

THE MEDIATING ROLE OF ORGANIZATIONAL LEARNING IN THE RELATIONSHIP BETWEEN LEADERSHIP COMMUNICATION, KNOWLEDGE MANAGEMENT, AND ORGANIZATIONAL COMMITMENT AMONG ACADEMICIAN IN CHINESE HIGHER EDUCATION INSTITUTES

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Abstract

This study investigates the mediating role of organizational learning (OL) in the relationship between leadership communication (LC), knowledge management (KM), and organizational commitment (OC) among academic staff in Chinese higher education institutions. Using a cross-sectional survey design, data were collected from 402 academic staff and analyzed through partial least squares structural equation modeling (PLS-SEM). The model tested the direct effects of LC and KM on OL and their subsequent impact on OC. The results reveal that LC significantly influences OL ($\beta = 0.615$, $p < 0.001$), while KM also has a positive and significant effect on OL ($\beta = 0.203$, $p < 0.001$). OL, in turn, plays a crucial role in enhancing OC ($\beta = 0.754$, $p < 0.001$). Importantly, OL mediates the relationship between LC and OC ($\beta = 0.464$, $p < 0.001$) and between KM and OC ($\beta = 0.153$, $p < 0.001$). The model demonstrated high explanatory power, with OL accounting for 70.2% of its variance ($R^2 = 0.702$) and OC explaining 58.5% ($R^2 = 0.585$). This research uniquely integrates OL as a mediator in the triadic relationship between LC, KM, and OC, offering new insights into how organizational learning strengthens organizational commitment. It enriches the underexplored context of Chinese higher education and provides practical recommendations for academic leaders and policymakers. By fostering a learning-centric environment, institutions can enhance knowledge-sharing practices, improve communication strategies, and build long-term organizational loyalty among academic staff.

Keywords: Knowledge Management, Leadership Communication, Organizational Commitment, Organizational Learning.



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INTRODUCTION

Organizational learning plays a pivotal role in enhancing the effectiveness of leadership communication, knowledge management, and organizational commitment, especially in academic environments. As higher education institutions face increasing challenges from globalization, technological advancements, and competitive pressures, the capacity for continuous learning and

adaptation has become critical. Leadership communication is central to fostering a culture of trust, collaboration, and innovation, enabling academic organizations to align their strategies with dynamic external demands (Sundari, & Hertuti, 2022; Angelakis et al. 2024). Additionally, effective knowledge management practices ensure that information flows seamlessly within organizations, enhancing decision-making and resource allocation (Sharif et al. 2024). Organizational commitment among academicians, a cornerstone for institutional success, is closely linked to how effectively leadership and knowledge practices are integrated. Studies have highlighted that fostering a learning-oriented culture not only supports individual and collective growth but also strengthens organizational loyalty (Mishra and Upadhyay 2021). Furthermore, dynamic capabilities derived from organizational learning allow institutions to respond proactively to shifting demands, underscoring its mediating role between leadership, knowledge processes, and commitment (Souza and Takahashi 2019; Sunandar, Alvarez, & Cardozo, (2024). The dynamic and rapidly evolving landscape of higher education, driven by globalization, technological advancements, and institutional reforms, necessitates robust strategies to ensure organizational effectiveness. Leadership communication (LC) and knowledge management (KM) are recognized as pivotal factors influencing organizational commitment (OC). However, existing research has largely overlooked the mediating role of organizational learning (OL) in this relationship, particularly in the context of Chinese higher education institutions. This gap highlights the need for a deeper understanding of how OL can enhance the impacts of LC and KM on OC, addressing the pressing challenges these institutions face today.

The urgency of this study lies in the increasing demands placed on academic institutions to maintain staff commitment, overcome knowledge silos, and improve leadership practices to stay competitive globally. These challenges underscore the critical importance of fostering a culture of continuous learning. By focusing on OL, this research provides a framework to address these issues effectively, offering insights into creating a cohesive, learning-oriented organizational environment. The study employs a cross-sectional survey of academic staff in Chinese higher education institutions and utilizes partial least squares structural equation modeling (PLS-SEM) to analyze the relationships among LC, KM, OL, and OC. The objectives of this research are to evaluate the direct impacts of LC and KM on OC, examine the mediating role of OL in these relationships, and propose practical strategies for cultivating a learning-oriented culture. Through this comprehensive approach, the study aims to bridge the identified research gap and provide actionable solutions for enhancing organizational commitment in academic institutions.

Leadership Communication (LC) has undergone significant transformation over the years. Initially, in the early 20th century, the focus was on Trait Theory. Researchers like Ralph Stogdill (1948) posited that certain inherent traits and characteristics made individuals effective leaders. For instance, traits such as charisma, decisiveness, and confidence were believed to facilitate effective communication and inspire followers (Stogdill 1948). Moving forward, during the mid-20th century, the emphasis shifted from inherent traits to observable behaviors. This period saw the rise of Behavioral Theories. (Blake, R., & Mouton 1964), for example, suggested that effective leadership is not just about who leaders are, but what they do. Consequently, communication behaviors such as active listening, clear articulation of goals, and the ability to provide constructive feedback became central to effective leadership (Blake & Mouton, 1964).

Subsequently, in the 1960s and 1970s, the Situational and Contingency Theories emerged. (Hersey, P., & Blanchard 1969) developed the situational leadership model, which emphasized the need for leaders to adapt their communication styles based on the readiness and competence of their followers. This theory posited that effective leaders must be flexible in their communication, using directive or supportive approaches as needed (Hersey & Blanchard, 1969; Rini, Oktavia, & Hong, 2024; Simamora et al., 2024). Similarly, Fiedler's contingency theory suggested that the effectiveness of a leader's communication style depends on the interplay between the leader's personality, the task at hand, and the organizational environment (Fiedler 1967). Organizational Commitment (OC) is a multifaceted concept that has garnered significant attention in organizational behavior and human resource management. It refers to the psychological attachment and loyalty an employee feels towards their organization, influencing their willingness to remain with the organization and exert effort on its behalf. The study of OC is crucial as it impacts employee behavior, job performance, and overall organizational effectiveness. This essay traces the historical evolution of OC, from its early conceptualizations in the mid-20th century to contemporary models and perspectives.

Leadership Communication (LC) plays a pivotal role in shaping Organizational Commitment (OC), as effective communication from leaders fosters alignment, trust, and engagement among employees. LC is not merely about delivering information but creating a meaningful connection between leadership goals and employee experiences. Trust, is a fundamental driver of OC, and transparent communication is essential for building this trust. Leaders who openly discuss organizational challenges and successes create an environment where employees feel included and valued (Angelakis et al. 2024; Binti & Adeshina, 2024). During crises, empathetic communication strategies that acknowledge employee concerns significantly enhance their emotional resilience and strengthen their commitment to the organization (Sharif et al. 2024; Wirnayanti, Craig, & Malatjie, 2024). Effective leadership communication ensures clarity in roles and responsibilities, reducing workplace ambiguity. When employees understand how their contributions align with organizational objectives, they are more likely to feel connected to the organization's mission (Mishra and Upadhyay 2021). Storytelling is a particularly powerful communication tool that helps leaders articulate vision and inspire employees by connecting organizational goals to personal values (Eriksson and Lycke 2024).

