

Knowledge Sharing Behavior Of Business Teachers Of Pakistani Universities: An Empirical Testing Of Theory Of Planned Behavior

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Abstract

This study aims to explain the knowledge sharing behavior of business teachers of Pakistani Universities using the theory of planned behavior. For this purpose, data was collected from 157 business teachers serving in the Pakistani Universities. Smart-PLS has been used to analyze the collected data. Factor analysis and Cronbach's alpha confirmed the validity and reliability of the measurement scales. Similarly, Structural model were applied to find out the relationship among independent variables (attitude towards knowledge sharing, subjective norms of knowledge sharing, perceived behavioral control of knowledge sharing) and dependent variable (knowledge sharing intention and knowledge sharing behavior). The findings show positive and significant relationship among all the study variables.

Keywords: Knowledge Sharing Behavior, Theory of Planned Behavior, Smart-PLS, Pakistan

Introduction

In recent years, technological advancement has updated the teaching methods and made the teaching activities more complicated. Teaching related knowledge sharing may help teachers to solve variety of problems (Hou, Sung and Chang, 2009). Knowledge sharing of teachers with one another fosters continuous professional development among teachers. Both formal and informal approaches of knowledge sharing play pivotal role in

improving the knowledge, abilities and skills of the teachers, and therefore improve teaching practices (Heron and Hammond, 2001). Formal approaches of knowledge sharing include information sharing in the formal settings such as lectures, seminars and training workshops. Whereas, informal knowledge sharing takes place during informal social networks and coffee breaks (Reychav and Te'eni, 2009).

However, formal knowledge sharing has been critiqued of having potential of sharing explicit knowledge only (Brown and Duguid, 1996). Whereas, informal knowledge sharing methods in shape of storytelling and socializing have been recommended as effective means for sharing both explicit and complex tacit knowledge (Nonaka and Konno, 1998). Especially, knowledge related to teaching is often tacit knowledge (Carroll, 2003). According to Schlager and Fusco (2003), informal knowledge sharing among teachers helps teachers to improve their practices. Immediate desires and needs of teachers of knowledge lead to form informal social networks among them and these social networks transform teachers into active knowledge builders (Granger et al., 2002).

Additionally, knowledge management literature concluded that effective knowledge sharing plays pivotal role in developing core competencies and sustainable competitive advantage (Gold and Malhotra, 2001).

However, previous studies have provided that knowledge does not flow easily in the organizations and individuals usually resist to sharing the knowledge (e.g. Riege, 2005; Szulanski, 1996). These lacks of in-depth discussions and interactions related to instructional knowledge limit the professional development of the teachers (Hou, Sung and Chang, 2009). Therefore, this study is focusing on the variables which affect the tendency of teachers in engaging knowledge sharing behaviors. As the personal motivational and contextual factors influence the knowledge sharing behaviors of the individuals (Grrey, 2002), consequently, current research incorporates theory of planned behavior (TPB) in which individual attitudes, perceived behavioral control and subjective norms of knowledge sharing are integrated with knowledge sharing intention and behavior. TPB has successfully predicted wide-ranging behaviors in the social context (Conner & Armitage, 1998). The specific research objectives of the study are:

1. To find the impact of attitude towards knowledge sharing on the knowledge sharing intention.
2. To find the impact of attitude towards knowledge sharing on the knowledge sharing behavior.
3. To find the impact of subjective norms of knowledge sharing on the knowledge sharing intention.

4. To find the impact of subjective norms of knowledge sharing on the knowledge sharing behavior.
5. To find the impact of perceived behavioral control of knowledge sharing on the knowledge sharing intention.
6. To find the impact of perceived behavioral control of knowledge sharing on the knowledge sharing behavior.

