

The Impacts of Knowledge Management in Higher Education Sector: Ikh Zasag International University, Mongolia

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Abstract

The main goal of our study are to analyze the correlations between professors' professional skills, communication skills and attitudes on knowledge management. We worked on this study based on the basic theory of management theory and social science developed work assumptions and new conceptual models which were used by international researchers in their studies. The survey was conducted online channel by 112 professors, which made it possible to classify and compare some of the results.

We used SMART PLS-3.0, a qualitative research program, to analyze correlational, multifactorial, and pathologies, and to summarize the results of the forensic scientist's analysis of how factor variables affect knowledge management.

Our study can be significant to consider both theoretical and practical issues and inserting further most necessary practices at Ikh zasag International University, Mongolia.

Keywords: Professors' Professional Skills, Professors' Communication Skills, Professors' Attitudes, Knowledge Management, Ikh Zasag International University, Mongolia

1. Introduction

Knowledge management in the higher education sector is essential for enhancing the efficiency and effectiveness of educational institutions. It encompasses the processes of creating, sharing, using, and managing knowledge to improve academic and administrative services. By implementing knowledge management strategies, universities can foster innovation, improve learning outcomes, and enhance collaboration among faculty and students [1].

Moreover, effective knowledge management practices contribute to the preservation and dissemination of knowledge, which is vital for maintaining a competitive edge in the rapidly evolving educational landscape. Ultimately, knowledge management not only supports institutional goals but also enriches the overall educational experience for students and faculty alike.

We studied that Ikh Zasag International Universitys professors knowledge management in our study. Ikh Zasag International

University (IZIU) was founded in 1994 and it is comprehensive university with 10 branch schools. It's very honorable that IZIU is named by the title of Main Code for the period of Chinggis Khaan – 'IKH ZASAG' ('Great Governance'). IZIU consists of two campuses and has been carrying on its educational and research activities in twenty years since its foundation. Currently about 7500 students including international students are studying in over 50 majors of undergraduate and graduate programs at the IZIU. Over 12000 students graduated from the University for the past period. About 90 percent of them are already employed.

2. The Theoretical Foundations of Knowledge Management

In order for us to establish an evolution of knowledge management theory, we must explicate the theories at work in the field, and the sources underlying the development of the theories. To be regarded as theories, there must be more involved than just data, variables, constructs, or diagrams. Unfortunately, there is substantial disagreement about what constitutes theory. For some, theory explains the connections between phenomena. In order for

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Lopez et al., (2004) argued that knowledge management and learning go hand in hand in organizations (Singh, 2008). Knowledge management is a circle process that facilitates knowledge sharing and establishes learning as directly process within an organization [3].

It is essential to understand the fact when professors show the intention to share skills, experience, attitudes and knowledge with their fellow professors. Similarly, it is also important for the higher education institute to understand their professors' skills from a research and practical perspective because sometimes they are ready to share their knowledge and skills [4].

Professors' Professional Skills on Knowledge Management

Professors can significantly enhance their careers by developing professional skills that are essential across various roles and industries. These skills not only facilitate job acquisition and advancement but also improve workplace relationships and overall job performance. Key professional skills include communication, problem-solving, leadership, and emotional intelligence, all of which contribute to effective collaboration and innovation within academic settings [5].

Additionally, engaging in continuous learning through workshops, certifications, and networking opportunities can further bolster these skills, making professors more valuable in their roles. Ultimately, fostering strong professional relationships and honing relevant skills are crucial for career growth in higher education. The theory of personality traits postulates that people naturally deal with different situations and interact with their environment in different ways. Ahmed, (1998), Eastman, Eastman, Tolson (2001), Hsieh, Hsieh, & Wang (2011) defined that however, personality traits may also be key indicators of other facets of an individual's life, including innovativeness [6]. Petr Smutny et al (2016), argued that five managerial skills were measured in their study: organizational skills, motivational skills, communication skills, evaluation and supervisory skills and cooperativeness [7]. According to the literature review, we were hypothesized as below:

H1. Professors' Professional Skills have an Influence on Knowledge Management

Professors' communication Skills on Knowledge Management

There are several studies which show an association between knowledge management and communication e.g. Kumar and Gupta in 2012 tried to cover different aspects of knowledge and knowledge management systems and its role in multinational corporations [8].

