Relationship between Personality Traits and Knowledge Sharing Behavior:
A Systematic Literature Review

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Abstract

This study aims to examine the relationship between big five personality traits and Knowledge Sharing (KS) behavior along with KS best practices during the KS process. Literature was searched and collected from the Web of Science, Scopus, LISTA and Google Scholar following PRISMA guidelines. The analysis revealed that except neuroticism, all other four personality traits had positive correlation with KS. The positive impact of KS practices has been reported on employee’s personalities and the employees were using varied resources including organized different seminars and workshops etc. The findings will be valuable for managers to design comprehensive and personalized knowledge management system for managers on their personality traits and KS behavior.

Keywords: Big five personality traits, personality traits, knowledge sharing

Introduction

Organizations consider knowledge as a promising source of success and a rudiment of competitive advantage over other firms. Organizational knowledge is always highly valuable, thin on the ground, sporadic, scarce, reliance on the specific path, indiscernible, hard to understand and imitate. Therefore, it is considered as a strategic (Naim and Lenkla, 2016) and intangible asset (Badaracco, 1991). To maintain the organizational competitive edge, knowledge deserves special attention and policies to transfer into the organization for future. Hence, deliberate attention is given to the knowledge management systems by all the organizations (Cabrera, Collins & Salgado, 2006).

The ulterior motive of knowledge sharing is to facilitate others and vice versa (Wei et al., 2012; Yuen & Majid, 2007). In addition, individuals also share knowledge for self-actualization, as they feel content, happy, and consider themselves as an important part of the organization, play a significant role in maintaining the goals (Chong et al., 2019). Knowledge sharing also entails innovations and improvements (Manaf, Harvey, Armstrong & Lawton, 2020). Precisely, knowledge sharing is a channel of transferring personal knowledge to improve others’ skills, adroitness, virtuosity and competencies. Thus, knowledge sharing enhances the organization’s productivity while maintaining the competitive advantage. Different activities of knowledge sharing include spontaneous, easy-going and informal communications, which lead to problem
solving techniques. For the purpose of maintaining a highly knowledge sharing environment, it is equally important for both parties to give and gain knowledge willingly.

**Personality Traits**

Personality is defined as a set of qualities that lead to a unique profile of an individual. Personality is a discrete, persistent, staunch and unwavering psychological trait that defines the emotions, opinions, views, feelings, attitudes and behavior of a person (McCrae, 2009). After keen observation and examination by a plethora of researchers and studies, a general consensus has been achieved on the Big Five Inventory or big five personality traits (John et al., 2008; Yang & Hwang, 2014). Big Five-Factor (BFF) is generally an accepted model and a valid model of personality. It also helps in predicting the behaviors of employees at the workplace (Gupta, 2008). It consists of five basic personality traits, which embrace all the significant variations of dynamic personalities. These are categorized as: extraversion, agreeableness, conscientiousness, neuroticism and openness to experience.

**Personality Traits and Knowledge Sharing**

Manaf, Harvey, Armstrong and Lawton, (2020) subtletly observed the relationship between the personality traits of public managers and managerial tacit knowledge. They depicted that personality (agreeableness, conscientiousness and openness) is directly associated with the knowledge sharing behaviors. However, no significant relationship was found between the other two personality traits (extraversion and neuroticism) and knowledge sharing behavior. Similarly, Rashid, Ma’amor, Badrolhisam and Mansor (2019) found a significant positive relationship of extraversion, agreeableness, conscientiousness and openness with knowledge sharing. Similarly, many other researchers found a significant relationship between personality traits and knowledge sharing behavior in the educational sector (Agyemang, Dzandu, & Boateng, 2016; Chong, Teh, & Tan, 2014; Gupta, 2008; Lotfi et al, 2016; Lin, Hsieh, & Lian, 2018; Pour, & Taheri, 2019; Rahman et al. 2018).

