
Factors Affecting Knowledge Management: A Study in Al-Madinah International University, Malaysia

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Abstract

The aim of this study is to investigate the factors which can affect the knowledge management in Al-Madinah International University, Malaysia. This study employs a quantitative methodology for which questionnaires were distributed to on-campus staff at the university and a sample of 138 responses was collected for multiple regression analysis. Statistical Packages (SPSS) software was used to analyze the structure model. The results show that the motivation factors such as social interaction, trust, management support, learning orientation and motivation can provide explanation of knowledge sharing. This study found a positive correlation between sharing knowledge and the social interaction. Therefore, this study suggests that when knowledge is built and is shared then it creates a positive impact on an organizations employees. This study will contribute to the literature in the field of knowledge sharing. Comparatively, the studies focusing on knowledge sharing among Malaysian universities are limited.

Keywords: Knowledge Sharing, Five Potential Factors, Al-Madinah International University (MEDIU), Malaysia.

1. INTRODUCTION

In essence, Knowledge Management (KM) has a general linkage to the construction of accuracy of the knowledge or the sources of knowledge such as manpower for certain individuals at a suitable time (Wabwezi, 2011). As such, considering that almost all KM initiatives require knowledge sharing, knowledge sharing may

become the most important aspect (Singh *et al.*, 2021; Hirlak&Yeşil, 2018). Sharing knowledge can both be a pull or a push; knowledge workers, when they look for knowledge sources, they create a pull (e.g., cooperation with colleague, experts, and library search), the user is pushed knowledge onto him because of this the knowledge push happens (e.g., unsolicited periodicals, and newsletter) (Ali *et al.*, 2019). Knowledge sharing (KS) affects working relationships, power spreading, and patterns of influence (Argote, 1999). For organizations, the KS initiative needs the management of change and motivation, and so, ascertaining what is required in the launch of a KS initiative is crucial for the assurance of fruitful outcomes. Consequently, the behavior of employees and organization needs modification, like boosting the motivation and redirecting the efforts or develop their loyalty and social force (Chau, 2018).

In the University, some factors were found to affect knowledge sharing, and therefore, 5 potential factors were proposed in the model which are: trust, social interaction, motivation, management support and learning orientation. All these factors describe knowledge sharing in organizations and how knowledge sharing is improved when the factors interact (Iqbal *et al.*, 2019). Companies of telecommunication deal with a lot of challenging tasks, and for this reason, Nazim and Mukherjee (2016), stressed the importance of knowledge sharing practice in the company. Knowledge sharing determinants which are critical for success in the University in Malaysia is examined, and these determinants: trust, social interaction, motivation, management support and learning orientation. This research has attempted to answer the questions such as, is there a relationship between social interaction and knowledge sharing at the MEDIU?. Is there a relationship between trust and knowledge sharing at MEDIU?. Is there a relationship between motivation and knowledge sharing at MEDIU?. Is there a relationship between learning orientation and knowledge sharing at MEDIU? And is there a relationship between management support and knowledge sharing at MEDIU?. The objectives of this study are to examine the relationship between social interaction and knowledge sharing at MEDIU. To study the relationship between trust and knowledge sharing at MEDIU. To investigate the relationship between motivation and knowledge sharing at MEDIU. To explore the relationship between learning orientation and knowledge sharing at MEDIU and to determine the relationship between management support and knowledge sharing at MEDIU.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The primary purpose of knowledge-based social development and knowledge management is to enable and boost knowledge sharing between and among the organizational entities including units, individuals, in addition to communities (Newell *et al.*, 2002).

2.1 Knowledge Sharing

Theory of Reasoned Action (TRA) is a social psychology model. This theory explains the reasons behind the intended behavior (Ajzen, 1985). According to this theory the reasoned actions are focused on the knowledge sharing behavior which is intended (Bock *et al.*, 2005). This theory represents the social norms and attitude which influences knowledge sharing behavior (Ajzen, 1985). Due to this swiftness of expansion, new knowledge needs to be fashioned using the accessible one (Alavi&Leidner,2001), and then realized. In this regard, the expression “Knowledge itself is power” coined by Francis Bacon was changed to “Knowledge is power” as expressed by Brown(1989).

