Personality, Social Identity and Knowledge Withholding Intentions: An Empirical Study

Dr. Chhaya Wadhwa*

ABSTRACT

The management and sharing of knowledge is critical to an organization's performance, innovation, continuous improvement and competitive advantage and leads to an overall positive environment in any organization. As a result knowledge sharing at work, has received increased researcher and practitioner attention in the last two decades. However it is still not well understood why employees often resist sharing their knowledge with co-workers. Although many studies have explored the factors affecting the knowledge sharing intention, few have explored the role of personality, social identity theory and perceived identity in the knowledge withholding intentions. Survey data were collected from 236 management students from Delhi NCR. The results indicate that personality and perceived social negatively affect the knowledge withholding intention.

Keywords: Personality, Knowledge Withholding Intentions, Social Identity, Management Students

INTRODUCTION

Knowledge sharing has been identified as one of the most important sources of long-term competitive advantage in today's global economic environment is knowledge (Liao et al, 2004; Stewart, 1997; Nonaka & Takeuchi, 1995). To utilize and leverage the knowledge of the employees, technology alone cannot ensure knowledge sharing. Employees are very critical for the success of any organization, and their willingness to share clearly and voluntarily what they know with colleagues is a very crucial (Davenport, De Long, & Beers, 1998; Kim & Mauborgne, 1998; Stevens, 2000). Knowledge is of two types- explicit knowledge – which is relatively easy to document, transmit and shared through communication systems or formally stored in repositories for later use (Markus, 2000) and the second type is the tacit knowledge- which is "highly personal and hard to formalize, making it difficult to communicate or share with others" (Nonaka & Konno,1998). As stated by J. Michael Pemberton (2004), "KM's purpose is generally agreed to be that of leveraging or converting information assets into knowledge of a strategic quality, which, in turn, generates innovation that enables improved revenue and a better strategic and competitive position in the organization's market" (p. 48).

Howell & Annansingh (2013) in their research on the subject suggest that value of knowledge sharing in management education is exhibited when students are encouraged to express, share, negotiate, and understand tacit knowledge and the same holds true for knowledge workers in any organization. Knowledge sharing enables students to enhance their understanding and application of concepts (Eid & Nuhu, 2011). Class participation enables integration and assimilation of knowledge (Yeh, Huang, and Yeh, 2011). In subsequent studies, Yeh and colleagues (2012) found creativity of students can be enhanced with using a combination of e-learning tools and other knowledge management processes. In the knowledge economy, sharing knowledge, thus, has become a critical issue for most organizations and management institutes today.

LITERATURE REVIEW

For successful knowledge management systems and e-learning, Hwang (2008) suggested that individuals' motivation for knowledge sharing is a crucial factor. Companies today realize the value of knowledge sharing and management. Lately, the interest in knowledge sharing has captured the interest of management institutions as well (Howell & Annansingh, 2013; Norris,

***Assistant Professor, Apeejay School of Management, Dwarka, New Delhi**

Lefrere, & Mason, 2006). However, academic institutions have started to incorporate knowledge management models into their training programs and curricula (e.g., Yeh et al., 2012, Alony, Whymark, & Jones, 2007; Ferguson, Mathur, & Shah, 2005; Choi & Lee, 2003). The curriculum in management education is increasingly focusing on knowledge sharing. The students are increasingly being encouraged to understand, articulate and exchange tacit knowledge (Howell & Annansingh, 2013). Knowledge sharing enables students to enhance their understanding of concepts and be more capable of their application (Eid & Nuhu, 2011).

Organizations, today, are trying to actively promote and leverage knowledge sharing. However people have a tendency to hoard knowledge, to guard it and to share and release it only selectively out of a desire to appear valuable to the company. A lack of knowledge sharing also known as knowledge withholding - leads to knowledge leaks, and ultimately results in organizational inefficiency such as repeated mistakes throughout the organization, time wasted duplicating work or "reinventing the wheel," difficulty creating and reusing information, missed connections, delays in adjusting strategic direction, slow problem-solving and sluggish innovation (Davenport & Prusak, 1998; Gilmour, 2003; Ipe, 2003; Martinez, 1998; Nonaka & Takeuchi, 1995).

Yang (2004) found that the absence of strong personal motivations is likely to encourage knowledge withholding behavior. Lin and Huang (2010) suggested that in context of group such as in class, withholding effort in terms of knowledge contribution is higher. They further proposed that the factors affecting positive behavior variables such as knowledge sharing may not be same as those affecting negative behavior variables such as knowledge withholding. Therefore, knowledge withholding requires separate research (e.g., Connelly et al, 2012; Webster et al, 2008; Schein, 2004).

