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Do knowledge management systems motivate and satisfy the academic staff in higher education Institutions?

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Keywords

Academic staff satisfaction;
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teaching motivation.

Abstract

Higher education knowledge management has three goals: improving task quality and efficiency, training human resources at all operational levels, and expanding an organization's field knowledge base to enhance the organization's knowledge or intellectual investment. This research aimed to elucidate the effect of knowledge management on teaching motivation and academic staff satisfaction in Vietnamese universities. The purpose of this study is to establish a clear relationship between knowledge management and teaching motivation and academic staff satisfaction; three dimensions of knowledge management systems, namely knowledge acquisition, knowledge dissemination, and knowledge utilization, all of which contribute to increased teaching motivation and academic staff satisfaction when knowledge management systems are implemented. The quantitative research technique was utilized to gather data in this study by surveying 381 professors using a questionnaire. SPSS 22.0 and SmartPLS software were used to process data obtained via survey professors engaged in teaching. Managerial implications for knowledge management systems have been suggested to increase academic staff satisfaction and teaching motivation.

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Introduction

Maintaining and developing human resources is extremely important for any organization, primarily when the Covid-19 pandemic globally affects most industries; maintaining employee motivation and satisfaction have become even more essential and pressing tasks (Kaur et al., 2021). In that situation, the higher education sector faces a significant challenge in maintaining and developing human resources to improve teaching motivation and satisfaction. Improving teaching motivation is challenging for higher education institutions (Khoa, 2020). In recent studies, the knowledge management system is considered an effective tool for managers to improve organizational management and create sustainable competitive advantages regarding human resources for their organization. Several studies have shown that knowledge management is the premise and foundation for developing and maintaining human resources (Razzaq et al., 2019). The knowledge management process includes creating, acquiring, disseminating, and utilizing knowledge (Lee et al., 2013). Monitoring, leadership, policy development, communication, knowledge protection, strategic knowledge management, knowledge-based training, recruiting, performance evaluation, remuneration, learning mechanisms, and information technology practices all fall under the category of knowledge management (Khoa & Hoa, 2021).

Research publications have emphasized the need for innovation in engineering and biomedical science curricula since 2018. Knowledge management's expansion in the classroom might be analyzed (Glass et al., 2018). According to experts, firms should prioritize knowledge management since it is one of the most important resources for producing goods and services. Regardless of differences in educational background or learning style, KM's development has followed a pair of spirals, one epistemological and the other ontological (Nonaka et al., 2000). It was also argued by Rowley (2000) that higher education institutions are in the knowledge business as they are involved in knowledge creation, dissemination, and learning. Demchig (2015) concludes that via information gathering, improved availability and accessibility, and effective utilization, knowledge management helps organizations drive innovation, increase customer service, and achieve business excellence.

Concerning the experimental data on universities and higher education institutions, they must function with limited financial resources and trained, experienced instructors (Demchig, 2015). Knowledge transfer in educational institutions during a pandemic confronts obstacles, in addition to those highlighted over the last decade, from support systems and three aspects of intellectual capital, i.e., human, structural, and relational (Velasquez & Lara, 2017). A unique approach to the knowledge exchange and dissemination method to manage and protect information for competitive advantage was implemented; however, the contribution has not been validated with an actual measurement employing a knowledge management system during the Covid-19 pandemic (Dei & van der Walt, 2020). The use of knowledge management in higher education institutions is now regarded as an effective method and

instrument for improving teaching motivation and work satisfaction. Employee motivation to work could be seen through their enthusiasm, dedication, and focus on contributing to their purpose and general goals (Ifinedo, 2003; Viriando & Sfenrianto, 2021). It shows that work motivation is related to the desire to achieve good results and work performance with the assigned tasks at the organization. Mohamed (2012) discovered that motivated employees would encourage ethical behaviors in the organization. In educational institutions, the motivation of employees, specifically the faculty, is their main driving force; therefore, identifying the teaching motivation of the lecturers is crucial in maintaining the organization's success. Lecturers with good work motivation will refrain from violating professional ethics in teaching, examination, and scientific research. The importance of intrinsic motivation makes creative activities at work (Kim et al., 2021; Klaeijns et al., 2018). In higher education, employees are mainly lecturers, the central resource of the organization and the core factor in acquiring and using the knowledge management process. Lecturers are considered essential in determining the quality of education and training. Job satisfaction is one of the lecturers' work motivations and is often considered one of the criteria for assessing a university's resources (Sharma & Jyoti, 2009). Exploring the relationship between knowledge management and academic staff satisfaction and teaching motivation at the university is crucial in developing and maintaining human resources.