2.2 Social Interaction on Knowledge Sharing

Davenport and Prusak (1998) indicated that in achieving successful knowledge sharing, the method chosen must always be appropriate with the social processes and culture of the organization. Relevantly, the behavior of individuals and mindsets and their consequential relationships are dictated by diverse contextual dimensions (De Long & Fahey, 2000).The organizational context, social climate and culture, therefore, typify the interconnecting standpoints on the similar phenomenon (Ashkanasyet *al.*, 2000; Koranteng&Wiafe, 2019). Hence, based upon the discussed findings, the test will be carried out on the hypothesis below:

H1: Social interaction (SI) significantly affects knowledge sharing (KS)

2.3 Trust on Knowledge Sharing

The construct of trust has not been adequately explored as well. In this regards to this construct, Webb (1996) reported the presence of those who believe that high-level trust may obstruct monitoring, and this could reduce cooperation. Conversely, Argoteet *al.* (2003) reported the presence of those who believe that trust among participants could facilitate knowledge sharing. Meanwhile, Levin and Cross (2004) discovered that trust could mediate the perceived usefulness of knowledge. In knowledge sharing, Harris *et al.* (1999) reported the importance of relationship development grounded upon trust (Nerstad et al.,2018). Hence, grounded upon the outcomes of past works, the following hypothesis will be tested in this study:

H2: Trust (TR) significantly affects knowledge sharing (KS)

2.4 Motivation on Knowledge Sharing

Accordingly, Argoteet *al.* (2003) stated that the organizational involvement is dependent on the learning motivation.Organizational members who are motivated can easily and effectively deal with bad situations, this is other than their ability of faster knowledge transfer. Osterloh and Frey (2000) mentioned that there are two types of motivation: one motivation type is extrinsic which encompasses recognition, incentives, pay, and awards, and the other motivation is intrinsicwhich

is linked to the factors associated with work and the environment (Gagné *et al.*, 2019). Hence, grounded upon the relevant findings reported in past researches, the following hypothesis is to be tested in this study:

H3: Motivation (MO) significantly affects knowledge sharing (KS)

2.5 Learning Orientation on Knowledge Sharing

Learning orientation can affect the organization's inclination to create, apply and sharing all type of knowledge (Baker & Sinkula, 1999). Learning at the level of organization signifies the interpretation of the mutual comprehension and cooperative action which results in procedures, new products, strategies, and methods as well (Crossan *et al.*, 1999). Through the commitment towards open-mindedness, learning and mutual vision, Vera and Crossan (2004) and Baker and Sinkula (1999) reported the effect of organizational context on both knowledge sharing and learning, and with all these combined, the construct learning orientation can be formed (Farooq, 2019). Organizations, therefore, need to continuously find and mend errors discovered in their implemented theories (Crossan *et al.*, 1999). Hence, grounded upon the past highlighted findings, the following hypothesis is to be tested in this study:

H4: Learning orientation (LO) significantly affects knowledge sharing (KS)

2.6 Management Support on Knowledge Sharing

The management support literature reported the worth of the style of top management when and supporting the environment for effective knowledge innovation and sharing inside units of business (Van de Ven, 1986; Pan & Scarbrough, 1998; Vera & Crossan, 2004). Accordingly, managers could consistently promote the sharing of knowledge among employees while also providing the needed support. Relevantly, Hambrick and Mason (1984) who are theorists of strategic leadership have emphasized the significance of making decisions at the level of top management to the organization's outcomes. Eventually, the made decisions will determine that what will happen to the business units and organization (Hambrick, 1989; Han *et al.*, 2019). Hence, grounded upon the past findings discussed, the following hypothesis is to be tested in this study:

H5: Management support (MS) significantly affects knowledge sharing (KS)

In the theoretical framework, the model includes the primary knowledge sharing (KS) predictors which are conjectured as Management support (MS), Social interaction (SI), Learning orientation (LO), Trust (TR), and Motivation (MO). Nonetheless, in this study, a chance of exploration of the inclusion of the independent variables to be an IV factor which imparts an impact on knowledge sharing (KS) which functions as the DV of this study. In order to ascertain the degree of the 5 independent variables (Management support (MS), Social interaction

(SI), Learning orientation (LO), Trust (TR), and Motivation (MO)) are vital in impacting its direction, Knowledge sharing (KS) will be scrutinized further.

