Trust and Motivation as Mediators of Big Five Personality and Knowledge Sharing

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ABSTRACT

The purpose of this paper is to examine the interrelationships among various interpersonal psychological factors to explain their effect on knowledge sharing behaviors at workplace. A sample of 450 employees was drawn from knowledge based industries. To tap the information regarding performance on knowledge sharing, Big Five personality, motivation and trust parameters, Knowledge Sharing Behavior (KSB) scale by Yi (2009), Big Five personality traits scale by Gosling et. al., (2003), extrinsic and intrinsic motivation scale by Lin (2007), and trust in peers and management scale by Mooradian (2006) were used. Partial Least Square technique of Structural Equation Modeling was applied using SmartPLS 2.0.M3 to understand the proposed relationships. Findings show the prominence of conscientiousness among Big Five personality traits to explain knowledge sharing behaviors at workplace (Total Effect of conscientiousness on knowledge sharing being 0.5246 significant at $p < 0.01$). Interpersonal trust is another important factor, which, however, is found to be at low levels in the organizations we studied (rated at 7th position out of 8 variables according to IPMA analysis). Intrinsic motivation is found to be a better predictor of knowledge sharing than the extrinsic motivation (Total Effect of intrinsic motivation on knowledge sharing being 0.3195, while that of extrinsic motivation on knowledge sharing being 0.1274, both significant at $p < 0.01$). Trust, extrinsic and intrinsic motivation were found to mediate the relation between certain personality traits and knowledge sharing. Although the paper has certain limitations, nevertheless, this is the first study to consider the relationship between personality, interpersonal trust, motivation and knowledge sharing in a single study and making us understand the interacting and mediating role of trust and motivation to explain knowledge sharing.

Keywords: Knowledge sharing, personality, trust, motivation, mediation.

1. INTRODUCTION

Knowledge sharing has been shown to reduce costs in organizations, promote new product developments, improve group dynamics, and increase organizations' competitive abilities. (Cummings, 2004).

Nevertheless, promoting knowledge sharing in the organization can be a challenging procedure. At the individual level, it may give rise to a feeling of losing a valuable personal asset (Argote et. al., 2001). Promoting the creation of new knowledge and its sharing is one of the challenges faced by today's managers (Kogut and Zander, 1992). Various interpersonal factors impair the intention and ability of individuals to share knowledge, resulting in the failure of even the most advanced knowledge administration frameworks adopted by the organizations meant to promote knowledge sharing (Bock et. al., 2005).

Knowledge Sharing can be researched within several contexts including organizational and cultural, interpersonal and group characteristics, or motivational (Wang, S., & Noe, R. A. 2010).

Research on knowledge sharing at individual level have been conducted in information sciences (Wasko & Faraj, 2005), strategic management (Reagans & McEvily, 2003), organizational behavior (Bordia et. al., 2006) and psychology (Lin, 2007b, c, d). One of the reasons why the knowledge management systems implemented in the organizations fail is the dearth of concern regarding the interpersonal factors that influence the knowledge sharing in individual or organizational settings (Voelpel, Dous, & Davenport, 2005).

Several factors are known to directly or indirectly influence the psychology of knowledge sharing. These factors may include management characteristics and administrative interventions such as incentives or rewards aimed to promote knowledge sharing (Cabrera & Cabrera, 2002); environmental characteristics (Levin and Cross, 2004); and the characteristics of the individuals who are owners of the knowledge such as the strength of association with the organization, interpersonal trust in peers and management, and the sources of motivations, which will ultimately assist them on deciding whether to conceal or share their knowledge (Levin and Cross, 2004).

Various researchers have shown an insight into the psychology of knowledge sharing at individual level. Knowledge sharing has been shown to be influenced by interpersonal factors such as personality, emotional intelligence, work engagement, motivational aspects, and interpersonal trust (Obermayer-Kovács et. al., 2015).

Only a few researchers have studied the interactions among different interpersonal factors to explain knowledge sharing (Mooradian et. al., 2006). Our study is among the few which explains the psychological process of knowledge sharing through mediations among trust and motivation.

2. LITERATURE REVIEW

Knowledge Sharing

Knowledge Sharing has been defined as "the provision or receipt of task information, know-how and feedback regarding a product or procedure" (Cummings, 2004), which is an impression of a socially interactive culture comprising the exchange of knowledge, experiences, skills, abilities and values within or between organizations. Knowledge sharing is a two-way process involving both the demand and supply of the knowledge created (Ardichvill et. al., 2003).

