

The Relationship Between Leadership, Knowledge Management, Innovation And Organisational Performance In Higher Education Institutions

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ABSTRACT

The relationship between leadership, knowledge management, innovation and organisational performance in higher education institutions was reviewed with the help of 25 papers selected from Google Scholar. The advantages of good and effective leadership in managing knowledge, leading to innovation, and enhancing organisational performance are well-known. In the case of HEIs, this is facilitated by the faculties of the university, who are intellectually well-equipped for it. The first question, what type of leadership, was answered by most seven papers in different ways. Although the exact style identified in these papers differed, the broad concurrence was for transformational leadership style. Knowledge management involves knowledge creation, acquisition, collation and sharing. Innovation will happen only when these processes occur well. Having a leadership that encourages effective knowledge management for innovation will help the HEI enhance its performance and gain a competitive advantage. Some papers had the limitations of low sample size and lack of clarity in describing sampling procedures. Both these limitations affect their validity and generalisability. Out of 25 papers, 20 were authored and from Islamic countries. Although the existence of papers from other countries was indicated by cross-references in these papers, there is a need for more research on this topic from other countries.

Keywords: Leadership, knowledge management, innovation, organisational performance, and higher education institutions

Introduction

Knowledge-oriented leadership (KOL) in higher education institutions (HEIs) can improve organisational performance by managing knowledge assets, implementing knowledge management (KM) processes, and increasing innovation. KOL can improve team performance, partially mediated by the speed of innovation. KOL can increase knowledge management capacity (KMC) by guiding members of the organisation in KM processes. KM can contribute to organisational performance by increasing innovation performance. KM facilitates connections between knowledge and exchanges within innovation processes and enhances innovative performance by developing new capabilities. KM plays a vital role in improving organisational performance by implementing best practices, making good decisions, reacting quickly to institutional challenges, handling processes properly, and increasing people skills. KM involves extracting information from various relevant sources to enhance the learning process. Organisational learning (OL) is the application of knowledge obtained using KM to boost organisational skills.

Studies from the knowledge-based approach indicate that high performance, increased sustainability, and competitive advantage are dependent on the proper use of knowledge-based resources in an organisation. The higher education sector involves a knowledge-intensive business process that requires an elaborate management of knowledge-based resources. Higher education institutions that manage their knowledge-based resources well are more innovative and prepared to deal with the challenges of research and innovation in the educational system. Institutions of higher education improve their efficiency, organisational

development and performance through knowledge-based leadership and worthwhile knowledge-management strategies.

Much research has been done on the relationship between leadership, knowledge management, innovation and organisational performance in higher education institutions. This paper aims to provide a quick review of the topic.

Methods & Results

Methods

To conduct this review, a systematic literature search was performed using Google Scholar. The search was limited to articles published in peer-reviewed journals. The keywords used for the search were "leadership," "knowledge management," "innovation," "organisational performance," and "higher education institutions." A total of 50 articles were initially retrieved. However, after screening for relevance and quality, only 25 articles were included in the review. The 25 articles were thoroughly examined and analysed using thematic analysis to identify common themes and patterns related to the relationship between leadership, knowledge management, innovation, and organisational performance in higher education institutions. The themes were then organised and categorised to provide a comprehensive overview of the topic. Throughout the analysis process, special attention was paid to the quality and credibility of the selected articles to ensure the validity and reliability of the findings.

Results

The results of a survey of 312 faculty members of Pakistani HEIs by Rehman and Iqbal (2020) showed a significant relationship between leadership, knowledge management, innovation and organisational performance in higher education institutions. KM processes and innovation partially mediated the effect of knowledge-oriented leadership on organisational performance. In another Pakistani study, using a survey of 217 academic and administrative personnel of research universities, Iqbal, Latif, Marimon, Sahibzada, and Hussain (2019) showed that KM enablers had a significant impact on KM processes and that KM processes influenced organisational performance directly and indirectly through innovation and intellectual capital. Intellectual capital is the extra variable here compared to the results of Rehman and Iqbal (2020).

