Determinants of Knowledge Sharing and Impacts of Knowledge on Working Performance of Public Employees in Tien Giang Province of Vietnam

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Abstract: This study investigates not only the factors determining knowledge sharing but also examines the effect of knowledge sharing on working performance of public employees in Tien Giang province of Vietnam. The data set includes 372 observations, which are collected in local and provincial offices. The study uses EFA method combining ordinary least squared regression for analyzing. The results indicate that information technology, organizational learning culture, and supports from senior management have impacts on knowledge sharing. In particular, the information technology has strongest impacts on knowledge sharing. At the same time, knowledge sharing is found to have significant impacts on the working performance of government officials in Tien Giang province.

Keywords: Knowledge, work performance, technology, sharing, culture

1. Introduction

Knowledge is known as awareness, personal knowing, and experience of governmental officials in doing jobs as well as in connecting to the colleges. Others consider knowledge the facts, laws, concepts, principles, casual relationships, insight, judgments and feelings (Ahmad & Daghfous, 2010). Knowledge often exists in each individual and knowledge which can only be used by that person is collected through the private absorption. Other people who want to use another's knowledge must be shared. Now, researchers indicate that the world is moving to knowledge economy in which economic resources are not only the machines but also knowledge. In developing and integrating time, beside technology and information technology, government officials in local areas can access and acquire knowledge quickly and flexibly. Whenever knowledge is easily shared from one to another person, working ability can arise and the results would be more effective. Knowledge sharing can also improve working skills of the officials (Widjaja, 2019).

However, at the provincial level, a large number of officials have not been fully utilized and the policy makers have not put their attention on knowledge sharing to improving working performance. In literature, empirical studies which focus on knowledge sharing of local officials in Vietnam are relative rare. This paper will partly fulfill this gap in the literature and raise some policy implications for policy makers to consider related issues on knowledge sharing in local officials in Tien Giang province.

The following section will present the literature review. Section 3 introduces the methodology. The section 4 is for empirical results while the section 5 will conclude the paper.

2. Literature Review

The literature on knowledge sharing determinants is dominant in knowledge sharing research. Islam et al. (2011) examine the relationship between organizational cultural factors and knowledge sharing of service organizations in Bangladesh. This study finds that trust, communication between staff, and leadership have significantly positive impacts on knowledge sharing. However, reward system, on the other hand, does not significant impact on knowledge sharing. This result may contradictory to those previously (Al-Alawi et al., 2007; Ling et al, 2009). It may result from the reason that in Bangladesh employees do not want to share their knowledge because they are afraid of losing their jobs or of being replaced in service industry. It is also because of their low beliefs on the colleges. In other words, benefits of sharing knowledge may not cover its costs whenever the employees share all what they know. In another study, Kharabsheh et al. (2012) study the determinants of knowledge sharing in pharmaceutical firms in Jordan. The questionnaire has been done within 13 pharmaceutical firms in Jordan. There are six factors affecting knowledge sharing in this research, organizational culture, communication system, learning orientation, information technology, beliefs, and reward system. Among these determinants, learning orientation is found to have largest impacts on knowledge sharing. Effective communication system is essential to those who need to enlarge knowledge sharing within the enterprises. In addition, Mansor and Kenny (2013) underlie the knowledge behavior of employees in public services in Malaysia. Demographic variables and organizational influences are core of regard in the study. The review of literature indicates that demographic profiles do not have impacts on knowledge sharing behavior outside the working places. It may imply that employees in...
public services only share their working knowledge while the connections out of work are weak and insignificant. The organizational factors oppositely have direct effects on knowledge sharing. In this paper, knowledge sharing is found to have positive impacts on the success of public services via promoting good attitude and behavior of employees. Another study relating to public sector is the research of Muqadas et al. (2017). In the paper, Muqadas et al. (2017) explores the challenges of knowledge sharing in public university in developing economies. The data is collected from lecturer, assistance professors, professors, registrar, and vice chancellor. The results show some negative factors of knowledge sharing behavior such as promotion opportunities, employee favoritism, and hoard knowledge to gain power, authority, and influence. A poor linkage between knowledge sharing and rewards, and the unsupportive culture have negative impacts knowledge sharing behavior in public universities.

