

Dearth of Knowledge Cloning in Academia: Psychological and Social Predictors of Attitudes toward Knowledge Sharing of Professors

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Abstract: The research examined psychological and social factors related to attitude towards knowledge sharing among 187 (62.33%) males and 113 (37.67%) females academic Professors from 4 Nigerian universities. Their age ranged from 39 to 63 years (mean = 44 years, Sd = 5.23). A cross-sectional survey design was used to collect data on preventative psychological ownership, individualism-collectivism, self-efficacy, extroversion-introversion, and attitude towards knowledge sharing. Results showed that self-efficacy, extroversion-introversion, individualism, collectivism, and preventative psychological ownership were related to and account for unique variance in attitude towards knowledge sharing beyond the contributions of age and tenure. Jointly and independently, self-efficacy, extroversion-introversion, individualism-collectivism, preventative psychological ownership, age and tenure contributed to attitude towards knowledge sharing. It is conclusively stated that these psychological and social factors are related to attitude towards knowledge sharing. It is therefore recommended that university management should employ the service of psychologists in developing attitudinal change modules to improve attitude towards knowledge sharing among the academic Professors. [Ojedokun O, Idemudia ES. **Dearth of Knowledge Cloning in Academia: Psychological and Social Predictors of Attitudes toward Knowledge Sharing of Professors.** *Life Sci J* 2013;10(3):2087-2096] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 306

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1. Introduction

All over the world, knowledge intensive industry such as the university system acknowledges knowledge cloning through mentoring of younger and less-experienced academic staff. So for the advancement of science, the society and education of students, academic Professors, compared to other academic staff, are not only encouraged but also demanded to clone themselves (i.e., reproduce) by mentoring younger and less-experienced academic staff through knowledge sharing (KS). Ironically in the Nigerian universities, the unfortunate reality is that, at present, it is not certain that much knowledge cloning is been practiced by academic Professors. Hence, the question, what is responsible for the lukewarm attitude towards KS among academic Professors? Apart from the generic lack of institutional based facilities, another possible reason could be their attitude towards knowledge sharing.

To Bohner and Dickel (2011), attitude is an evaluation of an object of thought. Attitude objects comprise anything a person may hold in mind, ranging from the mundane to the abstract, including things, people, groups and ideas. In this paper, attitude is an individual's positive or negative evaluation of KS. Individuals' attitude is important in motivating KS. This is because attitude is a precursor

of behavior (Fazio & Williams, 1986), though not in every situation. Generally speaking, a favorable attitude towards KS is expected to be positively related to more frequency of KS behavior and a negative attitude towards KS should be related to less frequency of KS behavior.

Knowledge is the information processing that takes place in human minds, as well as personalized information related to facts, procedures, concepts, interpretations, ideas, observations and judgments (Alavi & Leidner 2001). This definition moves knowledge beyond mere information to include facts and ideas gotten through experience. In the work environment, knowledge is an important organizational asset (Suppiah & Sandhu, 2010; Tucker et al., 1996), and the concern is how to manage this important resource (Davenport & Prusak, 1998; Hansen et al., 1999). Attitude towards sharing the knowledge that resides in the mind of individuals and gathered through experience with others plays a pivotal role here (Suppiah & Sandhu, 2010; Osterloh & Frey, 2000). This is because positive attitude towards sharing knowledge between employees and among teams allows organizations to exploit and capitalize on knowledge-based resources (Cabrera & Cabrera, 2005; Damodaran & Olphert, 2000).

Attitude is undoubtedly the product of thought and thought processes differ from person to person based on some psychosocial factors (Cacioppo et al., 1986). Thus in this study, individual and cultural differences are proposed as explanations for attitude toward KS.

In the area of attitude toward KS, researchers (e.g., Matzler et al., 2008; Usoro et al., 2007; Mooradian et al., 2006; Tagliaventi & Mattarelli, 2006; Cabrera et al., 2006; Kankanhalli et al., 2005; Argote et al., 2003) have investigated how technological issues, organizational, team and personal characteristics influence attitude toward KS. However, a research lacuna exists that overlooked some antecedents of KS. Among these, preventative psychological ownership and individualism-collectivism orientation can be two of them that may be related to attitude towards KS. In addition, variables such as self-efficacy and extroversion-introversion linked to attitude towards KS in previous studies (e.g., Matzler & Müller, 2011; Matzler et al. 2008; Cabrera et al. 2006; Endres et al. 2007) are also important.

