

## PERSONALITY CHARACTERISTICS AND WILLINGNESS TO SHARE TACIT KNOWLEDGE: IS THERE A CONNECTION?

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### ABSTRACT

There is dearth of research on the connection between personality characteristics (altruism and self-efficacy) and willingness to share tacit knowledge particularly in Nigeria. This study, therefore, attempted to bridge this gap by exploring the impact of altruism and self-efficacy on willingness to share tacit knowledge in a sample of 325 health workers (nurses = 239; doctors = 86). Participants' ages ranged from 20 to 56 years ( $M_{age} = 34.33$ ;  $SD = 7.92$ ). Results of the 3 x 3 ANOVA and LSD pairwise comparison test revealed that employees with high level of altruism reported high willingness to share tacit knowledge compared with those with moderate or low level of altruism. Similarly, employees with high sense of self-efficacy were willing to share tacit knowledge compared with their counterparts who had moderate or low sense of self-efficacy. These findings inform the need for organizational managers to design psychological interventions that may enhance employees' levels of altruism and self-efficacy.

*Keywords:* altruism, health workers, self-efficacy, tacit knowledge

### INTRODUCTION

In their pursuit of success especially in the present competitive economy, organizations need workers who are resourceful, creative, knowledgeable, and willing to share and use tacit knowledge for the growth of the organization. This is because tacit knowledge has been recognized as a valuable organizational resource for gaining high performance, productivity, competitive advantage, and new innovative ideas for sustainability (Berman, Down, & Hill, 2002; Hansen & Haas, 2001; Kaser & Miles, 2002). Organizations who promote knowledge sharing (particularly tacit knowledge) have been reported to be more productive, profitable, efficient, and successful than their counterparts who did not promote knowledge sharing (Alony, Whymark, & Jones, 2007; Holste & Fields, 2010; Nonaka, 1994). Tacit knowledge also plays an important role in strategic decision-making process of an organization (Brockmann & Anthony, 1998).

Tacit knowledge, defined as an individual know-how, is usually found in the head, mind, and thoughts of the knowledge owners (Bishop, 2003; Koskinen, Pihlanto, & Vanharanta, 2003; Nonaka 1994; Polanyi, 1966). Tacit knowledge develops as a result of long personal practical experience and it is shown outside as a skillful activity (Koskinen, 2003; Nonaka 1994). As important as it is, tacit knowledge is very difficult to reduce to writing or transform to explicit form (Holste, & Field, 2010). Example of tacit knowledge are personal skills, visions, ideas, intuitions, hunches, gut-feeling, and insight (Holste, *et al.*, 2010; Okyere-Kwakye & Nor, 2011).

Knowledge sharing is the source of knowledge creation (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995). Therefore, tacit knowledge can only be available in an organization if employees with tacit knowledge are willing to share their knowledge within the organization (Nonaka, 1994; Szulanski, 1996). However, Li, Zhu, and Wang, (2010) noted that most employees with tacit knowledge are always reluctant to share their knowledge with others. This may be due to the fear of losing competitive advantage to co-workers (Olapegba, Balogun, & Idemudia, 2013) or lack of proper reward (Osterloh & Frey, 2000).

Previous studies (e.g. Foos, Schum, & Rothenberg, 2006; Holste, *et al.* 2010; Lucas, 2005; Ryan & O'Connor, 2013; Yang & Farn, 2010; Zhang, 2011) have shown that tacit knowledge sharing can be facilitated and promoted by different situational and organizational factors such as interpersonal trust, affiliation climate, early involvement, national culture, due diligence, and social interaction. Recently, Balogun (2014) found that willingness to share tacit knowledge increased with age, job tenure, and level of education. He also found that female workers were more willing to disseminate tacit knowledge than their male counterparts.