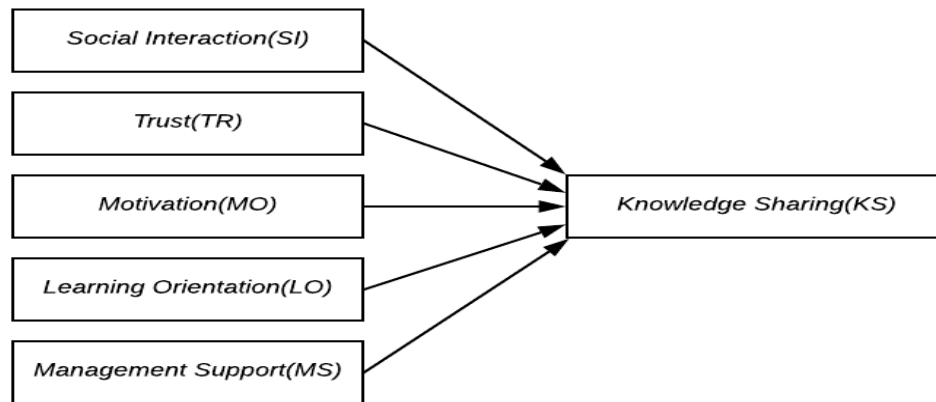


Fig1. Conceptual Framework

3. METHODOLOGY

3.1 Research Paradigm and Approach

This study, adopted descriptive research methodology. A survey design which was descriptivewas used, the aim of which was to gathering accurate and complete information that can help in defining the current phenomenon. Literature review is used to develop a questionnaire. The software package SPSS was used for finalization of conceptual model. The relationships between the constructs can be predicted which are hypothesized in the model.

3.2 Research Design

A questionnaire for collection of data. To conduct a behavioral and social sciences research, a survey method is used which evaluates the behavior and attitudes of the sample population (Creswell, 1994). The information management and library sciences professions are mostly using these variable types and they concentrate on Knowledge Sharing (KS) role of the variables which areperceived, which are not studied that often so they can conclude the Knowledge Sharing (KS) of theuniversity staff.The assumption is that if a questionnaire is used then it can generate an illustration which isreliableof the variables which are perceived in knowledge sharing (KS) at the university.

3.3 Population and Sampling

Systematic random sampling was adopted in this study (Cooper & Schindler, 2011; Creswell, 2009).

3.4 Population

The strength of the staff at the university according to the HR department is 191. Sekaran's (2003) stated that with the confidence interval of 11.99 and with the confidence level of 95% of the sample size calculator, it was calculated that the sufficient sample size will be 138.

3.5 Sampling Method

Questions help in obtaining the data by using a survey, questionnaire, polls, and the statistical data which was pre-existing was manipulated by using the computational techniques application. The main aim of quantitative research is to gather the data which is numerical and data generalization for the groups of the individuals or clarification of the phenomenon in a question. This study will use quantitative questionnaire.

3.6 Sampling Frame

This study has used the sampling frame by Sekaran (2003). The population is 191 employees and the sampling frame is 138 employees of Al-Madinah International University.

3.7 Research Sampling Technique

In the methods of probability sampling, the systematic sampling includes those participants which belong to the bigger population which is based upon random being a point and also fixed, periodic intervals. The total staff of 138 was chosen using this sampling technique.