Theoretical Background

Knowledge Sharing Behavior

According to the knowledge-based view of the firm (Grant 1991, 1996; Eisenhardt & Santos, 2002; Teece 2000; Spender 1996), knowledge plays vital role in developing sustainable competitive advantage. However, knowledge is possessed by the individuals (Nonaka and Konno 1998) and, more particularly, by the employees who recognize, create, and apply knowledge while doing their jobs. Therefore, knowledge sharing in the organization is affected by the individuals' knowledge sharing behaviors. Limited knowledge sharing in the firm leads to knowledge gaps in the organization and these knowledge gaps limit the organizational potential to achieve its goals (Baird and Henderson 2001). Darr and Kurtzberg (2000) put forwarded that knowledge sharing is about gaining experience from other members of the organization and this sharing triggers organizational learning. Knowledge sharing means discussion and exchanging of knowledge and information with other members via all modes (i.e. conference, workshops, trainings, lectures and social networks etc.). The knowledge sharing aims to increase the value of knowledge (Levitt & March, 1988). Additionally, employees have potential to create and adapt the knowledge (Allen, 1977). Therefore, employees' sharing of knowledge is the key to organizational success.

Knowledge sharing among employees is important because employees are the source of both explicit and tacit knowledge (Dhanaraj, Lyles, Steensma & Tihanyi, 2004; Smith, 2001). Therefore, employees should share their experience and knowledge with other employees who are in need of it in order to complete their tasks well. Moreover, knowledge is shared with right time, at right place and at right time in order to get maximum value from the knowledge.

However, employees are not always motivated to share their knowledge, because it is considered as core competency of the individuals and viewed as source of power. Therefore, knowledge sharing is considered as major challenge for organizations in the knowledge management discipline. This is why, this study is concerned in highlighting the possible factors which affect the willingness of the individuals to share knowledge.

Theory of Planned Behavior

The main theme in theory of planned behavior is that the best way to predict and explain a person's behaviors is through that person's behavioral intentions. The theory was originally called the theory of reasoned action (Ajzen & Fishbein, 1980). According to the theory, attitude of person and subjective norms influence his behavioral intentions. The person's behavioral intentions then influence his behavior. Attitude refers to the person's favorable or unfavorable expressions toward behavior. Subjective norm is related to perceived social pressure from other individuals to perform or not perform the behavior. Similarly, intention is the motivation to perform a behavior. It shows the willingness of person to perform a certain behavior and determine the level of effort which a person will put toward the behavior. Ajzen (1991) provided that a person is more likely to perform a behavior if there is stronger intention to perform it.

Later research found that an important variable was missing from the theory of reasoned action, namely, perceived behavioral control (PBC). For example, Bandura, Adams, Hardy, and Howells (1980) empirically put forwarded that a person's behavior is highly affected by his level of self-confidence (his self-perception that she has the ability to perform a behavior). PBC was added to the theory of reasoned action, and it was renamed as the theory of planned behavior based on the findings of above researches (Ajzen, 1985).

Attitude towards Knowledge Sharing

The theory of reasoned action (Fishbein & Ajzen, 1975) and theory of planned behavior (Ajzen, 1988) propose that individual attitudes trigger the intention to perform certain behavior, and this intention influence behaviors of individuals. More specifically, Joseph and Jacob (2011) and Bock and Kim (2001) provided the attitude toward knowledge sharing and knowledge sharing intention has strong relationship. Similarly, the study of Yang (2008) on employees working in international tourism industry provided that attitudes of individuals toward sharing of knowledge affect knowledge sharing behavior in the organization. Moreover, Yang (2009) and Gottschalk (2007) emphasized of attitude of individuals in improving knowledge sharing practices in the firm.

The effect of attitude towards sharing knowledge on intention and behavior has also been reinforced by Szulanski (1996) who argued that individuals have attitudinal willingness or unwillingness to share knowledge. Individuals tend to share knowledge in order to fit new career opportunities and job advancement. So, this study hypothesizes the first two hypotheses as:

H 1: Attitude towards knowledge sharing has positive impact on the knowledge sharing intentions.

H 2: Attitude towards knowledge sharing has positive impact on the knowledge sharing Behavior.