Relating to the impacts of knowledge sharing and working efficiency of public employees, Kang et al. (2008) use data from the survey of 323 respondents in South Korea. The results indicate that employees’ knowledge sharing has positive effects on individual working performance. Among nine components of knowledge sharing including reward systems, openness in communication, employee training, support from the top management, cooperation, organizational learning culture, organizational structure, knowledge clarity, and knowledge usefulness, there are only first four factors which are positively related to knowledge sharing behavior. Perceived trustworthiness between individuals has also positive impacts on both knowledge sharing and working performance. Supporting to the argument that knowledge sharing behavior can improve the working performance, Kuzu et al. (2014) find that not only knowledge sharing but also employee relationships have positive impacts on employee performance. The study has been conducted in five-star hotels in Antalya, Turkey. Primary data is collected from employees in these hotels. Other researchers also indicate the positive contribution to the performance in their studies (Zahari et al., 2014; Banerjee et al., 2017; Singh et al., 2017; Zilani et al., 2020).

In this study, the proposed model which logically bases on the literature review is express in the figure 1.

### Figure 1: Proposed Model
Source: Author’s Suggestion

#### 3. Methodology

This study employs both qualitative method and quantitative method for analysis. Firstly, group discussion in qualitative method is conducted to adjust the questionnaire. A group of eight experts in human resource departments of public service has been gathered and discussed within 5 hours. The result of the discussion part is the final version of the questionnaire. Final questionnaire includes 22 components of 6 variables. Then, the questionnaire is used to collect data for quantitative estimation. A sample of 470 questionnaires has been delivered and 372 effective ones are received. Likert scale is used to measures all variables and it ranges from 1 to 5, which represents absolutely disagree to totally agree. Respondents are the people who are working in public services including 11 District People Committees in Tien Giang province. The study uses SPSS22 to analyze Cronbach’s Alpha, Exploratory Factor Analysis (EFA), and regressions.

#### 4. Empirical Results

##### 4.1. Cronbach’s Alpha Results

| Variables                              | Components       | Cronbach’s alpha |
|----------------------------------------|------------------|------------------|
| Organizational Learning Culture        | OLC1, OLC2, OLC3 | α = 0.808        |
| Employee Training                      | ET1, ET2, ET3, ET4 | α = 0.733      |
| Supports from senior management        | HT1, HT2, HT3    | α = 0.846        |
| Information Technology                 | IT1, IT2, IT3, IT4 | α = 0.778      |
| Knowledge Sharing                      | KS1, KS2, KS3, KS5 | α = 0.796      |
| Employee Performance                   | EP1, EP2, EP3, EP4 | α = 0.929      |

*Table 1: Results of Reliability Statistics
Source: Author’s Calculation*
The results indicate that 5 independent variables and 1 dependent variable all have the Cronbach’s Alpha coefficients which are over 0.7. In addition, all components have the corrected item total relation coefficient > 0.3. So, all components can be used for EFA analysis.

4.2. EFA Analysis

4.2.1. EFA Analysis of Independent Variables

EFA results show that after taking the 2nd EFA and eliminating the component ET4 (public employees are encouraged to participate training programs), the Kaiser-Meyer-Olkin coefficient gets 0.855 which indicates the suitable EFA analysis. The Bartlett’s Test of Sphericity has a significant level showing close relationships among components. Total variance explained equals to 0.695 indicating these 4 independent variables can explain 69.5% of data variation.

| Kaiser-Meyer-Olkin | 0.855 |
|--------------------|-------|
| Bartlett’s Test of Sphericity | Chi-Square |
| Df. | Sig. |
| 78 | 0.000 |
| Total variance explained | 0.695 |

