Antecedents of knowledge-sharing behavior in higher education

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Abstract

Knowledge sharing (KS) has been consistently recognized as essential in organizational development and employee improvement. This paper aims to expand on previous empirical research on KS by examining the effect of personality traits (PT) and perceived organizational support (POS) on one's knowledge-sharing behavior in higher education. The authors also examined perceived organizational support's moderating and mediating roles in these relationships. Using a questionnaire and data from 205 lecturers from 3 universities in Jakarta were used for research hypotheses. The results of this study reveal that personality traits (PT) and perceived organizational support (POS) have a significant influence on knowledge-sharing behavior (KS). The results also show that a higher level of perceived organizational support (POS) cannot strengthen the relationship between personality traits (PT) and knowledge-sharing behavior (KS). The teacher's desire to share knowledge can be influenced by the teacher's personality traits and the organization's role in creating supportive conditions. Organizations can provide good welfare and opportunities for their members to develop. This study shows that personality traits (PT) and perceived organizational support (POS) are essential factors influencing a person's desire to share knowledge, especially in higher education.

Key words: Knowledge management; personality traits; perceived organizational support; higher education

INTRODUCTION

In today's economy, knowledge sharing is an important skill everyone must have and always involves a team in the implementation process (Chong et al., 2014). A person must be able to communicate with one another to achieve knowledge sharing among individuals within the organization. So the effectiveness of skills in sharing knowledge is an important activity in work. Knowledge sharing has been recognized as a vital and useful tool for the knowledge management process (Farrukh et al., 2020). Sharing knowledge is not only an exchange of information and knowledge between individuals in completing their tasks (Stachová et al., 2020; Swanson et al., 2020) but is a process of making effective decisions, encouraging innovation, ultimately can produce good performance and better and create a competitive advantage (Deng et al., 2022; Kwahk & Park, 2016; Nguyen et al., 2021).

The main business of higher education is teaching and learning, so knowledge plays a very important role in both processes (Jacob & Hellström, 2000). The impact of failure to communicate knowledge has a very detrimental effect on both organization and learning. Knowledge will increase the ability of organizational members to produce knowledge and innovation in learning (Buckley, 2012; Wick, 2000).

The role of a lecturer, especially in higher education, is to conduct teaching, research, and community service. Outstanding knowledge-sharing behavior can help an educator improve the quality of teaching, research, and community service (Gebreyohans et al., 2022). Knowledge can create organizational members to generate new knowledge and teaching innovations from the knowledge they acquire (Buckley, 2012). By exploiting his knowledge, a teacher can provide the best teaching methods and innovate to improve research. Ultimately, higher education will produce quality students and is needed by the industrial world.

In some educational environments, knowledge sharing among academics does not work well due to a lack of willingness to share knowledge. An example is discussing sharing experiences in teaching between fellow teachers so they can provide the best quality teaching (Gebreyohans et al., 2022). Some people might assume that knowledge sharing is part of the culture in higher education, but in reality, this is not the case because shared knowledge is complex (Al-Kurdi et al., 2018; Alotaibi et al., 2014) and is influenced by culture, beliefs, and motivation (Ipe et al., 2003). Wang (2010) stated that individual characteristics and management support could influence knowledge sharing. Individual characteristics can be described as a person's personality traits which are described in five personality factors (Farrukh et al., 2020). Management support has increased people's willingness to share (Wang & Noe, 2010). Perceived superior and employee support and encouragement to share knowledge can increase knowledge exchange among employees and perceptions of the usefulness of sharing knowledge (Cabrera et al., 2006; Kulkarni et al., 2007).

Many studies focus on the causes of knowledge sharing in the context of the telecommunications industry (Akram et al., 2017), research and development (Huang, 2009), hotel industry (Afsar et al., 2019; Monica Hu et al., 2009), corporate service (Birasnav, 2014), information technology (Lee & Yu, 2011; Tohidinia & Mosakhani, 2010), multinational companies (Hameed et al., 2019; Usmanova et al., 2020), health (Mura et al., 2016), but little research has focused on understanding knowledge sharing in the higher education context. In this case, university teachers play an important role in producing and reusing knowledge and intellectual property through teaching and research (Seonghee & Boryung, 2008). Consequently, sharing knowledge, expertise, and resources between academics has become vital for universities (Al-Kurdi et al., 2018; Ramayah et al., 2013). This study tries to map the factors that impact knowledge sharing, especially those related to personality traits and perceived organizational support in higher education.