It has been proved in researches and studies that effective communication is very significant for any business and it of utmost important for top management, directors, managers & employees working at any level to communicate with each other in effective and proficient manner to develop a successful business environment.

Similarly, knowledge management can also be done successfully with effective communication between top management, managers and other employees. Managers with poor or deprived communication skills cannot interact effectively with team and is also not able to share all the relevant information which can disturb and destroy the knowledge management system of an organization. Manager must be able to set a proper knowledge management system and has competencies to communicate with teams [9].

Organizational communication is a well-defined process of sharing and transferring of opinions, data, thoughts, experiences and emotions between employees of an organization. If a manager is a good communicator with excellent skills can intensively in create and transfer the strategies and rules to the workers and can manage knowledge. Communication is required to transfer knowledge form one medium to another medium.

Managers with well develop communication skills and tools (verbal, written and electronic communication tools) are able to manage knowledge in an excellent manner in comparison to those who lack this skill and tools [10]. There is a very close association between effective communication, information sharing and knowledge exchange process. In every mode, from unspoken to obvious knowledge, communication is essential [11]. Consequently, communication is vital in knowledge management process, and a manager with excellent communication skills can creation, manage and sharing the knowledge effectively and efficiently. According to the literature review, we were hypothesized as below:

H2. Professors' Communication Skills have an Influence on Knowledge Management

Professors' Attitudes on Knowledge Management

Professors' attitudes in the higher education sector are shaped by various factors, including their perceptions of institutional support, job satisfaction, and the balance between teaching and research [12]. Research indicates that faculty at public undergraduate institutions express greater interest and satisfaction in teaching compared to research, although there is a notable disparity in perceived institutional support for teaching, which may affect morale. Additionally, faculty attitudes towards research are generally positive, with many perceiving themselves as capable researchers despite some reservations about their experience [13].

The knowledge sharing attitude within the organizations depends upon several factors. Employees' tendencies are vital in this regard. Some of the researchers argued that two factors are important, the first one is the attitude and the second one is

subjective norms. Aneela Syed and et all, (2020), constructed upon knowledge management processes, the current study investigated the interrelationship between knowledge sharing attitude among the faculty members and knowledge management processes in higher education institutes [14].

Several prior studies have demonstrated the separate or simultaneous positive impact of knowledge management enablers and processes on knowledge sharing attitude of university teachers (Gold, Malhotra, Segars 2001; Iqbal et al., 2019; Sahibzada

et al., 2020) [15]. According to the literature review, we were hypothesized as below:

H3. Professors’ Attitudes have an Influence on Knowledge Management

Our study explains how professors’ professional skills, professors’ communication skills and professors’ attitudes on knowledge management. The conceptual model of factors on knowledge management is drawn in Figure 2.1.

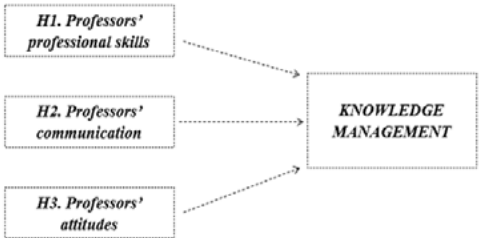


Figure 2.1: Conceptual models of factors on knowledge management
Source: Own diagram

3. Research Methodology

Data collection and questionnaire design of our study used Likert five-point scales make it possible to discriminate opinions more finely, restrict for chosen more rather than other scales. Cooper (1998) described that most causal research relies on designed experimentation and simulation programs (Cooper, 1998) [16].

There are many software programs used to process data analysis. In this paper, SPSS and SmartPLS-3.0 were chosen for their simplicity and completeness.

The Cronbach Alpha testing will be used as it is the most well accepted reliability test tool applied by social researchers. Cronbach (1946) identified that in Cronbach’s Alpha reliability analysis, the closer Cronbach’s Alpha to 1.0, the higher the internal consistency reliability [17], (Cronbach, 1946).

There were 112 professors were participated Ikh Zasag International University, Mongolia in our study between September and November, 2024.

