Factors Determining the Knowledge Sharing Practices among Graduate Students in Kerala: An Empirical Analysis

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Abstract

The present study has been carried out with the objective of identifying the various factors determining the knowledge sharing practices of graduate students. The study is an empirical one and employed cross-sectional study design. The data required for the study has been collected from a representative sample of 400 graduate students studying in various higher education institutions in the state of Kerala by administering the knowledge sharing practices scale. The study identifies the various factors determining their knowledge sharing practices by employing factor analysis.

Key Words: *Knowledge Sharing Practices; Graduate Students; Factor Analysis*

1. The context of the Study

Knowledge is a social phenomenon (Brown and Duguid, 2002) and hence it involves people. Knowledge is comprised of experience, values, contextual information, and insights acquired through experience. Together, these serve all as a basis for evaluation and integration of new information and experience. Knowledge is created and implemented in the brain of a person. In organisations, knowledge is incorporated into documents, databases, business procedures

and organisational norms (Davenport and Prusak, 2000). Areekkuzhiyil (2016) asserts, knowledge can be regarded as the only unique resource that grows when shared, transferred, and managed skillfully. Knowledge is one of the most important intangible assets possessed by human beings. Unlike other finite resources like land, capital and labour, knowledge is an infinite resource that can generate increasing returns through its systematic use and application. In the 21st century, knowledge is being considered to be the primary production resource and managing knowledge is the main focus of modern organisations.

Knowledge sharing can define as a social interaction culture, involving the exchange of individual knowledge, experiences, and skills through the whole organisation. Knowledge sharing comprises a set of shared understandings related to providing employees access to relevant information and building and using knowledge networks within organisations (Hogel et al., 2003).

Enabling efficient knowledge sharing is not easy. The challenges are often related to motivating people to share knowledge, identifying the key people to share their knowledge, organizing the existing knowledge and making knowledge easily accessible (Logan, 2006).

Knowledge sharing behaviour is able to provide opportunities to equip academics not only with knowledge but also skills and professionalism to meet the requirements of human resources in achieving a knowledge-based economy. However, one of the significant barriers preventing individuals sharing knowledge is insufficient motivation or lack of reward, either monetary or non-monetary (Azudin, Ismail and Taherali, 2009)

2. Knowledge Sharing Practices- An Overview

Knowledge Sharing is defined as a complex and dynamic exchange occurring through a relationship between two actors. This process involves both "enquiring and contributing to knowledge through activities such as learning by observation, listening and asking, sharing ideas, giving advice, recognizing cues, and adopting patterns of behaviour" (Bosua and Scheepers, 2007). It is the exchange of knowledge between at least two parties in a reciprocal

process allowing reshaping and sense-making of the knowledge in the new context (Willem, 2002). Knowledge sharing is the process intended at exploiting existing knowledge, identifying existing and accessible knowledge, in order to transfer and apply this knowledge to solve specific tasks better, faster and cheaper than they would otherwise have been solved (Christensen, 2007). It includes the exchange of ideas, information, experience or expertise between individuals. In the present study knowledge sharing practices has been assessed using the knowledge sharing practices scale. Greater scores in the knowledge sharing practices scale indicate a higher level of knowledge sharing.

3. The objective of the Study

The objective of the study is to analyse and identify the factors determining the knowledge sharing practice among the under graduate students in Kerala.

4. Methodology

The study is an empirical one. The study is based on primary data. Cross-sectional study design has been used for the study. Stratified sampling technique has been employed to select the required sample. While selecting sample due considerations has been given to (i) type of the Institution and (ii) stream of course of the respondents. The sample size selected for the study is 400 under graduate students of various institutions of higher education in the state of Kerala.

5. Tool Used for Data Collection

The primary data required for the study has been collected with the help of Knowledge Sharing Practices Scale (Areekkuzhiyil, 2018). Knowledge sharing practices scale is a Likert type five-point scale which includes items to assess the different dimensions of knowledge sharing practices of students. The convergent validity and discriminant validity of the various constructs of the knowledge sharing practice scale is above the accepted level. The Cronbach's alpha is found to be 0.938 and composite reliability is 0.928 for the knowledge sharing practices scale.

