

## Enhancing Knowledge Management Effectiveness through Transformational Leadership and Organizational Culture: Evidence from Educational Institutions of Pakistan

Haider Ali<sup>1</sup>, Dr. Kashif Amin<sup>2</sup>, Dr. Sajid Rahman Khattak<sup>3</sup>

### Keywords:

Organizational Culture, KM Effectiveness, Transformational Leadership, HEIs, Pakistan

### ABSTRACT

The purpose of this research aimed to look into the relationship between leadership and organizational culture and knowledge management effectiveness. For this purpose, data from 320 faculty members working in different public sector universities were collected using a survey questionnaire. The reliability was ensured using Cronbach's alpha technique. The study indicated that transformational leadership has an essential link to the success of knowledge management. Moreover, organizational culture has a significant association with knowledge management effectiveness. The study also offers specific recommendations, implications, limitations, and ways for future research are also highlighted.

### INTRODUCTION

Knowledge-sharing behavior is critical for achieving organizational performance. Previous research has extolled the virtues of organizational employees' knowledge sharing behavior, claiming that it can help in advancing firm performance, enhance financial and operational performance, advance human resources, support and promote innovation and its implication (Hendryadi et al., 2019), help organization to gain a competitive edge, and make employees more creative and problem solvers (Wang and Wang, 2016).

As the primary decision-makers in an organization, leaders play an important role in the effective management of knowledge (Khattak et al., 2018; Ali et al., 2020; Lin and Lo, 2015). From an organizational standpoint, factors like organizational culture and leadership influence employee knowledge sharing behavior, and account for gaining a competitive edge (Rafique and Anwar, 2019). Moreover, to motivate and influence their followers, transformational leaders participate in creative thinking, share new ideas, and encourage their followers to be actively involved in KM processes (Khattak et al., 2017). As rightly noted by past literature that KM is the vital tool through which organizations could be able to sustain their competitive edge. However, it is very difficult for

<sup>1</sup> Ph.D. (MS) Scholar, Qurtuba University of Science & Information Technology, Peshawar, Pakistan

<sup>2</sup> Faculty Member, Qurtuba University of Science and Information Technology, Peshawar, Pakistan

<sup>3</sup> Assistant Professor, IBMS, The University of Agriculture, Peshawar, Pakistan

organizations to create and maintain such effective KM culture in their organizations, if once they create such culture, then it became very difficult for their competitors to copy it (Zaied et al., 2012). Knowledge acquisition and transfer in large organizations is a difficult task because there are different units in the organization and it's difficult for management to effectively handle the whole process of KM (Liao and Wu, 2010). It is evident from the previous discussion and literature, that knowledge management is more important than knowledge itself. Organizations should try to find ways and establish a policy regarding how to transfer knowledge and skills at the individual level, group level, and departmental level (Siadat et al., 2015).

Past research highlights the advantages of knowledge management and argued that KM is the possible avenue through which organizations may be able to sustain their competitive advantages in the marketplace (e.g., Khattak et al., 2016; Ali et al., 2020; Al Khajeh, 2018; Narayanan et al., 2020). Today, researchers attempt to determine how an organization's internal environment promotes KM practices, how to create a knowledge-sharing culture in their firms, and what role a leader has in motivating followers to participate in knowledge-sharing activities. (Farooqi et al., 2017). Conducted study paper has explored the concept of human capital investment and economic growth. One of the major objectives was to analyze the relationship between human capital investment and economic growth in Pakistan. The result suggested that human capital investment is having a positive impact on economic growth Ali, L. (2020).

Past studies highlighted the link among leadership styles, KM, and organizational culture in product-oriented organizations, but this link was not greatly explored in academic or services organizations. Thus, to bridge this gap, the present research examined the relationship between transformational leadership style and KM with the intention that the relationship between transformational leadership and KM is strong when organization culture supports the knowledge sharing process (Ali et al., 2020; Hendryadi et al., 2019; Lin and Lo, 2015).

## **LITERATURE REVIEW**

The important role of leadership in an organization set was highlighted by past literature in greater detail (e.g., Khattak et al., 2017; Duggan, 2018; Khattak et al., 2016). To achieve organizational goals, effective leaders make plans and strategies that could help to achieve the overall goals of the organizations (Malhotra et al., 2007). One major responsibility of effective leaders is to build confidence and motivate their followers in an organization. For the smooth running of an organization, effective leaders can control organizational activities very keenly (Haver et al., 2013).