Promoting the conception and sharing of new knowledge is vital for the development of any organization (Nonaka and Takeuchi, 1995). Knowledge is a vital resource necessary to attain sustainable competitive advantage in a knowledge based organization through a process in which employees would be stimulated to develop new knowledge and apply it in the most productive manner. (Davenport & Prusak, 1998).

At individual level, knowledge sharing has its roots in the social exchange theory, where the employees, through a series of social interaction, would bring more efficiency in the behaviors crucial for success at job (Lin, 2007). Knowledge sharing, at organizational level, is about the formulation, coordination and organization, capturing, reusing and relocating the experience-based knowledge, which is present within the organization, to the needful centers within or outside the organization, making the knowledge available to others and generating new knowledge based on the existing one.

Knowledge sharing helps an organization retain the intellectual capital, even after the employee has left the organization, thereby increasing the profitability and productivity of the organization, ultimately leading to value addition and sustainability (Lin, 2007).

Personality and Knowledge Sharing

Personality refers to the "individual differences in characteristic patterns of thinking, feeling and behaving" (APA). Personality, being a cross-situational and highly stable attribute, has been known to explain the variation in a variety of human actions, behaviors and choices, (Landers & Lounsbury, 2006). There are various dimensions of personality which could be explained through several theories. The Five-Factor Model (FFM) best explains the variability in personality traits, making it the most comprehensive and widely used measure of personality (Zhang & Huang, 2001). Lewis Goldberg proposed the FFM comprising of five dimensions of personality, nicknamed the "Big Five" comprising of openness to experience, extraversion, conscientiousness, agreeableness and emotional stability (Goldberg, 1990).

Few empirical studies have been conducted on the relation between personality type and knowledge sharing. Agyemang et. al., (2016) found all five traits except conscientiousness to be significantly promoting knowledge sharing among instructors. Chong et. al., (2014) found extraversion and conscientiousness to be the predictors of knowledge sharing behaviors in classrooms. Cabrera et. al., (2006) found agreeableness, openness, and conscientiousness to significantly explain the intention to share knowledge. Mooradian & Matzler (2006) found agreeableness to influence knowledge sharing by increasing trust among coworkers.

Extrinsic and Intrinsic Motivation and Knowledge Sharing

Motivation can be defined as "an internal state ...giving rise to a desire or pressure to act" (Westwood, 1992). Given the prominence of the interpersonal factors in explaining knowledge sharing, the lack of extrinsic and intrinsic motivation among employees has been found to be associated with the failure of the knowledge sharing initiatives taken by the management (Osterloh & Frey, 2000). Osterloh and Frey (2000) found extrinsic and intrinsic motivations to be central in promoting knowledge sharing behaviors of employees. From the perspective of knowledge sharing, extrinsic motivation focuses on the reasons justifying the achievement of goals in terms of benefits or rewards received from sharing a particular knowledge

set (Deci & Ryan, 1985), while intrinsic motivation focuses on the inherent gratification and satisfaction derived from sharing a unique knowledge (Deci, 1975). Both extrinsic and intrinsic motivations have been known to have a positive impact on knowledge sharing on workplace (Chen & Hsieh 2015).

Interpersonal Trust and Knowledge Sharing

Interpersonal trust has been defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et. al., 1995). Interpersonal trust among peers and management has been known to boost the knowledge exchange process, while making it more efficient and less costly; and ensuring the adequate comprehension and absorption of the knowledge so received; ultimately leading to its more efficient application, hence bringing the efficiency at job (Levin and Cross, 2004). Lin (2007) found trust in coworkers to promote tacit knowledge sharing among students. Similarly, Rahman et. al., (2015) found positive association between trust and knowledge sharing. Ozlati (2015) found institution, benevolence, and competence-based trust to positively impact knowledge sharing, while benevolence and institution-based trust were found to moderate the association between relative autonomy and knowledge sharing.