6. Results and Discussion

Exploratory factors analysis has been performed to classify the items into different groups. Principal component analysis (PCA) method was selected to generate the initial solutions for the EFA. Table 1 indicates that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy worked out to 0.747, clearly establishing the reliability of the constructs (Malhotra, 2007) and indicate that the relationship with the items is statistically significant and is suitable for EFA to provide the parsimonious set of factors (Tabachnick and Fidell, 2007). The Bartlett's test of sphericity is significant which indicates that the correlation among the measurement items is higher than 0.3 and are suitable for EFA (Hair et al., 2006). Table 2 presents the information of communalities explained by each item.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.747
Bartlett's Test of Sphericity	Approx. Chi-Square	3413.636
	Df	561
	Sig.	0.000

Table 2: Communalities Shared by Individual Items

item	Initial	Extraction	item	Initial	Extraction	item	Initial	Extraction
1	1.000	0.637	12	1.000	0.622	23	1.000	0.754
2	1.000	0.628	13	1.000	0.725	24	1.000	0.751
3	1.000	0.490	14	1.000	0.499	25	1.000	0.641
4	1.000	0.609	15	1.000	0.587	26	1.000	0.645
5	1.000	0.607	16	1.000	0.408	27	1.000	0.594
6	1.000	0.538	17	1.000	0.523	28	1.000	0.731
7	1.000	0.699	18	1.000	0.467	29	1.000	0.688
8	1.000	0.574	19	1.000	0.564	30	1.000	0.446
9	1.000	0.458	20	1.000	0.632	31	1.000	0.580
10	1.000	0.609	21	1.000	0.689	32	1.000	0.615
11	1.000	0.551	22	1.000	0.520	33	1.000	0.536
						34	1.000	0.584

Table 3: Total Variance Explained of Knowledge Sharing Practices

Components	Initial Eigen Values		
	Total	% of Variance	Cumulative %
1. Attitude and Willingness to Learn (AWL)	5.207	15.314	15.314

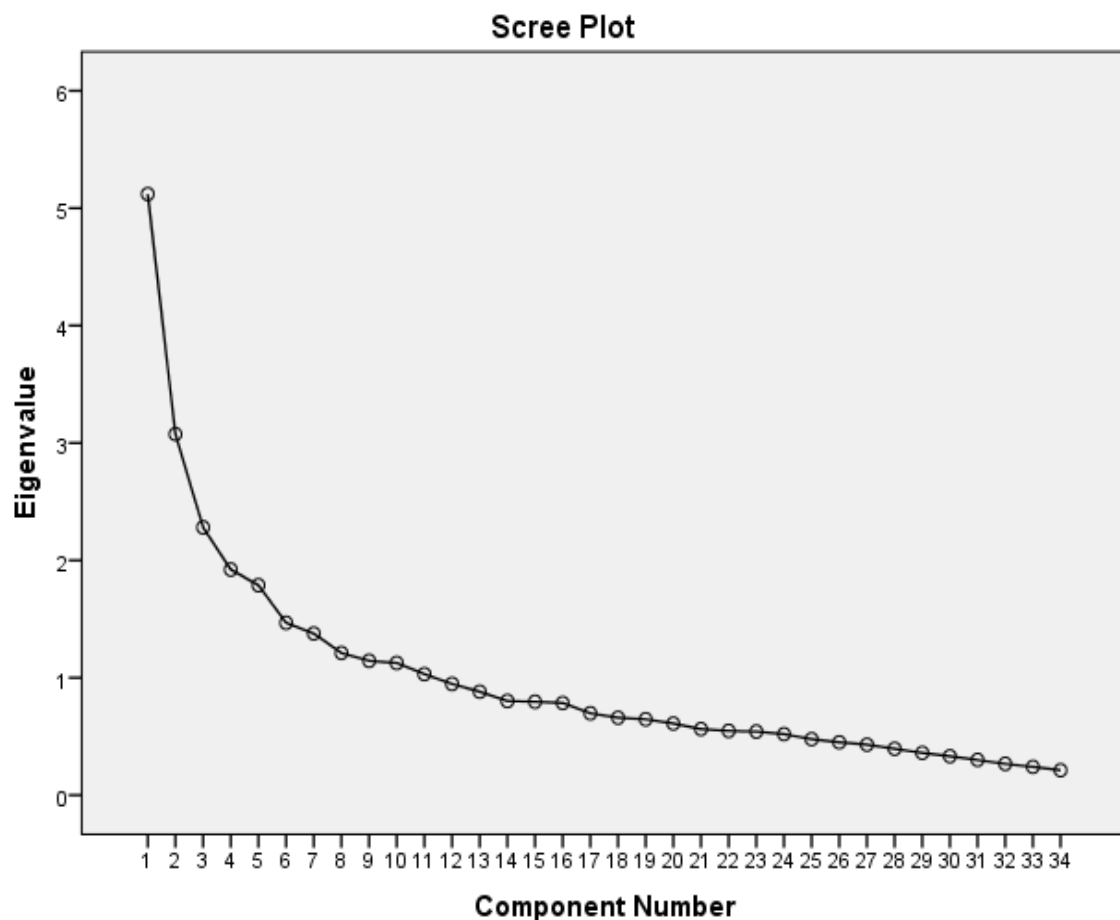|			
2. Attitude towards Knowledge Sharing (AKS)	3.071	9.033	24.347
3. Enjoyment in Helping Others (EHO)	2.080	6.118	30.465
4. Knowledge Self Efficacy (KSE)	1.953	5.743	36.208
5. Subjective Norm (SN)	1.637	4.814	41.022
6. Willingness to Share Knowledge (WSK)	1.438	4.231	45.253
7. Attitude to Learn (AL)	1.399	4.115	49.368
8. Use of ICT	1.210	3.559	52.927
9. Organisational Support to Share Knowledge	1.146	3.372	56.299
10. Organisational Culture	1.060	3.119	59.418