Empathetic and inclusive communication directly impacts employee morale, which is a critical component of OC. Leaders who engage employees in decision-making processes foster a sense of belonging and ownership. For instance, regular feedback and recognition not only improve morale but also drive long-term loyalty (Hasibuan, Chu, & Godh, 2024; Nazaruddin, Sofyani, & Utami 2024). Leadership communication also facilitates knowledge sharing and collaboration, which are essential for sustaining organizational commitment. Leaders who prioritize open communication channels and employ digital tools to enhance collaboration encourage a culture of shared learning and innovation (Santos-Rodrigues, Gupta, and Carlson 2015; Muis, Pholboon, & Kamali, 2024). Moreover, frameworks for knowledge management led by effective communication practices strengthen the collective commitment of teams (Zahrawi 2019; Zakiyah, Boonma, & Collado, 2024). In an increasingly globalized and dynamic workplace, LC becomes even more critical. Leaders who adapt communication strategies to diverse cultural and organizational contexts are better positioned to foster a unified commitment across geographically dispersed teams (Galán-Muros et al. 2017; Rahmayanti, & Kwalat, 2024). Leadership communication serves as a cornerstone for fostering organizational commitment by building trust, aligning vision, and enhancing engagement. It acts as a strategic tool that leaders can leverage to bridge the gap between organizational objectives and employee expectations. By employing transparent, empathetic, and inclusive communication practices, leaders can create an environment where employees are motivated to remain committed to their organizations. This dynamic interplay between LC and OC ultimately drives organizational success and sustainability.

Knowledge Management (KM) has evolved significantly over the past few decades, reflecting changes in how organizations understand and leverage knowledge to improve performance and adapt to changing environments. This narrative explores the historical development of KM, highlighting key milestones, theories, and technological advancements that have shaped its evolution. The concept of Knowledge Management can be traced back to the mid-20th century, with early contributions from scholars like Peter Drucker. (Drucker 1959) introduced the term “knowledge worker” to describe individuals whose primary job involves handling or using information. This marked the beginning of recognizing knowledge as a critical organizational asset (Drucker, 1959). Knowledge Management (KM) is a critical driver of Organizational Commitment (OC) as it fosters a culture of collaboration, learning, and shared purpose. By effectively managing and leveraging organizational knowledge, leaders can enhance employees' emotional and professional connection to their work and the organization. A strong KM system facilitates the sharing of knowledge, which enhances employees' sense of belonging and collaboration. When employees feel they are part of a knowledge-sharing ecosystem, they are more likely to commit to organizational goals. Research highlights that leaders who prioritize knowledge-sharing practices promote collective learning and innovation, thereby reinforcing OC (Kanwal, Nunes, & Arif 2019; Melinda, Feizi, & Monfared, 2024). KM practices that align with organizational objectives help employees see the value in their work. Tools such as collaborative platforms and knowledge repositories enable employees to contribute meaningfully, increasing their engagement and commitment. When employees perceive that their expertise is valued and utilized, their loyalty to the organization grows (Zahrawi 2019). Leadership plays a crucial role in bridging KM and OC. Leaders who actively promote and participate in KM initiatives, such as mentoring, training, and knowledge-sharing sessions, demonstrate their commitment to employee development. This inspires reciprocal commitment from employees (Halimah et al., 2024; Nazaruddin et al. 2024). Organizations

that embed KM into their innovation strategies tend to experience higher levels of OC. KM practices encourage employees to think creatively and collaboratively, fostering a sense of ownership over organizational achievements. This connection between KM and innovation strengthens employees' commitment to their roles and to the broader organizational mission (Santos-Rodrigues et al. 2015). Long-term OC is often tied to employees' opportunities for growth and continuous learning, both of which are central to KM. Organizations that implement KM systems to provide ongoing learning and development pathways encourage employees to invest their careers in the organization (Yusof et al. 2023). The globalization of work and the rise of remote collaboration make KM even more critical. Leaders who use digital tools to facilitate global knowledge-sharing practices can enhance OC by creating a unified organizational culture across geographic boundaries (Galán-Muros et al. 2017). Knowledge Management (KM) significantly influences Organizational Commitment (OC) by promoting collaboration, innovation, and learning. Through effective KM practices, organizations create environments where employees feel valued, engaged, and motivated to remain loyal. The synergy between KM and OC is essential for building resilient and adaptive organizations in an ever-changing global landscape.

LC enhances OL by breaking down barriers to communication, creating channels where faculty can freely share insights, seek feedback, and collaborate with their peers. This environment of openness is vital in HEIs, where knowledge-sharing and intellectual collaboration are cornerstones of academic and research success. Leaders who communicate the value of learning also inspire faculty to adopt a mindset oriented toward growth and development, seeing learning as an ongoing, collective process that benefits both the individual and the institution. In HEIs, where knowledge generation and dissemination are core objectives, the link between LC and OL is particularly relevant. Leadership communication helps create a climate of trust and transparency, which is crucial for promoting a collaborative and supportive environment for learning. When leaders actively communicate and encourage open dialogue, faculty and staff feel empowered to share insights, seek feedback, and engage in reflective practices that are essential for OL. For instance, faculty members are more likely to collaborate across disciplines, adopt new teaching methods, and incorporate diverse perspectives when they feel supported and valued by their leaders (Kezar and Eckel 2004). By fostering a culture of learning, HEI leaders contribute to the continuous improvement of academic programs, research, and administrative processes, thereby enhancing the institution's adaptability and responsiveness to change.

Leadership Communication (LC) is a crucial enabler of Organizational Learning (OL), facilitating the processes through which organizations acquire, share, and utilize knowledge. Effective communication from leaders not only conveys information but also fosters a culture of collaboration, inquiry, and adaptability, which are essential for OL. Leadership communication acts as a bridge between individual and collective learning within an organization. By encouraging open dialogue and the sharing of ideas, leaders help create an environment where employees feel safe to express thoughts and share knowledge. This communicative culture is vital for OL, as it ensures that learning is not siloed but widely disseminated across teams (Miklosik, Evans, and Hlavaty 2023). Effective LC aligns employees with the organizational vision and learning goals. Leaders who communicate the strategic importance of learning initiatives foster a shared understanding and commitment to those objectives. This alignment ensures that employees view learning as integral to organizational success, enhancing their engagement in OL processes (Eriksson and Lycke 2024).

A learning-oriented culture thrives on consistent and empathetic communication from leaders. By modeling curiosity, adaptability, and a willingness to learn, leaders set the tone for the entire organization. Regular feedback loops, town halls, and storytelling by leaders can inspire employees to embrace learning and contribute to collective knowledge (Angelakis et al. 2024). Organizational learning often occurs during periods of change or innovation. Leaders who use LC effectively during such times can help employees navigate transitions by clarifying objectives, addressing concerns, and celebrating milestones. Transparent and inclusive communication reduces resistance to change and ensures that learning opportunities are maximized (Hancock and Nuttman 2014). In the age of remote and hybrid work, digital tools have become integral to LC and OL. Platforms like Slack, Microsoft Teams, and Zoom allow leaders to disseminate learning materials, facilitate collaborative discussions, and gather insights in real-time. This digital transformation has expanded the scope of OL by enabling seamless communication across geographically dispersed teams (Galán-Muros et al. 2017).