Knowledge sharing can be described as a process by which a person exchanges knowledge and creates new knowledge together (Zhao et al., 2020). Knowledge-sharing behavior includes gathering information and expertise from outside to inside, donating or spreading knowledge from the inside out, and making organizational knowledge (van den Hooff & de Leeuw van Weenen, 2004). Two most important factors can affect knowledge sharing including personality traits (Javaid et al., 2022; Matzler et al., 2008; Mooradian et al., 2006) and perceptions of organizational support (Hameed et al., 2019; Swift & Virick, 2013; Yang et al., 2020).

Sharing knowledge

Sharing knowledge is a small part of the knowledge management process. The concept of knowledge management was initially dominated by information technology and moved from a technological perspective, but with time knowledge management has developed within the view of people from knowledge and organizations (Ipe et al., 2003). According to Pandey (2016), the knowledge management process consists of (1) Knowledge Creation. Creating knowledge requires a person or group of people who come up with new ideas, concepts, innovative products, processes, etc. Thus creating knowledge involves the dimensions of people, technology, and techniques that link people and technology. Knowledge creation occurs in many dynamic forms. Most often, through humanistic means, such as formal training, new experiences, or talking to people who share your interests. Organizations now live (or die) by their ability to create knowledge, innovate, and generate value with new knowledge. (2) Knowledge Acquisition is exploring knowledge by identifying the required knowledge domain in line with an organization's knowledge management strategy. The organization's new resource-based view that intangible, rare resources cannot be imitated and replaced in the long run is an organization's competitive advantage. Knowledge is an intangible resource, so more innovative organizations can leverage their acquisition capabilities to update their knowledge capital consistently to fit the existing environment. (3) Knowledge Collation compares and analyzes two or more sources of information. Its connotation includes calibration because calibration involves comparing several measurements with a given standard. Knowledge gathering is a must before being passed down to the repository. The Knowledge Management process requires a structured, coordinated system for managing knowledge effectively. It requires both implicit and explicit knowledge forms. Explicit knowledge can be identified more easily, and systems and procedures can be developed to deal with it, for example, through feedback and training. But tacit knowledge poses a greater challenge because knowledge originates with the individual or someone who has the source of the knowledge. (4) Knowledge Storage and Use After knowledge is created, acquired, or compiled, knowledge must be stored in a repository so that individuals, groups, and organizations can access that knowledge. Storage and retrieval of organizational knowledge are important to effective organizational knowledge management. (5) Knowledge Dissemination is the delivery and acceptance of knowledge by involving individuals in transferring best practices, lessons, or innovation processes. Dissemination is successful if it can increase awareness, choose based on the information obtained between alternatives, and exchange information, materials, and perspectives. (6) Knowledge Sharing is a process that allows knowledge of individuals or groups to be transferred to others in an organization to be applied to improve or create new products, sources, and processes. Explicit knowledge is very easy to share because it is easy to document. In contrast, tacit knowledge requires mentors, apprenticeships, contracts, face-to-face communication, trust, respect, and friendship to share knowledge. (7) Knowledge Re-use and Synthesis, knowledge reuse is a process that emphasizes the centrality of knowledge in the organization by aligning information systems and communication technology with human activities and organizational mechanisms, such as the learning process in the organizational structure. The knowledge reuse process includes six stages (i) the approach to reuse; (ii) looking for reusable ideas; (iii) scanning for reusable ideas; (iv) evaluating reusable ideas; (v) conducting an in-depth analysis of reusable ideas and selects the most suitable one; and (vi) use the idea. (8) Knowledge Capitalization encourages stakeholders to transform the individual and institutional experience and knowledge into capital that can be used in the future. Knowledge capitalization is usually analyzed by recourse to external socio-economic factors. The process of knowledge capitalization involves the sale or production of economically added value in the knowledge that must be fully understood and reproduced by inventors and others.