Abdel-Aal and Khairy, (2016) revealed that there existed a significant positive relation between agreeableness, conscientiousness and open to experience with knowledge sharing behavior in the hotel and tourism industry. Similarly, Anwar (2017) also found that there were a significant positive relationship between all the personality traits (except neuroticism), and knowledge sharing behavior of individuals working in high level knowledge sharing organizations, in Pakistan.
Significance of the study

The current study contributes to growing literature on personality traits and will contribute to deeper insight on how it affects the knowledge sharing behavior of individuals. It may also help to improve the KS practices in organizations. Moreover, it will also open new horizons for managers in the course of personnel selection and retention, in accordance with their personality traits.

Research objectives

The research objectives that would be addressed in this study are to:

1. Investigate the relationship exists between knowledge sharing and personality traits
2. Explore the knowledge sharing practices or behavior among users/employees/people

Methodology

Search Strategy

The studies included in this paper were primarily identified using the Web of Science, Scopus, LISTA and Google Scholar. The search query, limited to title and abstract, was “Personality traits” OR Extroversion OR Agreeableness OR Consciousness OR Neuroticism OR Openness AND “Knowledge Sharing” OR “Knowledge Exchange” OR “Knowledge Transfer”. A search was conducted using these keywords from the years 2000 through December 2020 and the search was simplified again in March 2021. After comprehensive search from 2000 to 2020, the total 21 studies were selected. Out of 21 studies twenty studies were used quantitative research method except one which was used mixed method. There was no any study found to use qualitative research method.

Inclusion criteria:

- Studies on relationship between personality traits and knowledge sharing;
- Studies on impact of personality traits on knowledge sharing;
- English language studies;
- Research articles published from 2000 to December 2020;
- Only empirical/cross-sectional studies were included.

Exclusion Criteria were:
• Review based articles, books, book chapter, proceeding, dissertation, reports, conference papers were not included; and
• Papers written other than in the English language was not included.

**Study Selection and data extraction**

After the selection of the studies (Figure 1), the retrieved research studies were examined based on their relevance with the research objectives, sample/technique and key findings after applied statistical test to determine the relationship among study variables and the impact of personality traits on knowledge sharing i.e. correlation, regression (Hierarchical, multiple, path least square) and path coefficient.

< Figure 1: Study selection procedure>

**Results**

The literature was searched from four major databases: Web of Science, Scopus, LISTA and Google Scholar and the results retrieved were 3471. On the basis of titles and abstracts after initial scanning, 28 studies were collected but seven studies were excluded due to unavailable full text. Finally, 21 studies were selected that fulfilled the inclusion criteria. This inclusion and exclusion criteria depended upon the availability of full text and on the existence of a relationship between personality traits and KS, exploring the impact of personality traits on knowledge sharing and exploring the practices or behavior for knowledge sharing. Table 1 shows the summary of the selected studies. The selected studies included empirical research articles ranging from the year 2000-2020. These empirical studies were conducted in different fields and published in different research journals i.e. management, social sciences, health, library science and business. Table 2 presents the methodological details of the selected studies i.e. research method, sampling techniques, and studies conducted in different countries. Out of 21, there were twenty studies conducted quantitatively and used survey based questionnaires to achieve the objectives. One study used mixed method research approach. The studies were used different sampling techniques i.e. simple random sampling technique was used in four papers, convenience sampling were used in three papers, while stratified random sampling was used in two papers followed by random cluster sampling and systematic random sampling used in one paper. However 10 studies did not mention any sampling technique mentioned in table 2. The
result shows that four studies were conducted in Malaysia, two in Iran, Pakistan, and Taiwan, respectively followed by one in each of the following countries; Austria, Bangladesh, Egypt, China, Germany, Ghana, India and Spain. However, 3 studies did not mention any country.

Table 1: Research Methodological Information

All the studies used personality traits as independent variables and knowledge sharing as dependent variables. Most of the review studies used five major traits i.e. extroversion, agreeableness, conscientiousness, neuroticism and openness; however a few studies used emotional stability (Chong et al. 2014) instead of neuroticism.