Between transformational and authentic leadership, only the former had a positive impact on the innovativeness of HEIs in Jordan. Knowledge-sharing moderated this relationship in transformational leadership. These results were obtained by Elrehail, Emeagwali, Alsaad, and Alzghoul (2018) from a survey of 173 academic staff of four universities in Jordan. This study had the limitations of conducting only in four private universities in a developing country, comparing only two leadership styles with a sample size, which may be inadequate. A survey by Al-Husseini, El Beltagi, and Moizer (2021) involving 250 academic staff from Iraqi public universities showed positive direct relationships between transformational leadership and knowledge sharing and innovation. Knowledge sharing impacted innovation independently. Knowledge sharing was also a mediator of the relationship between transformational leadership and innovation. A recent study conducted by Supermane (2019) surveyed 359 academic lecturers from six Malaysian teachers' training institutes. The results showed that the impact of transformational leadership on teaching and learning innovation was more significant than the indirect impact through knowledge management. Hence, no mediation effect of knowledge management on the relationship between transformational leadership and innovation was obtained. Interviews with 26 senior management and members of staff, in the faculty of Economics and Administration in Iraq by Al-Husseini and Elbeltagi (2012) showed the need for knowledge sharing within the faculty and the importance of transformational leadership on process innovation more than product innovation. Using 289 valid responses Alnesr and Ramzani (2019) showed a significant relationship between transformational leadership and innovation. Transformational leadership had an indirect effect on innovation through knowledge sharing. Thus, knowledge sharing mediated the relationship between transformational leadership and innovation. To explore the effect of knowledge management practices and leadership styles (transformational and transactional) on university teachers' performance, Ather and Awan (2021) surveyed 260 teaching faculty members from four Pakistani universities. It was observed that knowledge sharing was practised by both transformational and transactional leaders. Both leadership styles (transformational and transactional) positively impacted university teacher performance. Knowledge management practices enhanced university teacher performance. However, only the effect of transformational leadership style and knowledge management practices influenced teacher performance. There was no effect on the transactional leadership style. A survey of 384 academic leaders, faculty members and postgraduate students of a Pakistani HEI by Jamali, Bhutto, Khaskhely, and Sethar (2022) led to the conclusion that transformational (TF) leadership has a positive relationship with faculty performance at MUET, Jamshoro. Organisational Culture (OC) negatively moderated the relationship between Laissez-faire (LF) leadership and faculty performance (FP). According to the faculty, transformational leadership was most suitable for the promotion of their performance as it gave them challenging tasks, autonomy, and mutual trust through supporting subordinates' creativity, improving their confidence, and maintaining

collaborations. Laissez-faire leadership had a positive impact on faculty performance. However, Transactional leadership negatively impacted faculty performance.

Organisational culture stressing individual initiative and empowerment (innovation?) influences the knowledge creation process, followed by knowledge exchange, in Saudi public universities. Thus, organisational culture does not impact all processes of knowledge management equally or simultaneously. Knowledge management processes are creation, dissemination, exchange and application (Adeinat & Abdulfatah, 2019).

Positive relationships among leadership, knowledge sharing, and innovation were obtained by Anis, Hadi, Rajiani, and Abbas (2021) from a survey of 500 academic staff in Indonesian public universities. Knowledge sharing was a mediator between leadership and innovation. These results were attributed to a new leadership style consisting of a sense of wholeness, harmony and well-being through care, concern and appreciation of self and others.

From a survey of 410 employees of two Palestinian universities, Naser, Al Shobaki, and Amuna (2016) observed that the knowledge management maturity of both universities was at level 3. The maturity levels range from the lowest level of not being aware of what KM is and how to use it to improve performance to mainstream KM in the entire university. Level 3 denotes KM practices in some areas of the university activities.

A survey of 248 academic and management staff of Pakistani HEIs by Farooq Sahibzada, Xu, Afshan, and Khalid (2021) revealed a direct relationship between knowledge-oriented leadership (KOL) and organisational performance (OP). KOL improved knowledge worker satisfaction (KWS) and KWS enhanced their productivity (KWP) leading to improvement of organisational performance.