However, no concrete study linking personality characteristics (e.g. altruism and self-efficacy) to willingness to share tacit knowledge seems available in tacit knowledge sharing literature particularly in Nigeria. Hence, this study examined the effect of altruism and self-efficacy on willingness to share tacit knowledge among health workers, who may regularly have needs to share knowledge in the course of performing their jobs. This study may give health management insight on how they can encourage and motivate their knowledge driven workers to share their knowledge within the organization.

Altruism is a way of behaving marked by unselfish concern for the welfare of others or acting for others good. It usually involves helping and sacrificing something (e.g., time, energy, possessions etc.) for someone other than the self with no expectation of any compensation or benefits, either direct, or indirect (Chattopadhyay, 1999). Altruism has been conceptualized "as an individual disposition that reflects a tendency to behave in a way that improves the well-being of another personal or nonhuman species" (Batson, 1987 cited in Ojedokun & Balogun, 2011, p. 71). Authors who emphasize the motivational aspect of altruism agree that altruistic behaviour must: benefit the recipient and the benefit must be the goal itself, be performed voluntarily and intentionally, be performed without expecting any external reward (Bar-Tal, 1986).

There has been a debate as to whether “true” altruism actually exists or not. The theory of psychological egoism asserts that no act of helping and sacrificing can be described as true altruism as the actor receives an intrinsic reward in the form of personal gratification. Personal gratification, according to this theory, motivates altruistic people to give and help others. However, the studies of Batson (1991) and Batson (2012) strongly supported the existence of true altruism, arguing that altruistic people help primarily because of empathy rather than for ego or self (Batson, 1991). An empathic individual always desires to help others especially those in distress even when the situation could be easily avoided, whereas those who lack empathy avoid helping others unless it is difficult or impossible to avoid exposure to another's suffering (Batson, 1991).

Several studies on altruistic behaviours such as helping, comforting, sharing, co-operation, and community service have shown that most altruistic individuals are more likely to help if they perceive that others are in need and or in distress (Batson, 2011; 2012). In other words, an altruistic employee may be more willing (compared with those with low level of altruism) to disseminate or share his/her personal knowledge with other co-workers who need help without expecting any benefit or return from it. This is because altruistic people are selfless individuals who often believe that acting for the benefits of others is right and good (Batson, 2011).

Past studies have attested to the fact that altruism is a significant factor in general knowledge sharing. Okyere-Okwakye and Nor (2011) for example, found that workers with high altruism easily shared their knowledge than individuals with low altruism. In like manner, Lin (2007) reported that female employees have high altruism than male employees and as such they tended to exchange or share knowledge more than males. In a study by Li *et al.* (2010) altruism had a direct and positive effect on the intention to share tacit knowledge.

Individuals' perceived capability, also known as self-efficacy may motivate workers to willingly share their tacit knowledge or know-how. Self-efficacy is an individual's belief in his/her abilities or capabilities to perform or execute a course of action or task (Bandura, 1997). Self-efficacy can also be defined as an individual's self-evaluation towards one's abilities for a particular behaviour and the effort needed to overcome any challenges or obstacles in exhibiting such behaviour. Self-efficacy concerns not with the skill one has but with the belief or judgment of what one can do with the skills one possesses (Okyere-Okwakye & Nor, 2011).

The way an individual perceives his/her self may influence his/her behavioural choices. For instance, people with high sense of self-efficacy may be willing to take on difficult and relevant tasks and work to assure that they are accomplished, whereas people with low sense of self-efficacy may avoid difficult tasks and see challenges as a threat to be avoided (Afolabi & Obuseh, 2013; Balogun 2012). Bandura (1997) postulated that self-efficacy determines the willingness to undertake a certain action. In other words, high sense of self-efficacy may increase an employee's willingness to share his/her

knowledge whereas low self-efficacy may decrease an employee's willingness to share knowledge.