Storytelling is a powerful LC tool that enhances OL by contextualizing abstract concepts and connecting them to real-world applications. Leaders who use storytelling effectively can illustrate the

value of learning initiatives, making them more relatable and motivating employees to actively participate (Eriksson and Lycke 2024). Leadership Communication (LC) is indispensable for Organizational Learning (OL), acting as a conduit for knowledge sharing, cultural alignment, and change management. Through transparent, inclusive, and adaptive communication strategies, leaders can create an environment where learning is a continuous and collective effort. This interplay between LC and OL not only fosters organizational adaptability but also positions the organization for long-term success in a rapidly changing world. A significant relationship exists between Knowledge Management (KM) and Organizational Learning (OL), as effective KM practices are foundational to fostering a learning-oriented environment within organizations. KM encompasses the processes of acquiring, storing, sharing, and utilizing knowledge, which are critical for supporting OL. When an organization has robust KM systems in place, it enables continuous learning by providing access to valuable information, facilitating knowledge sharing across teams, and preserving organizational memory for future reference.

Knowledge Management (KM) is fundamental to fostering Organizational Learning (OL) within institutions, as it supports the creation, sharing, and application of knowledge—key components of a learning-oriented culture. In Higher Education Institutions (HEIs), KM practices provide the infrastructure and processes needed to manage and mobilize knowledge effectively, making it accessible to faculty and staff. By creating knowledge repositories, encouraging collaborative platforms, and facilitating knowledge-sharing sessions, KM enables institutions to absorb and integrate knowledge into their daily practices, thereby strengthening OL. KM directly influences OL by ensuring that valuable knowledge resources are stored, organized, and easily retrievable. This accessibility allows faculty and staff to continuously learn from shared knowledge, adapt to new information, and apply insights to their work. When knowledge is effectively managed, individuals within the institution are more capable of building on existing knowledge, leading to enhanced problem-solving, innovation, and improvement in academic and research practices. In HEIs, where knowledge is a core asset, KM practices that prioritize easy access and usability of information help establish a culture where learning is continual and systematic. Studies by (Loermans 2002) emphasize the positive impact of KM on OL, illustrating how structured KM processes lay the groundwork for knowledge absorption and integration across the organization. These processes ensure that learning is not a sporadic or individual pursuit but a collective, institution-wide effort supported by accessible resources and organized information flows. By enabling consistent knowledge sharing and application, KM practices create an environment where OL can thrive, with faculty and staff constantly building on existing knowledge and adapting it to new challenges.

In the context of Higher Education Institutions (HEIs), the link between KM and OL is particularly important, as HEIs are dedicated to generating, storing, and disseminating knowledge. Effective KM practices in HEIs can enhance OL by enabling faculty and staff to access relevant research, collaborate across disciplines, and incorporate new insights into teaching and administrative practices. Knowledge Management (KM) and Organizational Learning (OL) are intrinsically linked, with KM providing the infrastructure and processes to capture, store, and disseminate knowledge, and OL leveraging these processes to create a continuous cycle of learning and improvement. Together, they enhance an organization's ability to adapt, innovate, and sustain competitive advantage. KM establishes the systems and practices necessary for OL by creating repositories of organizational knowledge, facilitating its accessibility, and ensuring its relevance. Knowledge repositories, collaborative platforms, and document management systems are examples of KM tools that empower employees to engage in learning activities, fostering a culture of continuous improvement (Yusof et al. 2023).

KM emphasizes knowledge sharing, which is fundamental to OL. By enabling the exchange of experiences, insights, and expertise among employees, KM ensures that learning is not confined to individual efforts but becomes a collective organizational process. This exchange helps organizations avoid the pitfalls of knowledge silos and promotes cross-functional learning (Kanwal and Rehman 2017). Leadership is critical in linking KM and OL, as leaders guide the implementation of KM systems and ensure that organizational learning is aligned with strategic goals. By fostering a knowledge-sharing culture, leaders create an environment where learning is encouraged and celebrated, leading to the practical application of knowledge for organizational success (Galán-Muros et al. 2017).

Technological tools such as intranets, collaborative software, and artificial intelligence systems are integral to KM, enabling efficient knowledge capture and dissemination. These tools also support OL by providing employees with easy access to learning resources and fostering real-time

collaboration, which enhances both individual and organizational learning (Zahrawi 2019). KM fosters OL by embedding innovation into organizational practices. Through KM, organizations can analyze past successes and failures, which informs future learning and decision-making. This iterative learning process ensures that organizations remain agile and capable of adapting to market changes (Santos-Rodrigues et al. 2015). KM provides the mechanisms to sustain OL by documenting and institutionalizing best practices and lessons learned. These knowledge assets serve as a foundation for ongoing training and development, ensuring that learning is preserved and can be leveraged for future organizational growth (Miklosik et al. 2023).

Knowledge Management (KM) and Organizational Learning (OL) are complementary processes that together enable organizations to thrive in dynamic and competitive environments. By facilitating the acquisition, sharing, and application of knowledge, KM provides the tools and structures that drive OL. Organizations that integrate KM and OL effectively are better positioned to innovate, adapt, and achieve sustained success. When an organization has robust KM systems in place, it enables continuous learning by providing access to valuable information, facilitating knowledge sharing across teams, and preserving organizational memory for future reference (Huber 1991; Nonaka 1994). Organizational Learning (OL) is an institution's capacity to create and maintain a culture of continuous learning and professional development, which plays a critical role in strengthening Organizational Commitment (OC) among its members. In Higher Education Institutions (HEIs), fostering OL is especially vital, as it encourages faculty members to engage in ongoing growth and skill-building activities, which align them more closely with the institution's mission and objectives. OL encompasses creating opportunities for faculty members to expand their expertise, participate in skill development programs, and actively engage in knowledge-sharing initiatives.

When faculty perceive that their institution prioritizes their professional growth, they are more likely to feel valued, supported, and motivated to contribute to the institution's success. This supportive learning environment helps cultivate a psychological connection between faculty members and the institution, reinforcing their commitment and loyalty. Research by Chiaburu and Harrison (2008) and Ahmad and Islam (2011) demonstrates that employees who experience continuous learning opportunities within their organization exhibit higher levels of dedication, as they view the organization as an enabler of their personal and professional growth. Furthermore, OL facilitates collaboration, innovation, and adaptability within HEIs, as faculty members share knowledge, exchange ideas, and work collectively toward common goals. This collaborative learning culture strengthens relationships among faculty and enhances their sense of belonging within the institution. As individuals grow professionally through OL practices, they feel more connected to the institution's long-term objectives and more willing to invest their time, energy, and talents in its success.

Organizational Learning (OL) and Organizational Commitment (OC) are deeply interconnected, as OL fosters an environment of growth, adaptability, and inclusion, which in turn enhances employees' emotional and professional attachment to their organization. By creating a culture that values continuous learning, organizations can strengthen employees' commitment to their roles and the overarching mission. OL enhances OC by empowering employees with opportunities to grow and improve their skills. When organizations invest in learning and development initiatives, employees perceive the organization as supportive of their personal and professional growth, increasing their loyalty and commitment (Eriksson and Lycke 2024). Engagement is a critical aspect of OC, and OL fosters engagement by involving employees in meaningful learning processes. Opportunities for collaboration, participation in decision-making, and shared learning experiences create a sense of belonging and motivate employees to remain committed to the organization (Miklosik et al. 2023). Leaders play a pivotal role in connecting OL to OC. By effectively communicating the value of learning initiatives and modeling a learning mindset, leaders inspire employees to align their goals with organizational objectives. This alignment fosters a deeper sense of purpose and commitment among employees (Angelakis et al. 2024).