This research presented data on the effect of knowledge management on teaching motivation and academic staff satisfaction in Vietnamese universities. This study aims to clearly understand the relationship between knowledge management and teaching motivation and academic staff satisfaction; three dimensions of knowledge management systems, including knowledge acquisition, knowledge dissemination, and knowledge utilization, improve teaching motivation and academic staff satisfaction when knowledge management systems are implemented. The software SPSS 22.0 and SmartPLS will process survey data on lecturers who participate in teaching. Before finishing, the data analysis findings will be presented and debated. Managerial implications for knowledge management systems have been suggested to enhance teaching motivation and academic staff satisfaction

Literature review

Knowledge Management in higher education institutions

Many results have confirmed that knowledge acquired through university research accounts for a large part of the knowledge base of each country (Bultrini et al., 2015; Khoa & Nguyen, 2020). It can be said that a university is a place that possesses valuable intellectual resources. Therefore, effective management and use of this resource is a problem for universities. Mikulecký and Mikulecka (1999) suggested that, generally, the academic environment is conducive to using knowledge management concepts and techniques. Knowledge management in higher education has three goals: increasing task quality and efficiency, developing human resources at all operational levels, and growing

an organization's or field's knowledge base to improve the organization's knowledge investment or intellectual investment (Nilsook & Sriwongkol, 2009). Knowledge management in educational institutions can be understood as an organized and systematic process for creating and disseminating information and simultaneously selecting, filtering, and implementing explicit and tacit knowledge to create unique value that can enhance teaching and learning environments (Adhikari, 2010). The following reasons explain this: universities often have modern information infrastructure, sharing knowledge with others is a matter of course for the faculty, and students desire to acquire knowledge from accessible sources as quickly as possible. In this study, knowledge management systems in higher education institutions include three dimensions, knowledge acquisition, knowledge utilization, and knowledge dissemination (Ngoc-Tan & Gregar, 2018).

Knowledge acquisition is collecting data from sources outside the organization after authorization (Zahra & George, 2002). Many types of knowledge sources outside the organization are formed in networks with linkages between different organizations. Organizational productivity and performance will be enhanced as the organization gathers various sources of knowledge to serve its plans and strategies. Bhatt (2001) defined knowledge acquisition as the combination of the abilities to give initial thoughts and parts of knowledge and organize and link them in the organization. Knowledge acquisition is a continuous and dynamic process; the formation of knowledge acquisition processes helps organizations obtain large enough and necessary data sources to serve their management.

Knowledge utilization includes applying, utilizing, and implementing knowledge in organizational processes (Haghighi et al., 2014). It is an important issue because many managers always raise concerns, especially when it is relevant in higher education environments. Holsapple and Joshi (2002) said that using data management systems in knowledge management would help categorize, search, and link knowledge better. Creating a data source managed by a knowledge management system will make it easier for organizations to find, share, utilize and contribute significant values to promote their values and capabilities.

Knowledge dissemination is the organization's knowledge process (Alavi & Leidner, 2001). It may happen between people, groups, or organizations via any communication channel. Furthermore, five variables influence knowledge dissemination: the value of source knowledge, the desire of the source to share information, the variety of communication channels, the recipient's willingness to absorb knowledge, and the receiver's capacity to absorb it (Gupta & Govindarajan, 2000). Meanwhile, Connelly and Kelloway (2003) defined knowledge dissemination as behaviors related to exchanging information or assisting others.

Teaching motivation

Teaching motivation is an essential factor of the higher education environment; whether the lecturers have a good

teaching motivation or not determines the success of a training program provided by the Faculty/Institutes of every university. Zembylas and Papanastasiou (2004) showed the impact of bonuses, recognition, leadership satisfaction, and work nature on the teaching motivation of lecturers; the author studied the student attitudes, direct leadership support, salary, learning opportunities and concluded that low levels of job satisfaction or lack of motivation are all related to factors above. Salary, job design, working environment, and the effective evaluation, training, and development management system strongly impacted teaching motivation and helped lecturers be more engaged in their work (Alam & Farid, 2011). The motivational variables were classified into two categories: internal factors, such as the nature of the job, training, and advancement possibilities, and external ones, such as pay, superior support, and connections with co-workers (Boeve, 2007). Besides, other studies only focus on in-depth research on one factor and show the impact on the lecturers' teaching motivation, such as Barnett and McCormick (2003), who focused on the leader's vision and the relationship between this factor and the teaching motivation of lecturers. Similarly, leadership style did affect the teaching motivation of lecturers (Eyal & Roth, 2011).

