

The Role of Organizational Culture and Human Resource Management Practices in Strengthening the Effect of Leadership on Knowledge Sharing (A Study at Ngudi Waluyo General Hospital, Wlingi, Blitar, East Java, Indonesia)

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ABSTRACT

Objective – The results of previous studies show that leadership has a positive effect on knowledge sharing. However, there was a lack of studies which could prove that organizational culture and human resource practices can strengthen the effect of leadership on knowledge sharing. The objective of this study is to explain the role of organizational culture and human resource practices as moderating variables for the effect of leadership on knowledge sharing.

Methodology/Technique – The study was conducted at the Ngudi Waluyo General Hospital, Wlingi, Blitar, East Java, Indonesia. The number of respondents were 55 nurses. The WarpPLS program was utilized to obtain analysis of the study.

Findings – The results of the study show that both organizational culture and human resource practices are not strong enough to serve as moderators for the effect of leadership on knowledge sharing.

Novelty – This study shares the idea that both organizational culture and human resource management practices cannot serve as moderating variables which can affect transformational leadership in health service organizations. In this case, the nurses' knowledge sharing. This study also generated an advanced idea for verification.

Type of Paper: Empirical

Keywords: Leadership, Knowledge Sharing, Organizational Culture, Human Resource Management Practices, Nurse.

JEL Classification: M12, M14.

1. Introduction

The competitive advantage of an organization will increase when the organization applies knowledge and places an importance on the practice of knowledge sharing. This can help the organization to achieve its strategic goals. Nonaka and Takeuchi (1995) reveal that the knowledge creating company becomes important for individual workers in the process of knowledge creation, a process where individuals internalize the input as part of organizational knowledge.

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Hospitals, as health service-providing organizations, play an important role in giving health services to the community. The quality of services in hospitals is greatly influenced by the assessment of its success and performance. Therefore, medical professionals are needed urgently in improving the quality of hospital services. One of the efforts to improve service quality performed by medical professionals and employees of hospitals is to implement knowledge sharing.

Basically, knowledge sharing is a kind of activity where knowledge is available for all individuals in the organization as it is intended to increase performances (Hoegl et al., 2003). Individuals share the knowledge they have learned and transfer it to those with similar interest and who are aware of its advantage. The process of sharing is not just about gathering data and information but also about transmitting the value of the knowledge itself. Therefore, if it is properly managed, knowledge sharing can improve work quality, decision making skills, efficient problem solving skills and also competence, all of which will benefit the organization (Omar Sharifuddin bin Syed-Ikhsan & Rowland, 2004; Yang, 2007).

2. Literature Hypothesis

2.1. Leadership and knowledge sharing

Leaders, as figures who are responsible for the improvement of an organization has a great influence toward the existence of knowledge sharing carried out by the members of the organization they lead. In the context of hospitals, there are many forms and processes of health service activities which exemplify the value of knowledge sharing. The process of service activity is a form of behavior which need to be applied when serving clients, hence, a high awareness of this among nurses and medical personnels can become a culture of the hospital. The existence of such culture has an important meaning in increasing knowledge sharing (Hoegl et al., 2003).

Theoretically, the influence of leadership on subordinates was aimed at achieving organizational goals (Yukl, 2002). Leaders create a certain culture in the organization they lead (Schein, 2004) and when this occurs, the organizational culture (Shared Value) can influence the entire organization's program and strategy (Teh & Corbitt, 2015). Leadership is a process of directing and influencing the activities of group members whose goal is to inspire and support other followers by providing what they need so as to reach the organization's goals (Luthans, 2011). Leadership is the essence of management that will guarantee that each function of the management runs well whilst achieving organizational goals.

According to Bass et al., (2003), a transformational leader is one who pays attention to the needs and motives of the followers. He inspires others to reach their full potential and to surpass personal interest for the sake of the group. The values maintained by a transformational leader include: love, personal growth, wholeness, self-transcendence, meaning-seeking and work purpose.