OL promotes behaviors that go beyond job requirements, known as organizational citizenship behaviors (OCBs), which strengthen OC. Employees who participate in OL activities often develop a stronger emotional connection to their organization, leading them to go above and beyond in their roles (Nazaruddin et al. 2024). In environments characterized by rapid change, OL helps employees develop the adaptability and resilience needed to navigate uncertainty. Organizations that prioritize OL during periods of change build trust and reduce employee turnover, as employees feel supported and equipped to meet new challenges (Hancock and Nuttman 2014). Continuous learning opportunities contribute

significantly to long-term OC. Employees who experience ongoing learning and development are more likely to see a future within the organization, leading to higher retention rates and sustained commitment (Santos-Rodrigues et al. 2015). Organizational Learning (OL) serves as a powerful mechanism for enhancing Organizational Commitment (OC) by fostering growth, engagement, and adaptability. By creating a culture that values continuous learning and development, organizations can build strong emotional and professional bonds with their employees, driving long-term loyalty and commitment. The interplay between OL and OC underscores the importance of strategic learning initiatives for organizational success.

RESEARCH METHOD

This study employed the cross-sectional quantitative survey research design. The targeted population was the academic staff members from public sector universities in Guizhou, China. A total of 525 questionnaires were distributed to the academic staff using a stratified random sampling technique to ensure representation across different faculties and departments. According to (Krejcie and Morgan 1970) sample size table, a minimum sample size of 375 was deemed necessary for this study. To enhance the response rate and account for potential non-responses, a larger sample was targeted. Out of the 525 distributed questionnaires, 421 were returned, of which 402 were valid for analysis, resulting in an effective response rate of 77%.

This study adapted the knowledge management practices questionnaire developed by (Filius, de Jong, and Roelofs 2000) which included five dimensions, namely knowledge management transfer (6 items), knowledge management documentation (6 items), knowledge management creation (7 items), knowledge management acquisition (7 items), and knowledge management application (8 items). For the leadership communication, we adapted the shortened version of the PLCQ developed by (Schneider et al. 2015), which has 6 items. We adapted (Meyer and Allen 1997) questionnaire to measure organizational commitment, which has 13 items. Besides, we adapted the questionnaire from (Marsick and Watkins 2003) to measure organizational learning which has 20 items. Each construct was measured using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Data collection was conducted over a period of three months. The researcher employed multiple methods to maximize response rates, including direct distribution of questionnaires, follow-up reminders through email, and the involvement of contact persons at each university. Participants were assured of the confidentiality and anonymity of their responses to reduce evaluation anxiety and encourage honest and unbiased participation. The study employed G-Power software to calculate the required sample size to ensure adequate statistical power for detecting meaningful effects. Based on the recommended alpha level of 0.05 and a power of 0.80 (commonly accepted standards for social science research), the analysis focused on a medium effect size ($f^2 = 0.15$) for a multiple regression model involving four predictors: Leadership Communication (LC), Knowledge Management (KM), Organizational Learning (OL), and Organizational Commitment (OC). The analysis determined that a minimum sample size of 85 participants would be necessary.

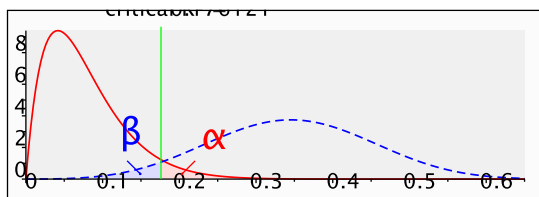


Fig. 1. G-Power analysis

Fig.1 demonstrates the statistical power analysis for the study, likely produced using G-Power software. It highlights the critical R^2 value of 0.176121, which represents the minimum coefficient of determination required to detect a significant effect under the specified conditions, such as an alpha level of 0.05 and a desired power of 0.80. The red curve corresponds to the alpha (α) level, representing the probability of committing a Type I error (rejecting a true null hypothesis), while the blue dashed

curve represents beta (β), indicating the likelihood of a Type II error (failing to reject a false null hypothesis). The statistical power, defined as $1 - \beta$, reflects the study's ability to detect meaningful effects. The intersection of the curves at the critical R^2 value shows the threshold for rejecting the null hypothesis. This visual underscore the importance of carefully selecting parameters like sample size and effect size to achieve adequate power, minimize errors, and ensure the validity of the study's findings.

Given the potential for non-responses and incomplete data, a larger sample size of 525 was targeted, of which 421 responses were received, with 402 valid for analysis, achieving an effective response rate of 77%. This sample size exceeds the calculated minimum, thereby ensuring robust statistical reliability and validity for the study's findings. The ample sample size also supports the use of Partial Least Squares Structural Equation Modeling (PLS-SEM), which benefits from larger datasets to improve model stability and predictive accuracy. This study utilized partial least squares structural equation modeling (PLS-SEM) with SmartPLS 3.0 software for data analysis. PLS-SEM is advantageous in assessing both direct and indirect effects among multiple variables within a structural model simultaneously (Hair et al., 2022). This study applied a two-stage approach, beginning with the evaluation of the measurement model, followed by the structural model assessment (Hair et al., 2019).

RESULTS AND DISCUSSION

Response Rate

According to (Babbie 2007), the study's response rate was 77%, which is regarded as extremely good and should suggest that the current survey research study is successful. From the 525 surveys that were sent out, 421 were returned. The information on the questionnaire response rate is displayed in Table 1 below.

Table 1. Questionnaire responses

	No.	Percentage
Questionnaires distribution	525	
Questionnaire returned	421	80%
Questionnaires disqualified	19	5%
Questionnaire qualified	402	77%

Data screening and Cleaning Data

Data analysis aids in the researcher's ability to spot any mistakes of important presumptions while using multivariate data analysis methodologies (Habibi et al. 2022; Hair et al. 2019). Therefore it is necessary to go through the exercise of cleaning the data before further process of analysis. The data cleaning exercise involved four analyses, namely missing values analysis, test of outliers, normality test and multicollinearity test. Proceeding to initial data screening, all the 375 usable questionnaires received were coded and entered into the SPSS.

Missing Value

Missing values are problematic since they reduce the size of the sample and obliterate data for analysis. Missing values may potentially be a sign of bias in the research data. Any data set may contain randomly or non-randomly missing values. It is possible for there to be random missing values when a respondent accidentally omits to answer a survey question. On the other hand, non-random missing data, which are frequently observed in surveys pertaining to sensitive subjects, occur when a respondent purposefully chooses not to answer a survey question. It is important to handle any missing values as part of the data cleansing procedure. The following options are available in SPSS to deal with missing values in a data set.