Thus, the research question addressed here is: What is the joint and independent influence of preventative psychological ownership, individualism-collectivism, self-efficacy, extroversion-introversion on attitude towards KS? Unfortunately, literature on psychosocial factors related to attitude toward KS among the Nigerian academic Professors is scarce. The scarcity of specific psychosocial factors associated with attitude towards KS among academic Professors limits the understanding of what is needed to change the attitude. Hence, this present attempt is considered an important area of research.

The objective of the present study is to investigate the joint and independent influence of psychological and social factors on attitude toward KS among Professors in some Nigerian universities. Specific aims of this study are:

- Find out whether jointly and independently, preventative psychological ownership, individualism, collectivism, self-efficacy and extroversion-introversion will contribute more to the variance of attitude towards KS beyond the contributions of age and tenure.
- To investigate the independent and joint influence of preventative psychological ownership, individualism, collectivism, self-efficacy and extroversion-introversion, age and tenure on attitude towards KS.

This study is considered to be of general theoretical and practical relevance in the area of psycho-social analysis of attitude towards KS in organizations and institutions, specifically in the university settings and other related organizations. This is based on the observations of the authors that

at the most valedictory lectures attended in Nigeria, a regret of the most valedictory Professors is the vacuum created by their retirement. They often asked rhetorically, “who is succeeding us at the department and faculty?” Therefore, if a large number of Professors within a department or an area of specialty were to retire within months of each other, without reproducing themselves, that department may suffer from the loss of knowledge and experience, creating a gap in sustainable competitive advantage of the entire university. Hence, for the attitude change purposes, the findings will help the university management identify potential psychosocial barriers against KS, as well as those Professors who may be particularly unwilling to clone themselves as a result of these psychosocial factors and subject them to attitudinal change modules.

Theoretical Assumption, Concept Integration, and Hypotheses

The phenomenon of attitude towards KS and its antecedents can be explained via the social learning and social cognitive theories (Bandura, 1986, 1997) and functional approach to motivation (Snyder & Cantor, 1998). These theories highlight on how individuals learn, process, interpret information, respond to situations and personal characteristics related to attitude formation.

Social learning theory is a perspective in attitude formation. When applied to variables such as preventative psychological ownership, individualism, collectivism and attitude towards KS, social learning theory would state that the socialization experience and mode of reinforcement influence patterns of thinking, feeling and acting toward object/s. Either directly or indirectly, through symbolic behaviors of the parents such as marking of personal objects and using of ‘possessive’ statements, children are more likely to learn and develop certain behavioral traits that could influence their attitudes toward sharing later in life. These may include territoriality and individualism/collectivism orientations.

As an extension of social learning theory, Bandura (1986) positioned self-efficacy and outcome expectancies as the central motivators of behavior in his social cognitive theory. Situation-outcome expectancies are based on the perception that some consequences are determined by the environment and are therefore out of personal control. Action-outcome expectancies are also related to the belief that one’s actions are instrumental to a particular outcome.

The functional approach to motivation posited that people are motivated to form positive or negative attitudes toward an object because attitudes toward this object are satisfying certain personal needs. For instance, an extrovert’s motive for sharing

knowledge might be to satisfying personal needs for social network and recognition.

In terms of preventative psychological ownership, Pierce et al., (2001) defined psychological ownership as individuals' feeling that the target of ownership (material or immaterial in nature) or a piece of it is 'theirs' (i.e., 'it is MINE!'). The core features of psychological ownership are the feeling of possessiveness and of being psychologically tied to an object. The possessions are felt as extension of the self (Dittmar, 1992), and this can affect attitude and behavior (Isaacs, 1993; O'Toole, 1979). When individuals form bonds of ownership over physical, informational or social targets in the organization, they may mark those possessions as belonging exclusively to themselves. Indeed, Brown et al., (2005) argue that ownership and self-identity are so interrelated that people engage in territorial behaviors, such as hoarding, marking or defending, as ways to identify and defend their possessions.