Researchers have suggested that intention and attitude to share knowledge increase with high self-efficacy (Cabrera, Collins, & Salgado, 2006). In a study conducted among Korean employees, Cho, Li, and Su (2007) found that self-efficacy to share knowledge positively predicted knowledge sharing intention and a preference for knowledge sharing mechanism (e.g. knowledge data base). Similarly, Lin (2007) reported that self-efficacy significantly contributed to employees' intention and attitude to share knowledge. Lu, Leung, and Koch (2006) also found a significant effect of self-efficacy on knowledge sharing. In Nigeria context, Ojedokun and Idemudia (2013) found that self-efficacy significantly and positively predicted professors' attitude towards knowledge sharing. By implication, employees with high sense of self-efficacy are likely to share their tacit knowledge than employees with low sense of self-efficacy. It is upon these premises that the researcher hypothesized that:

1. Altruism will have a significant influence on willingness to share tacit knowledge such that highly altruistic employees will report higher willingness to share tacit knowledge than those with moderate or low altruism.
2. Self-efficacy will have a significant influence on willingness to share tacit knowledge such that employees with high sense of self-efficacy will be more willing to share tacit knowledge compared with those who have moderate or low sense of self-efficacy.
3. Altruism and self-efficacy will have a significant interaction effect on willingness to share tacit knowledge.

## METHOD

### Design and Participants

A 3 x 3 quasi-experimental design was adopted in the study. Three hundred and twenty five health workers (nurses = 239; doctors = 86) were selected for the study using simple random sampling technique. Participants comprised 121 (37.2%) males and 204 (62.8%) females. Their ages ranged from 20 to 56 years with a mean of 34.33 years and standard deviation of 7.92. Also, 129 (39.7%) of the participants were married, 196 (60.3%) were single. In terms of job status, 141 (43.4%) employees were in junior cadre, 184 (56.6%) were in senior cadre. Majority of the participants (61%) had organizational tenure of over 3 years. Regarding their religion affiliation, 104 (32.0%) were Muslims, 211 (64.9%) were Christians, while 10 (3.1%) were Traditionalist.

### Measures

*Willingness to Share Tacit Knowledge:* This was measured with a 4-item questionnaire developed by Holste *et al.*, (2010). Sample items include: "I would willingly share my new ideas with this individual". The items are rated on a 7-point scale ranging from 1 = strongly disagree to 7 = strongly agree. Holste *et al.* (2010) reported a reliability and construct validity coefficients of .85 and .69 respectively for the questionnaire.

Balogun (2014) obtained a Cronbach's alpha of .75 in Nigerian sample. High scores imply high willingness to share tacit knowledge while low scores indicate low willingness to share tacit knowledge.

*Altruism:* This was assessed with a 20-item Self-reported Altruism Scale developed by Rushton, Chrisjohn, and Fekken (1981). Sample item include: "I have given directions to a stranger". The items are rated on a 5-point scale ranging from 1 = Never to 5 = Very often. Cronbach's alpha internal consistency of .89 was obtained in the present study. Scores equal to or above the mean indicate high altruism while scores below the mean imply low altruism.

*Self-efficacy:* This was measured with a 10-item self-efficacy scale developed by Schwarzer and Jerusalem (1995). Sample item include: "I can manage to solve difficult problem if I try hard enough". The items are rated on a 4-point scale ranging from 1 = Not at all true to 4 = Exactly true. Schwarzer, *et al.*, (1995) reported internal consistent reliability coefficient of 0.86. In this study, a Cronbach's alpha of .71 was obtained. High scores indicate high level of self-efficacy while low scores imply low level of self-efficacy.

### Procedure

The participants were drawn from public hospital in Akure, Nigeria. The researcher sought and obtained permission from the Chief Medical Director (CMD) and Head of Nursing Service of the hospital after the purpose of the study had been clearly explained to them. Using a list of medical doctors and nursing staff at the hospital, employees who fall on even numbers were randomly chosen as respondents while those who fell on odd numbers were excluded. The purpose of the study was explained to the participants. They were informed that participation was purely voluntary and that they were free to discontinue whenever they felt uncomfortable to continue with the research. The participants were also given assurance of confidentiality and anonymity of their identities and responses. Three hundred and fifty (350) questionnaires were distributed to participants that consented. Three hundred forty one (341) of these questionnaires were retrieved out of which 325 were duly completed and found usable for the analysis. This yielded a response rate of 92.9%.