Academic staff satisfaction

In higher education institutions, finding out the methods and determining the factors that affect lecturers' satisfaction in teaching and scientific research is vital in management science. This study compiles some perspectives on job satisfaction, in which the lecturers are the main research subjects. Job satisfaction comes from interacting with individual variables, job characteristics, and the organization (Hagedorn, 2000). Chen et al. (2006) used six factors to assess the satisfaction of lecturers in China, including organizational vision, respect, feedback on results, management system, salary and welfare, and working environment. Work plays a central role in many people's lives, so one's job satisfaction is an essential component of the overall happiness of employees (Smith, 2007). Job satisfaction is the state that employees feel and satisfy when performing work with clear goals and efficient orientation; besides, he pointed out that satisfaction at work is affected by the combination of three factors, are the expected value from the job, the means of work, and the remuneration from the results of labor in the organization (Lee, 2007). Lecturers' job satisfaction reflects the teachers' affection towards their work or teaching role; it is deemed an emotional state of happy or positive feelings due to evaluating a person's work or work experience (Skaalvik & Skaalvik, 2010). Assessing and recognizing the factors affecting the satisfaction of lecturers helps administrators at institutes provide accurate policies and measures to stimulate and maintain the working motivation of human resources at the organization.

Hypothesis and conceptual model

Some studies have shown a direct and correlated relationship between knowledge management and employees' job satisfaction. Knowledge management systems must overcome organizational difficulties, including employee

confrontations and job satisfaction (Hasballah, 2021). Knowledge management is considered a fundamental factor in increasing the satisfaction level of an organization; the application of elements in the knowledge management process helps shape the interaction between employees and take advantage of the knowledge resources of the involved personnel within the organization, thereby achieving high performance at work and leading to satisfaction with their assigned work (Meher & Mishra, 2021). Employing different empirical methods when applying knowledge management systems is essential in helping organizations manage and achieve their desired performance, impacting their employees' state of mind and actions (Mia & Chowdhury, 2021). Employee satisfaction may be quantified by examining their work satisfaction as a result of knowledge management practices. Knowledge management, which encompasses knowledge acquisition, distribution, development, and retention, has a beneficial effect on work satisfaction (Alias et al., 2018). Hence, the knowledge management system can be a positive antecedent of academic staff satisfaction as these hypotheses:

H1: Knowledge acquisition positively affects academic staff satisfaction in higher education institutions.

H2: Knowledge utilization positively affects academic staff satisfaction in higher education institutions.

H3: Knowledge dissemination positively affects academic staff satisfaction in higher education institutions.

Information dissemination in an organization is affected by several variables, including the nature of the knowledge, employee characteristics, the structure of the company, and employee attitudes (Widodo et al., 2020). Knowledge dissemination is a premise for employees to absorb different knowledge through interactions between colleagues to create new knowledge, effectively use that knowledge, improve their competitiveness, reach personal achievement, and provide new knowledge about product and service improvement. Considering the importance of the competitive environment, a good knowledge management process helps organizations manage knowledge effectively in formulating strategies to compete with competitors in their industry (Khoa & Hoa, 2021). Regarding mutual interactions in the organization, knowledge management helps employees get intense work motivation and achieve satisfaction and enjoyment in work. Kanaan et al. (2019) also explore organizational management practices for better results. This study examines the significant link between knowledge sharing, company culture, and employee motivation. Employees are motivated when information is shared equitably among them as part of the corporate culture. Because employee performance ultimately leads to success, every company must appreciate its workers and enhance their work motivation. In other words, organizational performance in terms of efficiency and effectiveness is linked to employee motivation, ultimately maximized by organizational performance, establishing the importance of knowledge access equality in the organizational culture to learn appropriate knowledge (Soeprayitno & Rahayu, 2019). Hence, the hypotheses were proposed:

H4: Knowledge acquisition positively affects teaching motivation in higher education institutions.