Fig. 1: Scree Plot

7. Factors Determining the Knowledge Sharing Practices of Graduate Students

Table 3 presents the total variance explained by each component. The number of factors that contributed Eigenvalue greater than one was only significant and remaining was disregarded (cf. Hair et al., 2006; Tabachnick and Fidell, 2007). The items have been converged into 10 components. These components together explain 59.418% of the knowledge sharing practices of graduate students. These factors are named accordingly and they are described below.

7. 1. Willingness to Learn (WL)

An important aspect of knowledge sharing is donating or dissemination of knowledge. For disseminating knowledge, the individual has to learn. Hence, there must be a willingness and positive attitude toward learning. A large number of items have been loaded on this factor (Eigenvalue = 15.314). Attitude and willingness to learn play a significant role in the knowledge sharing practices of graduate students.

7.2. Attitude towards Knowledge Sharing (AKS)

Attitude has long been shown to influence behavioural intentions (Ajzen and Fishbein, 1980). The knowledge sharing practices of students are influenced by their attitude toward knowledge sharing. A good number of items have been loaded on this factor and it contributes 9.033% variance to the organizational stress of teachers (Eigenvalue = 3.071).

7.3. Enjoyment in Helping Others (EHO)

Osterloh and Frey (2000) have argued that knowledge sharing activity is motivated by one's own intrinsic motivations. Wasko and Faraj (2000) have also demonstrated that individuals are intrinsically motivated to contribute their knowledge because they enjoy helping others. As knowledge sharing behaviour helps other members of a society to solve their problems, a member who enjoys helping other members is likely to harbour a positive attitude toward knowledge sharing (Kankanhalli et al., 2005). This factor contributes 6.118 % of variance (Eigenvalue = 2.09).

7.4. Knowledge Self Efficacy (KSE)

Self-efficacy is a potentially important factor influencing the decision to share knowledge (Bock and Kim, 2002; Hsu et al., 2006; Kankanhalli et al., 2005). If individuals are confident in their ability to share knowledge, then they would be likely to perform the behaviour (Bandura, 1994). Hence, knowledge self-efficacy is a significant element determining the knowledge sharing practices of graduate students. It contributes 5.743% of the variance in the knowledge sharing practices of graduate students (Eigenvalue = 1.953).

7.5. Subjective Norm (SN)

According to Azjen and Fishbein's theory of planned behaviour (Azjen and Fishbein, 1980), one of the determinants of an intention to perform an action is the subjective norm of the individual, that is, the perceived pressures from the immediate social environment towards the action. People will be more inclined to perform a certain behaviour if they feel that

important referent individuals are likely to approve and even applaud such behaviour. Kuo and Young (2008) observed that subjective norms along with attitude describe the person's intention to share the knowledge. It contributes 4.814% of the variance in the knowledge sharing practices of graduates students in Kerala.