According to Boussenna and Elkharraz (2021), a study of 88 teacher-researchers at a university in Morocco revealed that leadership played a crucial role in enhancing organizational performance, particularly in the areas of knowledge management (KM) implementation, training, research, organisational governance. This moderating role was deduced from the increase in correlation coefficient from 0.917 (without leadership as a moderator variable) to 0.953 (with leadership as a moderator variable). The degree of impact with leadership as a moderator variable was 3.6%. The sample size of 88 is low for any generalisability. Innovation was not included in the list of variables.

Survey results from 64 team leaders and 303 team members of Pakistan's HEIs showed that knowledge-oriented leadership enhanced team performance, which was partially mediated by the pace of innovation. There was no mediating role for the quality of innovation in this relationship. Team performance was positively related to the sustainable competitive advantage of the HEIs (Manzoor, Zhang, & Ma, 2023).

In the process of developing a conceptual framework, Overall (2015) argued that innovation, as the most knowledge-intensive activity, is an important antecedent of organisational performance. Therefore, it does not happen easily. If employees can trust the leadership, they will develop a commitment to the organisation and satisfaction. This can stimulate creativity, leading to innovation. Thus, leadership, knowledge management, and the quality of the relationship, which consists of trust, commitment, and satisfaction, are significant dimensions of the innovation-performance relationship. By synthesising the three research streams of social capital, the resource-based view of the firm, and relationship quality, it is possible to foster a positive relationship between leadership and employees for innovation.

Using Path Goal Theory on the survey data from 143 employees of Jordanian private universities, Alzghoul, Algraibeh, Khawaldeh, Khaddam, and Al-Kasasbeh (2023) showed that strategic thinking enhanced employee creativity and it was moderated by knowledge-oriented leadership. According to Path Goal Theory, management success is dependent on the specific style of behaviour adopted by them in a given scenario. However, the authors have not explained how this theory applies to their findings.

The results obtained from a survey of 201 lecturers at the Faculty of Economics and Business of Islamic Higher Education, Indonesia by Supriyanto, et al. (2023) indicated that empowerment leadership directly impacted organisational innovation. Knowledge sharing mediated the relationship between empowerment leadership and individual creativity, but this mediation did not extend to organisational innovation.

Results from 257 surveyed academics by Al-Kurdi, El-Haddadeh, and Eldabi (2020) indicated a remarkably strong influence of organisational climate on academics' KS practices. Organisational leadership and trust had a positive relationship with the knowledge-sharing behaviour of the academics. The theory of planned behaviour was applied to these results. The academics were selected from the UK, Saudi Arabia, UAE, Bahrain, Kuwait, Qatar, Oman, Jordan and Egypt. It is surprising that with such widespread sourcing of

participants, only 257 could be obtained from 3000 reached for the survey. The response rate would have been better if help had been obtained from the concerned ministries and the top management of the universities.

The knowledge management process consists of knowledge creation, organisation, sharing and application. Organisational culture consists of participatory, innovative, rational, and stability cultures. Leadership style has supportive and command leadership as its components. Using a survey of 224 experts, researchers, and managers at four Iranian research centres, Akhavan, Zahedi, Dastyari, and Abasaltian (2014) showed that the command leadership style influenced only the organisation and utilisation dimensions of the knowledge management process. Supportive leadership style has influenced knowledge management dimensions of creation, sharing, and utilisation. Participatory and innovative cultures positively influenced all four dimensions of the knowledge management process. Stability and rational cultures positively influenced the knowledge creation and organisation. Command leadership had a positive effect on the KM process.

Asbari, Purba, Hariandja, and Sudibjo (2023) noted that introducing a knowledge-sharing culture can be challenging. The authors researched the factors influencing lecturer knowledge sharing and innovation in Indonesian universities to improve their global competitiveness. The theory of planned behaviour was used to evaluate how attitudes, subjective norms, and perceived behavioural control shaped lecturers' knowledge-sharing intentions and behaviours. The influence of knowledge sharing and dynamic leadership on innovative behaviours was included in this study. The results of an online survey of 357 lecturers from 38 Indonesian universities revealed that attitude did not influence knowledge-sharing intention, but subjective norms and perceived behavioural control did. Knowledge-sharing intention effectively predicted actual knowledge-sharing behaviour. Dynamic leadership mediated the relationship between knowledge-sharing behaviour and innovation.