## RESULTS

The results of the descriptive and inter-variable analyses are shown in Table 1.

Table 1:

### Descriptive and Inter-Variable Correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3
1. Altruism	19.01	3.10	1		
2. Self-efficacy	20.57	9.68	.48**	1	
3. Willingness to share tacit knowledge	5.32	1.54	.21*	.16*	1

Note: \* $p < .05$ . \*\* $p < .01$ . N = 325.

Results in Table 1 indicated that a significant positive relationship exist between altruism and willingness to share tacit knowledge [ $r(323) = .21, p < .05$ ]. This suggests that willingness to share tacit knowledge increased with high level of altruism. Similarly, self-efficacy had a significant positive association with willingness to share tacit knowledge [ $r(323) = .16, p < .05$ ], implying that willingness to share tacit knowledge increased with high sense of self-efficacy.

To test hypotheses 1 to 3, the participants were divided into three groups (high, moderate, and low altruism) based on their scores in measures of altruism. Each of the three groups were further sub-divided into high, moderate, and low self-efficacy based on the participants' scores in the measure of self-efficacy. This was done using SPSS Categorization Wizard. A 3 x 3 ANOVA was then conducted on the data. The results are presented in Table 2.

Table 2:

**Summary of 3 x 3 ANOVA on Willingness to Share Tacit Knowledge**

Source	<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Altruism	1018.91	2	508.45	9.85	< .05
Self-efficacy	342.03	1	345.03	12.01	< .01
Altruism x Self-efficacy	119.32	2	58.64	7.78	< .05
Error	24955.91	321	134.47		
Total	27607.87	325			

The results in Table 2 revealed that altruism had a significant effect on willingness to share tacit knowledge [ $F(2,321) = 9.85, p < .05$ ]. Similarly, self-efficacy had a significant effect on willingness to share tacit knowledge [ $F(1,321) = 12.01, p < .01$ ]. Furthermore, altruism and self-efficacy had a significant interaction effect on willingness to share tacit knowledge [ $F(2,321) = 7.78, p < .05$ ]. The results in Table 2 supported hypothesis 3. In the case of hypotheses 1 and 2, the significant of the  $F$  values did not indicate which group of altruism or self-efficacy was the most willing to share tacit knowledge.

Thus, two sets of Least Significant Difference (LSD) pairwise comparison test were conducted to ascertain which of the 3 groups of altruism scored significantly higher on the measure of willingness to share tacit knowledge. The results on altruism and self-efficacy are shown in Tables 3 and 4, respectively.

Table 3:

**Summary of LSD Test on Altruism and Willingness to Share Tacit Knowledge**

Level of altruism	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3
1. High Altruism	100	57.89	11.03	-		
2. Moderate Altruism	97	47.01	9.72	-4.31*	-	
3. Low Altruism	128	43.50	8.66	5.32**	2.55*	-

Note: \* $p < .05$ . \*\* $p < .01$ .

As shown in Table 3, employees with high level of altruism reported higher willingness to share tacit knowledge ( $M = 57.89$ ) compared to those employees with moderate ( $57.89 > 47.01$ ;  $LSD = 4.31$ ,  $p < .05$ ) or low ( $57.89 > 43.50$ ,  $LSD = 5.32$ ,  $p < .01$ ) level of altruism. With these results, hypothesis 1 was supported.

Table 4:

**Summary of LSD Test on Self-efficacy and Willingness to Share Tacit Knowledge**

Level of self-efficacy	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3
1. High Self-efficacy	105	51.95	9.42	-		
2. Moderate Self-efficacy	150	49.73	10.75	3.73*	-	
3. Low Altruism	70	38.11	6.53	-6.55**	.71	-

Note: \* $p < .05$ . \*\* $p < .01$ .