The improvement of knowledge sharing depends on the people working within the organization. These are people who are already doing it and in that process, share and implement the knowledge –sharing practice (Ipe, 2003). Ipe (2003) also revealed several factors which can influence knowledge sharing: (1) Nature of Knowledge - knowledge based on its nature is divided into two namely, tacit and explicit. Tacit knowledge is the knowledge obtained by individuals from personal experiences (Nonaka, 1994). Tacit knowledge is not easy to be codified or communicated without individuals who have the knowledge. In contrast, explicit knowledge is easier to be codified and transferred through space and time (Lam, 2000). The second factor includes (2) Motivation to share; (3) Opportunities to share; and (4) Culture of the work environment.

Research focusing on knowledge sharing in public service organizations such as hospitals have been conducted by several researchers. The research result showed that knowledge sharing becomes important at hospitals especially for professional workers because knowledge sharing behavior can be a learning mechanism for hospital organizations (Popper & Lipshitz, 2000).

Previous empirical research showed that leadership has a positive effect on knowledge sharing (Nguyen & Mohamed, 2011; Shao et al., 2012). The role of leaders as a facilitator, mentor, and innovator has a positive impact on knowledge sharing but it has a negative connotation on monitoring (Yang, 2007). The positive impact of leadership on knowledge sharing has been noted by Girdauskienė and Savanevičienė (2012) whose work was based on their research of the TV industry. Their outcome showed that the impact is relatively weak.

H1: Leadership has positive effect on knowledge sharing.

2.2. Organizational culture

Several thoughts of theoretical concept about organizational culture have been widely used as the basis of the research conceptual framework and as the basic of corrective discussion of a proposition. This can be traced to Schein (2004), Hofstede and Gert (2005) and Denison (2006). All of them have made a specific reference to organizational character in the implementation. Schein (2004) emphasized more on the existence of an invisible philosophy concept which later became an issue that the behavior of the organization member will form value; from value, the organizational culture will be created. Hofstede and Gert's (2005) concept was a macro culture concept while Denison's (2006) concept emphasized on organizations with competition.

Culture is defined as "*pattern of basic assumption*" (Schein, 2004). The key of every culture is a sequence of assumptions about how to determine: "*What is real*" and "*How members or group take an action, How they determine what is relevant information, and When they have enough of it to determine where to act and what to do*". Therefore, culture reflects values, norms and practices within an organization. Value is manifested into norms that later on will be sharpened into actions.

Related to knowledge sharing, organizational culture is considered as the factor that influences the behavior of individuals in knowledge creation, knowledge sharing and knowledge usage (Long & Fahey, 2000).

Nonaka and Takeuchi (1995) reveal that "*organizational culture orients the mindset and action of every employee*". If this is connected to knowledge sharing, then norms and practices in organizations can influence the ownership of knowledge within the individual and also the process of knowledge sharing in organizations.

Several empirical studies (Kathiravelu et al., 2014; Lee et al., 2016; Al-Alawi et al., 2007; Shao et al., 2015; Yang, 2007; Islam et al., 2015) which focus on the direct effect of organizational culture on knowledge sharing indicated positive and significant effects. All of these showed that the collaborative culture item in the research result was insignificant.

H₂: Organizational Culture as a moderating variable for the effect of leadership on knowledge sharing.

2.3. Human resource management practices

Human Resource Development is one of the forms or subsystems of Human Resource Management (Mondy & Noe, 2005; Miner & Crane, 1995). Activity programs and human resource development strategies are influenced by leaders (Ritchie, 2000). Through the development of human resource, organizations and their leaders will have competent and professional staffs who will later be able to increase the value of knowledge sharing (De Vries et al., 2010).

Therefore, knowledge sharing is indirectly influenced by leadership through the development of human resource or the practice of human resource management. It is also possible that the development of human resource strengthens the influence of leadership on knowledge sharing.

Previous studies (Williams & Lee, 2016; Chee-Yang et al., 2011) proved that human resource management practices have a direct and positive influence on knowledge sharing. This is further asserted by Hislop (2003) who mentioned that there is a potential significant effect of human resource management practices on knowledge sharing.

H₃: Human Resources Management Practices as a moderating variable for the effect of leadership on knowledge sharing.