When individuals believe that they owned an object (e.g., expertise or knowledge) and become territorial with/over it, this feeling is referred to as preventative psychological ownership. This includes the feeling of not wanting to share the object and feeling as though, in general, individuals should be the one to determine what happens to/with the object. In addition, if individuals anticipate infringement on their targets of ownership, they may engage in preventative territoriality to maintaining the levels of ownership and to communicating ownership to potential threats and the social unit as a whole.

In developing a theoretical foundation of territoriality, Brown et al., (2005) explicitly focused on the concept of territoriality as being behavioral and propose that the stronger an individual's feeling of psychological ownership of an object, the greater the likelihood he/she will engage in territorial behaviors. However, in light of Pierce et al., (2001), that psychological ownership is a cognitive-affective construct, in this study, preventative psychological ownership is approached from the cognitive-affective aspect of territoriality.

The feeling of territoriality makes people to become too preoccupied with objects of ownership at the expense of their performance or other pro-social behaviors (Avey et al., 2009). It was further stated that, the fear of losing one's territory and associated self and social identity may promote politicking and prohibit transparency, collaboration and KS. Hence, preventative psychological ownership is expected to have an inverse relationship with attitude toward KS.

Cultural orientations, values, norms, and accepted practices are believed to influence attitudes and behaviors. This paper addresses individual-level cultural orientation from the perspective of

individualism-collectivism. This construct describes the self-perception in relation to significant others (Triandis et al., 1988). An individualistic orientation is based upon self-satisfaction rather than the satisfaction of others, while a collectivistic orientation is related to a high concern for group welfare and motivation towards activities that provide group success (Erez & Earley, 1993; Earley & Gibson, 1998). Researchers (e.g., Eby & Dobbins, 1997) suggest that I-C orientation has a strong influence on workplace attitudes and behaviors. Hwang and Kim (2007) reported that collectivistic orientation influences attitude towards KS. Therefore, individualism or collectivism orientation is likely to influence attitude towards knowledge sharing.

Within social cognitive theory, self-efficacy is derived from the confidence that individuals have in the skills they possess to affect the course of events. This positive self-perception of competence is expected to influence attitude and willingness to carry out a particular behavior. Bandura (1995) described this belief as the determinant of how people think, behave and feel. In this paper, self-efficacy refers to a Professor's general belief in his/her abilities and skills as a scholar. This belief can be interpreted as a self-motivational force that can stimulate positive or negative attitude towards KS. If a Professor lacks confidence in his/her abilities as a scholar, the individual may be less willing to participate in KS because he/she thinks that the effort would not make a difference. Hsu et al., (2004) reported that individuals with high self-efficacy are more willing to share their knowledge and past experience than individuals with low self-efficacy. Probably high self-efficacious individuals evaluate their capabilities highly and this positive evaluation motivates them to share their knowledge.

Researchers have also reported association between self-efficacy and KS intentions, attitudes and behaviors. For instance, Cabrera et al., (2006) found that self-efficacy to share knowledge predicted self-reported participation in KS activities. Bock and Kim (2002) reported positive association between self-efficacy and attitudes toward KS, which then predicted reported KS with co-workers. Cho et al., (2007) found that self-efficacy to share knowledge positively predicted KS intentions. Similarly, Lin (2007) found that self-efficacy positively predicted KS attitudes and intentions. Lu et al., (2006) found positive influence of self-efficacy on KS. Bryant and Terborg (2008) measured employees' perceived ability to share knowledge as peer mentors, operationalized similarly to self-efficacy, and found positive associations among competence, KS and creation.

Based on the functional approach theory, extroversion-introversion dimension was selected as a factor in attitude towards KS. Jung (1971) categorized personality into two types, extrovert and introvert. Extroversion is the act, state, or habit of being predominantly concerned with and obtaining gratification from external stimulation. Extroverts tend to enjoy human interactions and are enthusiastic, talkative, assertive and gregarious. They take pleasure in activities that involve large social gatherings, such as parties, community activities, public demonstrations and business or political groups. Extroversion is reported to have a positive influence on KS (de Vries et al., 2006). Extroverts tend to share knowledge whether or not they would be held accounted and rewarded for it (Wang et al., 2011). Possibly extroverts have a higher need for status (Barrick et al., 2005), which is identified as a motivating factor for their positive attitudes toward KS (e.g., Ardichvili, 2008). Also, Matzler et al., (2008) reported an association between personality trait of extroversion and attitude towards KS.

