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NORMATIVE COMMITMENT AND KNOWLEDGE SHARING; INFLUENCE OF COGNITION BASED TRUST AND PERCEIVED COST OF KNOWLEDGE SHARING

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ABSTRACT

This study attempts to underpin the role of normative commitment on knowledge sharing (KS) within the framework of moderating variable of cognition based trust through reducing the perceived cost of knowledge sharing. This study uses a survey of 180 questionnaires from ten public sector universities of Punjab and employs the standardized versions of predictors in multivariate regression analysis to investigate the moderation. Exploratory factor analysis and average variance extraction is used to examine the convergent and discriminant validity. Further, this study employs confirmatory factor analysis to examine the overall fitness of the model. The key findings of the study postulate that cognition based trust moderates the relationship between normative commitment and knowledge sharing and further between perceived cost of knowledge and knowledge sharing. The findings of the study conclude that cognition trust improves the knowledge sharing behavior in colleagues. Nevertheless, the study concludes that universities' management should emphasize towards social exchange relationships to facilitate KS behavior among faculty members through adopting collaborative culture and appropriate structure in universities.

Keywords: *Normative Commitment, Knowledge Sharing, Knowledge Sharing Cost*

1) INTRODUCTION

In a cut throat competition, intangible resources e.g. knowledge and organizational capabilities perform fundamental role for sustainable performance and competiveness (Teece et al., 1997; Subramaniam & Youndt, 2005). Resource base view (RBV) is the most emerging line of research in this regards which tends to determine the relationship of firm's capabilities and resources with its performance. It postulates that firm's controllable resources bring out competitive advantage for firms' because these are unique, rare and cannot be imitated and replaced (Barney, 1991). Recent research indicates a massive transition of economies from production base to knowledge based economies (Drucker, 1993; Powell and Snellman, 2004) because knowledge resources are non-compatible and difficult to imitate which provides sustainable performance. In knowledge intensive industries, knowledge sharing has received massive recognition to its' strategical importance (Nahapiet and Ghoshal, 1998; Grant, 1996). Likewise, knowledge based view (KBV) asserts that knowledge sharing has achieved huge attention due to its viability to create new knowledge, learning and innovation (Donate and Guadamillas, 2011; van den Hooff and de Ridder, 2004). Afiouni, (2007) asserts that knowledge is embedded in individuals' minds and organization's systems which provide competitive positioning because knowledge is non-replicable, imitable and rare. The productive deployment of this valued resource is a challenging issue facing today's organizations due to barriers of KS (Drucker, 1993; Davenport and Prusak, 1998).

Haas and Hansen, (2007) argued that KS can be viewed as process of coordination, communication and interaction of knowledge. It contains shared meaning and understanding and how to provide the access of exiting knowledge to employees (Lin, 2007b). Recent research found that organizational competence and performance can be augmented by effective KS which can improve the business process efficiency thus making jobs bit relax and easier through the exchange of job related knowledge, unique practices and learning curves (Huang and Wu, 2010; Wang and Wang, 2012).

The major problem challenged by organizations' are the employees' lethargic and reluctant attitude towards knowledge sharing (Denning, 2006). However, in this regard, organizational commitment e.g. sense of obligation performs important role to influence the KS behavior (Soliman

and Spooner, 2000; Liebowitz, 1999) which turns to reduce the perceived of knowledge sharing among colleagues. Nevertheless, Cabrera and Cabrera, (2002) investigate the role of different determinants of KS e.g. emotional attachment which may help to reduce the cost of KS and encourages the KS among colleagues. Casimir et al., (2012) found that affect based trust reduced the perceived cost of KS which significantly moderates the relationship between affective commitment and knowledge and perceived cost of KS and KS. Further, they suggested that for knowledge as 'collective commodity' positive cultural changes tends to encourage the social exchange relationship to boost the KS among colleagues.

Lack of organizational commitment and trust probably are important indictors which increase the cost of KS that turns to reduce the knowledge sharing aptitude among colleagues. Perceived of knowledge sharing is loss of dominant power, time and effort if knowledge is to be shared with peers. Therefore, individuals are reluctant that if knowledge is to be shared with them they would get more expert determination, dignity and promotion. Although, previous studies acknowledged that organizational commitment, affect based trust and incentives negate the perceived cost of knowledge sharing (Casimir et al., 2012; Lee and Ahn, 2007). Further, perceived cost of KS has not been examined in context of normative commitment and cognition based trust. Therefore, this study contributes to existing literature in context that how the cognition based trust influences the relationship between normative commitment and KS and further between perceived costs of knowledge sharing and knowledge sharing.