The concept of transformational leadership was initially introduced by Burn in 1978 and was further nourished by Bass and Avolio in different years. This leadership style is superior due to its certain characteristics like involving followers in the decision-making process, creating a vision for the organization, motivating their followers, encouraging their followers to come up with unique ideas, encouraging innovation and creativity, caring about followers needs, and building confidence in their

followers (Emery and Barker, 2007). Such leaders motivate and inspire their followers to achieve organizational goals. They used various tactics and techniques to improve followers' morale, motivation, job performance, and employee trust & engagement (Robbins and Davidhizar, 2007). They are role models for their followers. Such leaders encourage new knowledge by supporting listening and implementing new ideas (Ali et al., 2020). Thus, transformational leaders can play a vital role in knowledge flow in the organization. Such leaders motivate their followers to share new ideas and skills. The focus of such a leader is to create an environment where colleagues can share what they learned (Gheith, 2010). Transformational leaders are always in search to find ways how their followers to engage in the knowledge-sharing process (Molero et al., 2007). Ali et al. (2020) also found that transformational leadership has a positive impact on knowledge management effectiveness. Thus, based on the cited literature, we proposed that:

**H1:** Transformational Leadership has a significant effect on knowledge management effectiveness

A plethora of past studies highlighted the association between organizational culture and knowledge management, (e.g., Jacks et al., 2012, Gehman et al., 2013, Suppiah and Sandhu, 2017, Saleem et al., 2017, & Ali et al., 2021). Jacks et al. (2012) concluded their research that two of the organizational culture facets, i.e., openness and trust have a significant impact on knowledge management processes. They argued that creativity and knowledge sharing are the two important aspects of an organization. Similarly, Naveed et al. (2016) believe that collecting knowledge and donating knowledge is possible through teamwork. Previous findings also recommended that national culture may not completely determine the hurdles of organizational culture. As rightly noted by Gerhart and Fang (2005) that a little portion of individual culture and organizational culture is explained by changes in national culture.

Moreover, to motivate and influence their followers, transformational leaders participate in creative thinking, share new ideas, and encourage their followers to be actively involved in KM processes (Khattak et al., 2017). As rightly noted by past literature that KM is the vital tool through which organizations could be able to sustain their competitive edge. However, it is very difficult for organizations to create and maintain such effective KM culture in their organizations, if once they create such culture, then it became very difficult for their competitors to copy it (Zaied et al., 2012). Knowledge acquisition and transfer in large organizations is a difficult task because there are different units in the organization and it's difficult for management to effectively handle the whole process of KM (Liao and Wu, 2010). It is evident from the previous discussion and literature, that knowledge management is more important than knowledge itself. Based on the cited evidence, we postulated that:

*H<sub>2</sub>: Organization culture significantly affects knowledge management effectiveness.*

## **RESEARCH METHODOLOGY**

To test the study hypotheses, faculty members i.e., Lecturer, Assistant Professor, Associate Professor, and Professor working in 14 public sector universities of Islamabad were chosen as the population. As

per Higher Education Commission (HEC) record, there are 6119 faculty members in these 14 public sector universities. Through random sampling, we select 350 sample sizes from the target population. Data from the selected sample was collected using a Likert-type scale. The participants were informed about the purpose of the study and were persuaded that their responses were used only for research purposes.

### **Measures**

Questionnaire methodology has been considered as the most appropriate in the present case study. The nature of the data was found quantitative and help was taken from the closed-ended structured questionnaire (Dawar, 2020). To maximize the rate of response, the questionnaire was distributed in person by researchers to the management of the Kunming rail and subways section. For data collecting purposes, the in-person method was found most reliable Arshad, (2020).

### **Transformational Leadership Scale**

Transformational leadership was assessed using the Bass and Avolio (2000) scale. This scale has 11 items and was measured using a five-point Likert scale. This scale has good reliabilities in the previous studies e.g., Khattak et al. (2016), Ali et al. (2021). In our case, we also come up with a good reliability value, i.e., 0.91.

### **Organizational Culture**

To measure organizational culture, we used the scale of Burke (1989) and Hurly and Hurt (1998). This scale has 14 items in which three items measure collaboration (Burke, 1989), six items measure trust, and five items measure learning (Hurly and Hult, 1998). All items of the scale were assessed through a five-point Likert scale. We come up with a good reliability value, i.e., 0.87.