In contrast, introversion is the tendency to focus attention predominantly on internal stimulation or one's own mental life. Introverts derive their enjoyment through reflection on themselves and have little stimulation from external events. The common characteristic is that introverts are more reserved and less outspoken during social interaction. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people, though he or she may enjoy interactions with close friends. Because introverts are less warm emotionally and are less cut out for social interactions (Besser & Shackelford, 2007), they are more likely to have few social skills required for a mentoring relationship that would produce positive attitude towards KS, hence their negative attitudes toward KS. Researchers (e.g., Matzler & Müller, 2011; Matzler et al. 2008; Cabrera et al. 2006) have found that out of the Big-five personality traits, extraversion-introversion was the strongest predictor of KS.

Also, differences in age, gender differences and differences in education level have been found to be related to KS (Riege, 2005; Connelly, & Kelloway, 2003). Cho et al. (2007) investigated expertise as years of organizational tenure, and found that expertise positively affected attitudes towards KS.

Hypotheses

Hence, it is hypothesized that:

1. Self-efficacy, extroversion-introversion, individualism, collectivism and preventative will contribute more to the variance in attitude towards KS beyond the contribution of age and tenure.

2. There will be a significant joint and independent influence of self-efficacy, extroversion-introversion, individualism, collectivism, preventative psychological ownership, age and tenure on attitude toward KS.

2. Material and Methods

Research design

A cross-sectional survey design was used to collect information on preventative psychological ownership, individualism, collectivism, self-efficacy, extroversion-introversion, age and tenure in relation to attitude toward KS.

Participants

One hundred and eighty-seven (62.33%) males and 113 (37.67%) females Professors from 4 universities in the South-western Nigeria participated in the study. Their age ranged from 39 to 63 years with a mean of 44 years. There were 178 (59.33%) Christians, 99 (33%) Moslems and 23 (7.67%) traditional worshippers. 241 (80.33%) were married, 40 (13.33%) were divorced/separated and 19 (6.34%) were widowed. Lastly, their average length of service was 12.25 years.

Instrument

A questionnaire that measured the variables of interest was the instrument of data collection.

Individualism-collectivism. This was measured with 32-item cultural orientation scale of individualism (IND) and collectivism (COL) developed by Singelis et al., (1995). The IND scale (16 items) emphasizes a view of the self as autonomous and distinct from others, emphasizing equality (e.g., "I often do my own things") and inequality (e.g., "Competition is the law of nature"). The COL scale (16 items) stresses a self that is part of a group or belonging to a collective, with acceptance of hierarchy (e.g. "I respect the majority's wishes in groups of which I am a member") and equality (e.g. "I feel good when I cooperate with others"). All items are answered on a 5-point scale ranging from 1= strongly disagree to 5 = strongly agree. Singelis et al., (1995) reported alphas ranging from .67 to .74 among adolescent and adult samples. In this study, Cronbach's alphas for individualism and collectivism were .83 and .85, respectively.

Self-efficacy. This was assessed with a 10 item General Self-efficacy Scale (GSE) by Schwarzer and Jerusalem (1995). The scale is on a 4 point response pattern of "1= not all true" to "4=exactly true," yielding a total score between 10 and 40. A typical item is, "Thanks to my resourcefulness, I can handle unforeseen situations." High reliability, stability, and construct validity of the GSE scale were

confirmed by Leganger et al., (2000) and Schwarzer et al., (1999). The high validity and reliability of the scale has been demonstrated across various research contexts and diverse populations (e.g., Luszczynska et al., 2005), and it forms only one global dimension (Leganger et al., 2000; Scholz et al., 2002). In the present study, a Cronbach alpha of .94 was obtained for the scale.

Preventative psychological ownership. This was measured using a 4 item scale for the feelings of territoriality by Avey et al., (2009). Responses were made on a 7-point scale (strongly disagree = 1 to strongly agree = 7). The scale items included "I feel I need to protect my ideas from being used by others in my organization", "I feel I have to tell people in my organization to 'back off' from projects that are mine". In this study, the Cronbach alpha value was .84.