*Table 2: KMO and Bartlett’s Test*
*Source: Author’s Calculation*

The EFA analysis also classifies components into 4 groups of variables, which are presented in the rotated component matrix.

| Factor | 1 | 2 | 3 | 4 |
|--------|---|---|---|---|
| IT2    | 0.822 |   |   |   |
| IT3    | 0.794 |   |   |   |
| IT1    | 0.742 |   |   |   |
| IT4    | 0.574 |   |   |   |
| OLC1   | 0.829 |   |   |   |
| OLC2   | 0.764 |   |   |   |
| OLC3   | 0.733 |   |   |   |
| HT1    |   | 0.849 |   |   |
| HT3    |   | 0.781 |   |   |
| HT2    |   | 0.712 |   |   |
| ET2    |   |   | 0.826 |   |
| ET1    |   |   | 0.727 |   |
| ET3    |   |   | 0.673 |   |

*Table 3: Rotated Component Matrix*
*Source: Author’s calculation*

4.2.2. EFA Analysis of Knowledge Sharing and Employee Performance

The knowledge sharing variable has the Kaiser-Meyer-Olkin coefficient of 0.772, which is greater than 0.7. This result implies a suitable EFA analysis. The Bartlett’s Test of Sphericity is significant and knowledge sharing components share a close relation. 62.2% of knowledge sharing variation is explained by its 4 components. The similar results can be found in Employment Performance in which 87.7% of variation is explained by 3 components.

| Knowledge Sharing | Component | Factor loading |  |
|-------------------|-----------|----------------|---|
| KS2               | 0.820     |                |   |
| KS3               | 0.803     |                |   |
| KS1               | 0.801     |                |   |
| KS5               | 0.727     |                |   |
| Kaiser-Meyer-Olkin| 0.772     |                |   |

| Employee Performance | Component | Factor loading |  |
|----------------------|-----------|----------------|---|
| KS2                  | EP3       | 0.948          |   |
| KS3                  | EP2       | 0.944          |   |
| KS1                  | EP1       | 0.917          |   |
| KS5                  |           |                |   |
| Bartlett’s Test of Sphericity | 443.96 (0.000) | 917.17 (0.000) |   |
| Total variance explained | 0.622 | 0.877 |

*Table 4: EFA Results of Knowledge Sharing and Employee Performance*
*Source: Author’s Calculation*
4.3. Estimation Analysis

The regression results are presented in table 5.

| Model | Unstandardized coefficients | Standardized coefficients | t | Sig. | VIF | R² |
|-------|-----------------------------|---------------------------|---|------|-----|----|
|       |                             |                           |   |      |     |    |
| KS    |                             |                           |   |      |     |    |
| OLC   | 0.14                        | 0.18                      | 3.62 | 0.00 | 1.64 | 0.43 |
| ET    | 0.03                        | 0.04                      | 0.77 | 0.44 | 1.51 |
| HT    | 0.08                        | 0.11                      | 2.08 | 0.04 | 1.69 |
| IT    | 0.44                        | 0.47                      | 10.32 | 0.00 | 1.37 |
| Constant | 1.33                     | 0.18                      | 7.46 | 0.00 |     |
| EP    |                             |                           |   |      |     |    |
| KS    | 0.55                        | 0.07                      | 10.54 | 0.00 | 0.00 | 0.23 |
| Constant | 2.14                     | 0.22                      | 9.67 | 0.00 |     |

Table 5: Estimation Results
Source: Author's Calculation

The first estimation results indicate that there are 3 main determinants of knowledge sharing among public employees in Tien Giang province of Vietnam. Organizational Learning Culture, supports from senior Management, and Information Technology have positively significant impacts on knowledge sharing behavior of public employees in Tien Giang province. These findings are similar to those of previous studies (Al-Alawi et al., 2007; Ling et al, 2009; Islam et al., 2011; Kharabsheh et al., 2012; Mansor and Kenny, 2013; Muqadas et al., 2017). However, Employee Training seems to have no effect on Knowledge sharing. It may be explained that training programs may increase the employee skills but these programs have not encouraged everyone to share their knowledge. In addition, the working environment in public sector is always not easy. People there have to be careful in working and connecting to others. Employees are not open to transfer their knowledge to colleges who are potentially their opponents in the future. Training programs may facilitate the working efficiency but not knowledge sharing.