Outliers

According to (Hair et al. 2019), outliers are extreme values in respect to the remaining data in a sample. Because outliers can cause a data set to become non-normal, using statistical techniques particularly parametric ones where the normality of the data is expected, becomes extremely problematic (Schoenborn et al. 2019). The existence of outliers in the data set can significantly skew the regression coefficients and produce untrustworthy findings since outliers are subsets of observations that seem to be at odds with the rest of the data (Barnett 2021). SPSS was utilized to find any observations that might show up outside of the SPSS value labels due to inaccurate data entry in order

to identify outliers (Habibi, Yusop, and Razak 2020). To do this, minimum and maximum statistics were used to tabulate frequency tables for each variable, demonstrating that no value was discovered outside of the anticipated range. Every survey item in a study or a composite variable that averages the scores of items measuring a particular dimension can be subjected to univariate outlier analysis. Based on the study variables, it was deemed reasonable to perform an outlier analysis because the questionnaire utilized in this study had 74 survey items. For each of the composite variables, a few outliers were found using SPSS. Analyzing these outliers in the unprocessed data showed that majority of them were probably the result of coding mistakes. Literature suggests the following ways of dealing with outliers by designating them as missing values; the values that stand out can be eliminated. Second, if a question is deemed poorly phrased, the variable may be excluded from the study and mathematical transformation.

In this study, the first option removing the outliers and treating them as missing values—was chosen since the study's outliers were small and the product of coding errors. The fifteen multivariate outliers that were discovered were eliminated in order to guarantee the accuracy of the data analysis technique. 375 data points made up the study's final data set.

Multicollinearity

According to (Tabachnick, B. G., & Fidell 2007), multicollinearity is a condition where predictor variables in a regression model exhibit very high correlations, typically exceeding 0.90, which can cause issues in interpreting the regression coefficients. To detect multicollinearity, two important indicators are used: Tolerance and Variance Inflation Factor (VIF). A VIF value exceeding 10 or a Tolerance value below 0.1 signals significant multicollinearity and suggests that the predictors may not provide unique information to the model. In the present analysis, multicollinearity was assessed by examining the Tolerance and VIF values for each predictor variable:

Leadership Communication demonstrated a Tolerance value of 0.458 and a VIF of 2.182. Both values are well within the acceptable range, indicating that there is no issue of multicollinearity for this variable. The Tolerance is above the critical threshold of 0.1, and the VIF is far below 10, suggesting that Leadership Communication provides unique information to the model. Knowledge Management showed a Tolerance of 0.662 and a VIF of 1.510. These values confirm that Knowledge Management does not suffer from multicollinearity, as the Tolerance is comfortably above 0.1, and the VIF is well below 10, indicating that this variable is not highly correlated with others in the model. Organizational Learning had a Tolerance of 0.500 and a VIF of 2.000, both of which fall within the recommended limits. This indicates that Organizational Learning does not exhibit multicollinearity, ensuring that it independently contributes to the explanation of the dependent variable in the model. In conclusion, based on the criteria outlined by Tabachnick & Fidell (2007), the multicollinearity diagnostics indicate that none of the predictor variables in this regression model exhibit problematic multicollinearity.

The Tolerance and VIF values for all variables are within the acceptable ranges, confirming that each variable provides a unique and significant contribution to the model without redundancy or excessive correlation.

Normality

Assessing normality is a crucial step in determining the suitability of data for parametric statistical tests. One common method for evaluating normality is by examining the skewness and kurtosis values of the data, which provide insights into the symmetry and the "tailedness" of the distribution. According to (Garson 2012), skewness and kurtosis values within the range of -2 to 2 are considered acceptable, indicating that the data is approximately normal. For the leadership communication variable, the skewness is -0.232 and the kurtosis is -0.511. Both of these values fall within the acceptable range of -2 to 2, indicating that the distribution of this variable is nearly symmetric and does not have heavy tails, thereby suggesting a distribution that is approximately normal.

Similarly, for the knowledge management variable, the skewness is -0.751 and the kurtosis is -0.027. These values are also within the acceptable range, suggesting that although the distribution is slightly left-skewed, it is still within the bounds of normality. The Organizational Learning variable has a skewness of -0.378 and a kurtosis of 0.723, both of which are well within the -2 to 2 range. This indicates that the data for this variable is fairly symmetric, with a slight tendency toward a peaked distribution, yet it remains within the range that suggests normality. However, the organizational

commitment variable shows a skewness of -0.798 and a kurtosis of 1.993. While these values are still within the acceptable range of -2 to 2, the kurtosis value close to 2 suggests a distribution with heavier tails, indicating a potential deviation from perfect normality. This could imply the presence of outliers or extreme values, which might require further investigation or transformation if strict normality is necessary for subsequent analyses.

In conclusion, leadership communication, knowledge management, and organizational learning exhibit distributions that are approximately normal based on their skewness and kurtosis values being within the -2 to 2 range. The organizational commitment variable, although still within the acceptable range, shows a kurtosis value that may suggest heavier tails, indicating a slight deviation from normality. While from a graphical point of view, the researcher uses the normal graphics of the Q-Q plot. All three variables are in the Normal Q-Q values of the plot as shown in

Common Method Bias (CMB)

(Podsakoff, MacKenzie, and Podsakoff 2012) found that common method variance which according to is also known as mono method; is defined as the variance that is attributable to the measurement method rather than to the construct of interest. As stated by Podsakoff et al (2012), common method variance is a major concern in self-report survey. Common Method Variance, also known as mono-method bias, refers to the variance that is probably caused by measurement method rather than to the construct of interest (Podsakoff et al. 2012). Normally, in self-report surveys researchers have agreed that common method variance is a major concern for scholars. Common method bias, in self-report could also inflate relationships between variables.

This study used a variety of strategies to reduce the impact of common method variance. Reducing evaluation anxiety was the first step in addressing or lessening the adverse effect of common method variance in the current study. There are no right or incorrect answers to the questions or things that will be chosen for the questionnaires, according to the instructions provided to the respondents via the surveys. Likewise, participants were ensured that any information they provided for the study would remain private. The second strategy to address common method variance in this study is to make improvements to the scale items in the questionnaire where ambiguous ideas were entirely avoided. Every survey question was prepared in clear, succinct model phrases. Thirdly, the principle components factor analysis recommended by (Podsakoff and Organ 1986) was used for all study variables. The investigation produced a list of parameters that explained 59% of the variance. Out of all of these, the most important component accounts for 38% of the variance overall, which is less than 49%. Additionally, this result demonstrated that no one component could account for the majority of the covariance between the predictor and criterion variables. This conclusion suggests that common technical bias is not a major issue in this study.

Demographic

General information about the survey participants is shown in Table 2. Respondent attributes include age, gender, years of employment in the current company, and level of education or training. The investigator examined the response profiles based on their demographic attributes in relation to the sample participant profiles. Table 2 presents the comprehensive analysis. Men made up 54% of the 375 legitimate respondents whose replies were included in this study; women made up the remaining 46%. The number of respondent by gender reflects the total number of male and female academic staff members working in Chinese HEIs.