Various studies have indicated the importance of knowledge sharing in assimilation of learning during classroom teaching and discussion. In management education, classroom discussion is one of the most often used pedagogical strategies. Knowledge sharing during classroom discussions encourages students to gain an understanding of various issues and appreciate others' perspectives; however, in its absence the knowledge gathering will be hampered.

There is a clear distinction between the two concepts. Apparently, an increase in knowledge-sharing intention will signify a decrease in knowledge-withholding intention, but it may not hold true in all cases. Literature also suggests that students with high knowledge-sharing intention may share common knowledge or nonessential knowledge during knowledge sharing sessions, but may hold crucial knowledge. Thus, to improve understanding of knowledge contribution behavior is important to understand and study knowledge-withholding intention.

In organizations, employees identify with their organizations and they strive for achieving the organizational goals, and for that they have to share knowledge. Organizational identification is rooted in social identity theory (Tajfel and Turner, 1986), which assumes that group membership is important for employees. Social identity reflects one's acceptance of and sense of belonging to a group of people (Ashforth &Mael, 1989). The importance of social identity results from the individual's need to belong (Baumeister and Leary, 1995), and it was found that identification with an organization is essential (e.g. Riketta, 2005). Employees who strongly identify with their organization are more committed and willing to remain in the company, show higher motivation, and are more supportive towards colleagues. Researchers also found that identification with one's own team is influential as well (Riketta and Van Dick, 2005): team members with a high sense of identification become more involved with their team.

Generally people have more favorable attitude towards the members of the in-group as compared to those of the out-group (Clement, Noels, & Doeneault, 2001). Kane and colleagues (2005) suggested individuals evaluate in-group members as more trustworthy, honest, loyal, cooperative, and valuable to the group than out-group members; thus, individuals may feel more comfortable sharing knowledge within groups that share a social identity, as opposed to groups that do not. There is a difference between personal identity and social identity, people can perceive themselves either as individuals (personal identity) or as members of a group (social identity) in a certain moment and it varies according to the circumstances under which people's sense of personal identity is stronger than their sense of identity as group members. It is therefore hypothesized that the students who strongly identify themselves as members of a group that they belong to will be more committed to the members and in turn, knowledge withholding should be less likely

to occur. It is argued that students' intention toward knowledge -withholding in a class is affected by their perceived class identity, hence our hypothesis:

H 1 : Perceived social identity has a negative effect on knowledge-withholding intention.

Big Five personality traits are important predictors of knowledge construction and knowledge sharing (Wang et al., 2012; Cabrera, Collins, & Salgado, 2006; Mooradian et al, 2006). The Big Five personality factors have extensively been studied in the field of personality research for several decades (Benet-Martínez & John, 1998; Costa & McCrae, 1989, 1992). Researchers have even suggested that no personality assessment is complete without measuring the five basic factors that include agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience (Aguilar et al, 1998). The five personality dimensions as defined here have been examined across a variety of contexts, including organizations and organizational behavior.

The first dimension, Extraversion, may be considered as the extent to which an individual is sociable, gregarious, assertive, talkative, active, and adventurous (Norman, 1963; McCrae & Costa, 1985; Barrick & Mount, 1991). Literature suggests that people who are extroverts tend to be emotionally positive and tend to participate more in team activities and hence our hypothesis:

H 2: There is a negative relationship between extraversion and knowledge withholding intention.

The second dimension i.e. Emotional Stability, Stability, Emotionality, or Neuroticism. This dimension may represent the extent to which individuals are anxious, depressed, angry, embarrassed, worried, or insecure. Individuals who are more neurotic are characterized as nervous, tense, hypochondrial, and impulsive, whereas individuals who are less neurotic are considered self-confident, calm, even-tempered, and composed (Norman, 1963; McCrae & Costa, 1985). Hence our hypothesis:

H3 : There is a positive relationship between neuroticism and knowledge withholding intention.

The third dimension has been termed Agreeableness or Likability, and characteristics of this dimension reflect people who are courteous, flexible, trusting, good-natured, cooperative, forgiving, and tolerant (Norman, 1963;Barrick & Mount 1991). these are the people who are helpful, generous, cheerful and cooperative, hence our

HYPOTHESIS

H4: There is a negative relationship between agreeableness and knowledge withholding intention.

The fourth dimension has most frequently been called Conscientiousness, and it may be conceptualized as the extent to which individuals are dependable, careful, thorough, responsible, organized, persevering, and planful (Norman, 1963). These are the people who are more reliable, responsible and in situations of team work, they are more cooperative with others as compared to the people who have lower levels of conscientiousness. Hence our hypothesis:

H5: There is a negative relationship between conscientiousness and knowledge withholding intention.