The outcomes of the research studies indicated a positive association between personality characteristics of the individuals and intention of the knowledge exchanging behavior among them (Lin et al., 2018). Additionally, it was noticed that most of the studies employed correlation and regression analysis to observe the association between personality characteristics and knowledge sharing practices of the individuals (Anwar, 2017; Lin et al., 2018; Teh et al., 2011; Zhang et al., 2019).

Among 21 studies, about 9 studies used different types of regression analysis to evaluate the link between personality characteristics of the people and intentions and attitudes of knowledge-sharing among them (Cabrera et al., 2006; Chong et al., 2014; Esmaeelinezhad & Afrazeh, 2018; Gupta, 2008; Matzler et al., 2011; Pour & Taheri, 2019; Teh et al., 2011). Furthermore, it was found that 12 research studies employed the correlation coefficient analysis to find out the relation between behavior and practices of knowledge sharing with personality characteristics (Abdel-Aal & Khairy, 2016; Agyemang et al., 2016; Anwar, 2017; Cabrera et al., 2006; Chong et al., 2014; Matzler et al., 2011; Lin et al., 2018; Teh et al., 2011; Wang & Yang, 2007; Wu & Lin, 2017; Zhang et al., 2019).

It was observed that the extroversion trait of the personality was positively associated with the intentions of knowledge-sharing among the employees working in different sectors (Pour and Taheri, 2019). The findings of the research studies included in this systematic review also displayed that the agreeableness trait of the personality also influenced the individuals in sharing more knowledge (Abdel-Aal & Khairy, 2016; Khan & Zaman, 2020; Lin et al., 2018).

It was also observed that the knowledge-sharing practices were more prevalent in the different areas when there was a high level of trust, determination and mutual respect among the individuals (Wang and Yang, 2007). The research studies included in this review also presented
the positive impact of knowledge-sharing practices or behavior on the personality of the employees. It also enhanced more financial and social outcomes for the organization (Abdel-Aal & Khairy, 2016).

Discussion

The findings of the present systematic review indicated a strong association between the personality characteristics and knowledge-sharing attitudes of the employees working in different organizations. The most common personality trait that showed a positive association with increased behavior of knowledge sharing includes conscientiousness, agreeableness, and extraversion. These findings were in agreement with the outcome of previous studies (Agyemang et al., 2016; Gupta, 2008; Matzler et al., 2011). This was due to the reason that team leaders exhibiting these qualities presented longer time commitment with the firm or organization.

The impact of using the advanced knowledge management system was positive in terms of high outputs. The reason can be attributed to agreeableness, openness and conscientiousness in the personality of the employees that help the team members to share their roles accordingly (Cabrera et al., 2006). The different practices and information systems including the training practices such as seminars or workshops for the knowledge sharing information were used to become organized in the organizations that help the employees to improve their knowledge and follow ethical rules and regulations.

The study demonstrated that practices, such as, seminars and workshops, creating a knowledge sharing environment, interventions of human resources, networking and arranging the group discussions of knowledge management, help in improving the personality attributes and exerted a strong impact on exchange of knowledge between the employees (Gupta, 2008). These findings were in agreement with the previous studies. In addition, agreeableness and neuroticism were also associated with knowledge sharing intentions and practices of individuals. This could be due to the reason that the openness trait of the personality increased the ability of individuals to communicate more in a working environment (Abbas et al., 2013). Overall, there was a positive impact observed in terms of personality attributes and the development of knowledge-exchange practices of the individuals.

Limitations
There are some limitations in the current study. Moreover, literature published during 2000-2020 was selected only, with an additional limitation of English language. Due to the inclusion criteria there was a probability that some important studies in other languages were left out.

**Concluding comments**

The results showed that there is a positive association between four personality traits and knowledge sharing. However, the negative association of neuroticism was found with KS behavior in some of the studies. Literature highlighted different KS practices used by individuals in their organizations including seminars, discussion, meetings, workshops etc.
References