### **Knowledge Management Effectiveness**

To assess knowledge management effectiveness, we used a 21 items scale developed by Gold et al. (2001). This scale measures KM in three dimensions, i.e., efficiency 7-items, adoptability 7-items, and innovativeness 7-items. Past research also used this scale for assessing knowledge management effectiveness, e.g., Masadeh et al. 2019, Ali et al. 2021, and was found a good reliability value. In our case, we also come up with a good reliability value, i.e., 0.92.

## **RESULTS**

To test the study hypotheses, faculty members i.e., Lecturer, Assistant Professor, Associate Professor, and Professor working in 14 public sector universities of Islamabad were chosen as the population. As per Higher Education Commission (HEC) record, there are 6119 faculty members in these 14 public sector universities. Through random sampling, we select 350

sample sizes from the target population. Data from the selected sample was collected using a Likert-type scale. The participants were informed about the purpose of the study and were persuaded that their responses were used only for research purposes.

### **3.1. Measures**

Questionnaire methodology has been considered as the most appropriate in the present case study. The nature of the data was found quantitative and help was taken from the closed-ended structured questionnaire (Dawar, 2020). To maximize the rate of response, the questionnaire was distributed in person by researchers to the management of the Kunming rail and subways section. For data collecting purposes, the in-person method was found most reliable Arshad, (2020).

#### **3.1.1. Transformational Leadership Scale**

Transformational leadership was assessed using the Bass and Avolio (2000) scale. This scale has 11 items and was measured using a five-point Likert scale. This scale has good reliabilities in the previous studies e.g., Khattak et al. (2016), Ali et al. (2021). In our case, we also come up with a good reliability value, i.e., 0.91.

#### **3.1.2. Organizational Culture**

To measure organizational culture, we used the scale of Burke (1989) and Hurly and Hurt (1998). This scale has 14 items in which three items measure collaboration (Burke, 1989), six items measure trust, and five items measure learning (Hurly and Hult, 1998). All items of the scale were assessed through a five-point Likert scale. We come up with a good reliability value, i.e., 0.87.

#### **3.1.3. Knowledge Management Effectiveness**

To assess knowledge management effectiveness, we used a 21 items scale developed by Gold et al. (2001). This scale measures KM in three dimensions, i.e., efficiency 7-items, adoptability 7-items, and innovativeness 7-items. Past research also used this scale for assessing knowledge management effectiveness, e.g., Masadeh et al. 2019, Ali et al. 2021, and were found a good reliability value. In our case, we also come up with a good reliability value, i.e., 0.92.

#### 4. Results

SPSS the software which has been used for analyzation, before moving to apply high level statistics, we first assured the scale reliability. As we found that the scale has good Cronbach's alpha value, indicating that there is no issue of reliability. All values of Cronbach's are well above the threshold value of 0.7 and closer to 1 reporting a good case (see Table 1).

*Table 1. Reliability statistics*

Variable	No. of Items	Alpha Value
Transformational Leadership Style	11	0.91
Organizational Culture	14	0.87
Knowledge Management Effectiveness	21	0.92

To test the study hypotheses, we applied multiple regression. As from the results, transformational leadership has positive and significant association with KM effectiveness ( $\beta=0.391$ ,  $t= 8.37$ ,  $p=0.000$ ). Similarly, organizational culture has positive and significant relationship with KM effectiveness ( $\beta=0.394$ ,  $t= 7.63$ ,  $p=0.000$ ).The detail regression results were reported in Table 2.

*Table 2. Regression Results*

	UnStd. B	Std. Error	Std. B	t	p
Constant	2.18	.190		11.51	.000
Transformational Leadership	.392	.052	.403	7.59	.000
Organizational Culture	.439	.051	.440	8.45	.000

DV. KM effectiveness, R<sup>2</sup>= .56, F-Stat= 96.33, p= 0.000

## DISCUSSION

The under consideration study investigated the association between transformational leadership and organizational culture and knowledge management efficacy among faculty members at public sector universities located in Pakistan's capital area. As per Higher Education Commission (HEC), there are 14 public sector universities in Islamabad, having 6119 teaching staff, including lecturers, assistant professors, associate professors, and professors. Using simple random sampling, this study selects a sample of 350 based on the recommendations of past research. Data from the target participants were collected using a standardized scale. Initially, we distributed 350 questionnaires among faculty members to get their responses regarding the study variables. We received 312 valid responses from the participants. The scale validity and reliability were ensured using EFA and Cronbach's alpha techniques.