Knowledge Sharing can be interpreted as a person's attitude or ability to share knowledge (Yi, 2009). It has been said that sharing knowledge is divided into two, namely explicit knowledge and tacit knowledge. Explicit knowledge is easily articulated, coded, and transferred, whereas tacit knowledge is much more difficult to communicate and derives from individual experience (Ford & Chan, 2003). One of the things that can cause failure in implementing knowledge sharing is that individuals who have valuable information are often not tracked within the organization and that knowledge moves with them without benefiting the organization (North & Kumta, 2018). So that one of the reasons individuals are reluctant to share knowledge can be seen in the person's personality, especially in agreeableness, conscientiousness, and openness to experience (Matzler et al., 2008). Friendliness has the characteristics

of being kind, forgiving, polite to help, generous, cheerful, and able to work together; prudence has the attributes of being reliable, responsible, organized, hardworking, and result oriented; Openness to experience has the characteristics of imaginative, curious, original and independent.

Personality Traits and Knowledge Sharing

Personality is a relatively stable set of characteristics that consistently influence individual behavior. The two main theories about personality are trait theory and integrative approach (Nelson & Quick, 2018), while Robbins (2017)define personality as the way a person reacts and interacts with other people so that to know a person's behavior it is necessary to know the person and understand the situation at hand (Nelson & Quick, 2018). There are four basic propositions of interactional psychology regarding personality. (i) Behavior is a function of the ongoing multidirectional interaction between the person and the situation. (ii) The person is active in this process, either changing his situation or being changed by it. (iii) People have many different characteristics, including cognitive, affective, motivational, and ability factors. (iv) There are two important aspects of the situation: the objective situation and the person's subjective view. Personality will make people behave consistently in various situations. Personality will make people behave consistently in multiple situations.

According to trait theory, combining these traits forms a person's personality. Traits are broad general guidelines that provide consistency to behavior. Thousands of traits have been identified over the years. One popular personality classification involves the so-called Big Five. The top five personality traits based on Nelson (2018) are Extraversion People are gregarious, assertive, and friendly (as opposed to reserved, shy, and withdrawn). Agreeableness: The person is cooperative, warm, and agreeable (rather than cold, disagreeable, and antagonistic). Conscientiousness People are hardworking, organized, and dependable (as opposed to being lazy, unorganized, and unreliable). Emotional stability The person is calm, confident, and cool (as opposed to insecurity, anxiety, and depression). Openness to experience The person is creative, curious, and cultured (not practical with narrow interests).

Perceived Organizational Support and Knowledge Sharing

Perceived Organizational Support can be interpreted as the employee's deepest feelings that the organization cares, appreciates employees' contributions, and provides assistance for their socio-emotional needs and well-being by giving respect, recognition, and support (Afsar & Badir, 2017). Perceived Organizational Support is an organization's contribution to positive reciprocity with employees because they tend to act better to pay for the positive organizational effects generated when employees feel valued and supported by their organization. They will believe in corporate values and try their best for organizational success (Le & Lei, 2019).

In Le (2019) research stated that perceived organizational support has a significant influence on knowledge sharing. Employees tend to be reluctant to share their knowledge with others because they are afraid of losing their distinctiveness compared to other colleagues. Thus, if employees have high trust in support within their organization, their motivation and commitment will be greater to actively participate in knowledge sharing activities. Social exchange theory and norms of reciprocity explain the relationship between perceived organizational support and knowledge sharing: when employees feel that their organization values their contributions and their treatment is favorable (eg working conditions, salary rewards, and promotions), they will feel obligated to reciprocate this favor with a sense of caring about organizational well-being and working towards organizational goals (Yang et al., 2020). Knowledge sharing in this case can be considered as one of the objectives advocated by the organization. Perceived organizational support is then expected to have a positive relationship with knowledge sharing (Wang & Noe, 2010).

METHOD

This study used 205 respondents and statistical random sampling by selecting respondents according to the criteria of working in a university in Jakarta and Bekasi and having at least a master's education. The questionnaire uses a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was divided into three parts, namely knowledge sharing (5 items), personality traits (6 things), and perceptions of organizational support (5 items). Before conducting the research, the pretest was carried out using 30 respondents. This pretest ensures the suitability of each question item on the questionnaire.