Extroversion-introversion. Extroversion-introversion Scale (E-IS; Costa & McCrae, 1992) is 12 items scale taken from the Costa and McCrae (1992) measure of the Big-Five Personality Factors. Each item was responded to on a 5-point scale ranging from 1 = "Strongly disagree" to 5 = "Strongly agree". Higher scores indicate extroversion and lower scores indicate introversion. In this study, the twelve items reach an acceptable level of internal consistency ($\alpha=.86$).

Attitude towards knowledge sharing. This contained an instrument designed by Bock et al., (2005) which was used to measure knowledge sharing behavior, which consist 5 items with a 5-point response format from (1-strongly disagree to 5-strongly agree). Items included "My knowledge sharing with other organizational members is good", "My knowledge sharing with other organizational members is harmful", "My knowledge sharing with other organizational members is an enjoyable experience". Bock et al., (2005) reported an alpha coefficient of 0.92 for the scale in both public and private sectors in Korea. Reliability of the scale in this study was .86.

Procedure

Participants were recruited into the study through the faculty officers, head of departments and dean of faculties. Data were collected physically and through self-administer questionnaire by email. A highlighted statement on the questionnaire explained the aim of the study and informed the respondents that completing the questionnaire indicated their informed consent. They were assured that their responses would be anonymous and confidential. The questionnaire also contained instruction on how to respond to the items. A total of 400 questionnaires were administered, out of which 348 questionnaires

were completed and returned. Forty-eight questionnaires were excluded after performing preliminary univariate statistical analysis to screen the data. The survey lasted for two months. All data analyses were conducted with SPSS version 21.

Data analysis

Pearson product moment correlation statistical tool was used to determine the relationships among the variables. Also, hierarchical multiple regression statistical analysis was used to test the influence of predictors on the criterion.

3. Results

In order to test the relationships among the variables of study, we computed the zero-order correlations of the variables with attitude towards KS. The mean, standard deviation and correlation coefficients are presented in Table 1.

Table 1, Intercorrelations of study variables (n =300)

Variables	1	2	3	4	5	6	7	8
1. KS	—							
2. IND	-.28**	—						
3. COL	.36**	.10	—					
4. PPO	-.45**	-.13	-.22**	—				
5. SE	.29**	.19*	.23**	.16	—			
6. E-I	.34**	.04	.36**	-.31**	.23**	—		
7. Age	.26**	.08	.24**	-.35**	.17	.02	—	
8. Tenure	.25**	-.02	.30**	.14	.43**	.15	.14	—
Mean	19.42	32.05	34.00	34.00	25.78	32.89	45.12	12.13
Sd	5.02	5.76	3.58	2.33	5.12	2.76	3.65	4.34

**p< .001, *p< .05

KS = knowledge sharing, IND = individualism, COL = collectivism, PPO = preventative psychological ownership, SE = self-efficacy, E-I = extroversion-introversion

Results indicated that attitude towards KS was significantly and negatively related to individualism ($r = -.28$, $p < .001$), and positive related to collectivism ($r = .36$, $p < .001$). The results equally revealed that preventative psychological ownership had a significant negative relationship with attitude towards KS ($r = -.45$, $p < .001$). Self-efficacy and attitude toward KS were significantly and positively related ($r = .29$, $p < .001$). There was a significant positive relationship between extroversion-introversion and attitude towards KS ($r = .34$, $p < .001$). A significant positive relationship existed between age and attitude towards KS ($r = .26$, $p < .001$). Lastly, there was a significant positive relationship between tenure and attitude towards KS ($r = .25$, $p < .001$).

To test the hypotheses regarding the contributions of self-efficacy, extroversion-introversion, individualism, collectivism, and preventative psychological ownership to unique variance in attitude toward KS beyond the

contributions of age and tenure, and the joint and relative influence of psychological and social factors on attitude towards KS, an hierarchical regression analysis was computed to evaluate if the observed pattern of relationships among the variables in the correlational analysis were consistent with the hypotheses of this study. The result is presented in Table 2.