According to the current study, the transformational leadership style positively and significantly affects KM effectiveness. It means that when leaders practice transformational leadership behavior, the process of knowledge collection, acquisition, and sharing will be high among employees. The present study's findings are consistent with Ali et al. (2021), as they also found the same results. The result of this study is also in line with Khattak et al. (2017), as they found that transformational leadership has a significant association with employee creativity. Our findings are also consistent with Jacks et al. (2012), Gehman et al. (2013), Suppiah and Sandhu (2017). All these studies found the same findings as the present study has. This study also found that organizational culture has a significant association with KM Effectiveness. The current research results are consistent with Khattak et al. (2016) and Ali et al. (2021). Similarly, Suppiah and Sandhu (2017) also concluded their findings with the same results. Gehman et al.

(2013) also have the same conclusions.

## **RECOMMENDATIONS**

Based on the current study's findings, we offer specific recommendations for academicians, policymakers, and practitioners. It is recommended that top management of the educational institutions practice transformational leadership behavior to boost employee knowledge acquisition and sharing. Similarly, when leaders encourage their followers to come up with new ideas, love those who are creative, and motivate their followers to bring innovation, make their followers more confident to share and apply new knowledge. It is also recommended that top management create a culture where employees share their skills and expertise with their colleagues. Such practices make every individual of the organization share their knowledge and expertise with colleagues.

## **CONCLUSION**

The present research attempted to investigate the relationship between transformational leadership and organizational culture with KM effectiveness. The study selects 350 faculty members including lecturers, Assistant Professors, Associate Professors, and Professors. We received 320 questionnaires back that were completed in all aspects. Data from the target respondents was gathered using a structured scale. The scale used in this study was checked for validity and reliability and found satisfactory. The study found that both organizational culture and transformational leadership have a significant and positive association with KM effectiveness. Thus, it is concluded that top management of the universities must encourage their junior colleagues to share knowledge and skills among themselves through the support of their senior members.

## **LIMITATIONS AND FUTURE AVENUE**

The present research has many limitations as well that need to be addressed. First, this study only selects transformational leadership style and their impact on KM effectiveness. However, there are so many other leadership styles like servant leadership, ethical leadership, and inclusive leadership that are more effective in the case of KM effectiveness. Thus, future research may focus on how other leadership styles impact KM effectiveness. Second, the present research only collects the data from an educational institution, thus, we are unable to generalize the findings of the current study. So, to generalize the findings, it is suggested for future researchers to conduct a similar nature of the study in diverse settings i.e., choosing

different cities and different industries. Lastly, we conducted this research in Pakistan. It is recommended for future researchers to test the same model in other cultures and contexts and compare the findings with the current study.

## REFERENCES

- Al Khajeh, E. H. (2018). Impact of leadership styles on organizational performance. *Journal of Human Resources Management Research*, 2018, 1-10.
- Ali, L. (2020). HUMAN CAPITAL, EQUIPMENT INVESTMENT AND THE ECONOMIC GROWTH OF PAKISTAN. *International Journal of Business and Management Sciences*, 1(2), 78-88.
- Arshad, M. (2020). THE ROLE OF LEADER MEMBER EXCHANGE IN THE RELATIONSHIP OF EMPOWERING LEADERSHIP AND EMPLOYEE INNOVATIVE WORK BEHAVIOR. *International Journal of Business and Management Sciences*, 1(2), 44-63.
- Bass, B., & Avolio, B. (2000). *Multifactor Leadership Questionnaire* (Mind Garden, Redwood City, CA).
- Burke, M. C., & Edell, J. A. (1989). The impact of feelings on ad-based affect and cognition. *Journal of marketing research*, 26(1), 69-83.
- Duggan, K. J. (2018). *Creating mixed model value streams: practical lean techniques for building to demand*. CRC Press.
- Dawar, A. (2020). The Mediating Role of Trust between the Relationship of Organizational Justice and Job Satisfaction among the Education Sector of Pakistan: Mediating Role of Trust between the Relationship of Organizational Justice and Job Satisfaction among the Education Sector of Pakistan. *International Journal of Business and Management Sciences*, 1(3), 35-43.
- Emery, C. R., & Barker, K. J. (2007). The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *Journal of Organizational Culture, Communication and Conflict*, 11(1), 77-90.
- Farooqi, Y. A., Gohar, R., Nazish, A., & Ahmad, M. (2017). Impact of Leadership Styles on Knowledge Management Practices in Small and Medium Enterprises of Punjab (Pakistan).
- Gehman, J., Trevino, L. K., & Garud, R. (2013). Values work: A process study of the emergence and performance of organizational values practices. *Academy of Management Journal*, 56(1), 84-112.
- Gerhart, B., & Fang, M. (2005). National culture and human resource management: assumptions and evidence. *The International Journal of Human Resource Management*, 16(6), 971-986.