Table 2. Demographics of the respondents

	Description	No.	%
Gender	Male	201	53.6
	Female	174	46.4
Age	21-30	11	2.9
	31-40	69	18.4
	41-50	144	38.4
	51-60	115	30.7
	Above 60	36	9.6
Academic Background	Undergraduate	22	5.9
	Graduate	54	14.4
	Doctorate	128	34.1
	Post Doctorate	90	24.0
	Others	81	21.6
Experience	Less than 1 year	11	2.9
	1—10 years	40	10.7
	11—20 years	132	35.2
	21-30 years	105	28.0
	Above 30 years	87	23.2
Designation	Lecturer		
	Senior Lecturer	81	21.6
	Assistant Professor	180	48.0
	Associate Professor	114	30.4

Additionally, the descriptive analysis showed that 11 respondents (3%), were from the age group of 21-30; 69 respondents (18%), were from the age group of 31-40; 144 (38%) of the respondents were between the ages of 41 and 50; 115 respondents (31%), were from the age group of 51-60 and finally 36 (10%) were older than 60. As for the academic background is concerned it was revealed through descriptive analysis that 22 respondents (6%), were from the academic group of undergraduate; 54 respondents (14%), were from the academic group of graduate; 128 respondents, were from the academic group of doctorate means 34% of the respondents had a Ph.D. 90 respondents (24%), were from the academic group of Post Doctorate and finally 81 (22%) were from the academic group of others. Moreover, it has been revealed that 11(3%) of the 375 valid respondents had work experience less than one year; 40(11%) of the 375 valid respondents had work experience ranging from 1 to 10 years; 132(35%) of the 375 valid respondents had work experience ranging from 11-20 years; 105(28%) of the 375 valid respondents had work experience ranging from 21-30 years and lastly, 87 (23%) had work experience more than 30 years. From descriptive analysis it was observed that no representative showed his/her designation as lecturer; 81(22%) of the valid respondents mentioned their designation as Senior lecturer; 180(48%) of the valid respondents mentioned their designation as assistant professor; 114(30%) of the valid respondents mentioned their designation as associate professor; 3(30%) of the valid respondents and finally no representative showed his/her designation as professor.

Findings of Descriptive Statistical Analysis

This section shows the findings of a descriptive analysis conducted to identify the levels of knowledge management, leadership communication, organizational learning, and organizational commitment. The descriptive statistics provide an overview of the key variables examined in the study: leadership communication, knowledge management, organizational learning, and organizational commitment. The data were collected from 375 participants, with the results indicating varying levels of agreement and perceptions regarding each variable.

For leadership communication, the scores ranged from a minimum of 6.00 to a maximum of 10.00, with a mean of 8.74 and a standard deviation of 0.97. This suggests that participants generally have a positive perception of leadership communication, with the majority of responses clustering around the higher end of the scale. The relatively low standard deviation indicates that most participants had similar views on leadership communication, with limited variation in responses. The knowledge management variable yielded slightly higher mean scores, ranging from 6.00 to 10.00, with a mean of

9.24 and a standard deviation of 0.80. The high mean indicates that participants rated knowledge management very positively, suggesting strong agreement across the group regarding the effectiveness of knowledge management in their organizations. The lower standard deviation further suggests a high level of consistency among participants' responses, with minimal variation. Regarding organizational learning, the scores ranged from 4.00 to 10.00, with a mean of 8.70 and a standard deviation of 0.99. The slightly lower mean compared to knowledge management indicates that participants still had generally positive views of organizational learning but with slightly more variation in their responses. The broader range of scores also indicates a wider distribution of opinions on this variable. For organizational commitment, the scores exhibited the widest range, from 3.00 to 10.00, with a mean of 8.58 and a standard deviation of 1.10. While the mean score reflects a generally positive level of commitment among participants, the higher standard deviation suggests that there was more variability in how strongly individuals felt about their organizational commitment. This may indicate diverse levels of attachment and dedication within the organization. In summary, the results show in Table 3 that participants generally rated all four variables favorably, with knowledge management receiving the highest mean score, reflecting strong agreement among respondents. Organizational commitment, on the other hand, exhibited the greatest variability, indicating differing levels of commitment among participants. These findings suggest a positive organizational environment, particularly in terms of communication, knowledge management, and learning, though commitment levels vary more significantly among the respondents.

Table 3. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Leadership_Communication	375	6	10	8.73	0.97
Knowledge_Management	375	6	10	9.24	0.79
Organizational_Learning	375	4	10	8.70	0.98
Organizational_Commitment	375	3	10	8.58	1.09
Valid N (listwise)	375				

Assessment of Measurement Model

The analysis of the conceptual model was conducted in two phases, which involved the examination of measurement and structural model. As all the constructs in the current study are reflective, the evaluation of the measurement model was done based on the construct reliability, convergent and discriminant validities (Hair et al., 2014). The construct reliability based on internal consistency is established by using α and composite reliability (CR) values, with the threshold of 0.70 (Hair et al., 2014). On the other hand, the outer loading (indicator reliability) and the Average Variance Extracted (AVE) are considered to establish convergent validity. For this reason, the accepted cut-off value of outer loading is 0.70, while 0.50 for AVE (Hair et al., 2014). Finally, to ensure that a particular construct is distinct from other constructs, the discriminant validation was conducted by examining either cross-loadings, Fornell- Larker criterion or Heterotrait Monotrait Ratio (HTMT). To achieve discriminant validity, the indicator outer loadings on the associated construct should be greater than all of its loading on the other constructs, the square-root of AVE (\sqrt{AVE}) are larger than latent variable correlations (Fornell-Larker criterion) or HTMT below than 1.0 (Hair et al., 2014; Henseler, 2015). For each variables, the current study has demonstrated a good level of convergent validity, indicated by a good score of AVE and factor loading. Table 4 summarizes the analysis of measurement model of the current study.

Table 4. Measurement model of constructs

Variable	Items	Loading	α	CR	AVE				
KM	KMC20	0.701	0.951	0.955	0.516				
	KMC22	0.544							
	KMC23	0.493							
	KMC24	0.668							
	KMC25	0.691							
	KMC26	0.685							
	KMD10	0.585							
	KMD11	0.664							
	KMD12	0.623							
	KMD8	0.495							
	KMD9	0.675							
	KMT14	0.625							
	KMT15	0.682							
	KMT16	0.733							
	KMT18	0.637							
	KMap27	0.633							
	KMap28	0.649							
	KMap29	0.699							
	KMap30	0.691							
	KMap31	0.744							
	KMap32	0.711							
	KMap33	0.697							
	KMap34	0.747							
	KMaq1	0.557							
	KMaq2	0.565							
	KMaq3	0.573							
	KMaq4	0.654							
	KMaq5	0.604							
	KMaq6	0.628							
	KMaq7	0.58							
	LC	LC1				0.612	0.884	0.913	0.639
		LC2				0.816			
		LC3				0.862			
		LC4				0.851			
LC5		0.849							
LC6		0.778							
OC	OC1	0.745	0.925	0.935	0.53				
	OC10	0.732							
	OC11	0.573							
	OC12	0.545							
	OC13	0.716							
	OC2	0.733							
	OC3	0.705							
	OC4	0.738							
	OC5	0.8							
	OC6	0.765							
OL	OL1	0.725	0.955	0.959	0.541				
	OL10	0.8							

Variable	Items	Loading	α	CR	AVE
	OL11	0.769			
	OL12	0.717			
	OL13	0.621			
	OL14	0.611			
	OL15	0.73			
	OL16	0.761			
	OL17	0.786			
	OL18	0.81			
	OL19	0.707			
	OL2	0.622			
	OL20	0.746			
	OL3	0.668			
	OL4	0.742			
	OL5	0.672			
	OL6	0.797			
	OL7	0.8			
	OL8	0.771			
	OL9	0.8			

As for the discriminant validity, first, the cross-loadings were examined. All the indicator’s loadings in this study are greater than the entire corresponding cross-loadings (Hair et al., 2014) as shown in Table 4. Hence, the first criterion for discriminant validity is accomplished. Fornell-Larcker criterion is the second test in establishing the discriminant validity. The current study has conducted the HTMT criterion to affirm the discriminant validity. As shown in Table 5, all HTMT values are below than 1.0, therefore, the discriminant validity is confirmed (Henseler, Ringle, and Sarstedt 2015).