3.8 Research Design Data Collection Technique and Time Horizon

This research will use a survey. An online questionnaire will be distributed by using Google documents which are called the Google Surveys. All information and the data will be recorded by default and then it will be transferred into the Google Spreadsheet, after that it will be analyzed by using the statistical packages (SPSS).

3.9 Time Horizon

To study a phenomenon in a certain point in time of a question, cross-sectional study must be used. That's why the research projects which are carried by scholars to fulfill the requirement of their academic degree are done in one point in time (Saunders *et al.*, 2000). To carry out this work, a confirmatory test was done with the help of an online questionnaire which was given to the members which were online so it can revalidate the findings which were qualitative so to see that a cross-sectional study is construable.

The skewness and kurtosis was in the acceptable range of -2.58 and +2.58 at the 0.01 significance level or between -1.96 and +1.96 at 0.05 of the significance levels

for skewness and the normal range is between -3 and +3 for kurtosis.

3.10 Hypothesis Testing: Correlation

In order to analyze the relationships in the proposed model, the hypothesis have been created by using the factors. Here, when we talk about the scores then we talk about the variables and the constructs and factors which are computed. After that, the values which are obtained go through the correlation analysis.

When all test were done on the hypothesis, it indicated that the constructs are having a positive relationship. As such, it is observed that there is a positive correlation which is different from zero and it is meeting the criterion which is minimum and this is stated earlier and it indicates that it is supporting both the relationships and the hypothesis. A simple correlation hypothesis test (zero-order) was performed.

3.10.1 Social Interaction

The H1 indicates that there is a positive relationship between Social interaction (SI) and knowledge sharing (KS). According to Pallant (2016), the value which is less than 0.01 is a significance value which is observed in the correlation test, it shows that the two variable have a relationship and it also covers that statistically it has a unique contribution towards the equation. The below table show the correlation coefficient which is .679 between the two variables. The results show that there is a positive relationship and at the zero-order level, H1 is supported.

Table 1: Hypothesis H1 Testing

	IV1	DV
IV1	Pearson Correlation	.679**
	Sig. (2-tailed)	.000
	N	50
DV	Pearson Correlation	.679**
	Sig. (2-tailed)	.000
	N	50

***. Correlation is significant at the 0.01 level (2-tailed).*

3.10.2 Trust

The H2 indicates that there is a positive relationship between Trust (T) and knowledge sharing (KS). The below table show the correlation coefficient which is .687 between the two variables. The results show that there is a positive relationship and at the zero-order level, H2 is supported.

Table 2: Hypothesis H2 Testing

	IV2	DV
IV2	Pearson Correlation	.687**
	Sig. (2-tailed)	.000
	N	50
DV	Pearson Correlation	.687**
	Sig. (2-tailed)	.000
	N	50

***. Correlation is significant at the 0.01 level (2-tailed).*

3.10.3 Motivation

The H3 indicates that there is a positive relationship between Motivation (MO) and knowledge sharing (KS). The below table show the correlation coefficient which is .774 between the two variables. The results show that there is a positive relationship and at the zero-order level, H3 is supported.

Table 3: Hypothesis H3 Testing

	IV3	DV
IV3	Pearson Correlation	.774**
	Sig. (2-tailed)	.000
	N	50
DV	Pearson Correlation	.774**
	Sig. (2-tailed)	.000
	N	50

***. Correlation is significant at the 0.01 level (2-tailed).*

3.10.4 Learning Orientation

The H4 indicates that there is a positive relationship between Learning Orientation (LO) and knowledge sharing (KS). The below table show the correlation coefficient which is .674 between the two variables. The results show that there is a positive relationship and at the zero-order level, H4 is supported.

Table4:Hypothesis H4 Testing

	IV4	DV
IV4	Pearson Correlation	.674**
	Sig. (2-tailed)	.000

	N	50	50
DV	Pearson Correlation	.674**	
	Sig. (2-tailed)	.000	
	N	50	50

***. Correlation is significant at the 0.01 level (2-tailed).*

3.10.5 Management Support

The H4 indicates that there is a positive relationship between Management Support (MS) and knowledge sharing (KS). The below table show the correlation coefficient which is .779 between the two variables. The results show that there is a positive relationship and at the zero-order level, H5 is supported.