The results from a survey of 212 academic staff from various universities in the Kurdistan region of Iraq by Budur, Demirer, and Rashid (2024) revealed the direct positive effects of knowledge sharing on innovation culture, quality of work life, and innovative behaviour of the participants. Innovative culture and innovative behaviour were mutually related. Quality of work life did not influence innovative behaviour. Innovative culture mediated the relationship between knowledge sharing and innovative behaviour. Thus, supporting innovative culture can increase innovative behaviour.

The results of a survey of 421 responses from employees of five Malaysian research universities by Tan and Noor (2013) showed that knowledge sharing by university employees was influenced by trust, organisational rewards, organisational culture, knowledge management system quality, openness in communication, and face-to-face interactive communication. Research collaboration was strongly influenced by knowledge sharing. The knowledge management–knowledge sharing –collaboration model showed that knowledge management influenced individual– organisational –technological– communication constructs encouraging knowledge sharing by the university employees to support research collaboration.

To succeed in knowledge management, HEIs should attempt to effectively connect their knowledge management initiatives and processes with their rapidly changing needs to enhance their goals. The implementation and utilization of information and communications technology for the purpose of bolstering and streamlining knowledge management has brought to light the pressing requirement to discover novel approaches, resources, and strategies for designing frameworks, processes and technologies of knowledge management. This is essential in order to encourage efficient knowledge management for better provision of services in the field of higher education. Omona, van der Weide, and Lubega (2010) Proposed a conceptual framework for using ICT to improve knowledge management in HEIs using the synergies from Stankosky's (2005) knowledge management pillar for enterprise learning combined with the task/technology fit theory of Goodhue and Thompson, (1995). Stankosky's (2005) knowledge management pillars to enterprise learning consist of leadership, organisation, technology and learning in support of enterprise-wide KM initiatives, which are critical success factors for knowledge management implementation. In accordance with the task/technology fit theory, the utilization of information technology has the potential to enhance individual performance. For optimal results, the technological capabilities must align with the tasks the user needs to carry out. The conceptual framework of knowledge management proposed by the author is presented in Fig 1.

