude and increases their performance, as well as their knowledge acquisition and knowledge sharing behavior.

According to the KBV theory, knowledge is the most valuable strategic asset of an organization, and if managed properly, and the knowledge-related capabilities of the organization result in a competitive advantage and superior organizational performance. Knowledge assets, such as knowledge oriented leadership, should be viewed as a strategic asset and require continuous investment to allow knowledge creation, acquisition, and dissemination in the organization, which can improve knowledge management behavior.

Managerial Implications

In the context of higher education institutions this study provides useful insights for the management of these institution and policy makers. To promote a knowledge management behavior in an organization, the organization should continually invest in their knowledge resources especially human capital and encourages knowledge management culture and collaboration to be competitive in this globalization era. Furthermore, organizational leaders should ensure that employee has access to the resources such as information system tools and adequate training for such tools, also the higher education institutions should continually collaborate with other institutions and provide sufficient time and resources for knowledge related activities and empower employees to engage in effective knowledge management activities. It has also been necessary according to the finding of this study that the employee work attitude is the key for successful implementation of knowledge management, therefore, leadership should focus on fostering positive work attitude by providing supportive work environment, recognition and also reward those who actively engaged in knowledge sharing activities. It is also necessary that the higher education institutions should align their strategic objectives with knowledge management goals, which involves integrating knowledge management practices in to performance evaluation, incorporating knowledge related matrices into institutional performance dashboards and recognize and incentivize knowledge creation, knowledge sharing and knowledge dissemination as a part of faculty evaluation processes.

Future Research Direction

This research study holds certain limitations, which should be acknowledged. First this research study has been conducted in Pakistan's HEIs only, so for the generalizability of results this study encourage researchers to consider other knowledge intensive organizations e.g., IT industry, aviation, pharmaceutical industries and chemical industry etc. It would be more interesting to consider to replicate this study in other countries to check the cultural difference. Second, this study was conducted on cross sectional environment, future researches may use longitudinal data to overcome the biases. Third, the convenience sampling techniques hold some biases, so this study encourages other scholar to use other sampling techniques as well. Also, we encourage scholars to incorporate mediator that will strengthen the relationship between KOL and KMB.

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