H5: Knowledge utilization positively affects teaching motivation in higher education institutions.

H6: Knowledge dissemination positively affects teaching motivation in higher education institutions.

Motivational factors show the ability to naturally compete in the organization and awareness, personality, attitude, and learning; motivation is an essential behavior factor (Wilkesmann & Lauer, 2020). Consequently, only when the motivational factors are met will the lecturers' positive behaviors be developed to serve their jobs well, creating satisfaction and enjoyment when participating in teaching and research in the organization. Incentives affect motivation, which is associated with work satisfaction (Paais & Pattiruhu, 2020). Crucke et al. (2022) said employee incentives and motivation affect work satisfaction. Hence, this study proposed the last hypothesis:

H7: Teaching motivation positively affects academic staff satisfaction in higher education institutions.

Several academics have cited knowledge management as an example of what it takes to keep knowledgeable employees happy (Chatzoudes et al., 2015; Kianto et al., 2016). The first thing to note is that prior research has shown that knowledge management evaluations focus on subjective criteria, such as the contentment of experts in the field, rather than objective ones. In this approach, knowledge worker happiness is a key indicator of knowledge management success (Sahibzada et al., 2020; Shujahat et al., 2018). Second, rather than weakening the financial incentives, knowledge workers are inspired to find answers to the challenges associated with knowledge-related tasks (Razzaq et al., 2019). Knowledge management equips workers with information and a framework for problem-solving by allocating the appropriate resources to the right people at the right time (Ha et al., 2021). Third, the present research demonstrates that knowledge development may increase knowledgeable workers' happiness since the new creation may boost the worker's productivity. Similarly, when workers share information, everyone's requirements may be satisfied (Ode & Ayavoo, 2020). Finally, knowledge is used to simplify tasks. In a nutshell, the three main tenets of knowledge management (knowledge production, sharing, and application) boost employee happiness and output in the workplace (Kanaan et al., 2019). Previous research on the topic, titled Knowledge Management Processes and Knowledge Worker Satisfaction (Meher & Mishra, 2021; Sahibzada et al., 2020), provides some insight into the connection between knowledge management and happiness at work. Many empirical studies have examined the relationship between knowledge management processes and knowledge worker motivation (Kanaan et al., 2019; Nguyen et al., 2019). The effect of knowledge management techniques on knowledge worker satisfaction and motivation has only been studied in a few cases. Based on seven hypotheses, Figure 1 points out the relationship between the knowledge management system and teaching motivation and academic staff satisfaction; in

which three dimensions of knowledge management systems, including knowledge acquisition, knowledge dissemination, and knowledge utilization, enhance teaching motivation and academic staff satisfaction when the knowledge management systems are adopted.

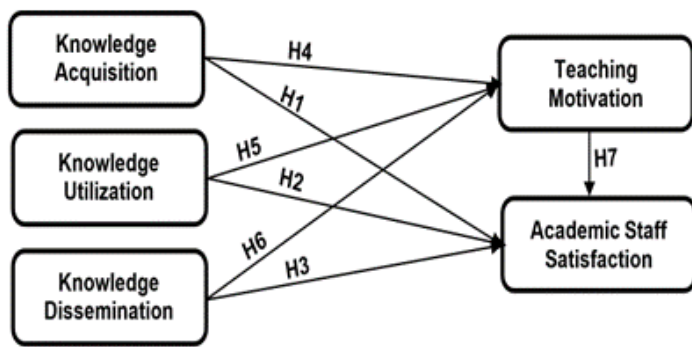


Figure 1. Conceptual model.

Research method

Sampling

This study applied the quantitative research method to achieve the research objectives. The data was collected from the survey based on a self-administered questionnaire distributed to 400 lecturers in the universities in Southern Vietnam. The purposive sampling method was done to collect data in this survey (Saunders, 2018). The participants must have experience in teaching for at least three years, and there is a knowledge management system in their university. The questionnaire used for the survey has screening questions to select appropriate survey subjects, such as "Does your school use a knowledge-sharing system (online bulletin boards, information storage system...)" (Q1) and "How many years have you been teaching?" (Q2). For Q1, if the answer is "No," the survey will stop; the same for Q2 if the answer is less than three years. After screening, 328 responses were used for the data analysis stage, accounting for 82%. There was a balance between the respondents' gender: 50.6% were men and 49.4% women. Moreover, 77.1% of the respondents' age was from 24 to 40. In terms of the university teaching majors, there was 33.8% in management and technical science. Most participants have Master's degrees (58.5%) and doctorates (33.2%). The full information related to respondent demographics is presented in Table 1.