1.1) Knowledge Sharing

Knowledge belongs to individuals because it resides in individual's minds (Rusly, et al., 2014). It does not contain any value until it is being dispersed and utilized at the organizational level (Nonaka and Takeuchi, 1995; Nonaka, 1994). Knowledge sharing is the voluntary desire to share knowledge and collaborate with others based on social exchange relationship (Nahapiet and Ghoshal, 1998). Theory of social exchange relationship postulates that reciprocation of social relationship tends to enhance the knowledge sharing tendency among employees (Cabrera and Cabrera, 2005). This theory is the building block which promotes the trust relationship, motivates the employees and brings out organization citizen behavior that turns to improve the firms' performance (Zboralski, 2009; Jarvenpaa and Staples, 2001). Research indicates that social exchange

relationship provides numerous benefits in terms of job security and consolidates the future relations of employees by encourage organizational citizen behavior (Cabrera and Cabrera, 2005; Muthusamy et al., 2007; Jarvenpaa and Staples, 2001). Organizational citizen behavior refers to voluntary organizational commitment that helps to inspire the knowledge sharing and provide competitive positioning (Casimir et al., 2012). However, Cabrera and Cabrera, (2005) argue that knowledge is an individual asset over which an employee has complete control whether or not to share knowledge based on costs and benefits.

1.2) Perceived Cost of Knowledge Sharing

Social exchange theory points out some potential barriers that why individuals are reluctant to share knowledge (Casimir et al., 2012; Cabrera and Cabrera, 2005). By and large, individuals' natural disposition of self-protection and self-centered having egocentric aptitude, normally demonstrates individuals' unwilling to share knowledge (Leana and van Buren, 1999). Social dilemma depicts that the apparent cost of KS in terms of time, effort and loss of expert power is a major concern for employees' reluctance towards sharing of knowledge (Casimir et al., 2012; Wasko and Faraj, 2000). Perceived cost of knowledge sharing refers to cost benefit analysis of shared knowledge in terms of loss of expert determination, time and effort (Cyr and Choo, 2010).

They assume that sharing of knowledge is risky in terms of jeopardy to self-protection towards job security, organizational prestige and rewards) and opportunity cost (in terms of time and effort) (Reige, 2005) than the benefits received like enhanced reputation. So, there is a choice whether they prefer to take time and make the efforts to share their resources (e.g. experiences, skills and knowledge) or not devoting to share their resources with others. This concludes that when perceived cost of KS increases the likelihood of KS decreases. This negative aptitude of KS can be mitigated through addressing the role of normative commitment and cognition based trust in colleagues.

1.3) Normative Commitment

Organizational commitment refers to relative strength of an individual identification with and involvement in a particular organization (Mowday et al., 1979, p.226). It helps to construct a positive attitude towards

knowledge sharing among colleagues. It refers to individual feelings or sense of obligation towards organization when they want to continue their job. It may also occur even when employees are unhappy and they want to peruse better job opportunities. This study adopts the Meyer and Herscovitch (2001) typology thus depicting the mind-set to reflect the normative commitment is the "perceived obligation" based on "reciprocity of norms" and "internalization of norms through socialization" which helps to establish the normative commitment that turns to improve the KS behavior among employees. Few studies support that the reciprocity of norm and the internalization of norm through socialization are the forms of extrinsic motivational factors and influence knowledge sharing behavior (Lin 2007a). Employees who received knowledge from other organizational members will be obliged to reciprocate the action by contributing knowledge to others within the organization and in this way reciprocity norm generates the perceived obligation and develop the normative commitment towards the organization which leads towards the knowledge sharing behavior (Tangaraja et al., 2015). Further, when employees internalized the organization norms through socialization then they will be more connected with each other and in this way social networks and trust relationship among the members becomes stronger and they will be more normatively committed towards their organization which also leads towards the better knowledge sharing behavior (Tangaraja et al., 2015).