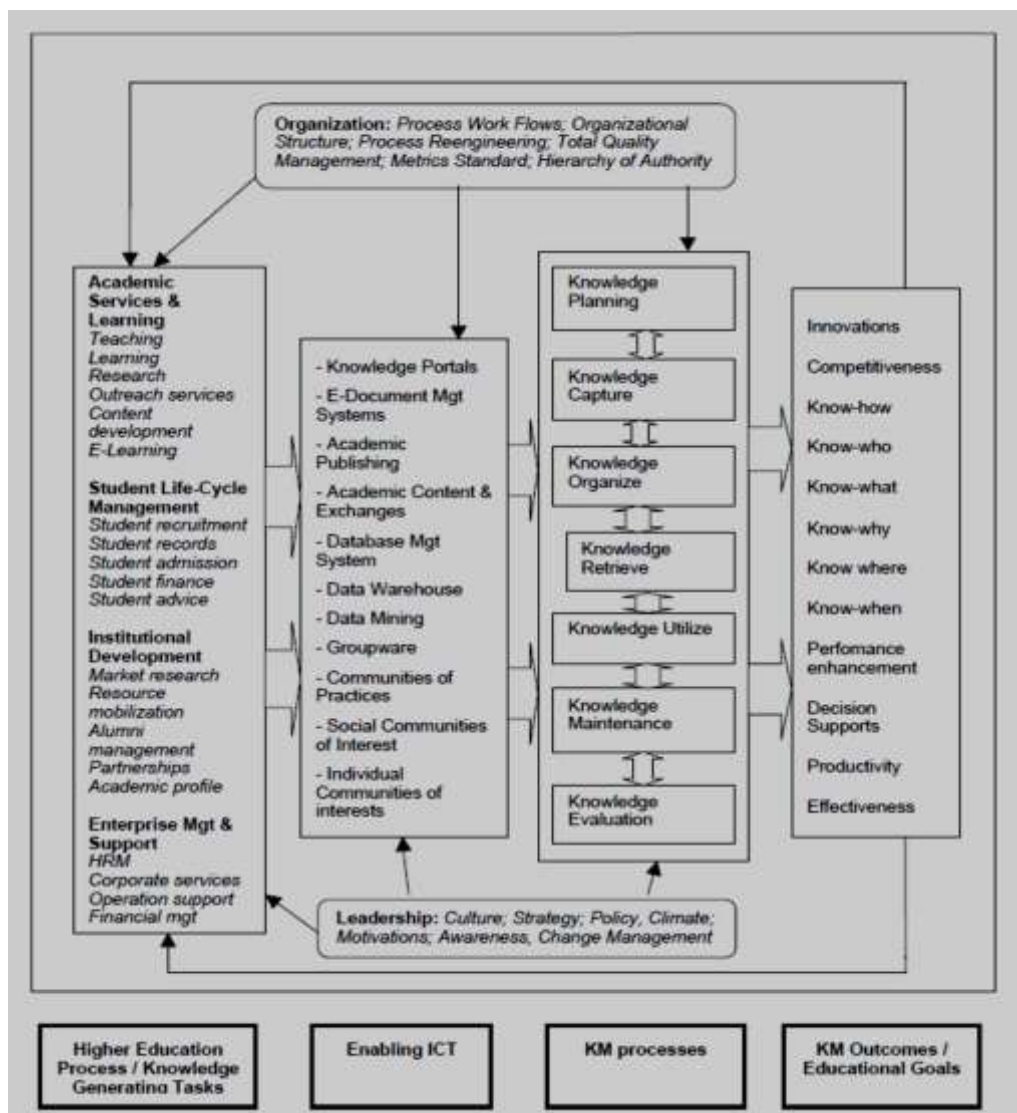


Figure 1 The conceptual framework for knowledge management proposed by Omona, van der Weide, and Lubega (2010).

Some challenges faced by Malaysian private HEIs included inadequate academic leadership, financial, resources and competency barriers, barriers to quality of education and human resource development and management. Many frameworks exist to assess the performance of HEIs to identify the areas to be improved. There are also some international ranking systems for HEIs. Malaysian private universities can use these tools to identify the areas for improvement and implement appropriate strategies to achieve high-quality education. These HEIs can also examine their leadership and innovation dimensions (Hashim, Haron, & bin Ibrahim, 2019).

Discussion

Out of 25 papers reviewed, seven dealt with leadership styles and 15 papers dealt with knowledge management, knowledge sharing and other related topics. Out of 25 papers, 20 were authored by researchers from Islamic countries. It does not mean that no research was conducted in other countries, especially in the USA, UK, Japan, Australia etc. Many references cited in the reviewed papers on the review topic were from Western countries. During the literature search, it was found that papers from other countries dealt more with firms rather than HEIs.

However, these broadly indicative trends show the need for more research from countries other than the Islamic states. Although innovation was a variable in many studies, none of the reviewed papers studied its role in teaching and research in HEIs. The description of samples and sampling processes in many papers was unclear. In a few papers, sample sizes were not adequate, and this affected their validity and generalisability.

Conclusion

To put the above research findings into practice, HEIs need to assess the current situation of leadership style, knowledge management and innovation. Then, progressively achievable goals through various strategies to manipulate these factors and moderators and mediators need to be set. The findings from research can be used to determine the strategies. Monitoring and reviews at regular intervals using any suitable performance measurement framework will indicate any changes to be made in the strategies.

