

Demographic Confirmation Analysis for Knowledge Management Behavior Identification

Yunita Kartika Sari¹

¹ Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University,
Jakarta, Indonesia 11480
yunita.sari@binus.ac.id

Abstract : Global changes impact all business sector including education sector. Therefore, education sector must pay attention on some efforts to facilitate human capital sustainability. There are three elements human capital include intellectual capital, social capital, organizational capital. Those are needed to be renewed and strengthened to improve intangible resources and add organization value for uniqueness and rarity. This study examine demographic variables that influence knowledge management behavior by applying confirmatory analysis in Neuroresearch method using 5% significance level. The findings show that demographic factor for gender and tenure do not influence significantly on knowledge management behavior and there is difference in knowledge management behavior on designation.

Keywords : Knowledge Management Behavior, Knowledge Sharing, Human Capital, Demographic

1. INTRODUCTION

Global changes impact all sectors including education sector. Therefore, this sector must consider some resources that support its human capital sustainability such as organizational capital, intellectual capital, and social capital. Those must be renewed and strengthened to add values of organizations for its rarity and uniqueness. This paper examines some demographic factors that influence knowledge management behavior. This research applied Neuroreserach method focus on confirmatory research and 5% significance level for confidence interval analysis. The research finding indicates that demographic factors (gender) and tenure do not influence knowledge management behavior, but designation factor does.

Global changes impact organization worldwide, increase competition, challenge technology advancement both product and services industries. Organization must handle the policies and strategies changes to survive in industry (Mohajan, 2019). Education sector must find a way to support its human capital sustainability.

Human capital has 3 elements. Intellectual capital as the first element includes creative, knowledge, innovative brainpower, and skills. It utilizes intangible asset and add value to the company. During last two decades, Intellectual Capital which includes inKnowledge Management has impactful for business (Salicru & Candidate, 2007). Social capital is the second element. It is a network outside and inside organization. Organizational capital or structural capital is the third element which consists of confidential information stored in database. (Sharma & Jaiswal, 2018).

Knowledge management is very necessary when knowledge integration is formed among individuals or groups along goods and services serving processes within any level of organization. (Rehman et al., 2011).

Some research examines factors that support knowledge management behavior for the success of organization. The most basic factor and the key to successful knowledge management is knowledge sharing (Rehman et al., 2011).

In organizational behavior terms, behavior is an activity. (Greenberg & Baron, 2008). Therefore, knowledge management is known as knowledge management behavior because knowledge management is a knowledge-based activities series. It is a valuable behavioral process in organizations and is practiced routinely as are skills, experiences, minds, and human capabilities.

Previous research mostly focusses on knowledge sharing and factors that influence it. According to Riege, there are 3 factors. They are individual, organization and technological. (Bakhari Ismail & Mohammad Yusof, 2009). This study aims to analyze demographic factors that influence knowledge management behavior.

2. LITERATURE REVIEW

One of the factors that influence organizational effectiveness is employee behavior (Jackson, Hitt, DeNisi, 2003). Employee behavior ultimately affects the success of the organization in obtaining sustainable competitive advantage. (Jackson, Hitt, DeNisi, 2003). It is due individual capabilities as human capital, either inherent or learnt add or create values for organization. (Sharma & Jaiswal, 2018). Therefore, everyone must renew and strengthen their capabilities through knowledge management. It is creating, managing and sharing the right information process at the right place and time to the right person. (Halawi, Aronson, & McCarthy, 2005; Ibragimova, D. Ryan, C. Windsor, & R. Prybutok, 2017). Furthermore, it is the process of planning, organizing, motivating, and controlling people, processes, and systems in organization. It covers knowledge acquisition, creation, refinement, storage, transfer, sharing, and utilization to enhance knowledge and decision and to improve organizational behavior and performance. (Johannessen & Johannessen, 2018).

Human Resources Management responsible for employee learning and development by means of a mechanism for creating and exchanging of knowledge to obtain the strategic objectives of organization. (Crawshaw, Budhwar, Davis, 2014). Human Resources Management facilitate the skill, experience and knowledge acquisition through learning programs provided by self-directed learning or an organization (Armstrong & Taylor, 2014). It focuses on the individual learning as human resources in organization that create, transfer, and use the knowledge. (Crawshaw, Budhwar, Davis, 2014).