Table 2: Hierarchical regression showing predictors of attitude towards knowledge sharing

Variables/Steps	R ²	Adj.R ²	ΔR ²	FforΔR ²	β
Step1	.11	.10	.11	8.79**	
Age					.25**
Tenure					.23**
Step 2	.18	.17	.07	10.25*	
SE					.27**
E-I					.33**
Individualism					-.24**
Collectivism					.34**
PPO					-.43**
Step 3	.29	.25	.11	11.00**	
Age					.17**
Tenure					.14**
Self-efficacy					.28**
E-I					.33**
Individualism					-.26**
Collectivism					.35**
PPO					-.45**

** $p < .001$

SE = self-efficacy, E-I = extroversion-introversion

PPO = preventative psychological ownership

In step 1, the results showed that age and tenure contributed significantly to variance in attitude towards KS by $R^2 = .11$, $F(2, 288) = 8.79$, $p < .001$. This suggests that the two predictors accounted for about 11% variance in the criterion variable. Relatively, age ($\beta = .25$, $p < .001$) and tenure ($\beta = .23$, $p < .001$) contributed significantly to attitude towards KS.

In step 2, controlling for age and tenure, the results revealed that self-efficacy, extroversion-introversion, individualism, collectivism and preventative psychological ownership contributed significantly to attitude towards KS by $R^2 = .18$, $F(5, 283) = 10.25$, $p < .001$. This indicated that the 5 predictors contributed about 18% to variance in attitude towards KS. R^2 also changed from .11 to .18, which suggests an increase of 7% to variance in attitude towards KS from the inclusion of the 5 predictors. Independently, results indicated that preventative psychological ownership ($\beta = -.43$, $p <$

.001) contributed more to attitude towards KS, indicating that willingness to give freely (low preventative psychological ownership) is associated with positive attitude towards KS. This is followed by collectivism ($\beta = .34$, $p < .001$), extroversion-introversion ($\beta = .33$, $p < .001$), self-efficacy ($\beta = .27$, $p < .001$) and individualism ($\beta = -.24$, $p < .001$), suggesting that individuals characterized by higher needs for collectivism, extroversion, self-efficacy and lower individualism are more likely to have favourable attitude towards KS. Hence, hypothesis one was confirmed.

In step 3, the results revealed a significant joint influence of all the predictors on attitude towards KS with $R^2 = .29$, $F(7, 281) = 11.00$, $p < .001$. This indicated that the 7 predictors contributed about 29% to variance in attitude towards KS. R^2 also changed from .18 to .29, suggesting an increase of 11% in variance of attitude towards KS attributed to the 7 predictor variables. Relatively, results indicated that preventative psychological ownership ($\beta = -.45$, $p < .001$) contributed more to attitude toward KS, followed by extroversion-introversion ($\beta = .35$, $p < .001$), collectivism ($\beta = .33$, $p < .001$), self-efficacy ($\beta = .28$, $p < .001$), individualism ($\beta = -.26$, $p < .001$), age ($\beta = .17$, $p < .001$) and tenure ($\beta = .14$, $p < .001$). Hence, hypothesis two was confirmed.

4. Discussion

The study aim was to establish the influence of preventative psychological ownership, individualism, collectivism, self-efficacy, extroversion-introversion, age and tenure on attitude toward KS. To the researchers' knowledge this is the first study that investigated the influence of these variables on attitude toward KS among Professors. Findings of the study show how differences in attitude toward KS are significantly related to preventative psychological ownership, individualism, collectivism, self-efficacy, extroversion-introversion, age and tenure. From those factors, psychological measures accounted for the largest share of variance.

Among these variables, preventative psychological ownership, collectivism, extroversion-introversion, self-efficacy and individualism were the most salient factors. Age and tenure also predicted attitude towards KS, but their relative contributions were reduced when the psychological variables were entered in the equation. The most important predictor of attitude towards KS is preventative psychological ownership, that is, individuals who are more willing to share their possession freely are more likely to have positive attitude towards. It seems that a low sense of preventative psychological ownership may be a requirement for Professors to have more positive attitude towards KS. This finding is consistent with

that of Avey et al., (2009) who indicated that territoriality leads people to become too preoccupied with objects of ownership, at the expense of their performance or other pro-social behaviors, and that, the fear of losing one's territory and associated self and social identity may promote politicking and prohibit transparency, collaboration and KS.