Table 5: Hypothesis H5 Testing

		IV1	DV
IV1	Pearson Correlation		.779**
	Sig. (2-tailed)		.000
	N		50
DV	Pearson Correlation	.779**	
	Sig. (2-tailed)	.000	
	N	50	

***. Correlation is significant at the 0.01 level (2-tailed).*

3.11 Hypothesis Tests:Regression Model

In order to study the proposed research model, multiple regression analysis is done to study the factors influence between them. When the hypothesis was tested, they indicate that influence is existing between the constructs. The analysis was done using one regression model only. The dependent variable was Knowledge sharing, the effectiveness is studied with other independent variables. Multiple regression analysis was used. The results are as follows in Table 6

Table 6: Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809 ^a	.654	.652	2.940

a. Predictors: (Constant), IV1, IV2, IV3, IV4, IV5

b. Dependent Variable: DV

According to(Hair *et al.*, 2014), when the researchers are interested in measuring the fraction of the total variance of the variable which is dependent, then they use

the coefficient of determination (R^2) This is described by the variable which is a predictor variable or a variable which is independent. The explanatory power of a regression model can be good if the value of R^2 which is obtained is high. If you see the table 6, the variable which is dependent, the R^2 value which is obtained from the regression model of this dependent variable, the effectiveness of knowledge sharing is .654. The regression model describes the staff effectiveness; this is indicated by the total variance which is 65.4 percent knowledge sharing which is describing this effectiveness. The value which is obtained (.654) is high. So, this indicates that the power of the regression model is good. So, it is then stated that the model is significant, which is statistics wise ($F=279.561$, $p<0.001$). The significance and the regression values of the coefficients establishes the factors in the model.

4. DISCUSSION AND RESEARCH FINDINGS

The findings of the research will be discussed to answer the research objectives. There are five objectives in this study, which are identified and will be explained and justified further, as below:

Social Interaction: is a contact which is happening on frequent basis between the individual's groups (Hansen, 1999), which determine both intra and inter-organizational associations through performing integrated activities by actors in different processes and also in routine sharing of knowledge. Keeping this context, many studies have reported the frequency of the communication and the closeness (e.g., Ghosale *et al.*, 1994; Tsai & Ghoshal, 1998; Tsai, 2001; Becerra & Gupta, 2003) as the determinant which is primary which creates effective social interaction. In this study, the results show a positive relationship between the knowledge sharing and social interaction. It also shows, the hypothesis is agreed on social interaction as it identifies it to be one of the predictors that can influence the sharing of knowledge of staff at the university.

In the social context, the individual property is trust (Giddens, 1990). As it is documented by numerous researches (e.g., Tsai & Ghoshal, 1998; Von Krogh *et al.*, 2000; Newell *et al.*, 2002), when there is trustworthiness and there is high mutual trust among employees exists then there is effective sharing of knowledge which improves the processes and activities.

In this study, the results show a positive relationship between the knowledge sharing and trust. It also shows, the hypothesis is agreed on trust as it identifies it to be one of the predictors that can influence the sharing of knowledge of staff at university.

The key determinant of knowledge sharing is motivation. Argote *et al.* (2003) reported the dominant force within an organization that can drive involvement is

motivation. The motivated employees of an organization can handle circumstances which are ill-structured easily and with more effectiveness as they are capable of transferring the knowledge faster. In this study, the results revealed that there exists a positive relationship between the knowledge sharing and the variable, motivation. It also shows, the hypothesis is agreed on motivation as it identifies it to be one of the predictors that can influence the knowledge sharing of staff.