1.4) Cognition based Trust

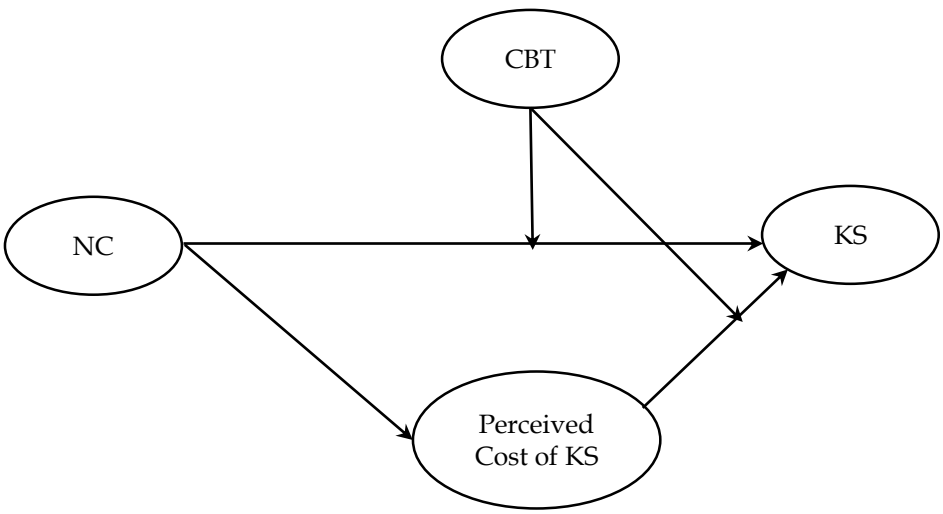
Trust is indeed important factor of knowledge sharing in organization (Zhou et al., 2010). If trust relationship occurs in organization then the individuals' feeling towards the sense of belongingness and willingness to share valuable knowledge would be increased (Bakker et al., 2006). Voluntarily sharing of knowledge is caused by social transaction which comes through trust relationship among colleagues (Soliman and Spooner, 2000; Mariotti, 2011). Trust is influential factor for firms' performance which encourages voluntary cooperation, particularly when organization activities are highly interdependent (McAllister, 1995; Bijlsma and Koopman, 2003). This indicates that trustworthiness among colleagues support employees' willingness to disseminate the knowledge (Andrews and Delahay, 2000). However, most challenging barrier for today's organizations is the organizational culture (i.e. knowledge infrastructure capabilities) for the development of interpersonal trust (Soliman and Spooner, 2000). This study uses the McAllister (1995) typology who views

that interpersonal trust performs a fundamental role to encourage the knowledge sharing behavior among organizational actors. He categorizes the interpersonal trust into cognition based trust and affect based trust. Cognition based trust is based on individual competence and intellectual abilities. For instance trusting on individual's professional and academic abilities is called as cognition-based trust. In simple words, cognitive trust is the trustor's willingness or confidence to rely on the trustor's capability and reliability which may accelerate the KS behavior among them. Numerous studies found the positive relationship of affect based trust with knowledge sharing (Yeh et al., 2006; Chowdhury, 2005; Wang et al., 2007; Casimir et al., 2012) which helps to mitigate the fear of perceived cost of knowledge sharing. However, this study is pioneer which attempts to investigate the moderating role of cognition based trust between normative commitment and knowledge sharing and further between perceived cost of knowledge sharing and knowledge sharing. The following hypotheses are proposed and tested which are shown in Figure 1:

H1: Cognition based trust moderates the direct relationship between normative commitment and knowledge sharing.

H2: The indirect relationship between normative commitments with knowledge sharing through perceived cost of sharing knowledge is moderated by cognition based trust.

Theoretical Model



2) Research Methodology

2.1) Data Collection

A quantitative research approach and survey method is employed to collect the data from faculty members working in ten public sector universities located in the province of Punjab. Using random sampling technique, 250 questionnaires were distributed among faculty members. A total 180 questionnaires were considered for analysis and remaining were discarded due to incomplete or ambiguous response. An overall response rate is 70% which is quite appropriate for this study.

2.2) Instrumentation

Questionnaire of the study contains two parts. Fist part describes the demographic information of respondent (e.g. gender, age, salary, qualification, experience in current organization etc.). Second part provides information about the measurement items. All the measurement items are adopted from existing literature. KS contains five measurement items and is adapted from the scale of van den Hooff and de Ridder (2004). Normative commitment contains six items which are used from the scale of Meyer and Allen (1997). Cognition based trust items' are considered from the scale of Wasti et al., (2010) and McAllister (1995). The study considers eleven items to measure the perceived cost of KS from the work of Casimir, et al., (2012).