Personality and Motivation

Work psychology suggests that individual differences (or personality) influence individual motivation through interaction with organizational and situational factors (Furnham, 2002). O'Reilly et. al., (1980) suggested that employees perceive their jobs in a significantly different manner, even if the tasks required to be performed at the job, and the job description remain constant, thereby suggesting a possibility of individual variance in the work behaviors, attitudes and motivations. A meta-analysis conducted by Judge and Illies (2002) found a strong influence of "Big Five" on different perspectives of motivation: expectancy, goal setting and self-efficacy motivation. Staw et. al., (1986) contended that the differences in employees' disposition influence their perception about the work environment, making them prioritize their motivations. Furnham (1997) suggested that intrinsic motivation factors affect extraverts more than the introverts. Individuals high in openness were found to be more satisfied with jobs which are less monotonous, which allow them to implement innovative skills and produced them the opportunity to learn new techniques (Furnham et. al., 2005). More recently, Furnham et. al., (2009) and Guillén & Saris (2013) found a strong association between personality and motivation. However, most of the empirical results showing the relation between personality and motivation have been inconsistent (Gellatly, 1996).

Personality and Trust

According to Costa and McCrae, (1992), an agreeable person being more altruistic to others, would more likely generate trust among coworkers. Mooradian et. al., (2006) found agreeableness to be strongly associated with trust in peers and management. Extraversion and agreeableness contribute positively to the team's communication, thereby generating trust (Jarvenpaa and Leidner, 1999). A study among the Finnish students found extraversion, agreeableness and emotional stability to predict different levels of generalized trust (Ignatius and Kokkonen, 2005). Furumo et. al., (2008) found agreeableness, conscientiousness and extraversion to be significant predictors of trust in face-to-face teams. Evans & Revelle (2008) found trust

to be related to extraversion and emotional stability, and trustworthiness to be related to agreeableness and conscientiousness. Mooradian et. al., (2006) found trust in peers to be mediating the relation between agreeableness and knowledge sharing. However, trust in management as a mediator was found to be insignificant.

Trust and Motivation

Interpersonal trust at workplace results in fairness of treatment and generates respect among employees, resulting in higher cooperation among employees, which may act as a basis of intrinsic motivation (Okello & Gilson 2015). In an exhaustive qualitative review of empirical studies on healthcare workers Okello & Gilson (2015) found interpersonal trust at workplace to directly and indirectly influence employee motivation in terms of respect; recognition, appreciation and rewards; supervision; teamwork; management support; autonomy etc. There is dearth of evidence supporting a positive relation between interpersonal trust and extrinsic motivation. There is in fact evidence supporting a negative relation between extrinsic motivation and trust which proposes that managerial actions primarily focused on the sources of extrinsic motivation alone may encourage a work environment with lesser interpersonal trust, which may impair intrinsic motivational factors (Ryan & Deci 2000; Newman & Lawler 2009). This however was held true only for a unidirectional relation, where extrinsic motivation was considered to be the predictor of interpersonal trust, and not the other way round. Extrinsic motivation in our research has been taken as a factor of "expected organizational rewards" and "reciprocity" (Davenport and Prusak, 1998). We believe that trust in peers and management would lead to higher reciprocity behaviors of both coworkers and management, and higher organizational rewards in terms of higher salary and promotion.

3. HYPOTHESES

Based on the theoretical and empirical evidences presented above, we propose the following hypotheses:

Trust as a mediator:

H1: Trust will mediate the relation between personality traits and knowledge sharing.

Extrinsic motivation as a mediator:

H2: Extrinsic motivation will mediate the relation between personality traits and knowledge sharing.

H3: Extrinsic Motivation will mediate the relation between trust and knowledge sharing.

Intrinsic motivation as a mediator:

H4: Intrinsic Motivation will mediate the relation between personality traits and knowledge sharing.

H5: Intrinsic Motivation will mediate the relation between trust and knowledge sharing.

4. RESEARCH METHOD

Sample and Data Collection

As our research intends to analyze the factors responsible for knowledge sharing, it was only logical to gather data from a population where knowledge sharing among employees is a significant factor for the success of the team performance and hence for the overall success of the organization. For this reason companies

from information and communication technology (ICT) based industry and financial institutions located in Delhi and Delhi-NCR regions were chosen for data collection, which are often classified as knowledge-based industries. Data was collected using survey method from middle-to-top level employees from these companies who were part of teams working on projects. Our study involves constructs with reflective models only. Out of 600 questionnaires distributed, 450 valid questionnaires were returned. Entire data collection process took around 180 days. The descriptive profile of data collected is given in Table 1.