One of the characteristic of an organization is learning orientation which helps in impacting the proclivity of the organization which can generate, as well as employ and sharing knowledge (Baker & Sinkula, 1999). Crossan *et al.* (1999) described that the learning that takes place at the organizational level indicates the understanding of mutual action and the understanding which is common into the fresh schemes, procedures, strategies, as well as products. In this study, the results show a positive relationship between the knowledge sharing and learning orientation. It also shows, the hypothesis is agreed on learning orientation as it identifies it to be one of the predictors that can influence the knowledge sharing of staff.

Management support is essential in sharing knowledge and the business unit's innovation (Van de Ven, 1986; Pan & Scarbrough, 1998; Vera & Crossan, 2004).

In this study, the results revealed that there exists a positive relationship between the knowledge sharing and management support. It also shows, the hypothesis is agreed on knowledge sharing as it identifies it to be one of the predictors that can influence the knowledge sharing of staff.

Table 7: Findings Summary of Hypothesis

Hypothesis	Result	Summary
H1: Social interaction (SI) significantly affects knowledge sharing (KS)	Supported	Correlation analysis shows a positive relationship between Social interaction towards knowledge sharing
H2: Trust (TR) significantly affects knowledge sharing (KS)	Supported	Correlation analysis shows a positive relationship between Trust towards knowledge sharing
H3: Motivation (MO) significantly affects knowledge sharing (KS)	Supported	Correlation analysis shows a positive relationship between Motivation towards knowledge sharing
H4: Learning orientation (LO) significantly affects knowledge sharing (KS)	Supported	Correlation analysis shows a positive relationship between Learning orientation (LO) towards knowledge sharing

H5: Management support (MS) significantly affects knowledge sharing (KS)	Supported	Correlation analysis shows a positive relationship between Management support (MS) towards knowledge sharing
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In this research model, the hypothesis results are;

1. Social Interaction (SI) have a direct relationship with Knowledge Sharing (KS).
2. Trust (T) have a direct relationship with Knowledge Sharing (KS).
3. Motivation (MO) have a direct relationship with Knowledge Sharing (KS).
4. Learning Orientation (LO) have a direct relationship with Knowledge Sharing (KS).
5. Management Support (MS) have a direct relationship with Knowledge Sharing (KS).

5. Conclusion

Knowledge sharing caused a major improvement in organization's systems at the university. This research can pave the way for the future researches and can contribute towards understanding the level of sharing knowledge which can benefit the staff and the companies. Other than this, the objectives of this research have answered some key questions and have also recommended, important justification for further investigation by keeping in mind this ground. According to a study by Koranteng and Wiafe, (2019), social interaction plays a key role in knowledge sharing. The managers must focus on active social interaction of employees so they can share information in a friendly environment in which they feel more connected with their peers. Furthermore, trust shows a further strengthening of interpersonal relationships among the employees, thus serving as a critical link in bridging the gap between employees intentions to share the information and their actually sharing the information (Nerstad et al., 2018). The employees learning orientation is found to have a positive correlation with the knowledge sharing. As the employees learning scale increases when the knowledge sharing is done freely (Gagné et al., 2019). According to a study by Han et al., (2019), the management support is required at every step of the implementation of knowledge sharing strategy. If management support is missing then employees feel demotivated and they then lack the enthusiasm in openly sharing the information.

The study has added important literature in terms of the current factors that need to be considered while evaluating the knowledge sharing (KS) among staff at of the university. The results of the research will help in developing a new model for managers among companies and universities in Malaysia and other respected

places (Singh et al., 2021). The Managers can use the knowledge sharing practice effectively to gain the maximum result from their staff members. Knowledge sharing at university level is critical because the whole system can only perform when the employees are well aware of the systems, procedures and the other aspects of an organization. The employees at the university level are also called knowledge workers. The nature of their work is different as compared to the employees working in organizations. The university employee's requirement is to increase their knowledge and how they can do this that can only be done through receiving the latest information. It is also observed that there are employees who tend to create hurdles in sharing of knowledge. This behavior is because of the fear of losing their authority which they have developed because of their unique knowledge. Furthermore, this study have investigated five critical factors which can serve the managers at the university level to better share knowledge among their employees.

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