This study used partial least squares - Structured Equation Modeling (PLS-SEM). Construct Reliability and Validity test using Cronbach Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) with a Cronbach Alpha reference value > 0.5; CR > 0.7 and AVE > 0.5 (Table 1). The validity test used the Heterotrait-Monotrait Ratio (HTMT) discriminant validity with a minimum criterion of < 0.9 (Table 2) and construct validity with a loading factor > 0.4. The results of the validity and reliability tests are as follows:

Table 1.
Construct Reliability and Validity

Variabels	Loading Factor		Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Knowledge Sharing (KS)	X1	0,7317	0,7610	0,8390	0,5121
	X2	0,6260			
	X3	0,7613			
	X4	0,7825			
	X5	0,6644			
Perceived Organization Support (POS)	X6	0,8015	0,8208	0,8713	0,5376
	X7	0,8299			
	X8	0,7301			
	X9	0,4504			
	X10	0,7822			
	X11	0,7393			
Personnality Traits (PT)	X12	0,6844	0,7648	0,8388	0,5107
	X13	0,7569			
	X14	0,7604			
	X15	0,6726			
	X16	0,6940			

Table 2.
Discriminant Validity

Variabel	KS	POS
Perceive Organization Support (POS)	0,5872	
Personnality Traits (PT)	0,6383	0,3327

Note: Heterotrait-Monotrait Ratio (HTMT)

FINDINGS AND DISCUSSION

From the questionnaire results, the demography of the teaching respondents who worked at the universities of Jakarta (86.8%) and Bekasi (13.2%) and the number of males and females was relatively the same 49.76% males and 50.24% females. The majority of education is a Master's degree, 92.68%, and the rest is a doctoral degree, 7.32%. The validity and reliability tests show that all items meet the standard loading factor, and the Cronbach's Alpha, Cr, and AVE values comply with the minimum required values.

This structural model was measured using bootstrapping with a sub-sample of 5000 (Garson, 2016; Hair et al., 2016, 2018), two-tailed, and a significant level of 0.05. From the results of this measurement model, two significant positive relationships were obtained: Personality Traits (PT) had a significant positive effect on Knowledge Sharing, and perceived organization support had a significant positive influence on Knowledge Sharing (KS). And there is one insignificant relationship, namely Perceived Organization Support (POS) cannot be used as a moderation of the relationship between Personality Traits (PT) to Knowledge Sharing (KS) (Table 3). The structural equation model of knowledge sharing has a coefficient of determination (R^2) of 0.377 or 37.7%. This means that the determinant of knowledge sharing shows where the influencing factors have 37.7% predictive power, and the other 62.3% is caused by other variables that cannot be explained.

Table 3.
Analisis Model Pengukuran

Hypothesis		Path Coefisien	T Value	P Values	Result
Direct Effect					
H1	POS -> KS	0,3528	4,1087	0,000	Accepted
H2	PT -> KS	0,4037	4,8273	0,000	Accepted
Moderation Effect					
H3	PT -> POS -> KS	0,0989	1,7617	0,078	Rejected

This finding is relevant to research that has been done. For example, the results from a study conducted by Han (2019) suggest that increasing perceptions of organizational support will encourage higher active knowledge-sharing. Human resource management practices are urgently needed here to promote employee involvement in sharing knowledge so that universities can provide appreciation and support to the government for sharing knowledge. It is the same as Shateri (2020) analysis that the more support an organization offers, a person will tend to exhibit more knowledge-sharing behavior. Metzler's (2011) investigation explains that individual characteristics influence knowledge sharing through affective commitment and knowledge documentation so that a person will be more effectively bound to the organization and more involved and more effective in knowledge documentation.

CONCLUSION

Personality Traits and perceptions of organizational support influence lecturers' willingness to carry out Knowledge Sharing. The desire to do Knowledge Sharing arises when a lecturer has the character of being trustworthy, friendly, disciplined, has good endurance, and independent, and there is organizational support to appreciate and provide opportunities for teachers to work better. The organization facilitates the needs of lecturers to exchange knowledge.

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