Table 1
Demographic profile

Demographic Characteristic		No. of responses	Percentage
Gender	Male	264	58.67
	Female	186	41.33
Age	Upto 30 years	261	58
	30-40 years	140	31.11
	Over 40 years	49	10.89
Experience	0-5 years	170	37.78
	5-10 years	207	46
	Over 10 years	73	16.22
Education	Undergraduate	193	42.89
	Post-graduate	257	57.11
Industry	ICT	181	40.22
	Financial	269	59.78

Instrumentation

In our study, the scales used to measure the variables were adapted from previous studies. All constructs have multiple sub-dimensions. Knowledge sharing and interpersonal trust were measured using 5-point Likert-type scale (ranging from 1 = Never to 5 = Always; and 1 = strongly disagree to 5 = strongly agree respectively). Rest of the constructs were measured using a 7-point Likert-type scale (ranging from 1 = strongly disagree to 7 = strongly agree).

Expected organizational rewards (a sub-construct of extrinsic motivation), defined as the intensity to which employees perceive about attaining extrinsic incentives such as monetary benefits, job security etc. if they share knowledge, was measured using four items scale derived from Davenport and Prusak (1998), which was validated by Lin (2007). Reciprocal benefits (a sub-construct of extrinsic motivation), which is the intensity of employees' believes that they would be reciprocated for sharing knowledge, were measured using four item scale adapted from Kankanhalli et. al., (2005), which has been validated by Lin (2007). Knowledge self-efficacy (a sub-construct of intrinsic motivation), which assesses the confidence of employees regarding the value of their knowledge to the organization, was measured using four-item scale constructed by Spreitzer (1995). Enjoyment in helping others, which assesses the perception of gratitude obtained by the employee through sharing knowledge, was measured using four items scale derived from Wasko and Faraj (2000), which was validated by Lin (2007). Big-5 traits (explained earlier) were measured using Ten-Item Personality Inventory-(TIPI) constructed by Gosling et. al., (2003). Trust in management and peers were measured using 6 items "Interpersonal Trust at Work Scale" developed by Cook and Wall

(1980), which has been validated by Mooradian et. al., (2006). Finally, knowledge sharing was measured using 28-item knowledge sharing behavior (KSB) scale developed by Yi (2009). The four dimensions of KSB measure written contributions (5-items), organizational communications (8-items), personal interactions (8-items), and communities of practice (7-items).

5. DATA ANALYSIS AND RESULTS

The relationships between the variables were assessed using structural equation modeling through partial least squares (PLS) approach. All the analyses in our study were conducted using SmartPLS 2.0.M3 (Ringle et. al., 2005). According to Hulland (1999), assessment and interpreted of a PLS model is a two-step process. In the first step, reliability and validity analysis is conducted for the measurement model. In the second step, the predictability and significance of the paths between constructs in the structural model is evaluated.

Indicator reliability results showed the items: F15 in the 'Reciprocal benefits' scale, F3 in 'Expected Organizational rewards' scale to be the problematic, where deleting these items would increase the Cronbach's α of the respective scales from 0.82 to 0.809, and from 0.744 to 0.753 respectively. However, as both values reflect a good degree of reliability, it is advisable to retain such items (Hair et. al., 2013), hence we decided not to remove them.

Average variance extracted (AVE) is a general measure used to establish convergent validity on the construct level.

The results of AVEs for different constructs and sub-constructs used in our model are presented in Table 2.

Table 2
Construct level AVE measures

Variables	*AVE*	*Variables*	*AVE*
Extraversion	0.9779	Organizational rewards	0.5568
Openness	0.8187	Reciprocal Benefits	0.6358
Agreeableness	0.9754	Trust in peers	0.8332
Conscientiousness	0.9789	Trust in management	0.6211
Emotional stability	0.9682	Written contribution	0.6858
Self-Efficany	0.6238	Organizational comm.	0.6075
Altruism	0.6519	Personal interaction	0.6231
		Communities of practice	0.624

As all of our constructs have AVEs > 0.5, we can say that such constructs, and hence entire model meets the convergent validity requirement.

Discriminant validity is the degree to which a construct is truly diverse from other constructs (Hulland, 1999). The Fornell-Larcker criterion (Fornell & Larcker, 1981), shown in Table 3, is a methodology used for measuring discriminant validity, which associates the square root of the AVE values (given on diagonal) with the latent variable correlations (given on the lower left triangle). The square root of the AVE value for a given construct should be greater than any of its correlation with other constructs in order to establish discriminant validity, suggesting that the given construct shares more variance with its own indicators, than with any other construct.