Table 5. Discriminant validity (HTMT.90) for constructs

	KM	LC	OC	OL
KM	0.645			
LC	0.666	0.799		
OC	0.624	0.628	0.728	
OL	0.611	0.761	0.815	0.735

PLS-SEM Path Analysis Findings

After the CFA that was done during the measurement model analysis, the structural model was examined. Several criteria were examined including the significance and relevance of structural model’s relationships, coefficient of determination (R^2), f^2 effect size, predictive relevance (Q^2) (Habibi, Mukminin, and Sofyan 2024; Sofwan et al. 2024).

Assessment of Structural Model

Figure 1 shows the structural model of the study. Table 6 displays that the results of hypothesis. The direct effect of LC on OC was not significant ($\beta=0.079$, p -value = 0.149), indicating that $H1$ was not supported. Second, LC has a significant influence on OL ($\beta = 0.615$, p -value = 0.000). Thus, $H2$ was supported. Based on the findings, it confirmed that effective leadership communication significantly improves the organization’s learning capabilities. This finding emphasizes that leadership communication is crucial in fostering a learning-oriented environment within the organization. Third, OL has a significant influence on OC ($\beta = 0.754$, p -value = 0.000). Hence, $H3$ was supported. This result indicates that when an organization fosters a strong learning environment, it directly leads to higher levels of commitment from its members. The significance of this relationship underscores the critical role of learning in driving organizational commitment. Fourth, the direct effect of KM on OC was found to be significant ($\beta = 0.211$, p -value = 0.000). Therefore, $H4$ was supported. This finding expounded that effective knowledge application leads to improved performance and job satisfaction, which are key drivers of OC. Fifth, KM has a significant influence on OL ($\beta=0.203$, p -value = 0.000).

Thus, *H5* was supported. The analysis confirmed that knowledge management practices directly enhance organizational learning processes, indicating that effective management of knowledge resources leads to improved learning outcomes. Sixth, OL mediated the relationship between LC and OL ($\beta = 0.464$, $p\text{-value} = 0.000$). Hence, *H6* was supported. This finding suggests that LC influences OC primarily through OL, highlighting the importance of learning as a pathway through which leadership communication enhances organizational commitment. Last but not least, OL mediated the relationship between KM and OC ($\beta = 0.153$, $p\text{-value} = 0.000$). Therefore, *H7* was supported. This suggests that knowledge management practices not only directly strengthen organizational commitment but also do so through the organization’s learning processes.

Table 6. Results of hypotheses testing

Hypothesis	β	p values	Decision
H1. LC -> OC	0.079	0.149	Not supported
H2. LC -> OL	0.615	0.000	Supported
H3. OL -> OC	0.754	0.000	Supported
H4. KM -> OC	0.211	0.000	Supported
H5. KM -> OL	0.203	0.000	Supported
H6. LC -> OL -> OC	0.464	0.000	Supported
H7. KM -> OL -> OC	0.153	0.000	Supported

Assessment of the coefficient of determination R^2 provides a measure of how well the independent variables in the model explain the variance in the dependent variables. In the context of this study, two key dependent variables—Organizational Learning (OL) and Organizational Commitment (OC)—were examined, with their R^2 values reflecting the predictive accuracy of the model for these constructs. For OL, the R^2 value was found to be 0.702, indicating that 70.2% of the variance in OL is explained by the independent variables included in the model as Figure 1. This suggests that the predictors used in the analysis are highly effective at capturing the factors that influence OL. A high R^2 value such as this demonstrates strong predictive accuracy, meaning the model provides a robust explanation of organizational learning. However, 29.8% of the variance remains unexplained, which could be attributed to external factors not considered in the current model, or due to inherent measurement errors.

In the case of OC, the R^2 value was 0.585, showing that 58.5% of the variance in OC is accounted for by the independent variables as Figure 1. While this is still a substantial proportion, it leaves 41.5% of the variance unexplained. This indicates that while the model provides a good explanation for Organizational Commitment, there may be other variables or contextual factors influencing OC that were not captured by the model. The relatively lower R^2 value for OC compared to OL suggests that additional factors could be explored to improve the model’s explanatory power for Organizational Commitment. The results of the Q^2 assessment confirm that the model has substantial predictive relevance for both OL and OC. The higher Q^2 value for OL (0.577) compared to OC (0.455) suggests that the model is slightly better at predicting outcomes for OL. Nevertheless, both Q^2 values being greater than zero indicate that the model is reliable in its predictions for both constructs, making it a strong tool for forecasting future behaviors or trends related to learning and commitment within the organization.