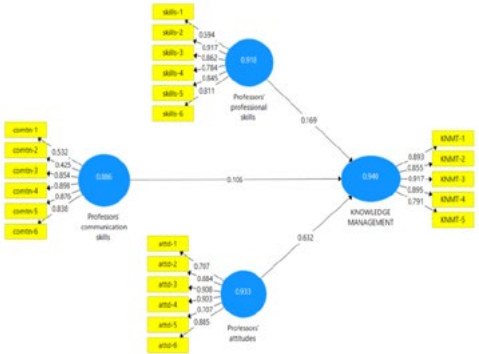


Figure 2.2: Results of Structure Analysis of Knowledge management (algorithm)
Noted: The result of study.

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach’s alpha
Professors’ professional skills	Skills-1	0.594	0.654	0.918	0.891
	Skills-2	0.917			
	Skills-3	0.862			
	Skills-4	0.784			
	Skills-5	0.845			
	Skills-6	0.811			

Notes: Skills-professors’ professional skills

Table 1: List of items of professors’ professional skills for each Construct of respondents

From the results, it indicate a range of performance across the different skills items, with Skills-2 achieving the highest score of 0.917. This suggests that this item is a strong indicator of the skills being measured.

The scores vary from 0.594 (Skills-1) to 0.917 (Skills-2), indicating that some skills may be perceived as more developed or effective than others. This variability can help identify areas for improvement. Items like Skills-2, Skills-3, and Skills-5 show strong results (above 0.8), suggesting they are critical components of the overall skills construct being assessed.

Average Variance Extracted (AVE) of 0.578 indicates that more than half of the variance in the items is explained by the underlying construct of professors' communication skills. Generally, an AVE

value above 0.5 is considered acceptable. Composite Reliability score of 0.886 suggests a high level of internal consistency among the items measuring communication skills. Values above 0.7 are typically considered satisfactory.

The Cronbach's alpha value of 0.839 also indicates good internal consistency, as values above 0.7 are preferred for reliable scales. The data on professors' communication skills demonstrates strong reliability and validity, making it a robust measure for assessing this construct within educational settings.

The individual item results show varying levels of contribution to the overall factor, with Comtn-4 showing the highest result, indicating it may be a key indicator of effective communication skills among professors (table 1).

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Professors' communication skills	Comtn-1	0.532	0.578	0.886	0.839
	Comtn-2	0.426			
	Comtn-3	0.854			
	Comtn-4	0.898			
	Comtn-5	0.876			
	Comtn-6	0.838			

Notes: Comtn -professors' communication skills

Table 2: List of items of professors' communication skills for each Construct of respondents

From the Table 2, it show a range of performance across the communication items, with Comtn-4 achieving the highest score of 0.898. This indicates that this item is a strong indicator of effective communication skills. The scores vary significantly, from 0.426 (Comtn-2) to 0.898 (Comtn-4).

The lower scores for Comtn-1 and Comtn-2 suggest these aspects of communication may require further attention or development. Items such as Comtn-3, Comtn-4, and Comtn-5 show strong results (above 0.8), indicating they are critical components of the overall construct of communication skills being assessed.

The data on communication skills assessment reveals both strengths and weaknesses within the evaluated items. High scores in several areas suggest effective communication practices, while

lower scores indicate specific areas where improvement may be necessary.

The AVE is a measure of the amount of variance captured by a construct in relation to the amount of variance due to measurement error. A common threshold for acceptable AVE is 0.50 or higher.

Composite Reliability is an index that assesses the reliability of a set of indicators measuring a construct. A CR value above 0.70 is generally considered acceptable, while values above 0.80 indicate good reliability. Cronbach's Alpha measures internal consistency among items in a scale. A Cronbach's alpha of 0.70 or higher is typically considered acceptable, with values above 0.80 indicating good reliability (table 2).

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Professors' attitudes	attd-1	0.707	0.701	0.933	0.911
	attd-2	0.884			
	attd-3	0.908			
	attd-4	0.903			
	attd-5	0.707			
	attd-6	0.885			

Notes: Comtn-professors' attitudes

Table 3: List of items of professors' attitudes for each Construct of respondents

The results indicate a generally strong performance across the attitude items, with attd-3 achieving the highest score of 0.908. This suggests that this item is a key indicator of positive attitudes.