7.6. Willingness to Share Knowledge (WSK)

The willingness of the individuals is an important factor which influences the knowledge sharing practices. This is especially important when knowledge sharing is voluntary in nature. This factor contribute 4.231% of variance (Eigenvalue = 1.438).

7.7. Attitude to Learning (AL)

Attitude toward learning of the learners contributes significantly to their knowledge sharing practices. This factor contribute 4.115% of variance (Eigenvalue = 1.399). Those having a high attitude towards learning usually exhibit a positive attitude towards knowledge sharing (Areekkuzhiyil, 2016)

7.8. Use of ICT

In the present technologically mediated society, use of technology plays a significant role in the knowledge sharing practices of graduate students. This factor contribute 3.559% of variance (Eigenvalue = 1.210). Various ICT devices and technologies are facilitating the knowledge sharing practices of graduate students.

7.9. Organisational Support to Share Knowledge

Organisational support refers to the extrinsic and intrinsic reward and motivation to share knowledge. An effective reward system is essential in order to motivate individuals to share knowledge because, in the absence of proper motivation, some may be unwilling to share knowledge. This factor contributes 3.372% variance to the knowledge sharing practices of graduate students.

7.10. Organisational Culture

The culture of the organisation plays a very important role in building a knowledge sharing environment. The culture of the organization provides strong support for building knowledge

sharing among the people of the organization. De Long and Fahey (2000) consider that organizational culture plays a fundamental role in the creation, sharing and use of knowledge. They state that one of the major ways in which culture influences knowledge management practices is by establishing norms regarding sharing knowledge. A second way in which organizational culture influences knowledge sharing is by creating an environment of caring and trust that is so important for encouraging individuals to share with others. It contributes 3.119% of the variance in knowledge sharing practices of graduate students.
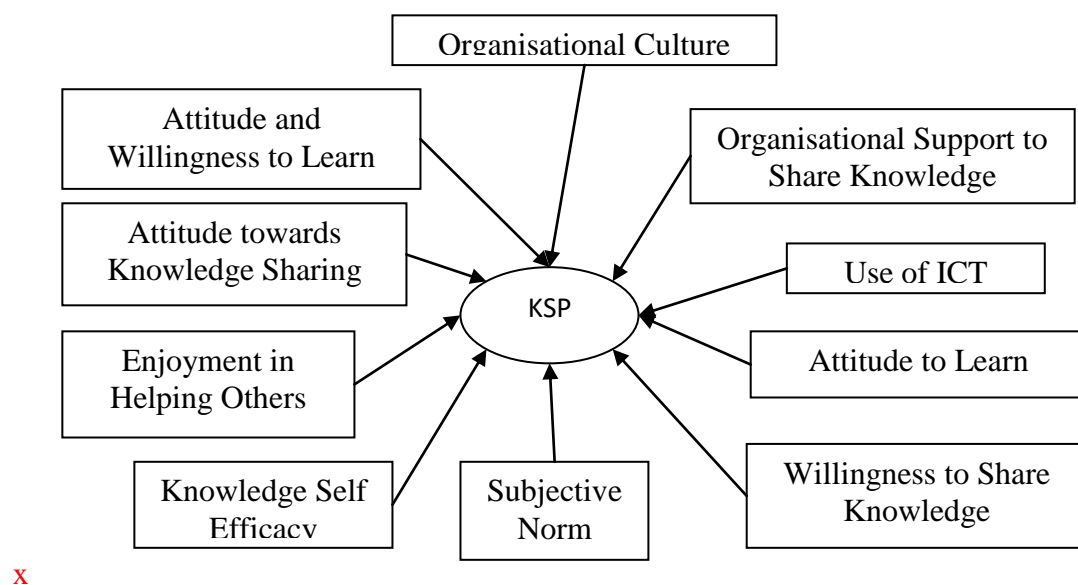

Fig.2: Factors determining the Knowledge Sharing Practices among Under Graduate Students in Kerala

8. Conclusion

The study reveals that the knowledge sharing practices of graduate students are determined by different factors. It involves personal factors and organisation related factors. These factors together explain 59.418% of the knowledge sharing practices of graduate students. By facilitating these factors, the knowledge sharing practice of graduate students can be enhanced.

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