3. Method

The population of this study is 55 nurses recruited from the General Hospital of “Ngudi Waluyo”, Wlingi, Blitar, East Java, Indonesia. Purposive Sampling Technique was utilized and data were measured by using a Likert Scale questionnaire with 5 response items of Strongly disagree with score 1 to Strongly agree with score 5.

Data analysis was done by using structural equation modeling with the WarpPLS approach. Moderation variable analysis on WarpPLS is done through the moderation regression approach which is achieved by adding interaction variables between the independent variable and the moderating variable. The moderation regression model used is as follow:

3.1. Regression models approach

Full models in this research is:

$$Y = \beta_0 + \beta_1 X + \beta_2 Z_1 + \beta_3 Z_2 + \beta_4 X * Z_1 + \beta_5 X * Z_2 + \varepsilon$$

Where:

Y = Knowledge Sharing

β_0 = Intercept

β_1, \dots, β_5 = Regression Coefficient

X = Leadership

Z₁ = Organizational Culture

Z₂ = Human Resource Management Practice

X * Z₁ = Interaction of Leadership and Organizational Culture

X * Z₂ = Interaction of Leadership and Human Resource Management Practices

ε = error

Table 1. Research Variables, Indicators and Items

Variables	Indicator	Items
Transformational leadership	Vision	1. Interpreting vision clearly (X1) 2. Highly committed on the job (X2)
	Inspirational communication	3. Making members proud to be a part of the organization. (X3) 4. Motivating employees to work according to the vision, mission and goals. (X4) 5. Motivating employees to work based on procedure (X5).
	Supportive leadership	6. Taking into account the interests of members (X6) 7. Motivating employees to be creative in performing the task (X7) 8. Paying attention to the employees' increasing performance (X8)
	Personal recognition	9. Providing work process improvement (X9) 10. Giving appraisal for work performance (X10) 11. Paying attention to career advancement (X11)
Organizational culture	Artifact	12. Organization's achievement becomes the pride (Z1.1) 13. Public assessment on the organization makes members proud (Z1.2)
	Value	14. Members understand the vision (Z1.3) 15. Members' behavior describes the mission (Z1.4)
	Basic Assumption	16. Moto as a working guideline (Z1.5)

		17. Organization's vision in accordance with the current development (Z1.6) 18. Organization's mission is supported by the stakeholders (Z1.7)
Knowledge sharing	Explicit knowledge	19. Pleased to make report about the job knowledge possessed (Y1) 20. The knowledges are written in the form of reports that can be used together (Y2)
	Tacit knowledge	21. Supporting the training program of the organization (Y3) 22. Sharing personal experiences related to the knowledge (Y4) 23. Pleased to share knowledge between members (Y5)
HRM Practices	Training	24. Training to increase members' competency (Z2.1) 25. Training for problem solving (Z2.2)
	Compensation	26. Giving decent incentive (Z2.3) 27. Giving performance reward (Z2.4)
	Development	28. Focusing on organization development (Z2.5) 29. Assessment of performance results (Z2.6)
	Staffing	30. Selecting staff with specific skills (Z2.7) 31. Selecting staff for the organization's progress (Z2.8)
	Participation	32. Members contribute in giving input in decision-making (Z2.9) 33. Members participate in giving feedback to achieve mission (Z2.10) 34. The opinion of each member is valued / appreciated (Z2.11)

4. Results

The respondents can be described as mainly females (69.09%), permanent employees (87.27%), married (65.45%), less than 25 years old (32.73%), have 1 child (40.0%), and undergraduate diploma holders (40.0%).

4.1. Validity and reliability test

The validity test shows that all the indicators are valid as all items of the indicators have a significant probability score $< 0,05$. Cronbach alpha value of each variable is more than 0.60, indicating that the data are reliable (Table 2).