2.3) Measurement Model

This study performs the exploratory factor analysis (EFA) to examine the convergent and discriminant validity of the constructs. Convergent validity shows the unity of items in a construct. Brown, (2006) argue that it measures the strength of relationship between items which are predicted to represent that single latent construct. Convergent validity states that factors measures the single constructs. It is evaluated by observing the values of factor loadings should be significant and greater than 0.40 (Guadagnoli & Velicer, 1988). Constructs reliability which should be greater than 0.70 for all the constructs and the average variance extracted (AVE) should be greater than 0.50 for all constructs (Fornell & Larcker, 1981; Chin et al., 2003; Bagozzi and Yi, 1988). Table 1 reveals the results of descriptive statistics, loadings, Cronbach Alpha and average variance

extracted. Results of this table indicate that all the loading items were fall within the acceptable range from 0.627 to 0.851 for all the measurement items of the constructs which confirm the existence of convergent validity. However, one item (i.e. NC1) deleted from the model due to having loading item less than 0.30. Further, results of C-α is greater than threshold of 0.70 thus confirming the existence of high internal reliability.

Table 1: Principle Component Analysis and Internal Reliability Testing

Constructs	Measurement Items	Mean	S.D	Loading	Cronbach Alpha	Average Variance Extracted
Knowledge Sharing	KS1			0.735		
	KS2			0.773		
	KS3	3.95	0.65	0.752	0.813	0.626
	KS4			0.844		
	KS5			0.851		
Normative Commitment	NC2			0.753		
	NC3			0.731		
	NC4			0.758		
	NC5		0.72	0.742	0.817	0.556
	NC6			0.745		
Perceived cost of Knowledge Sharing	PCKS1			0.627		
	PCKS2			0.689		
	PCKS3			0.739		
	PCKS4			0.655		
	PCKS5			0.767		
	PCKS6	2.54	0.66	0.774	0.853	0.513
	PCKS7			0.740		
	PCKS8			0.732		
	PCKS9			0.723		
	PCKS10			0.700		
	PCKS11			0.734		
Cognition Based Trust	CBT1			0.651		
	CBT2			0.803		
	CBT3	2.94	0.78	0.800	0.835	0.514
	CBT4			0.681		
	CBT5			0.651		

We used the Fornell and Larcker (1981) approach to assess the discriminant validity which states that items used to measure the constructs do not predict unrelated constructs (Kline, 2010). This approach suggests that if average variance extracted (AVE) is greater than square correlation among the construct then it is supposed to be existence of discriminant validity. Table 2 depicts the results of square correlation among the constructs and AVE. Diagonal values (italics) present AVE and off diagonal values are square correlation among the constructs. It is clear that diagonal values are greater than off diagonal values which suggest existence of discriminant validity.

Table 2: Discriminant Validity

Constructs	**NC**	**PCKS**	**CBT**	**KS**
NC	0.626			
PCKS	-0.067	0.556		
CBT	0.169	-0.034	0.513s	
KS	0.184	-0.126	-0.064	0.514

Notes:
NC = Normative Commitment
PCKS = Perceived Cost of Knowledge Sharing
CBT = Cognition Bases Trust
KS = Knowledge Sharing

We also examined the fitness of model through evaluating the absolute fit measures including CMIN/DF, goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), parsimony goodness of fit index (PGFI), parsimony normed fit index and root mean square error of approximation (RMSEA). Table 3 shows all these three fit indices approximately meet satisfactorily level. Therefore, we can say that our model is fit and suitable for testing the proposed research hypothesis.

Table 3: Overall Fitness of Indices of CFA Model

Fit Indices	Scores	Recommended cut-off value
Absolute fit measures		
CMIN/DF	1.406	≤2a;≥5b
GFI	0.803	≥0.90a; ≥0.80b
RMSEA	0.055	<0.08a; <0.1b
Incremental fit measures		
NFI	0.906	≥0.90a
AGFI	0.927	≥0.90a; ≥0.80b
CFI	0.902	≥0.90a
Parsimonious fit measures		
PGFI	0.664	The higher, the better
PNFI	0.652	The higher, the better

Note: Acceptability: a → acceptable and b → marginal

2.4) Moderation Analysis

A multivariate regression analysis was conducted to analyze the hypothesized moderating role of cognition based trust between normative commitment and knowledge sharing and further moderating role of cognition based trust between perceived cost of knowledge sharing and knowledge sharing. First, in this regard, we calculated the standardized versions of predictors' variables in order to reduce the multicollinearity problem. Second, product term of standardized predictors variables e.g. cognition based trust among colleagues normative commitment and perceived cost of knowledge sharing are used to evaluate the proposed moderating model.