- Gheith, N. A. R. (2010). Reconstructing organization culture through enforcing head nurses transformational leadership style. *Australian Journal of basic and applied sciences*, 4(6), 1288-1296.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems*, 18(1), 185-214.
- Haver, A., Akerjordet, K., & Furunes, T. (2013). Emotion regulation and its implications for leadership: An integrative review and future research agenda. *Journal of Leadership & Organizational Studies*, 20(3), 287-303.
- Hendryadi, Suratna, Suryani, & Purwanto, B. (2019). Bureaucratic culture, empowering leadership, affective commitment, and knowledge sharing behavior in Indonesian government public services. *Cogent Business & Management*, 6(1), 1680099.
- Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of marketing*, 62(3), 42-54.
- Jacks, T., Wallace, S., & Nemati, H. (2012). Impact of culture on knowledge management: A meta-analysis and framework. *Journal of Global Information Technology Management*, 15(4), 8-42.
- Khattak, S. R., Batool, S., & Haider, M. (2017). Relationship of leadership styles and employee creativity: A mediating role of creative self-efficacy and moderating role of organizational climate. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 11(2), 698-719.
- Khattak, S. R., Batool, S., Saleem, Z., & Takrim, K. (2016). Effects of Social Media on Teachers' Performance: Evidence from Pakistan. *The Dialogue*, 11(1).
- Khattak, S. R., Saeed, I., & Tariq, B. (2018). Corporate Sustainability Practices and Organizational Economic Performance. *Global Social Sciences Review*, 3(4), 343-355.
- Liao, S. H., & Wu, C. C. (2010). System perspective of knowledge management, organizational learning, and organizational innovation. *Expert systems with Applications*, 37(2), 1096-1103.
- Lin, S. W., & Lo, L. Y. S. (2015). Mechanisms to motivate knowledge sharing: integrating the reward systems and social network perspectives. *Journal of Knowledge Management*.
- Malhotra, A., Majchrzak, A., & Rosen, B. (2007). Leading virtual teams. *Academy of Management perspectives*, 21(1), 60-70.
- Narayanan, S., Nadarajah, D., Sambasivan, M., & Ho, J. A. (2020). Antecedents and outcomes of the knowledge management process (KMP) in Malaysian SMEs. *Journal of Small Business & Entrepreneurship*, 1-27.
- Naveed, R. T., Jantan, A. H. B., & Ahmad, N. (2016). Organizational Culture and Organizational Change in Pakistani Commercial Banks. *International Journal of Research*, 15.

- Rafique, G. M., & Anwar, M. A. (2019). Barriers to knowledge sharing among medical students in pakistan. *Journal of Hospital Librarianship*, 19(3), 235-247.
- Robbins, B., & Davidhizar, R. (2007). Transformational leadership in health care today. *The Health Care Manager*, 26(3), 234-239.
- Saleem, Z., Batool, S., & Khattak, S. R. (2017). Relationship between Leadership Styles and Organizational Commitment: Moderating Role of Emotional Intelligence and Organizational Support. *Journal of Managerial Sciences*, 11(1).
- Siadat, S. H., Matinvafa, A., Saeednia, A., & Moghadasi, F. (2015). Effective factors on successful implementation of knowledge management in higher education. *Management and Administrative Sciences Review*, 4(1), 166-181.
- Wang, Y. M., & Wang, Y. C. (2016). Determinants of firms' knowledge management system implementation: An empirical study. *Computers in Human behavior*, 64, 829-842.
- Zaied, A. N. H., Hussein, G. S., & Hassan, M. M. (2012). The role of knowledge management in enhancing organizational performance. *International Journal of Information Engineering and Electronic Business*, 4(5), 27.