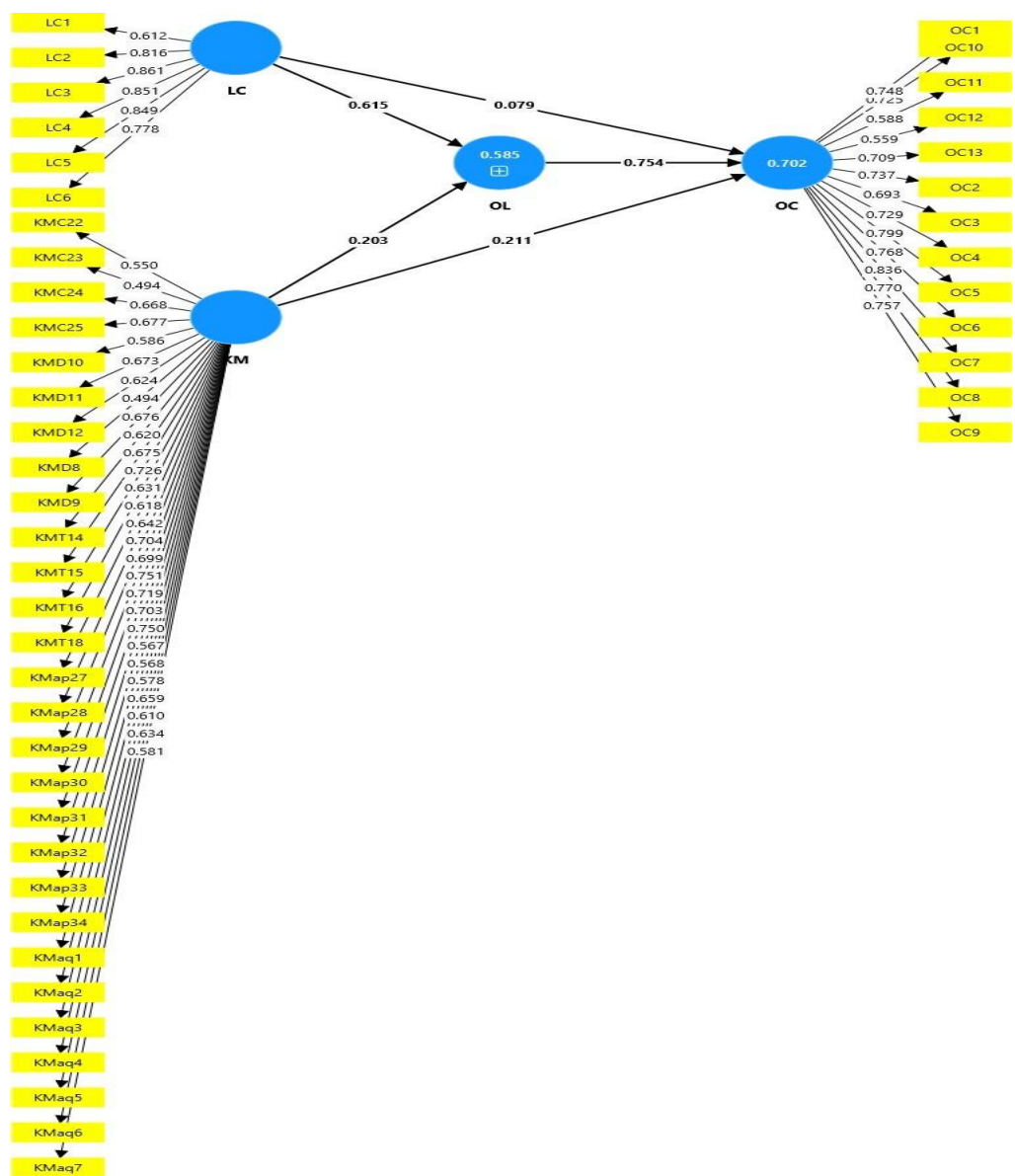


Fig. 2. Structural model of the study

The findings of this study reaffirm the multifaceted role of knowledge management (KM) and organizational learning in enhancing both individual and organizational outcomes. As emphasized by (Nonaka 1994), the dynamic interplay of tacit and explicit knowledge is central to fostering innovation and creating value within organizations. Building on this foundational theory, the results demonstrate how a well-structured KM system can support organizational agility and resilience. The systemic approach to creating learning organizations, highlighted by (Bui and Baruch 2010) was validated in this study. Organizations that adopt a systems perspective are better equipped to integrate individual learning with strategic goals, ensuring that knowledge is not only stored but also applied effectively. This aligns with the findings of (Filius et al. 2000) who underscore the importance of aligning HRD strategies with KM practices to enhance employee competency and performance.

The relationship between KM and organizational commitment is well-supported by existing research. For instance, (Dele-Ajayi et al. 2021) and (Ahmad and Bakar 2003) highlight the critical role of training and knowledge sharing in fostering organizational loyalty. This study confirms these findings by showing that KM initiatives contribute to stronger affective and normative commitment, as described in (Meyer and Allen 1997) organizational commitment model. Furthermore, the integration of leadership and communication styles, as explored by (Schneider et al. 2015) and (Tani, Xu, and Zhu 2021), is instrumental in shaping KM effectiveness. Leaders who foster open communication and empower employees create environments where knowledge is freely exchanged, reinforcing organizational learning and performance. This is particularly significant in contexts requiring a strong

ethical foundation and psychological empowerment, as noted by (Tani et al. 2021). Technological advancements also play a crucial role in enhancing KM practices. For example, the integration of big data and machine learning in smart home energy systems, as shown by (Ahmad et al. 2024) demonstrates the potential of technology-driven KM solutions to optimize performance. Similarly, the study by (Nirmala, Utami, and Nirmala 2020) highlights the significance of digital platforms in fostering collaborative learning and resource sharing.

Finally, the broader implications of KM and organizational learning extend beyond corporate settings. In educational contexts, as explored by (Farley, Leonardi, and Donnor 2021) KM practices can significantly enhance academic staff performance. These findings emphasize the universal applicability of KM frameworks in diverse organizational environments. Despite these contributions, the study is not without its limitations. Future research should focus on longitudinal studies to capture the evolving dynamics of KM and organizational commitment over time. Additionally, integrating insights from studies like (Demarest 1997) could further enrich the understanding of KM's role in strategic decision-making. In conclusion, this study provides a comprehensive examination of the interplay between KM and organizational learning, offering valuable insights for practitioners and researchers alike. By integrating theoretical and empirical perspectives, it highlights the transformative potential of KM practices in fostering organizational growth and sustainability.

CONCLUSION

In a conclusion, it is essential to address the research problem or goal directly by summarizing the findings and their significance. However, it can also extend beyond that to propose a new theory or concept if the analysis and facts support such a development. By synthesizing the results and implications, a study can contribute to theoretical advancements or conceptual frameworks. For instance, based on the findings of the uploaded research, the study demonstrated how organizational learning mediates the relationship between leadership communication, knowledge management, and organizational commitment. This research offers a novel contribution by integrating OL as a mediator in the relationship between LC, KM, and OC, particularly in the underexplored context of Chinese higher education institutions. Unlike previous studies that primarily examined the direct effects of LC and KM on OC, this study highlights the critical role of OL in creating a synergistic effect, bridging leadership communication and knowledge management with organizational commitment. This triadic relationship adds depth to the understanding of how organizational dynamics influence commitment in academic settings. From this, a new concept could emerge, such as “Dynamic Knowledge Leadership,” which integrates these relationships into a unified model that promotes innovation and organizational engagement. The implications of this research might highlight the importance of fostering a learning-oriented culture within higher education institutions, suggesting practical steps like leadership training programs and improved knowledge-sharing systems.

Based on the findings, this study recommends that academic institutions prioritize policies and training programs aimed at improving leadership communication and knowledge management practices to foster a culture of continuous learning. Investment in digital tools and collaborative platforms that facilitate effective knowledge sharing and organizational learning should also be a key focus. To enhance the applicability of the findings, future research should validate this model in different cultural and organizational contexts, ensuring its relevance beyond Chinese higher education institutions. Additionally, longitudinal studies are encouraged to capture the dynamic and evolving relationships among leadership communication, knowledge management, organizational learning, and organizational commitment over time. Employing a mixed-methods approach, combining quantitative analysis with qualitative insights, could provide a deeper understanding of the mechanisms driving these interactions and offer more practical strategies for academic leaders and policymakers. Thus, a conclusion can serve not only to resolve the initial research question but also to offer broader contributions to academic discourse and real-world application.

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AUTHOR CONTRIBUTIONS

Fang Zheng Kang: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing Original Draft Preparation. Fang Zheng Kang contributed significantly to the development of the

research framework, data collection process, and statistical analysis of the study. They were also responsible for drafting the initial manuscript and interpreting the study results. Mohd Faiz Mohd Yaakob: Supervision, Validation, Writing – Review & Editing. Mohd Faiz Mohd Yaakob provided guidance throughout the research process, including validating the methodology and data analysis. He contributed to the critical revision of the manuscript and ensured the accuracy and integrity of the research findings. Sock Beei Yeap: Literature Review, Data Curation, Writing, Review & Editing. Sock Beei Yeap was involved in conducting the supervised literature review, organizing the data for analysis, and providing feedback on the manuscript drafts. She helped refine the study's theoretical framework and assisted in editing the final version of the manuscript.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the generation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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