Scale measurement

The research items in this survey were adopted from prior studies. Preliminary research was done to adjust these items through focus group discussions with seven experts, senior lecturers, and researchers in the knowledge management field (Khoa et al., 2022b). The focus group was held under the authors' instruction via a discussion guideline sent via email to the participants. The constructs in the research model have received high acceptance from experts, and the research items that measured the research constructs were modified to adapt to the research context. The knowledge

Table 1. Respondents' demographics.

		Frequency	Percent
Gender	Male	166	50.6
	Female	162	49.4
Age group	24 – 30	105	32.0
	31 – 35	99	30.2
	36 – 40	49	14.9
	40 – 45	30	9.1
	> 45	45	13.7
Major	Management Science	111	33.8
	Technical science	111	33.8
	Social science	106	32.3
Education level	Bachelor	27	8.2
	Master	192	58.5
	Doctor/Ph.D.	109	33.2

management system was assessed by three constructs, including Knowledge Acquisition (AK) with six items, Knowledge Dissemination (7 items, KD), and Knowledge Utilisation (5 items, KU), adopted from Ngoc-Tan and Gregar (2018). Motivation included academic staff satisfaction (3 items, AS) as internal motivation, based on the Education Criteria of the Malcolm Baldrige National Quality Award, retrieved from Lee et al. (2000); and teaching motivation (4 items, TM) as external motivation, adjusted from Tang et al. (2016); Wilkesmann and Lauer (2020). All research items were evaluated via the five-pointed Likert scale, from "1" as "totally disagree" to "5" as "totally agree." The detailed items are shown in Table 2. The collected data were processed by the SPSS and SmartPLS software.

Table 2. Research items.

Code	Items
Knowledge Acquisition (AK)	
AK1	My university promotes and facilitates the inter-group exchange of ideas and information (faculties and administrative staff).
AK 2	My university has a system for collecting information from consumers, workers, business partners, and rivals.
AK 3	My university reacts to our suggestions and records them for future use.
AK 4	My university has rules that encourage employees to continue their education.
AK 5	My university honors us for our fresh ideas and expertise.
AK 6	My university has a system to absorb and transmit information.
Knowledge Dissemination (KD)	
KD1	My university has libraries, resource centers, and other knowledge-sharing venues.
KD2	My university understands the form, which I can use when required.
KD3	My university has a system for patenting new information.
KD4	My university offers a variety of publications that showcase the information that has been collected.
KD5	My university regularly holds symposiums, seminars, conferences, and training sessions to exchange information.
KD6	My university uses various textual methods, such as newsletters and manuals, to preserve the information they collect.
KD7	My university stores data in repositories for quick access by lecturers.
Knowledge Utilisation (KU)	
KU1	My university uses information analysis to generate new patterns and knowledge for future use.
KU2	My university puts information to use in order to meet critical competitive requirements.
KU3	My university protects information against improper or unlawful usage both within and outside.
KU4	My university uses many ways to expand knowledge and apply it to new circumstances.
KU5	My university has a system for screening, cross-referencing, and integrating knowledge.
Academic Staff Satisfaction (AS)	
AS1	I am dedicated to my institution's knowledge management practices.
AS2	I am pleased with their academic advancement possibilities via the institution's knowledge management practices.
AS3	institution's knowledge management practices are satisfactory to me.
Teaching Motivation (TM)	
TM1	Students need the knowledge gathered through the institution's knowledge management practices.
TM2	I am excellent at the subject(s) I teach because of the information gained through the institution's system.
TM3	I want others to be interested in the topic as well (s)
TM4	My instruction, in my opinion, substantially contributes to my student's overall academic development.

Results

The research started with a convergent validity test. This study examined outer loadings, average variance extracted, and composite reliability. According to table 3, external loadings exceeded 0.708, as Hair et al. (2016) suggested. The AVE criterion should be over 0.5. The AVEs in this research ranged from 0.606 to 0.781, which is acceptable. Similarly, the CR varied from 0.902 to 0.945, more than 0.7, as Hair et al. (2019) indicated. Following the convergent validity test, the discriminant validity test was performed. This test was utilized by the Heterotrait-Monotrait ratio of correlations (HTMT) to test discriminant validity, which must be less than 0.85 (Khoa et al., 2022a). As shown in Table 4, the measurement model has sufficient discriminant validity.