Subjective Norms of Knowledge Sharing

Ajzen (1991) defines the subjective norm as perceived social pressure from others to perform a behavior or not perform a behavior. Therefore, subjective norm towards knowledge sharing is the social pressure created by the individuals to share knowledge. The theory of reasoned action and theory of planned behavior provided that subjective norms predict intentions and behaviors of the individuals.

According to Lin and Lee (2004) knowledge sharing behavior is significantly determined by the subjective norms. Individuals having influence in the organizations create social pressure to encourage knowledge sharing behavior. Similarly, based on the theory of planned behavior, plethora of studies provides that subjective norms predict knowledge sharing related behaviors (e.g. Ryu, Ho and Han, 2003; Taylor and Todd, 1995). Therefore, this study further hypothesizes:

H 3: Subjective norms of knowledge sharing in the organization have positive impact on the knowledge sharing intentions.

H 4: Subjective norms of knowledge sharing in the organization have positive impact on the knowledge sharing Behavior.

Perceived Behavioral Control of Knowledge Sharing

Prior research provided that an important variable i.e. perceived behavioral control (PBC) is missing from the theory of reasoned behavior. For instance, empirical evidence is provided by Bandura, Adams, Hardy, and Howells (1980) that individual's level of self-confidence (self-perception about having ability of performing behavior) strongly influence individual behavior. Ajzen (1985) stated that findings of these studies added the perceived behavioral control as predictor of individual behavior and theory was renamed to theory of planned behavior. Moreover, individuals tend to show certain behavior when they have self-confidence of having Skills, knowledge, information, abilities, equipment, money, time and other's cooperation. Thus this study further hypothesizes last two hypotheses as:

H 5: Perceived behavioral control of knowledge sharing has positive impact on the knowledge sharing intentions.

H 6: Perceived behavioral control of knowledge sharing has positive impact on the knowledge sharing Behavior.

Methodology

Population of this research is comprised of business teachers of universities of Pakistan. However, due to fast, inexpensive, easy and the

subjects are readily available, this study used the non-probability convenience sampling technique. Thus business teachers of public, public-private and private universities located in Southern Punjab Pakistan were selected because of their convenient accessibility and proximity to the major researchers of this study. Questionnaire for current study adopted from multiple prior studies is used to collect data from business teachers of universities of Pakistan. Perceptual constructs (i.e. namely, perceived behavioral control, subjective norms, attitude, intention to share knowledge and knowledge sharing behavior) was measured by 22 questions and along with some demographic information. The items of knowledge sharing attitude, subjective norms, perceived behavioral control and knowledge sharing intention were adapted from the study of Ryu, Ho and Han (2003). Similarly, Lee (2001) was followed to operationalize knowledge sharing behavior. Total 250 questionnaires were distributed to the business teachers and 160 were returned out of 250 with 64% response rate. 3 questionnaires were rejected due to incomplete information. Therefore actual response rate came to be 62.8%.

Data Analysis

Data has been analyzed with the help of PLS SMART. The validity of the measures (i.e. namely, perceived behavioral control, subjective norms, attitude, intention to share knowledge, and knowledge sharing behavior) was assessed with the help of factor loadings. Similarly, to find the reliability of the study measures, Cronbach's Alpha values have been used. In the same way, path coefficients of the structural model are used to assess the relationships among the study variables.

Factor Loadings

Factor analysis has been used to find the validity of the study variables (i.e. namely, perceived behavioral control, subjective norms, attitude, intention to share knowledge and knowledge sharing behavior). The factor loadings as provided by the PLS smart analysis as provided in Table-1 show that each item is highly loaded (as the value is greater than 0.5) in the respective component. Therefore, twenty two items measure the five constructs, namely, attitude towards knowledge sharing, subjective norms of knowledge sharing, perceived behavioral control of knowledge sharing, knowledge sharing intention and knowledge sharing behavior significantly.