Table 3
Fornell-Larcker Criterion

	Agree	Consc	Ext. M	Extrav	Int. M	KS	Emo Sta	Openn	Trust
Agree	0.988								
Consc.	0.026	0.989							
Ext. M.	0.076	0.593	0.629						
Extrav.	0.009	0.003	0.005	0.989					
Int. M.	−0.022	0.701	0.385	0.053	0.710				
KS	0.339	0.541	0.390	0.271	0.512	0.579			
EmoSta.	0.009	0.009	−0.028	−0.004	0.037	0.289	0.984		
Openn.	0.037	−0.037	0.024	0.278	−0.02	0.107	0.020	0.905	
Trust	0.445	0.335	0.201	−0.043	0.185	0.524	0.001	−0.050	0.652

Accordingly, all of our constructs meet Fornell-Larcker criterion requirements and discriminant validity is established.

Assessment of the Significance and Relevance of the Structural Model Relationships

Examining the Total Effects

In a complex structural model like ours, an endogenous construct may be explained by several constructs indirectly. Hence, to get a complete understanding of the structural model, it is important to know the relevance and significance of the relationships between difference exogenous constructs and endogenous constructs, which is explained by the Total Effect of a particular exogenous construct on target endogenous construct. Total Effect is the sum of the direct effect and all indirect effects linking two constructs. PLS uses the bootstrapping methodology (Efron & Tibshirani, 1986) in order to assess the standard errors, which evaluates the significance of the structural coefficients.

Table 4
Displays the Total Effects and their significance (at 5% level) for
each exogenous construct on each endogenous construct

	Total effects			
	Ext Mot	Int Mot	KS	Trust
Agreeableness	0.0595	−0.0406	0.1675*	0.4387*
Conscientiousness	0.594*	0.7014*	0.5246*	0.3217*
Ext Mot			0.1274*	
Extraversion	−0.0099	0.0542	0.1265*	−0.0356
Int Mot			0.3195*	
KS				
Emotional stability	−0.0352	0.031	0.2047*	−0.0052
Openness	0.047	−0.0109	−0.0011	−0.0441
Trust	−0.0321	−0.0425	0.4151*	

*$p < 0.01$, Table 4 (Total effects).

From Table-4, we can see that conscientiousness is the only factor to have a significant total effect on both extrinsic motivation (0.594) and intrinsic motivation (0.701). Among all the endogenous constructs for trust, agreeableness and conscientiousness were found to have a significant total effect on trust (0.439 and 0.322 respectively). All the endogenous constructs, except openness, were found to have a significant total effect on knowledge sharing, with conscientiousness having the highest (0.525) among the Big Five, and trust having the highest (0.415) among rest of the constructs.

Coefficients of determination (R^2) results, representing the exogenous latent variables' combined effects on the endogenous latent variable, are presented in Table 5. R^2 is a measure which suggests the predictability of the constructs involved in a model. It is calculated as the squared correlation between the actual values and the predicted values of a particular endogenous construct.

Table 5
Coefficients of determination: R^2

Constructs	R Square
Ext Mot	0.3598
Int Mot	0.4981
KS	0.474
Trust	0.308

Using the results of R^2 displayed in Table 5, we can conclude that R^2 values of 'knowledge sharing' are moderate-to-substantial, while the R^2 values of extrinsic and intrinsic motivation and trust are moderate-to-weak.

Importance-performance Matrix Analysis

Importance-performance matrix analysis (IPMA) is a tool provided by PLS-SEM, which, using latent variable scores, compares the structural model total effects (importance) with the mean values of the latent variable scores (performance) for any given dependent variable, thus signifying the aspects which warrant managerial attention (Hair et. al., 2013). Table 6 and Figure 1 shows the result of IPMA analysis.