The scores range from 0.707 (attd-1 and attd-5) to 0.908 (attd-3), indicating that while most items reflect positive attitudes, there are areas (attd-1 and attd-5) that could benefit from further exploration or improvement. Items like attd-2, attd-3, attd-4, and attd-6 show strong results (above 0.8), indicating they are critical components of the overall construct of attitudes being assessed.

Average Variance Extracted (AVE): This value indicates the level

of variance captured by a construct in relation to the variance due to measurement error. Although we did not provide a specific AVE value, it is typically expected to be above 0.5 for adequate construct validity.

Composite Reliability (CR): This metric assesses the internal consistency of a set of items measuring a construct. A CR value above 0.7 is considered acceptable, and our provided value is CR: 0.933. Cronbach's Alpha statistic also measures internal consistency, with values above 0.7 indicating good reliability as Cronbach's Alpha: 0.911 (table 3).

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Professors' knowledge management	KNMT -1	0.893	0.759	0.940	0.920
	KNMT -2	0.855			
	KNMT -3	0.917			
	KNMT -4	0.895			
	KNMT -5	0.791			

Notes: Skills-professors' professional skills

Table 4: List of items of professors' knowledge management for each Construct of respondents

KNMT-1 (0.893): This item has a very high loading, indicating it is a strong indicator of the knowledge management construct. It suggests that respondents see this aspect as highly relevant to professors' knowledge management capabilities.

KNMT-2 (0.855): Also a strong loading, this item indicates a significant correlation with the construct, suggesting that it effectively captures an important dimension of knowledge management.

KNMT-3 (0.917): This item has the highest loading among all items, making it the best indicator of professors' knowledge management. It likely represents a critical aspect of how knowledge is managed in an academic context.

KNMT-4 (0.895): Similar to KNMT-1 and KNMT-3, this item shows a strong correlation with the construct, reinforcing its

importance in assessing knowledge management.

KNMT-5 (0.791): While this item has the lowest loading in this set, it still indicates a moderate to strong relationship with the construct. It suggests that it contributes to the overall understanding of professors' knowledge management but may be slightly less critical than the others.

The AVE is provided as 0.759, which is above the acceptable threshold of 0.50, indicating that a substantial amount of variance in the items is captured by the construct. The Composite Reliability is given as 0.940, which is excellent and indicates high reliability of the items measuring knowledge management. The Cronbach's Alpha is reported as 0.920, which also indicates very good internal consistency among the items (table 4).

THE FACTORS	Professors' knowledge management	Professors' attitudes	Professors' communication skills	Professors' professional skills
Professors' knowledge management	0.871			
Professors' attitudes	0.856	0.837		
Professors' communication skills	0.823	0.913	0.761	
Professors' professional skills	0.733	0.752	0.829	0.809

Noted: The result of study.

Table 5: The results of discriminant validity

The highest correlation is between Knowledge Management and Attitudes (0.856), indicating a strong positive relationship. This suggests that professors who are knowledgeable in their field tend to have more positive attitudes.

The correlation between Communication Skills and Attitudes (0.913) is also very high, suggesting that effective communication is closely linked to positive attitudes among professors.

The correlation between Knowledge Management and Communication Skills (0.823) is significant, indicating that professors who manage knowledge effectively also demonstrate good communication skills.

The correlation between Professional Skills and both Communication Skills (0.829) and Attitudes (0.752) suggests that those with strong professional skills also tend to have good communication abilities and positive attitudes.

The lowest correlation in this matrix is between Knowledge Management and Professional Skills (0.733). While still significant, this indicates a relatively weaker relationship compared to the other pairs. Interconnectedness of Factors in our study as below:

The strong correlations among these factors suggest that they are interconnected aspects of a professor's overall effectiveness in an educational setting. Knowledge Management and Attitudes: This relationship highlights the importance of fostering a knowledgeable faculty to enhance their attitudes towards teaching and learning. Communication Skills as a Mediator, given its high correlation with both attitudes and professional skills, effective communication may serve as a crucial mediator that enhances professors' interactions with students and colleagues.