Table 3. Result of convergent validity test.

Construct	Composite Reliability	Average Variance Extracted	Outer loading
Knowledge Acquisition	0.902	0.606	[0.726-0.83]
Academic Staff Satisfaction	0.914	0.781	[0.802-0.923]
Knowledge Dissemination	0.945	0.71	[0.731-0.892]
Knowledge Utilisation	0.935	0.744	[0.845-0.89]
Teaching Motivation	0.919	0.739	[0.841-0.883]

Table 4. Result of discriminant validity test (HTMT value).

Construct	Knowledge Acquisition	Academic Staff Satisfaction	Knowledge Dissemination	Knowledge Utilisation
Academic Staff Satisfaction	0.731			
Knowledge Dissemination	0.629	0.714		
Knowledge Utilisation	0.566	0.647	0.62	
Teaching Motivation	0.607	0.714	0.731	0.669

The Variance inflation factor (VIF) measures the degree of multicollinearity in a collection of multiple regression variables. It is equal to the variance of the entire model divided by that of a model with just that one independent variable. Each independent variable's ratio is computed. A high VIF implies a strongly collinear independent variable with the model's other variables. All VIF coefficients in table 5 are less than 3; hence, this research has no multicollinearity.

Table 5. Result of multicollinearity test (VIF value).

Construct	Academic Staff Satisfaction	Teaching Motivation
Knowledge Acquisition	1.64	1.594
Knowledge Dissemination	2.128	1.77
Knowledge Utilisation	1.796	1.612
Teaching Motivation	2.125	

Hair et al. (2016) recommended assessing the structural model by looking at the R², beta, and t-values using a 5,000-resample bootstrapping method. Researchers should also provide the predictive relevance (Q²) and the effect sizes (f²). Sullivan and Feinn (2012) claimed that although a p-value may tell if an impact occurs, it cannot disclose its magnitude. Both substantive (effect size) and statistical significance (p-value) are required in reporting and evaluating research. There are three level of f² as small (> 0.02), medium (> 0.15), and large (> 0.35). Moreover, researchers may also want to investigate Stone-Geisser's Q² value as a criterion of predictive significance (Nguyen & Khoa, 2021). A PLS path model's Q² value is generated by blindfolding latent variables. The threshold of Q² is more

than 0.

In table 6, R²AS is 0.576, which means 57.6% of the variance of academic staff satisfaction could be explained by knowledge acquisition, dissemination, utilization, and teaching motivation. Besides, R² for teaching motivation is 0.529, suggesting 52.9% of the change in teaching motivation is due to three factors belonging to knowledge management practices. Secondly, Q²AS is 0.44 and Q²TM is 0.382, which are larger than 0; therefore, the presence of endogenous latent variables implied that the PLS route model is predictive of these constructs.

Combining the results from table 6 and table 7, knowledge acquisition ($\beta = 0.148$, $t = 2.546$, $p < 0.05$, $f^2 = 0.029 > 0.02$), knowledge dissemination ($\beta = 0.41$, $t = 7.511$, $p < 0.001$, $f^2 = 0.202 > 0.15$), knowledge utilization ($\beta = 0.294$, $t = 5.306$, $p < 0.001$, $f^2 = 0.114 > 0.02$) positively influenced teaching motivation as applying the knowledge management system. These results give support for H4, H5, and H6.

Table 6. Result of R Square, f square, and Q square.

Construct	R Square	f Square		Q Square
		Academic Staff Satisfaction	Teaching Motivation	
Knowledge Acquisition		0.129	0.029	
Academic Staff Satisfaction	0.576			0.44
Knowledge Dissemination		0.065	0.202	
Knowledge Utilisation		0.04	0.114	
Teaching Motivation	0.529	0.046		0.382

Knowledge acquisition ($\beta = 0.299$, $t = 5.64$, $p < 0.001$, $f^2 = 0.129 > 0.02$), knowledge dissemination ($\beta = 0.241$, $t = 3.675$, $p < 0.001$, $f^2 = 0.065 > 0.02$), knowledge utilization ($\beta = 0.174$, $t = 2.871$, $p < 0.01$, $f^2 = 0.04 > 0.02$), and teaching motivation ($\beta = 0.204$, $t = 3.296$, $p < 0.01$, $f^2 = 0.046 > 0.02$) have a positive impact on academic staff satisfaction. These results give support for H1, H2, H3, and H7.