Table 1 Factor Loadings

	AT	KSB	KSI	PBC	SN
AT1	0.927				
AT2	0.866				
AT3	0.871				
AT4	0.856				
AT5	0.894				
KSB1		0.922			
KSB2		0.970			
KSB3		0.941			
KSI1			0.951		
KSI2			0.976		
KSI3			0.962		
KSI4			0.971		
KSI5			0.928		
PBC1				0.826	
PBC2				0.809	
PBC3				0.550	
PBC4				0.786	
SN1					0.934
SN2					0.947
SN3					0.935
SN4					0.955
SN5					0.680

Reliability Analysis

The reliability of the study variables namely, perceived behavioral control, subjective norms and attitude, intention to share knowledge and knowledge sharing behavior has been assessed by finding the values of the Cronbach's Alpha. The following table shows that all the five measures are reliable as the value of Cronbach's Alpha of each measure is greater than 0.7. More specifically, the Cronbach's Alpha of perceived behavioral control 0.756, subjective norms 0.936, and attitude 0.929, intention to share knowledge 0.978 and knowledge sharing behavior 0.939.

Table 2: Cronbach's Alpha Values

	Cronbach's Alpha
AT	0.929
KSB	0.939
KSI	0.978
PBC	0.756
SN	0.936

Regression Coefficient

The path coefficient reflects the impacts of perceived behavioral control, subjective norms and attitude on intention to share knowledge and knowledge sharing behavior. The Table-3 provides values of the path coefficients of impacts of perceived behavioral control, subjective norms and attitude on intention to share knowledge and knowledge sharing behavior. All the values of Path coefficient are significant except paths from subjective norms to knowledge sharing behavior and from perceived behavioral control to knowledge sharing intentions.

Table 3: Path Coefficient Values

	Beta Coefficient
AT → KSI	0.393
AT → KSB	0.178
KSI → KSB	0.365
PBC → KSI	0.048
SN → KSI	0.255
PBC → KSB	0.196
SN → KSB	0.072

Structural Model

The structural model as provides in figure 1 provides that perceived behavioral control, subjective norms and attitude of knowledge sharing altogether explains 27 percent of the variance of the intention to share knowledge. Similarly, perceived behavioral control, subjective norms, attitude and intention to share knowledge altogether explained 33.8 percent of the variance of the knowledge sharing behavior.