Knowledge management behavior is a routine organizational activity that includes utilizing and managing individual competence, experience, expertise, skills, talents, thoughts, ideas, intuition, commitment, innovation to practice individual into knowledge-based resources in an organization. (Celep & Çetin, 2005; Darroch, 2003; Shamim, Cang, & Yu, 2017). Therefore, that knowledge management behavior is an individual activity as a dynamic humanist process to collect, manage, apply, share, and update knowledge to achieve the effectiveness of organization and the optimize knowledge as specific intangible organization resources.

Demographic changes are one of the challenges for company especially regarding the effectiveness of organization knowledge management. The research on the impact of demographic on knowledge sharing behavior is still few. The demographic variables include gender, age, ethnic, designation and work experience. It explains that in the effort to seek information, there's differences among man and woman. Further study indicates education affect the behavior of knowledge sharing. (Bakhari Ismail & Mohammad Yusof, 2009; Boateng, Dzandu, & Agyemang, 2015; Omar & Aduce, 2017; Pangil & Nasurdin, 2008; Nagamani et al., 2013).

3. RESEARCH METHODOLOGY

This research apply Neuroresearch method focus on confirmatory research. This method uses moderator variable to deepen the explanatory research result. This research examine demographics variable. (Fios, Sasmoko, & Gea, 2016; Sasmoko; Indrianti, Karsidi, Wuisan, & Ruliana, 2018; Sasmoko & Ying, 2015). Questionnaires with Likert scale range in 1 to 4 is applied as research instrument and developed based on the theoretical framework. It consists of 30 (thirty) statements distributed to the respondents. This research examines the difference of knowledge management behavior based on gender, designation, and tenure of work. It assumes that demographic variables impact on individual knowledge management behavior.

4. RESEARCH ANALYSIS

268 educational staffs in private education institutions at South Tangerang have filled in the questionnaire. The demographic variables observed are gender, work experience and designation. There are 81% female and 19% male respondents. 8% respondents work for less than five years, 13% respondents work for ten years, 59% respondents work for twenty years, and 20% respondents work more than twenty years. The characteristic of designations are 18% pre-school educational staff, 29% elementary educational staff, 24% junior high school educational staff, 29% senior high school educational staff.

Proportion Estimation formula through the Blom formula with the Q-Q Plot approach is applied to examine normality test of Knowledge Management Behavior (KMB_Y) variable data distribution as an endogen variable. The plot is applied because the respondents is more than 200. The data distribution of KMP variable lead to a normal line and have no outliers. Detrended Normal Q-Q plot indicate that data distribution does not describe sine or cosine curve thus KMB data has a normal distribution.

In this research, knowledge management behavior is educational staff behavior in maximizing techniques, tools, techniques, strategies, and processes that support organization effort to collect, identify, select, process, and disseminate both individual and organization knowledge. Knowledge management behavior encourage knowledge optimization to enhance organization competitive advantage and organizational learning.

There are five categories of Knowledge Management Behavior. Deviant Knowledge Management Behavior is the first category. It is behavior that does not entirely advance organization to maximize tools, process, techniques, and strategies of company effort to collect, select, identify, process, and disseminate knowledge. Second is Unspecified Knowledge Management Behavior. It is behavior that does not definitely advance organization to maximize tools, process, techniques, and strategies of company effort to collect, select, identify, process, and disseminate knowledge. Fragmentary Knowledge Management Behavior is the third category. The behavior that does not fully advance organization to maximize tools, process, techniques, and strategies of company effort to collect, select, identify, process, and disseminate knowledge. The fourth is Specified Knowledge Management Behavior. It is the specifically advance organization to maximize tools, process, techniques, and strategies of company effort to collect, select, identify, process, and disseminate knowledge. Well Qualified Knowledge Management Behavior is the fifth category. It is the behavior that completely advance organization to maximize tools, process, techniques, and strategies of company effort to collect, select, identify, process, and disseminate knowledge.

Based on the confidence interval analysis with a significance level of 5%, it can be demonstrated that the interval class is 10 and the lower bound to upper bound range at 92.9606 to 95.1588. The conclusion is educational staff members typically practice Unspecified Knowledge Management Behavior. It signifies that the educational staff's behaviors commonly do not maximize the instruments, methods, procedures, and techniques that facilitate organizations in collecting, identifying, selecting, processing, and disseminating knowledge.

The educational staff knowledge management behaviors are differentiated by designation resulting in F of 3.737 with a significance value of 0.012 which is significant at $\alpha < 0.05$. It means that staff at elementary school have Fragmentary Knowledge Management Behavior. They are not completely maximizing tools, process, techniques, and strategies to support organization to collect, identify, process, select, and disseminate knowledge. The educational staff at junior high school have Unspecified Knowledge Management Behavior. They are not specifically maximizing tools, process, techniques, strategies that support organization to collect, select, identify, process, and disseminate knowledge.