The second estimation shows that knowledge sharing has a positive impact on employee performance. It implies that knowledge sharing can improve employee effectiveness. This argument is confirmed those of Kang et al. (2008), Kuzu et al. (2014), Singh et al. (2017), or Zilani et al. (2020). Employee performance needs not only employee ability but also outside supports. Employees can learn by themselves but the knowledge from colleges is also important in conducting jobs. Especially, intra-organizational relation is important for each employee to explore and utilize fully advantages of information. Knowledge sharing in public service sector is not only skills, or pure knowledge but information as well. The information could be a crucial determinant for employees to fulfill their working duties.

5. Conclusion and Management Implications

This research aims at investigating the determinants of knowledge sharing and impacts of knowledge sharing on employee performance in public sector in Tien Giang province of Vietnam. Such factors as Organizational Learning Culture, supports from senior Management, and Information Technology play a crucial role in explaining the variation of knowledge sharing in public sector. Using survey data of 372 respondents who are working in public areas of 11 districts in Tien Giang province, the study uses both qualitative method and quantitative estimation to examine the effects. Qualitative method finalizes the questionnaire. Quantitative estimations have been conducted in two parts. The first part relates to determinants of knowledge sharing while the second part examine the impacts of knowledge sharing on employee performance. The first estimation confirms that Information Technology, Organizational Learning Culture, and Supports from senior Management have positive impacts on knowledge sharing and the level of impacts from high to low is from Information Technology to Supports from senior Management. The second estimation shows a positive impact of knowledge sharing on employee performance as stated in some previous studies. These results are supported by other researches in other economies as well as other organizational fields.

5.1. Management Implication

5.1.1. Information Technology

This is the strongest determinant of knowledge sharing of public employees in Tien Giang province. Employees should be supported by modern information technology in order to increase the knowledge sharing within the offices. Information technology plays an important role in knowledge management at site to store information, profiles, working schedules, and to assign employees updating information to the whole system quarterly, semiannually, or annually. When an employee accesses or shares information, he/she has to log in with her/his ID and password. This would indicate the knowledge sharing frequency of each employee and would help to control the information. Besides, information technology skills should be updated as well as the application of new software which are used for working should be implemented. The upgraded technology will result higher level of knowledge sharing and thus increasing the employee performance in public services in Tien Giang province.
5.1.2. Organizational Learning Culture

The culture of organizational learning contributes to the knowledge sharing. Thus, the leaders should build the organizational learning culture for their organizations. This would create a positive working environment in working and sharing experience as well as group relations. Learning activity is the basic instinct but the demand to absorb new knowledge will reduce as people get older. Transferring knowledge can promote success and working motivation. Absorptive ability and intra-organizational learning capacity are interrelated and organizations which are good at absorbing new knowledge, especially external information would be beneficial and thus increasing their performance.

5.1.3. Supports from Senior Management

Knowledge sharing should be encouraged from the top managers of the organizations. The knowledge sharing procedure should be imposed in each organization and it will help to evaluate the effectiveness of knowledge sharing, which can be used to rank the employee performance. Besides that, senior managers should often share their information of plans, projects, skills, and contents of meetings for their employees. Managers should be the first persons who are willing to share knowledge to their subordinates. To maintain and strengthen the connections among employees, regular meetings should be held to deliver and to share information which is used for their work. These intra-connections can be useful in promoting employee performance. In addition, the managers should remind their public employees to share knowledge in order to cover their job successfully. Knowledge sharing activities is considered an important factor in consolidating the organizational position.

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