Table 2. Items, Mean Score, Factor Loading and Cronbach Alpha for Construct Variables

Construct	Item	Mean Score	Factor Loading	Cronbach Alpha
Leadership	X1	4.09	0.742	0.951
	X2	3.96	0.824	
	X3	3.82	0.883	
	X4	4.02	0.849	
	X5	4.11	0.852	
	X6	3.80	0.793	
	X7	3.96	0.837	
	X8	3.87	0.870	
	X9	3.76	0.835	
	X10	3.69	0.696	
	X11	3.60	0.815	
Knowledge Sharing	Y1	3.95	0.746	0.871
	Y2	3.65	0.621	
	Y3	4.15	0.867	
	Y4	4.04	0.912	
	Y5	4.09	0.907	
Organizational Culture	Z11	4.15	0.741	0.978
	Z12	3.80	0.759	

	Z13	3.85	0.690	
	Z14	3.82	0.685	
	Z15	4.20	0.754	
	Z16	4.09	0.871	
	Z17	4.04	0.847	
HRM Practices	Z21	4.22	0.476	0.923
	Z22	4.07	0.576	
	Z23	3.71	0.624	
	Z24	3.56	0.848	
	Z25	3.65	0.840	
	Z26	3.69	0.878	
	Z27	3.53	0.769	
	Z28	3.60	0.833	
	Z29	3.36	0.825	
	Z210	3.35	0.783	
	Z211	3.47	0.796	

4.2. Regression analysis

The result of the regression analysis for two moderating variables (Organizational Culture_Z1; and Human Resources Management Practice_Z2) is as follow:

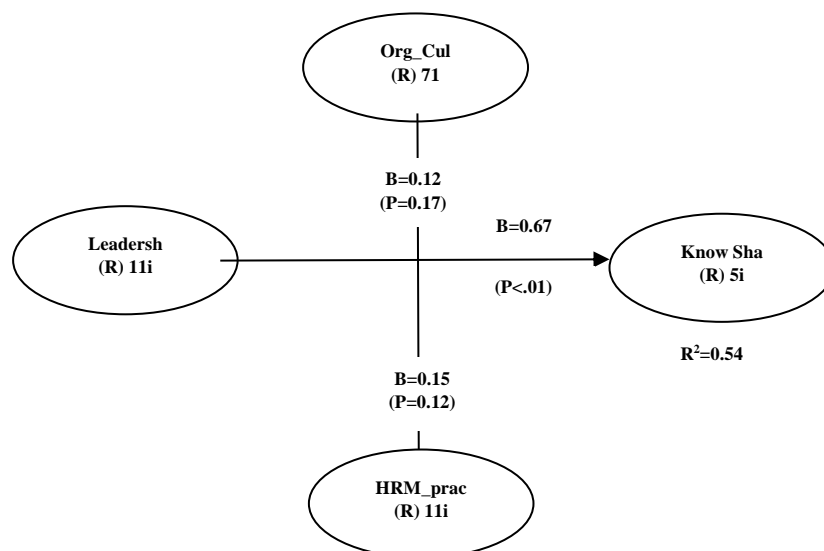


Figure 3.1 Regression Analysis for Two Moderating Variables

The diagram can be presented in the regression model as follow:

$$Z_Y = 0.67Z_X - 0.12Z_{X*Z1} + 0.15Z_{X*Z2}$$

(<.01) (0.17) (0.12)

The R-square value is 0.54. This means that the ability of X (Leadership), X*Z1 (Interaction of leadership and organizational culture), and X*Z2 (Interaction of leadership and human resource management practices) to explain Y (Knowledge sharing) is at 54%, while the rest (46%) belongs to other variables which are not used in the model.

4.3. Hypothesis testing

Hypothesis Testing: *Leadership has positive effect on knowledge sharing.*

Proposed Hypothesis	Hypothesis	Estimate	p-value	Rejected/Supported
Leadership → Knowledge Sharing X → Y	H1	0.67	<.01	Supported

Hypothesis Testing: *Organizational Culture as a moderating variable for the effect of leadership on knowledge sharing.*

Proposed hypothesis	hypothesis	Estimate	p-value	Rejected/Supported
Organizational Culture as a moderator of the influence of Leadership → Knowledge Sharing $X*Z_1 \rightarrow Y$	H2	-0.12	0.17	Rejected

Hypothesis Testing: *Human Resources Management Practices as a moderating variable for the effect of leadership on knowledge sharing.*

Proposed hypothesis	hypothesis	Estimate	p-value	Rejected/Supported
HRM Practices as a moderator of the influence of Leadership → Knowledge Sharing $X*Z_2 \rightarrow Y$	H3	0.15	0.12	Rejected

5. Discussion

The regression tests showed that leadership has a positive effect on knowledge sharing with a probability value of <.01. The result of the study supports the results of Nguyen and Mohamed (2011); Shao et al. (2012); and Yang (2007).