Educational staff knowledge management behaviors are differentiated by gender resulting in F of 0.783 with the significance value of 0.436. The α is below 0.05. Both male and female educational staff have Fragmentary Knowledge Management Behavior that do not completely maximize tools, process, techniques, and strategies that support organization to collect, select, identify, process, and disseminate knowledge.

Educational staff knowledge management behaviors of are differentiated by working experience in F of 0.834 with the significance value of 0.476. The value is not significant at $\alpha > 0.05$. There are no differences of knowledge management behaviors based on working experience thus all staff have Fragmentary Knowledge Management

Behavior. It means that they are not maximize tools, process, techniques, and strategies that support organization to collect, identify, process, select, and disseminate knowledge.

5. DISCUSSION

This research found that there are differences for variable designation in respondents knowledge management behavior. Educational staff at elementary school have Fragmentary Knowledge Management Behavior while educational staff at junior high level Unspecified Knowledge Management Behavior. Both male and female in this research are classified in same category which are Fragmentary Knowledge Management Behavior. Furthermore, respondent working experience do not influence their knowledge management behavior.

The finding in this research is similar with previous research by Pangli, Trinh Le Tan and Dao Thi Dai Trang, Nagamani and Katyayani. They found that gender has no significant influence in knowledge sharing behavior as part of knowledge management behavior. Ismail and Yusof also found that working experience (tenure) has no significant influence in knowledge sharing behavior. Arenawati Sehat and Shahren found that designation have its key role towards improving knowledge sharing behavior. (Bakhari Ismail & Mohammad Yusof, 2009; Boateng, Dzandu, & Agyemang, 2015; Omar & Aduce, 2017; nagamani & Nasurdin, 2008; Nagamani et al., 2013).

6. CONCLUSIONS

Global changes impact all business sectors and no exception in education sector. It put a challenge to give more attention on three key human capital elements which are intellectual capital, social capital, and organizational capital. Those need to be renewed and strengthened to shape them as intangible firm-specific resources that provide the organizational values for uniqueness and rarity. Knowledge management is very important for organization because there will always knowledge integration in it.

This research found that respondents do not realize the importance of knowledge management as the crucible of competitive advantage resource. Human resources must develop strong relationship and facilitate the effort to keep knowledge as invaluable capital. Organization must develop knowledge-based awareness among employees and knowledge management leaders. Leaders has a responsibility to lead by example in sharing knowledge, trust, and transparency. Transformational leadership style is needed to implement those responsibility. Some leadership trainings will enable leader successfully to take that responsibility.

Knowledge management awareness need to be increased thus each employee are willingly disseminate their knowledge. The finding categorized respondents in Unspecified Knowledge Management Behavior and Fragmentary Knowledge Management Behavior. It indicates that they are still unspecified, and incomplete maximize the tools process, technique, and strategies to support organization to collect, select, identify, process, and disseminate knowledge. This reluctant because of their fears of losing personal knowledge and making himself unimportant person in the organization. In fact, if knowledge is disseminated, it will not diminish, even the content shared becomes richer and wider. Sharing knowledge will make someone continue to learn and get updated knowledge. Increasing sharing knowledge motivation can be done by holding group activities on a regular basis.

The key success of knowledge management implementation is the behavior of the people who manage it because their behavior directly influences other employees' behavior. Each person is an influencer and influenced by his/her environment.

This research has some limitations. Future research is suggested to broaden the research variables that influence social behavior, leadership, and knowledge management behavior to create organizational learning.