The results in Table 4 revealed that employees with high sense of self-efficacy ( $M = 51.95$ ) were more willing to share tacit knowledge compared with employees with moderate ( $51.95 > 49.73$ ,  $LSD = 3.73$ ;  $p < .05$ ) or low ( $51.95 > 38.11$ ,  $LSD = -6.55$ ,  $p < .01$ ) level of self-efficacy. These results hereby supported hypothesis 2.

## DISCUSSION

This study explored the influence of altruism and self-efficacy on willingness to share tacit knowledge among health workers. As hypothesized, employees who are altruistic reported high willingness to share tacit knowledge compared to those with moderate and low altruism. This result is in consistent with the findings of previous studies (Lin, 2007; Li, *et al.* 2010) who found altruism to be an important predictor of employees' intention and attitude to sharing knowledge. The finding also supported those of Okyere-Okwakye, *et al.* (2011) who reported a significant positive association between altruism and knowledge sharing. Employees with high altruism may be willing to share tacit knowledge than those with moderate and low altruism because they believe that acting for the benefits of others is something that is right and good (Ashlag, 2006; Batson, 2011; Luzzatto, 1997). Individuals with this trait often show empathic concern (Batson, 1991). Unlike those who lack empathy, employees with empathic concern often desire to help others (without expecting any compensation, returns, or benefits, either

directly or indirectly from it) especially those in need or distress even when the situation could be easily avoided (Batson, 1991; Chattopadhyay, 1999).

In support of the second hypothesis, self-efficacy had a significant effect on willingness to share tacit knowledge such that employees with high level of self-efficacy reported high willingness to share tacit knowledge compared to those with moderate and low level of self-efficacy. This finding is in tandem with previous studies (Cabrera *et al.*, 2006; Cho *et al.*, 2007; Lin, 2007), which reported that high self-efficacy to share knowledge significantly predicted intention and attitude to share knowledge. The finding also corroborated the findings of Lu *et al.* (2006). The authors found a significant positive connection between self-efficacy and knowledge sharing. Individuals with high sense of self-efficacy are risk takers; they set difficult goals, approach challenges without fear, take on difficult and relevant tasks and work to assure that they are accomplished (Bandura, 1997; Balogun 2012). Thus, while individuals with high self-efficacy may confidently and boldly share their personal knowledge, individuals with low level of self-efficacy may be afraid to share their knowledge because of the fear of losing competitive advantage to other organizational members.

The results of the study also demonstrated that altruism and self-efficacy exerted a significant interaction effect on willingness to share tacit knowledge. This implied that employees who possessed high level of altruism and self-efficacy reported high willingness to share tacit knowledge compared with their counterparts in other categories. This finding supported the findings of Li *et al.* (2010) who found that personal features such as need satisfaction, sense of honor and altruism, interpersonal trust, team cohesion, and self-efficacy contributed significantly to intention to share tacit knowledge.

## CONCLUSION

The present study contributed to tacit knowledge literature by showing that employees' willingness to share tacit knowledge is connected with their personality characteristics such as altruism and self-efficacy. These findings therefore inform the need for organizational managers to design psychological interventions/programs that can enhance and encourage self-confidence and altruism. Organizational managers can enhance employees' self-confidence/efficacy and encourage altruistic behaviour by reinforcing or giving out enviable rewards to those who exhibit altruistic behaviour, praise, promote cooperation, and build a close relationship among employees (Li *et al.*, 2010; Okyere-Okwakye, *et al.* 2011).

Despite its contributions, this study has a few inherent limitations. Firstly, the sample size was too small for generalization. Secondly, the study did not consider the effect of social factors (e.g. social support and work climate). For instance, an altruistic employee may be reluctant to share his/her knowledge if the work environment is not supportive or care for his/her well-being. Thirdly, the sample was selected from a human/helping occupation. It may, therefore be beneficial if future studies can investigate the effect of personality and social variables on willingness to tacit knowledge sharing in a single model among larger sample that must be representatives of service and non-service occupations.

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