1. Adeinat, I. M., & AbdulFatah, F. H. (2019). Organisational culture and knowledge management processes: case study in a public university. *VINE Journal of Information and Knowledge Management Systems*, 49(1), 35-53. doi:10.1108/VJKMS-05-2018-0041
2. Akhavan, P., Zahedi, M. R., Dastyari, A., & Abasaltian, A. (2014). The effect of organisational culture and leadership style on knowledge management in selected research organisations. *International Journal of Scientific Management and Development*, 2(9), 432-440. Retrieved April 30, 2024, from https://d1wqtxts1xzle7.cloudfront.net/37228741/The_effect_of_organizational_culture_and_leadership_style_on_knowledge_management_in_selected_research_organizations-libre.pdf?1428388316=&response-content-disposition=inline%3B+filename%3DThe_effect_of_organ
3. Al-Husseini, S., & Elbeltagi, I. (2012). The impact of leadership style and knowledge sharing on innovation in Iraqi higher education institutions. In J. Surakka (Ed.), *ePub-Proceedings of the 4th European Conference on on Intellectual Capital: ECIC*, 23-24 April 2012 (pp. 26-35). Academic Publishing International Limited, Reading, UK. Retrieved April 29, 2024, from https://www.researchgate.net/profile/Gina-Hechanova/publication/269637573_A_Study_of_Culture_Dimensions_Organizational_Ambidexterity_and_Perceived_Innovation_in_Teams/links/564131f008ae24cd3e4105b5/A-Study-of-Culture-Dimensions-Organizational-Ambidexterit
4. Al-Husseini, S., El Beltagi, I., & Moizer, J. (2021). Transformational leadership and innovation: the mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670-693. doi:10.1080/13603124.2019.1588381
5. Al-Kurdi, O. F., El-Haddadeh, R., & Eldabi, T. (2020). The role of organisational climate in managing knowledge sharing among academics in higher education. *International Journal of Information Management*, 50, 217-227. doi:10.1016/j.ijinfomgt.2019.05.018
6. Alnesr, B., & Ramzani, S. (2019). The impact of transformational leadership on innovation through the mediating role of knowledge sharing in public and private universities of Syria. *Journal of Business and Management*, 21(2), 76-82. doi:10.9790/487X-2102037682
7. Alzghoul, A., Algraibeh, K. M., Khawaldeh, K., Khaddam, A. A., & Al-Kasasbeh, O. (2023). Nexus of strategic thinking, knowledge-oriented leadership, and employee creativity in higher education institutes. *International Journal of Professional Business Review*, 8(4), e01107-e01107. doi:10.26668/businessreview/2023.v8i4.1107
8. Anis, M. Z., Hadi, S., Rajiani, I., & Abbas, E. W. (2021). The managerial effects of leadership, knowledge sharing and innovation in higher education. *Polish Journal of Management Studies*, 23(1), 59-76. doi:10.17512/pjms.2021.23.1.04
9. Asbari, M., Purba, J. T., Hariandja, E. S., & Sudibjo, N. (2023). The Mediating Role of Dynamic Leadership towards the Relationship between Knowledge-Sharing Behaviour and Innovation Performance in Higher Education. *International Journal of Learning, Teaching and Educational Research*, 22(11), 466-485. doi:10.26803/ijlter.22.11.24
10. Ather, T., & Awan, R.-u.-N. (2021). Effect of Knowledge Management Practices and Leadership Styles of Heads of Departments on University Teachers' Performance. *Bulletin of Education and Research*, 43(1), 181-200. Retrieved April 30, 2024, from <https://files.eric.ed.gov/fulltext/EJ1320817.pdf>
11. Boussenna, Y., & Elkharraz, O. (2021). Leadership as a Moderator between KM and Organizational Performance. *American International Journal of Business Management (AIJBM)*, 4(9), 12-21. Retrieved April 29, 2024, from <https://www.aijbm.com/wp-content/uploads/2021/09/B491221.pdf#page=1.25>