Table 7. Path coefficient result

Relationship (Hypothesis)	β	t	Sig.	Result
Knowledge Acquisition -> Academic Staff Satisfaction (H1)	0.299	5.64	0.000	Supported
Knowledge Utilisation -> Academic Staff Satisfaction (H2)	0.174	2.871	0.004	Supported
Knowledge Dissemination -> Academic Staff Satisfaction (H3)	0.241	3.675	0.000	Supported
Knowledge Acquisition -> Teaching Motivation (H4)	0.148	2.546	0.009	Supported
Knowledge Utilisation -> Teaching Motivation (H5)	0.294	5.306	0.000	Supported
Knowledge Dissemination -> Teaching Motivation (H6)	0.41	7.511	0.000	Supported
Teaching Motivation -> Academic Staff Satisfaction (H7)	0.204	3.296	0.001	Supported

SRMR = 0.054; NFI = 0.921; RMS_theta = 0.1

The SRMR was introduced by Henseler et al. (2014) as a goodness-of-fit metric for PLS-SEM that may be used to prevent model misspecification. Moreover, Bentler and Bonett (1980) pointed out that Normed Fit Index (NFI) was one of the earliest fit metrics presented in the SEM literature. Consequently, the NFI produces values ranging from 0 to 1; the greater the NFI, the better the fit. NFI values greater than 0.9 generally indicate a good match. Lohmöller (2013) defined RMS theta as the root mean squared residual covariance matrix of the outer model residuals. Because outer model residuals for formative measurement models are meaningless, this fit metric is only appropriate for evaluating purely reflective models. RMS theta values less than 0.12 suggest that the model is well-fitting. The result in table 7 indicates a good fit model.

Discussion

The research found a positive relationship between knowledge management, teaching motivation, and academic staff satisfaction. Research in Vietnam's educational environment is the basis for enriching research materials on knowledge management in education. Research shows that the component elements of a knowledge management system are knowledge acquisition, knowledge utilization, and knowledge dissemination, which can have a substantial and direct impact on teaching motivation and academic staff satisfaction, as shown in Figure 2.

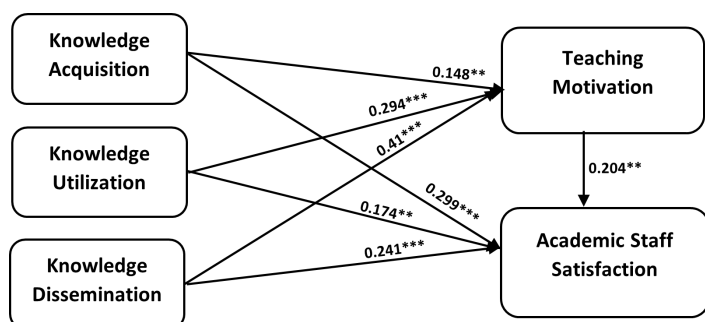


Figure 2. The resulting model (* $p < .05$. ** $p < .01$).

Ngoc-Tan and Gregar (2018) used three factors, knowledge acquisition, knowledge utilization, and knowledge dissemination, to explore the impact on improvement in the organization. Alias et al. (2018) studied knowledge management practice but using knowledge acquisition, knowledge creation, knowledge sharing, knowledge codification, and knowledge retention affecting employee job satisfaction; this result is similar to the impact of knowledge management on the satisfaction of lecturers (Alias et al., 2018); although, this study mentioned three other aspects, knowledge acquisition, knowledge utilization, and knowledge dissemination. Managers can increase their organization's competitive advantages by exploring the relationship between knowledge management and employee satisfaction. Hence, the knowledge management system is a crucial factor in creating a correlative relationship with employees' job satisfaction in an organization; therefore, exploring and examining the impact of knowledge management on academic staff satisfaction is always a topic of interest to management scientists. When knowledge management impacts work happiness, improved knowledge management applications might boost lecturers' satisfaction (Hasballah, 2021). Knowledge management may be used to solve organizational difficulties, thereby reaching the desired objectives and vision. As a result, knowledge management is vital in boosting work satisfaction. Knowledge management may assist businesses in identifying, selecting, organizing, disseminating, and transferring critical information and experiences (Mathew, 2010). Despite their distinctions, information and knowledge are sometimes employed interchangeably. Knowledge is derived through the flow of information because information gives a fresh perspective on perceiving each event or item. Information is the medium or substance required to acquire, create, and grow knowledge. This study's findings are congruent with those of Jadidi et al. (2013), who claim that knowledge management impacts

work satisfaction.