Results presented in table 4 reveal that direct relationship between normative commitment and KS is moderated by cognition based trust thus supports the hypotheses H1. Notwithstanding, indirect relationship of normative commitment via perceived cost of KS on KS indicates that relationship between perceived cost of KS and KS is moderated by cognition based trust which validates the hypotheses from H2.

Table 4: Multivariate Regression Analysis for Moderation on Knowledge Sharing

Predictors	**Coefficients (β)**	**T**
NC_z	0.294	3.314*
$PCKS_z$	-0.04	-0.70
CBT_z	0.253	3.005*
NC_Z X CBT_Z	0.243	2.225*
CBT_z X $PCKS_z$	0.200	2.013**
Legends: *p<0.01, **p<0.001, NC_z = standardized normative commitment, $PCKS_z$= standardized perceived cost of knowledge sharing, CBT_z= standardized cognition based trust,		

3) DISCUSSION OF THE STUDY

There are three key findings of this study. First, normative commitment positively influences the cognition based trust and further knowledge sharing behavior among employees. Second cognition based trust in colleagues moderates the relationship between normative commitment and KS. Finally, cognition based trust in colleagues also moderate the relationship between perceived cost of KS and KS.

3.1) Theoretical and Practical Implications

This study provides unique findings in terms of moderating role of cognition based trust between normative and KS and between perceived cost of KS and KS. The main purpose of our study is to uncover that how normative commitment contributes towards the KS behavior in colleagues, and further how cognition based trust moderates this relationship through reducing the perceived cost of knowledge sharing. The findings of the study are consistent with hypothesized moderating model and with previous studies thus indicating that social exchange relationship is paramount to influence the KS behavior among employees (Bolino et al., 2002; Rues and Liu, 2004). Findings suggest that sense of feeling and recognition (i.e. normative commitment) motivates the KS behavior in colleagues. Many studies have failed to discuss the relationship between normative commitment and KS (Van den Hooff and de Ridder, 2004; Meyer and Allen, 1997; Meyer and Herscovitch, 2001 and Lin, 2007a). However, but we put forwarded a theoretical model of Casimir et al.,(2012) by

incorporating the normative commitment and cognition based trust to bridge underlying gap of hypothesized model.

The positive relationship of normative commitment with KS behavior in colleagues is a new finding in an existing literature. In addition, findings of the study also highlight that when cognition based trust comes that would further strengthen the KS behavior among colleagues. Its means that cognition based trust brings out positive sense of feelings which encourages the KS among colleagues.

Above discussion concludes this relationship as when individuals are more willing to engage in KS behaviors when there exist a trust relationship among them (Choi, 2006) which help them to act in an impartial, trustworthy and ethical way (Ferres et al., 2004). Further, findings also reveal that cognition based trust (i.e. relying on individual capabilities and proficiencies) tends to reduce the perceived cost of KS which supports to boost the reciprocal social relationship and collaboration thus fostering KS behavior among colleagues. Hence, it concludes that cognition based trust moderates the relationship between normative commitment and KS, which further moderates the indirect relationship between perceived cost of KS and KS. Thus trust encourages the communication and foster knowledge diffusion (Politis, 2003).

The practical implication of this study is that knowledge is a unique and un-replicated asset because knowledge resides in minds of individuals and sharing of knowledge is important for gaining sustainable competitive advantage. Further, it is important for every organization to adopt appropriate structure and collaborative culture for facilitating flow of communication and social networking. The building of social exchange relationship demands creation of favorable and conductive organizational culture which may encourage knowledge sharing initiatives by providing employees involvement and adoption of organizational structure for better flow and communication of knowledge.

3.2) Key Limitations and Future Research

There are several limitations of this study. Firstly, our study is based on survey data collection which is considered as the most common research method used in organizational behavior (Spector, 1994), the cross-sectional research design does not allow us to infer causality from the hypothesized

relationship. Future researchers might use longitudinal design to draw causal relationships.

Secondly, the sample selected our study is the education sector of Pakistan, which is considered as the most knowledge intensive sector. But the relationships among normative commitment, cognition based trust, perceived cost of knowledge sharing and knowledge sharing are not strong in this sector. Future researchers might select other sectors (telecom, pharmaceutical, banking etc.) as their sample in order to develop strong relationship among them.

Although, this study makes significant contribution in existing literature but it fails to consider other contextual factors such as positive organizational culture, because culture plays a vital role in developing trust which may help to encourage KS sharing tendency in colleagues, which needs to be addressed in future studies. Future researchers should also investigate the role of organizational politics which is another important KS barrier in organization.

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