The highest average score item of the variable of leadership is X5 (My leader motivates employees to work according to the organization's procedure) is 4.11 (Table 3.1) while the highest loading factor score to leadership item is X3 (leader mentions something that makes me proud to be a part of the hospital) has a score of 0.833. This means that leadership in the General Hospital in Wlingi is reflected (formed) by X3 (leader mentions something that makes me proud to be a part of the hospital). However, based on their statements, the highest average score is in X5 (my leader motivates employees to work according to the organization's procedure) while the average score of X3 is 3.82, lower than the average score of X5 (4.11). To increase leadership at the Ngudi Waluyo General Hospital Wlingi, Blitar, East Java, conceptually, the leader should make the nurses proud by mentioning that they are part of the hospital.

The highest average score for the construct variable, knowledge sharing, is 4.15, which is on Y3 (supporting the training program of the organization). In practice, knowledge sharing is represented by the average score item of Y3 (4.15) which supports training. Conceptually, knowledge sharing is reflected by indicator Y4 (sharing personal experience related on knowledge) with the highest loading factor score of 0.912. The average score of Y4 is 4.04 which is smaller than Y3 (4.15). Therefore, the effort to encourage knowledge sharing can be done by increasing item Y4 (sharing personal experience related on knowledge).

5.1. Organizational culture as moderating variable

Organizational culture as the moderating variable in the regression model can be shown by the interaction of leadership (X) and organizational culture (Z1) and its effect on knowledge sharing.

There is no supporting evidence which can prove that organizational culture moderates the effect of leadership on knowledge sharing. This is shown by the interaction of coefficient X and Z1 which has a

probability score of 0.17 (>0.05). This research result shows that organizational culture does not play a role in increasing or decreasing the effect of leadership on knowledge sharing.

5.2. Human resource management practices as moderating variable

To prove that human resource management practices can act as a moderating variable in the regression model, the interaction of leadership (X) and human resource management practices (Z2) and its effect on knowledge sharing was shown.

There is also no evidence to show that the human resource management practice can act as a moderating variable. This is shown by the probability score of interaction X and Z2 which is 0.12 (>0.05). The result of this study shows that human resource management practices cannot play a role in increasing or decreasing the effect of leadership on knowledge sharing.

Thus, it can be deduced that both organizational culture and human resource management practices are not statistically proven to be moderating variables for the effect of leadership on knowledge sharing. In that regard, (1) encouraging the role of leaders in motivating employees (nurses) will increase knowledge sharing; (2) building the attitude of experience sharing within colleagues can increase employee's (nurses) motivation; (3) organizational culture and human resource management practices which are not proven as moderators could imply that both can be independent variables for knowledge sharing as dependent variable, or both can be mediating variable for the effect of leadership on knowledge sharing.

6. Conclusions and Suggestions

The conclusions of this study imply: (1) Transformational leadership in health service management has a positive and significant effect on knowledge sharing; (2) Organizational culture and human resource management practices cannot act as the moderating variable for leadership effect on knowledge sharing in health service public organizations.

The study adds evidence to literature to show the effect of transformational leadership in health service organizations on knowledge sharing. The study also gives ideas on the development of organizational culture and human resource management practices as effects on transformational leadership in health service organizations. Furthermore, this study generates the advanced idea of a verification which show that organizational culture and human resource management practices are both independent variables for a dependent variable (knowledge sharing). Both are mediating variables of the influence of leadership on knowledge sharing. Based on the research result, business practitioners in health service organizations can increase knowledge sharing through the effort of a leader who can motivate nurses by telling them that they are an important part of the health service organization. That motivation will be able to increase the nurses' skills in sharing related personal experience.

Suggestion for future study is to avoid sample domination of females. Thus, it is suggested to use non-probability sampling technique. Both organizational culture and human resource management practices need to be treated as moderating variables for the effect of transformational leadership on knowledge sharing.

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