The last dimension has been the most difficult to identify and achieve consensus across researchers (Barrick & Mount, 1991). It has been interpreted as Intellect or Intelligence (Borgatta, 1964), Culture (Norman, 1963), and Openness to Experience (McCrae & Costa, 1985). This dimension includes characteristics of those who are imaginative, cultured, curious, original, broad-minded, and intelligent (Barrick & Mount, 1991). Hence our hypothesis:

H6: There is a negative relationship between openness to experience and knowledge withholding intention.

A number of studies have explored the relationship between Big-Five personality traits and knowledge sharing. However, few studies have been done to study the influence of Big-Five personality traits and knowledge-withholding intentions and thus, this paper is in the same direction.

METHOD & MEASURES

Quantitative measures were used for the data that were collected. These were used to measure the perceived social identity and knowledge withholding intention. A variety of demographic questions were asked from the participants. A total score was obtained for each participant by aggregating their item scores for each measure except for the demographic details.

The five dimensions of the big five personality - extraversion, agreeableness, conscientiousness, neuroticism; and openness to experience, were measured using the Big Five Inventory (Benet-Martinez & John, 1998). Items measuring the Knowledge withholding Intention were adapted from Lin and Huang (2010), while items measuring perceived social

identity were adapted from Kwon and Wen's (2009) social identity instrument. Five point (1-5) Likert scales with anchors ranging from strongly disagree to strongly agree were used for all the items.

SAMPLE AND PROCEDURES

The present study examined the role of the personality and perceived social identity in the knowledge withholding intention of the students.

The survey participants were the students form various Business schools form Delhi NCR. Survey questionnaire filled by 300 management students, pursuing full time PGDM or MBA course form various management schools in the Delhi NCR region. The participants were informed that the participation in this study was completely voluntary and that the survey responses would be strictly confidential and data from this research would be reported only in the aggregate. In total 267 questionnaires were returned and out of it only 236 usable questionnaires were used in the study. The respondents were asked about various demographic details like their age, gender, year of study, and prior work experience.

Table 1 : The Demographic profile of the Respondents

Profile	Frequency N= 236	Percentage %	Profile	Frequency N= 236	Percentage %
Gender			**Age (in years)**		
Male	137	58.1	Less than 20	6	2.5
Female	99	41.9	21-23	205	86.9
			24-25	18	7.6
			Above 25	7	3.0

Table 2 : Prior Work Experience of the Respondents

Profile	Frequency N= 236	Percentage (100%)
No prior Experience	154	65.3
Upto 6 Months	28	11.9
6-12 Months	30	12.7
12 -24 months	20	8.5
24 months & above	4	1.7

RESULTS

H1: Perceived social identity has a negative effect on knowledge-withholding intention.

Cronbach alpha for Perceived social identity in the dataset was .72. Hypothesis was tested using Pearson correlation between perceived social identity and knowledge withholding intention. The results indicate that there is a highly significant negative correlation between perceived identity and knowledge withholding intention. The coefficient of correlation $r = -.221$, $p < .05$ and $N=236$.

Further analysis was conducted to verify the relationship between the gender of the respondents and their knowledge withholding intention. Cronbach alpha for Knowledge withholding intention in the dataset was .80

ANOVA test , F value is 12.545 and $p < .01$, indicates that there is a significant difference in the level of knowledge withholding intention between the male and the female respondents. The male respondents had a higher propensity to withhold knowledge (Male mean = 13.89) as compare to the females = 12.08)

Table 3 : Regression of the perceived identity with Knowledge withholding Intention.

Model Surnmary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.221[a]	.049	.040	3.93470

a. Predictors : (Constant), PERCEIVED_IDENTITY

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.998	1	81.998	5.296	.023[b]
	Residual	1594.631	103	15.482		
	Total	1676.629	104			

a. Dependent Variable : KWI
b. Predictors : (Constant), PERCEIVED_IDENTITY

On conducting a regression of the dependent variable knowledge withholding intention and the independent variable perceived social identity, it was revealed that it was able to explain almost 5% variance (r square change = .049) in the knowledge withholding intention of the participants.

H2: There is a negative relationship between extraversion and knowledge withholding intention.

Extraverts are enthusiastic, energetic and optimists. It

represents the quantity and intensity of interpersonal interaction, the need for simulation and the capacity for joy . Cronbach alpha for Extraversion in the dataset was .74

Hypothesis 2 was tested using Pearson correlation between extraversion and knowledge withholding intention. The results indicate that there is a highly significant correlation between extraversion and knowledge withholding intention. The coefficient of correlation r = -.330 , p< .01 and N=236. This implies that respondents who had higher level of extraversion had lower intention to withhold knowledge.

H3: There is a positive relationship between neuroticism and knowledge withholding intention.