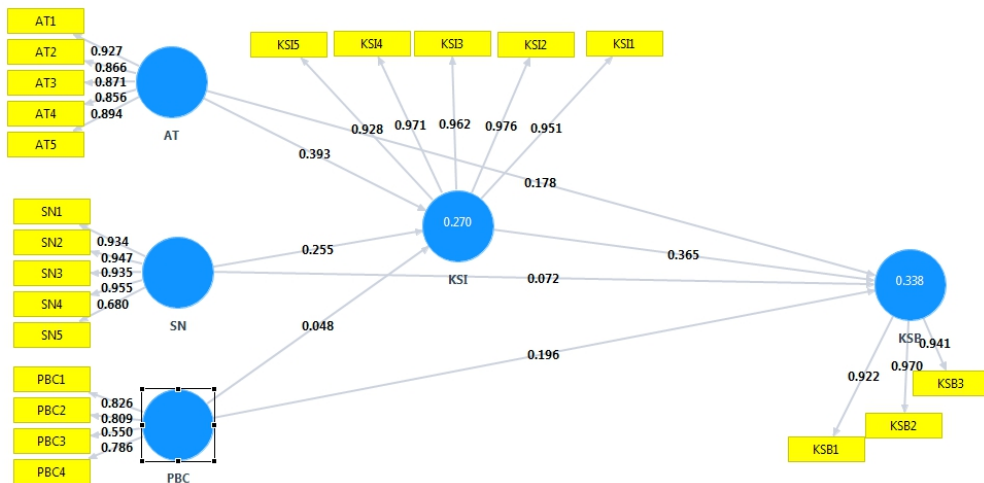


Figure 1: Structural Model

Discussion and Conclusion

On the basis of theory of planned behavior, this research designed to study predictors of knowledge sharing behavior of the business teachers. In order to uncover the potential influences on knowledge sharing behavior, a model was devised with a TPB framework. The analysis of data collected from business teachers provided consistence with the proposed model, and also the previous studies (Blueet al., 2001; Bock, Zmud, Kim & Lee, 2005; Kim and Lee, 2006; Kuo and Young, 2008). As hypothesized and supported by previous studies (Yeet al., 2006; Bock et al., 2005; Kankanhalli et al., 2005), higher levels positive attitudes toward knowledge sharing have higher level of knowledge sharing intention and behavior. In other words, in this study, the business teachers who felt that by sharing their knowledge they will contribute to the achievement of desired outcomes were more likely to share their knowledge. Cooperative individuals share knowledge and exchange ideas with other members of the organization (Yilmaz and Hunt, 2001). In addition, the study found significant effect of subjective norms toward knowledge sharing intention and behavior of the individuals. Hence, like previous studies (Leeet al., 2006) we can conclude that subjective norms can support active sharing of knowledge (Bock, Zmud, Kim & Lee, 2005) to transfer knowledge. The results of this study provided consistency with the TPB proposed by Ajzen (1991) and tested by many researchers and practitioners (Blueet al., 2001; Ryu et al., 2003; Kuo and Young, 2008). As proposed by the TPB frame work, attitudes toward knowledge sharing, subjective norms and perceived behavioural control, positively influence the intention to share knowledge. However, the perceived behavioral control has positive and weak impact on the knowledge sharing intention but having strong positive impact on the knowledge sharing behavior of the individuals. Research findings have consistently shown that attitude, subjective norm, and PBC influence behavioral intention, which then influences performance of behavior. However, findings have been mixed regarding the direct influence of PBC on behavior. Some research has found direct support for the effect of PBC on behavior, but others have found that PBC only influences behavior indirectly through intentions. Ajzen and Madden (1986) found a direct influence of PBC on behavior with low-level perceptions of control, but found indirect influence of PBC on behavior with high-level perceptions of control. Finally, Research results indicate that, at least in this sample, the higher intention toward knowledge sharing results into higher collection and donation of data. A number of researchers have reported a positive relationship between intention and the actual behavior (Ryu et al., 2003).

Theoretical and Managerial Implications

This study contributes to the existing literature on knowledge sharing behavior by providing empirical evidence from Pakistani context. The findings validate the systematic and rational models of individual's behaviors. Specifically, the knowledge sharing behavior of the individuals is planned and intentional. Additionally, the findings of study empirically prove the validity of the theory of planned behavior in Pakistan, particularly in the context of business teachers of Pakistani universities.

Moreover, knowledge sharing is the key to survive in this knowledge intensive era. The findings of this study provide that knowledge sharing cannot be instructed or forced. Organizations, specifically educational institutes, aiming to improve knowledge sharing in organizations need to nurture facilitative environment. Organizations can improve knowledge sharing by developing motivational drivers related to intentions of individuals to share knowledge. This study has contributed to managerial world by elaborating the facilitative work environment. Positive attitude, subjective norms and perceived behavioral control trigger to intention to share knowledge.

Limitations and recommendations for future research

The highlighted limitations are aimed to point out path for upcoming research. First of all, this is a cross sectional research in which respondents were targeted at a specific time. And results may be limited to that specific time. Therefore, longitudinal studies should be conducted in future, as the intentions may vary over the time period. Also, this study is limited to only business teachers of Pakistani Universities; future researches may study other sectors in Pakistan and abroad. Similarly, the study only considered the three factors (i.e. attitude towards knowledge sharing, subjective norms of knowledge sharing, and perceived behavioral control of knowledge sharing) which affect the knowledge sharing intention and behavior of the individuals. The future studies may focus on the other individual and organizational factors as possible antecedents of the knowledge sharing intention and behavior.

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