The influence of collectivism on attitude towards knowledge sharing appeared quite clearly in our data. Probably, individuals who rated themselves higher on collectivism desire solidarity, enjoy social harmony, have concern for others and value collegiality and collaboration, hence their more favorable attitude towards KS may be an indication of their willingness to help others. Previous finding of Hwang and Kim (2007) attests to the influence of collectivist cultural orientation on attitude towards KS.

Our findings showed a significant influence of extroversion-introversion on attitude towards KS. It seems that KS is helping extroverts to fulfill their needs for company, social networking, establishing and maintaining friendly and warm relations with colleagues. This finding is line with that of de Vries et al., (2006) who reported that extroversion has a positive influence on KS. Also, extroverts are reported to have more tendencies to share knowledge whether or not they would be held accounted and rewarded for it (Wang et al., 2011), an explanation for this is their need to gain status (Barrick et al., 2005), which has been identified as a motivating factor for KS (e.g., Ardichvili, 2008). Matzler et al., (2008) also found that personality trait of extroversion have a significant influence on KS. Studies (e.g., Matzler & Müller, 2011; Matzler et al., 2008; Cabrera et al., 2006) have found that of the Big-five personality traits, extraversion-introversion was the strongest predictor of KS.

The findings also reveal that Professors with higher levels of self-efficacy reported more favourable attitude towards KS. This finding is similar with research done by Cabrera et al., (2006), Bock and Kim (2002), Cho et al., (2007), Lin (2007), Lu et al., (2006), and Bryant and Terborg (2008), , in which, they reported that self-efficacy positively predicted attitudes toward KS. Individuals with a higher self-efficacy may share their knowledge and past experience more willingly than individuals with low self-efficacy because individuals with higher self-efficacy formulate positive judgment on their capabilities which motivates them to share their knowledge (Hsu et al., 2004). Hence, universities willing to promote positive attitude toward KS among Professors may need to organize self-efficacy training for those Professors with low self-efficacy evaluation.

Our findings also established the influence of individualism on attitude toward KS. It seems that individualism as a personal cultural orientation is a barrier to favorable attitude toward KS or retaining knowledge without helping others. Possibly, individuals who perceive academic career as individualistic are less likely to share their knowledge with others. Given that the academic world is a global environment and given the universal nature of knowledge, and the trend towards collaboration among scholars around the world, our findings raise some questions about the influence of individualism on attitude toward KS that will perhaps encourage further investigation. Nevertheless, previous research suggests that I-C orientation has a strong influence on workplace attitudes and behaviors (Eby & Dobbins, 1997).

Finally, we found significant influence of age and tenure respectively on attitude towards KS. Obviously, mentoring and KS come with experience which is associated with increase in age and organizational tenure. Difference of age has been found to be significant predictors of KS (Riege, 2005; Connelly, & Kelloway, 2003). This suggests that older Professors with long organizational tenure are reporting more positive attitude toward KS.

Conclusion

The main objective of this study was to understand the influence of psychological and socio-demographical factors on attitude toward KS among academic Professors. Our findings revealed that: (1) self-efficacy, individualism, collectivism, and preventative psychological ownership, extroversion-introversion were related to and account for unique variance in attitude toward KS beyond age and organizational tenure, (2) there was a significant joint and independent influence of self-efficacy, individualism, collectivism, preventative psychological ownership, extroversion-introversion, age and tenure on attitude toward KS.

Recommendations

The study was one of the first to provide empirical evidence about the influence of self-efficacy, extroversion-introversion, individualism, collectivism, preventative psychological ownership, age and tenure on attitude toward KS among academic Professors. It offers insights to university management, researchers, and practitioners on the value of psychological and demographical variables for explanation of lukewarm attitude toward KS among academic Professors, hence dearth of knowledge cloning in the academia. It is therefore recommended that university management should employ the service of psychologists in developing

attitudinal change modules to improve attitude toward KS among academic Professors. These modules should inculcate the psychological and demographical factors implicated in the present study.

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