Table 6
IPMA analysis

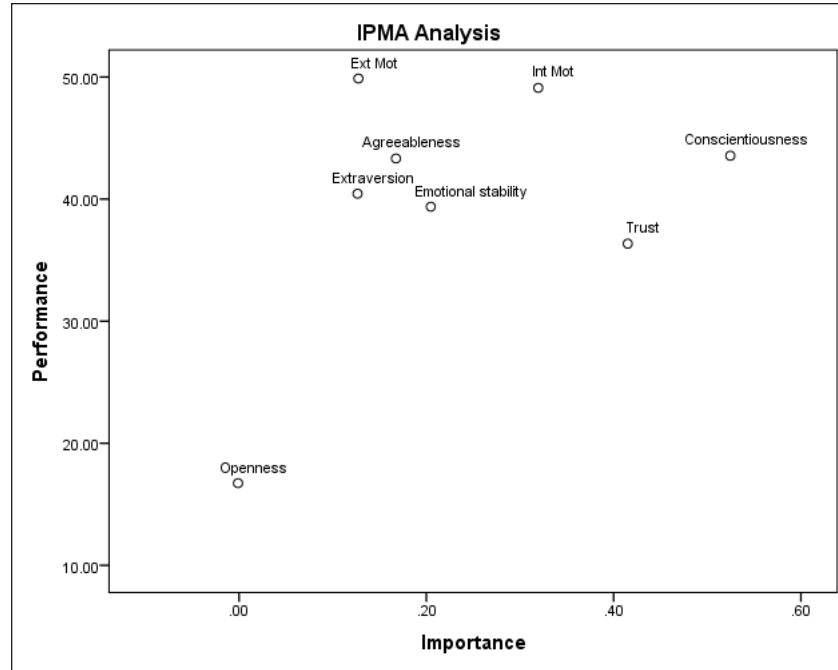| Index values and Total Effects for the IPMA of Knowledge Sharing		
	Importance (total effects)	Performance
Agreeableness	0.1675	43.3242
Conscientiousness	0.5246	43.5534
Ext Mot	0.1274	49.8808
Extraversion	0.1265	40.446
Int Mot	0.3195	49.116
Emotional stability	0.2047	39.3773
Openness	-0.0011	16.7301
Trust	0.4151	36.3486

Figure 1: IPMA analysis

From the IPMA analysis, it is evident that conscientiousness is the most important construct to facilitate knowledge sharing, while its performance is comparatively lesser than several others'. Construct extrinsic motivation performs best. Construct Trust is one of the least performing construct while it is one of the most important ones to facilitate Knowledge Sharing.

Mediation Analysis and Hypotheses Testing

Mediation characterizes a situation where a mediator variable, to a certain extent, absorbs the effect of an exogenous on an endogenous latent variable (Baron & Kenny, 1986). In our study, we restricted all the mediation analysis between three variables at a time depending on our hypotheses, in order to make comprehension easier. Mediation results are presented in Table 7, for those paths for which the condition of significant direct effect (without mediator) has been met. Such condition was not met for the direct effects of openness on knowledge sharing without trust and intrinsic motivation as the mediators. Hence, these paths were removed from the mediation analysis.

Table 7
Significance analysis of Mediation

	Mediator: Trust					
Path	*Path coefficient to Trust*	*Path coefficient of Trust to KS*	*Total effect*	*t value*	*Sig*	*VAF*
Agreeableness > Trust > KS	0.57	0.32	0.43	8.76	***	0.43
Conscientiousness > Trust > KS	0.44	0.32	0.30	7.65	***	0.47
Extraversion > Trust > KS	–0.03	0.32	0.24	–0.59	NS	–
Emotional stability > Trust > KS	0.02	0.32	0.25	0.37	NS	–

(Contd...)

Mediator: Extrinsic Motivation						
Path	*Path coefficient to Ext Mot*	*Path coefficient of Ext Mot to KS*	*Total effect*	*t value*	*Sig*	*VAF*
Agreeableness > ExtMot > KS	0.10	0.11	0.25	1.84	NS	–
Conscientiousness > ExtMot > KS	0.81	0.11	0.24	4.25	***	0.35
Extraversion > ExtMot > KS	–0.01	0.11	0.25	–0.38	NS	–
Emotional stability > ExtMot > KS	–0.05	0.11	0.24	–1.08	NS	–
Openness > ExtMot > KS	0.14	0.11	0.14	3.22	***	0.10
Trust > ExtMot > KS	–0.03	0.11	0.32	–0.67	NS	–
Mediator: Intrinsic Motivation						
Path	*Path coefficient to Int Mot*	*Path coefficient of Int Mot to KS*	*Total effect*	*t value*	*Sig*	*VAF*
Agreeableness > IntMot > KS	–0.03	0.29	0.24	–0.77	NS	–
Conscientiousness > IntMot > KS	0.96	0.29	0.43	8.47	***	0.63
Extraversion > IntMot > KS	0.07	0.29	0.27	2.01	**	0.08
Emotional stability > IntMot > KS	0.04	0.29	0.25	1.22	NS	–
Trust > IntMot > KS	–0.04	0.29	0.31	–0.99	NS	–