We concluded that the analysis of the correlation matrix reveals significant relationships among professors' knowledge management, attitudes, communication skills, and professional skills. These insights can guide educational institutions in enhancing faculty effectiveness through targeted development initiatives.

4. Conclusions

In conclusion, the strong correlations among knowledge management, attitudes, communication skills, and professional skills indicate that these factors are interconnected components of a professor's overall effectiveness in an educational setting [18]. The relationship between knowledge management and attitudes underscores the necessity of fostering a knowledgeable faculty to improve their perspectives on teaching and learning. Additionally, the significant correlation between communication skills and both attitudes and professional skills suggests that effective communication plays a vital mediating role in enhancing professors' interactions with students and colleagues. By focusing on these interconnected factors, educational institutions can create a more supportive environment for faculty development. Ultimately, improving these areas can lead to better educational outcomes for both professors and students alike.

5. Recommendations in our Study

To enhance professors' effectiveness, institutions should implement professional development programs that focus on improving knowledge management and communication skills, encourage collaborative learning opportunities to foster positive attitudes, and establish monitoring systems to regularly assess faculty needs and provide necessary support as below in our study:

Professional Development Programs: Institutions should consider implementing training programs that focus on enhancing professors' knowledge management and communication skills, as these areas are strongly linked to positive attitudes and professional effectiveness.

Encouraging Collaborative Learning: Creating opportunities for professors to share knowledge can improve both their knowledge management practices and their attitudes towards collaboration.

Monitoring and Support Systems: Regular assessments of these factors can help identify areas where professors may need additional support or resources, ultimately leading to improved educational outcomes.

References

1. Imran, A. (2019). Personality traits, individual innovativeness and satisfaction with life. *Journal of Innovation and Knowledge*, 38-46.
2. Singh, S. K. (2008). Role of leadership in knowledge management: A study. *Journal of Knowledge management*, 3-15.
3. Smuthy, P. (2012). The Relationship between Managerial Skills and Managerial Effectiveness in a Managerial Simulation Game. *Estrategia Organizaion Czech Science Foundation*, 11-21.
4. Bayasgalan Tsogtsuren et al. (2021). The empirical study of employers' satisfaction: The case of Executive Leadership Academy, University Of Internal Affairs, Mongolia. *International Journal of Asian Social Science*, 365-375.
5. Bayasgalan Tsogtsuren, E. D. (2021). The determinants of students' satisfaction on librarian service quality: The case of University Of Internal Affairs, Mongolia. *International Journal of Innovation Scientific Research and Review*, 1931-1937.
6. Bednarikova, I. M. (2014). *Introduction to leadership communication*. Olomouci: ISBN 978-80-244-4304-1.
7. Bennis, W. (1990). *Managing the dream: leadership in the 21st century*. New York: New York.
8. Burns, J. (1978). *Leadership*. New York: Harper and Row, 141-168.
9. Cooper, H. (1998). *Synthesizing research: A guide for literature 3rd ed*. Oaks: CA: Sage Publications, Thousand.
10. Hencley, S. (1973). Situational behavioral approach to the study of educational leadership. *Leadership: The Science and Art Today*, 139-164.
11. Imran, A. (2019). Personality traits, individual innovativeness and satisfaction with life. *Journal of Innovation and Knowledge*, 38-46.
12. Janie, B. B. (2006). *Ethics in Organizations and Leadership*. Jones and Bartlett.
13. Klingborg, D. J. (2014). What Is Leadership? *Leadership and Professional Development*, 280-285.
14. Mas-Machuca, M. (2014). The Role of Leadership: The Challenge of Knowledge Management and Learning in Knowledge-Intensive he Role of Leadership: The Challenge of

-
- Knowledge. *International Journal of Educational Leadership and Management*, 97-116.
15. Mihelič, K. K. (2010). Ethical leadership. *International Journal of Management and Information Systems*, 31-44.
16. Sharma, R. T. (n.d.). Managerial Skills for Managers in the 21st Century.
17. Singh, S. K. (2008). Role of leadership in knowledge management: A study . *Journal of Knowledge management* , 3-15.
18. Smuthy, P. (2012). The Relationship between Managerial Skills and Managerial Effectiveness in a Managerial Simulation Game . *Estrategia Organizaion Czech Science Foundation*, 11-21.

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