Neuroticism measures affective adjustment versus emotional instability of the individuals. Cronbach alpha for Neuroticism in the dataset was .76

Hypothesis 3 was tested using Pearson correlation between neuroticism and knowledge withholding intention. The results indicate that there is a highly significant correlation between neuroticism and knowledge withholding intention. The coefficient of correlation r = .146 , p< .01 and N=236.

H4: There is a negative relationship between agreeableness and knowledge withholding intention.

Agreeableness measures the degree to which a person enjoys being in the presence of others and as an individual's tendency to be interpersonally pleasant (Besser and Shackelford 2007), with high interpersonal relationships.

Cronbach alpha for agreeableness in the dataset was .74

Hypothesis 4 was tested using Pearson correlation between agreeableness and knowledge withholding intention. The results indicate that there is a highly significant correlation between agreeableness and knowledge withholding intention. The coefficient of correlation r = -.182 , p< .01 and N=236.

H5: There is a negative relationship between conscientiousness and knowledge withholding intention.

Conscientiousness measures the individual's degree of organization, persistence, and motivation in goal-directed behavior. Cronbach alpha for Conscientiousness in the dataset was .72 Hypothesis 5 was tested using Pearson correlation between conscientiousness and knowledge withholding intention. The results indicate that there is a highly significant correlation between conscientiousness and knowledge withholding intention. The coefficient of correlation r = -.281 , p< .01 and N=236.

H6: There is a negative relationship between openness to experience and knowledge withholding intention.

Openness to Experience refers to the proactive seeking and appreciation of experience for its own sake, and as toleration for and exploration of the unfamiliar. Cronbach alpha for Openness to Experience in the dataset was .73. Hypothesis 6 was tested using Pearson correlation between openness to experience and knowledge withholding intention. The results indicate that there is a highly significant correlation between openness to experience and knowledge withholding intention. The coefficient of correlation r = -.277, p< .01 and N=236.

Further analysis was conducted to verify the relationship between the gender of the respondents and their knowledge withholding intention. Cronbach alpha for Knowledge withholding intention in the dataset was .80

ANOVA test , F value is 12.545 and p < .01, indicates that there is a significant difference in the level of knowledge withholding intention between the male and the female respondents. The male respondents had a higher propensity to withhold knowledge (Male mean = 13.89) as compared to the females = 12.08)

Table 4 : Regression of the Big Five Personality Traits with Knowledge withholding Intention.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.448[a]	.201	.183	3.62013

a. Predictors : (Constant), Openness, Neuroticism, Agreeableness, conscientiousness, Extroversion

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	738.306	5	147.661	11.267	.000[b]
Residual	2935.589	224	13.105		
Total	3673.896	229			

a. Dependent Variable : KWITHOLD

b. Predictors : (Constant), Openness, Neuroticism, Agreeableness conscientiousness, Extroversion

On conducting a regression of the dependent variable knowledge sharing intention and the independent variables the big five personality traits- agreeableness, openness, extraversion, neuroticism, and conscientiousness, it was revealed that these variables are able to explain 20% variance (r square change = .201) in the knowledge sharing intention of the participants.

LIMITATIONS

Although our findings presented significance for theoretical research and practice, there were several limitations to our study. The findings of this research cannot be generalized as there could be self-reporting bias. Also, the data was collected from management students and may be different for different people. Further studies can be conducted with various segments that may comprise people with different backgrounds, across multiple age groups, or professions, which may give different insights into knowledge withholding behavior.

CONCLUSIONS AND FUTURE RESEARCH

Though most of the studies have focused on knowledge-sharing behavior, this paper attempts to study the knowledge-withholding behavior that is affected by the personality in terms of the big five personality traits and the perceived social identity of the respondents. The findings indicate that the aspects of big five personality play an important role in the knowledge withholding behavior and were able to explain approximately 20% variance in the said behavior of the respondents. The management students with higher level of extraversion, agreeableness and openness to experience, had lower levels of knowledge -withholding behavior. It was found that extraversion, conscientiousness, openness to experience, and neuroticism significantly affects the intention to withhold knowledge. The findings indicate that the perceived social identity play an important role in the knowledge withholding behavior and was able to explain approximately 5% variance in the said behavior of the respondents. The management students with higher level of perceived social identity had lower levels of knowledge -withholding behavior. In any organization, the focus is more on meaningful knowledge sharing and knowledge creation rather than knowledge withholding.

Future research directions may be pursued to understand the moderation effect of expected rewards and outcomes on knowledge-withholding intentions. Variables such as locus of control (Amichai-Hamburger, 2002), prior experience (Agarwal & Prasad, 1999), initiative and involvement of students within the group (Smith & Woodworth, 2012) may also be studied to have further understanding of knowledge-withholding behavior. Further research may also be attempted to explore how the social identity theory impacts the knowledge construction and the relationship between social identity theory and knowledge construction behavior.

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