**p < .05, ***p < 0.01.

Interpretation of Mediation Results (at 5% Significance Level)

Trust as a mediator: Trust was found to moderately mediate the relation between two personality traits (agreeableness and conscientiousness) and knowledge sharing (VAF = 0.43 and 0.47 respectively), partially supporting H1.

Extrinsic motivation as a mediator: Extrinsic motivation was found to weakly mediate openness and knowledge sharing (VAF = 0.10), and moderately mediate conscientiousness and knowledge sharing (VAF = 0.35), partially supporting H2. Hypothesis H3 could not be accepted.

Intrinsic motivation as a mediator: Intrinsic motivation was found to weakly mediate extraversion and knowledge sharing (VAF = 0.08), while a moderate-to-strong mediation was found between conscientiousness and knowledge sharing (VAF = 0.63), partially supporting H4. Hypothesis H5 could not be accepted.

6. DISCUSSION

Inspired by the necessity to understand the complex relation between prominent interpersonal psychological factors, and their relation with knowledge sharing behaviors of employees, in this study we incorporated Big Five personality traits, interpersonal trust, intrinsic and extrinsic motivational factors into a structural model, in order to study their direct and indirect effects on knowledge sharing. The results showed the prominence of conscientiousness and emotional stability among Big Five for explaining knowledge sharing behaviors, in lines with Cabrera et. al., (2006). Kim Shin and Swanger (2009) had also found conscientiousness to be one of the most significant personality traits in explaining knowledge sharing. IPMA analysis suggests that even though conscientiousness is the most important factor in explaining knowledge sharing, its performance is much lower than other interpersonal factors like motivational factors. This has implication for recruitment

practices, where the management should attempt to hire more employees rated higher at conscientiousness front, if promotion of knowledge sharing is the aim.

Intrinsic motivation appears to promote more knowledge sharing compared to extrinsic motivation. It is also a stronger mediator for conscientiousness and knowledge sharing. However, it appears that management is a little more focused at extrinsic methods compared to intrinsic methods, to motivate their employees. Management should rather introduce methods such as job enrichment, and value their suggestions (knowledge), which would motivate employees intrinsically, giving them a chance to utilize their unique knowledge set.

Interpersonal trust has been found to be one of the major predictors of knowledge sharing among all interpersonal factors, a result which is in lines with Mooradian et. al., (2006). Trust mediated the relation between personality traits and knowledge sharing for only agreeableness and conscientiousness among Big Five, which is also in line with Mooradian et. al., (2006). Surprisingly, even though interpersonal trust is one of the most important factors in explaining knowledge sharing, its performance is one of the lowest as per IPMA analysis. This has a major implication for the management, who should try to build more trust in their organization, if knowledge sharing has to be facilitated. Practices such as participative management, quality circles, etc. may be adopted in order to promote trust in management, while a more favorable atmosphere in order to facilitate team work should be created in order to promote trust within peers.

7. LIMITATIONS

In our study, Hierarchical Component Model was used for all constructs except for personality traits. In a Hierarchical Component Model, a construct is explained by two or more underlying dimensions, and as our study comprised a large number of constructs, this made it difficult to see the effect of one sub-dimension of a construct on that of another. Doing so could give a better understanding of the mechanisms through which different factors interact with one another. Future researchers should concentrate on a fewer factors in order to understand such a mechanism. Results regarding the role of personality in explaining knowledge sharing and other interpersonal factors are not perfectly consistent with older studies. However, studies involving personality are known to bring inconsistent results (Zhao & Seibert 2006). In order to keep the questionnaire of a reasonable length, we had adopted a very short scale in order to measure Big Five traits, comprising of only 10-items, as, for even the shortest of other inventories available, number of items exceed over 40 (Facet, B. F. D. Big Five Inventory-BFI). Future researchers may do a more focused study to understand the detailed interactions of personality traits with other interpersonal factors.

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