Several studies related the relationship between knowledge management and employee motivation (Chen et al., 2010; Ergün & Avci, 2018); this study realized a closely correlative relationship between these two elements; the studies here study employees in the organization. Sharing and using knowledge will enhance its core competencies and ultimately maximize operational efficiency in the relationship with its co-workers' superiors and facilitate interpersonal communication among the organization's human resources. Besides, employee satisfaction is equally crucial to the growth and development of the organization (Ifinedo, 2003; Shah et al., 2012). Employee motivation is critical for the success of continuing education in the information age (Kanaan et al., 2019). To realize this inspiration, the formation must encourage the effective pursuit of additional (recognized) qualifications, promote major mobility and professional flexibility, and link access to additional knowledge of the mutations at play within the firm and their context in order for the formation to become integral to the firm's overarching global strategy (Nguyen et al., 2019). The 'know-how' and dedication held by an organization's human capabilities differentiates successful organizations from others. According to Olomolaiye and Egbu (2004), knowledge workers or lecturers are unique resources that require and deserve management time and attention.

Highly driven lecturers are more likely to take advantage of learning and development opportunities since they are self-motivated and value their independence (Demircioglu & Chen, 2019). Two types of worker motivation have been identified: intrinsic and extrinsic (Paais & Pattiruhu, 2020). Hayati and Caniogo (2012) investigated the impact of intrinsic motivation on satisfaction. According to the research of Klaijnsen et al. (2018), motivation is defined as "a psychological process that provides goals and direction for employee behavior" or "an internal drive to meet employee satisfaction," in addition to other factors, such as internal processes and external forces related to organizational behavior.

Conclusion

This research examined the relationships between knowledge management, teaching motivation, and university academic staff satisfaction. According to the study, knowledge management is a favorable predictor of teaching motivation and teacher satisfaction. The study's findings helped shape an applied model of the good association between knowledge management and job motivation and satisfaction. The findings further support the positive link between teaching motivation and job satisfaction.

Higher education institutions need to strengthen and innovate the management work to improve the effectiveness of the knowledge management system. This study is relevant for managers, as the results relate to knowledge management, thereby being applicable to management activities at higher education institutions in Vietnam in order to improve the satisfaction and teaching motivation of the

lecturers, which significantly helps in the development and maintenance of the organization's resources.

For knowledge acquisition, managers should continuously invest in infrastructure, especially technology, to store data systems. Higher education institutions must invest in an extensive server system to store various knowledge resources, including teaching materials, student-related resources, and scientific research in Vietnam. At the same time, universities should use electronic resources through the electronic library system in association with considerable electronic resources at major universities in the world; this solution will create a significant support source to enhance the development of the knowledge acquisition system of lecturers.

With knowledge dissemination, digital resources will be the foundation and center for sharing knowledge with lecturers. The electronic database must be regularly updated to share knowledge with users promptly. In addition, higher education institutions need to organize online conference programs and online training classes to disseminate knowledge to lecturers. The Covid-19 pandemic has caused the world to shift to more online training and teaching through online software such as Zoom, MS-team, and Google meetings. In addition, universities need to use the online learning, exchange, and examination system LMS (Learning Management System) as a foundational tool to use, share and disseminate knowledge.

As for knowledge utilization, managers should encourage increased learning and use of the source of knowledge provided to form specific rules or processes. Managers should form a mindset and attitude to continuously use internal and external sources of knowledge to form habits for all human resources in the organization. Using good knowledge resources will help improve teaching and research productivity, motivating them to study and use knowledge to continue developing themselves.

Our research only evaluates the dynamics of knowledge management with three components as the foundation for acquiring, using, and disseminating knowledge. We believe that further research directions can expand knowledge management components to achieve better results. Another factor that researchers may be interested in is the multicultural factor. Ngoc-Tan and Gregar (2018) pointed out that universities in different countries with different cultural factors will give many exciting results, so further research can be done in different countries, which will have updated results on teaching motivation and academic staff satisfaction.

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