12. Budur, T., Demirer, H., & Rashid, C. A. (2024). The effects of knowledge sharing on innovative behaviours of academicians; mediating effect of innovative organisation culture and quality of work life. *Journal of Applied Research in Higher Education*, 16(2), 405-426. doi:10.1108/JARHE-08-2022-0257
13. Elrehail, H., Emeagwali, O. L., Alsaad, A., & Alzghoul, A. (2018). The impact of transformational and authentic leadership on innovation in higher education: The contingent role of knowledge sharing. *Telematics and Informatics*, 35(1), 55-67. doi:10.1016/j.tele.2017.09.018
14. Farooq Sahibzada, U., Xu, Y., Afshan, G., & Khalid, R. (2021). Knowledge-oriented leadership towards organisational performance: symmetrical and asymmetrical approach. *Business Process Management Journal*, 27(6), 1720-1746. doi:10.1108/BPMJ-03-2021-0125
15. Hashim, N. A., Haron, H., & bin Ibrahim, D. M. (2019). Leadership and Innovation on Performance of Private Higher Education Institutions in Malaysia. *KnE Social Sciences*, 511-526. doi:10.18502/kss.v3i22.5070
16. Iqbal, A., Latif, F., Marimon, F., Sahibzada, U. F., & Hussain, S. (2019). From knowledge management to organisational performance: Modelling the mediating role of innovation and intellectual capital in higher education. *Journal of Enterprise Information Management*, 32(1), 36-59. doi:10.1108/JEIM-04-2018-0083
17. Jamali, A., Bhutto, A., Khaskhely, M., & Sethar, W. (2022). Impact of leadership styles on faculty performance: Moderating role of organisational culture in higher education. *Management Science Letters*, 12(1), 1-20. doi:10.5267/j.msl.2021.8.005
18. Manzoor, A., Zhang, B., & Ma, H. (2023). Knowledge-Oriented Leadership in Powering Team Performance and Sustainable Competitive Advantages through Innovation: Evidence from Higher Education Institution. *Sustainability*, 15(20), 14715. doi:10.3390/su152014715
19. Naser, S. S., Al Shobaki, M. J., & Amuna, Y. M. (2016). Knowledge Management Maturity in Universities and its Impact on Performance Excellence" Comparative study". *Journal of Scientific and Engineering Research*, 3(4), 4-14. Retrieved April 29, 2024, from <https://philarchive.org/archive/ABUKMM#page=1.34>
20. Omona, W., van der Weide, T., & Lubega, J. (2010). Using ICT to enhance knowledge management in higher education: A conceptual framework and research agenda. *International Journal of Education and Development using ICT*, 6(4), 83-101. Retrieved April 30, 2024, from https://www.researchgate.net/profile/Walter-Omona-2/publication/235342037_Using_ICT_to_enhance_Knowledge_Management_in_higher_education_A_conceptual_framework_and_research_agenda/links/0912f51132e5f3dfff000000/Using-ICT-to-enhance-Knowledge-Management-in-
21. Overall, J. (2015). A conceptual framework of innovation and performance: The importance of leadership, relationship quality, and knowledge management. *Academy of Entrepreneurship Journal*, 21(2), 41-54. Retrieved April 29, 2024, from <https://www.proquest.com/openview/ba3fb840751fdb56c24922boa4fab2a/1?pq-origsite=gscholar&cbl=29726>
22. Rehman, U. U., & Iqbal, A. (2020). Nexus of knowledge-oriented leadership, knowledge management, innovation and organisational performance in higher education. *Business Process Management Journal*, 26(6), 1731-1758. doi:10.1108/BPMJ-07-2019-0274
23. Supermane, S. (2019). Transformational leadership and innovation in teaching and learning activities: The mediation effect of knowledge management. *Information Discovery and Delivery*, 47(4), 242-250. doi:10.1108/IDD-05-2019-0040
24. Supriyanto, A. S., Ekowati, V. M., Rokhman, W., Ahamed, F., Munir, M., & Miranti, T. (2023). Empowerment leadership as a predictor of the organisational innovation in higher education. *International Journal of Professional Business Review*, 8(2), e01538. doi:10.26668/businessreview/2023.v8i2.1538
25. Tan, C. N.-L., & Noor, S. M. (2013). Knowledge management enablers, knowledge sharing and research collaboration: a study of knowledge management at research universities in Malaysia. *Asian Journal of Technology Innovation*, 21(2), 251-276. doi:10.1080/19761597.2013.866314