7. REFERENCES

- Armstrong, Michael dan Stephen Taylor, (2014). *Armstrong's Handbook of HumanResource Management Practice*. United Kingdom: Koganpage.
- Bakhari Ismail, M., & Mohammad Yusof, Z. (2009). Demographic Factors and Knowledge Sharing Quality among Malaysian Government Officers Communications of the IBIMA Demographic Factors and Knowledge Sharing Quality among Malaysian Government Officers. *Communications of the IBIMA*, 9, 1–8.
- Boateng, H., Dzandu, D. M., & Agyemang, F. G. (2015). The effects of demographic variables on knowledge sharing Article information : *Library Review*, 64(3), 216–228.
- Crawshaw, J., Budhwar, P., Davis, A., (2014). Human Resource Management: Strategic and International Perspectives, <https://research.aston.ac.uk/en/publications/human-resource-management-strategic-and-international-perspective>
- Celep, C., & Çetin, B. (2005). Teachers' perception about the behaviours of school leaders with regard to knowledge management. *International Journal of Educational Management*, 19(2), 102–117. <https://doi.org/10.1108/09513540510582408>
- Darroch, J. (2003). Developing a measure of knowledge management behaviors and practices. *Journal of Knowledge Management*, 7(5), 41–54. <https://doi.org/10.1108/13673270310505377>
- Fios, F., Sasmoko, & Gea, A. A. (2016). Neuro-research method: A synthesis between hermeneutics and positivism. *Advanced Science Letters*, 22(9), 2202–2206. <https://doi.org/10.1166/asl.2016.7565>
- Greenberg, J., & Baron, R. A. (2008). *Behavior in Organizations* (9th ed.). Upper Saddle River, NJ: Pearson Education.
- Halawi, L. A., Aronson, J. E., & McCarthy, R. V. (2005). Resource-Based View of Knowledge Management for Competitive Advantage in an organization. *The Electronic Journal of Knowledge Management*, 3(2), 75–86.
- Ibragimova, B., D. Ryan, S., C. Windsor, J., & R. Prybutok, V. (2017). Understanding the Antecedents of Knowledge Sharing: An Organizational Justice Perspective. *Informing Science: The International Journal of an Emerging Transdiscipline*, 15(January), 183–205. <https://doi.org/10.28945/1694>
- Johannessen, J.A., & Johannessen, J.-A. (2018). Knowledge Management and Organizational Learning. *Knowledge Management as a Strategic Asset*, 95–111. <https://doi.org/10.1108/978-1-78769-659-420181005>
- Jackson, S. E., Hitt, M. A., DeNisi, A. S. (2003). Managing Human Resources for Knowledge-Based Competition: New Research Direction in book: *Managing Knowledge for Sustained Competitive Advantage: Designing Strategies for Effective Human Resources*, Chapter: 14, Jossey - Bass
- Mohajan, H. K. (2019). Knowledge Sharing among Employees in Organizations. *Journal of Economic Development, Environment and People*, 8(1), 52. <https://doi.org/10.26458/jedep.v8i1.612N>
- agamani, G., Katyayani, J., Padmavathi, S., Viswa, M., Pradesh, A., Padmavathi, S., Pradesh, A. (2013). Knowledge sharing practice among academicians : Assessing the role of demographic variables. *International Journal of Business Management & Research (IJBMR)*, 3(4), 113–124.
- Omar, A. S. B. H., & Aduce, S. B. A. Z. (2017). The role of demographic variables on knowledge-sharing behaviour among academicians. *Journal of Telecommunication, Electronic and Computer Engineering*, 9(3–11), 111–114.
- Pangil, F., & Nasurdin, aizzat mohd. (2008). Demographics Factors and Knowledge Sharing Behavior Among R & D Employees. *Knowledge Management International Conference and Exhibition 2008*, 9(2), 128–133. <https://doi.org/10.7763/IJTEF.2014.V5.337>
- Rehman, M., Kamil, A., Mahmood, B., Salleh, R., & Amin, A. (2011). Review of Factors Affecting Knowledge Sharing Behavior. *2010 International Conference on E-Business, Management and Economics*, (January 2015), 223–227. Retrieved from <http://www.ipedr.com/vol3/46-M10011.pdf>
- Salicru, S., & Candidate, D. B. A. (2007). Intellectual Capital and Company Performance – Literature Review and Research Opportunities in Australia This paper was presented at the 21st annual Australian and New Zealand Academy of Management Conference - ANZAM 2007 (Managing Our Intellectual and S. *Business*.
- Sasmoko;, Indrianti, Y., Karsidi, R., Wuisan, D., & Ruliana, P. (2018). Neuroresearch: Another form of mixed method. *International Journal of Engineering & Technology*, 7(2.10), 134. <https://doi.org/10.14419/ijet.v7i2.10.10971>
- Sasmoko, & Ying, Y. (2015). Construct validity in neuroresearch. *Advanced Science Letters*, 21(7), 2438–2441. <https://doi.org/10.1166/asl.2015.6301>
- Shamim, S., Cang, S., & Yu, H. (2017). Impact of knowledge oriented leadership on knowledge management behaviour through employee work attitudes. *International Journal of Human Resource Management*,



5192(May), 1–31. <https://doi.org/10.1080/09585192.2017.1323772>

Sharma, K., & Jaiswal, N. (2018). Human Capital Management: An Emerging Human Resource Management Practice. *International Journal of Economics and Management Studies*, 5(3), 37–42. <https://doi.org/10.14445/23939125/ijems-v5i3p106>