The role of organizational culture, knowledge sharing and job satisfaction in higher education

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CHRONICLE	ABSTRACT
	This study aims to examine the influence of organizational culture on job satisfaction through knowledge sharing. The sample in this study totaled 259 lecturers, 50 groups of study programs at 27 universities. Hypothesis testing uses Hierarchical linear modeling (HLM). The results show that organizational culture had a significant positive effect on knowledge sharing, knowledge sharing had a significant positive effect on job satisfaction, and organizational culture had a positive and significant effect on satisfaction directly or indirectly.

1. Introduction

Knowledge is not only in documents and repositories, but also it is in people's minds as a result of time-to-time experience (Al-Alawi et al., 2007; Islamy, 2013; Islamy & Nurjaman, 2018). The increasing use and utilization of knowledge in companies raises the theory of knowledge management which is currently one of the most discussed topics in information technology and management (Knapp, 2002; Mansourvar & Yasin, 2010; Zhang et al., 2015). Knowledge in organizations becomes a very strategic asset (Bollinger et al., 2002; Durmusoglu et al., 2014; Meso & Smith, 2000), therefore knowledge that is in employees' mind in the organization must be managed well so that it can be utilized in increasing competitive advantage (Islam & Hasan, 2015; Issa, 2008). Knowledge management is present in managing knowledge within the organization, Knowledge management is considered as a key part in creating organizational excellence (Issa, 2008). Knowledge sharing is one of the many major focuses and is an important stage in the knowledge management process (Al-Alawi et al., 2007; Islamy, 2013; Islamy & Nurjaman, 2018; Issa, 2008). Organizational culture is beliefs, ideologies and norms that can influence the actions of employees in the organization (Jones et al., 2006). Organizational culture is ultimately about behavioral control, therefore the process of controlling behavior using norms and values. Organizational culture is a supporting factor for the effectiveness of knowledge sharing (Ruppel & Harrington, 2001; Jones et al., 2006; Lee et al., 2016). Many companies change organizational culture with a culture that can support the process of creating knowledge, transferring knowledge and utilizing knowledge (Jones et al., 2006). Cultural values tend to have a culture of low formality, good teamwork, collaboration, employee involvement and a competitive environment can support knowledge sharing activities in organizations (Wiewiora & Coffey, 2013; Wiewiora et al., 2010). Culture can be a driving force or a barrier in the process of knowledge sharing. So the current organization must be able to determine what kind of culture it should have in the current era of the knowledge economy (Yang, 2007). There are research findings suggest that market culture has a negative effect on knowledge sharing (Wiewiora et al., 2010). Islam and Hasan, (2015) revealed that the culture of formalization and centralization had a negative effect on the implementation of knowledge sharing. In the research of Lee et al. (2016) there was a hypothesis which was rejected, namely

hierarchical culture had a positive effect on knowledge sharing. Today the company operates in an era of globalization with a very competitive environment. Given the dynamic economic environment, companies must be able to adapt to the market and still provide the best to stay competitive. The company has utilized unique values and organizational culture in maintaining market power, competitive position, strategy and technology (Azanza et al., 2013; Barney, 1986; Park et al., 2004). Many organizational behavior theorists believe that a good fit between an individual and an organization based on the idea of a psychological contract will increase employee satisfaction in working for the organization (Silverthorne, 2004). Organizational culture has attracted attention, because it is related to the influence of organizational culture on job satisfaction (Bellou, 2008; Chang & Lee, 2007; Hall et al., 2010). Certain organizational cultures that are meaningful to the organization and employees will increase satisfaction at work so that employees feel comfortable at work and will provide the best for the company. There is a research gap regarding research into organizational culture that influences job satisfaction, research results (Macintosh & Doherty, 2010; Bellou, 2008; Chang & Lee, 2007).

In this study, knowledge sharing becomes a mediating variable between the influence of organizational culture on job satisfaction. Knowledge management impacts employees, firstly knowledge management can facilitate employee learning activities (Hussein et al., 2010). Knowledge sharing activities between employees and knowledge sharing Employees with superiors will be able to increase knowledge of each other. The facilities provided by the company in implementing knowledge sharing can increase employee satisfaction. Employees can improve their abilities, learn comfortably and a good learning culture can increase employee satisfaction at work. Many studies focus on the influence of knowledge management on satisfaction, so in this study the authors prefer to examine the effect of knowledge sharing on employee job satisfaction which is considered rare. Higher Education is the key in producing good quality and competitive human resources. Seeing this, the performance of educators in higher education should be the main focus so that university goals can be achieved. Lecturers in Indonesia are considered to have a low performance, seen from the number of studies conducted not comparable with the number of lecturers in Indonesia. So that conclusions researchers can use the study of organizational behavior in analyzing what factors can increase lecturer satisfaction so that it can give the best morning of the University. Research in the field of organizational behavior studies becomes a research study that has an appeal. Organizational behavior is divided into individual behaviors (individual level) and group behavior (group level). Robbins and Judge, (2013) present examples of individual levels are personality, motivation, perception, performance or job satisfaction. Examples of group and organizational levels are group structure, communication, leadership, structure or culture. So that in this study organizational culture variables become variables on group behavior (group level), knowledge sharing and job satisfaction as an individual level. Seeing this, the need for research that separates and explains behavior based on hierarchy in the organization. Multilevel and cross level analysis are the answers to these problems. This study aims to analyze the influence of organizational culture at universities on lecturer job satisfaction with knowledge sharing as a mediating variable. The reason why choosing the knowledge sharing variable as a mediating variable is because the lecturer is closely related to the process of disseminating knowledge. This research is expected to contribute to the development of organizational behavior studies and human resource management, especially regarding organizational culture, knowledge sharing and job satisfaction of lecturers. This study uses a multilevel analysis approach needed in organizational behavior research. The use of multilevel analysis in this study is expected to provide understanding for other studies funding multilevel and cross-level research. Seeing the problems that have been described, this study focuses on testing individual behavior (lecturers) explained by the variable knowledge sharing and job satisfaction, while group behavior (study programs) is explained by organizational culture variables.

2. Literature Review

2.1 Knowledge Sharing

Knowledge sharing is a key factor of the knowledge management process (Al-Alawi et al., 2007; Islamy, 2013; Islamy & Nurjaman, 2018). Knowledge can be divided into two types, namely (1) explicit knowledge, constitutes knowledge that is formal, systematic, and can be achieved through reading and team discussion, while tacit knowledge, is knowledge that is secretly possessed by someone, subjectively difficult to pronounce, difficult to communicate usually still in the minds of employees (Shao et al., 2012). The knowledge sharing process is an interaction process based on the interaction between tacit and explicit knowledge (Tseng, 2017). Knowledge sharing activities can occur between fellow employees, or interactions between employees and superiors. Several researchers (Islamy, 2013; Islamy & Nurjaman, 2018; van den Hooff & de Leeuw van Weenen, 2004; Van Den Hooff & Ridder, 2004; Vries et al., 2006) stated that knowledge sharing consists of two processes, namely: (1) knowledge donating, a person's willingness to share knowledge with their peers, and (2) knowledge collecting, a person's willingness to discuss, adopt and accept new knowledge from his colleagues.

2.2 Organizational Culture

Organizational culture can be defined as an assumption or shared value of an organization, these assumptions and values are held firm and studied to overcome the environment and solve problems, and these values are taught to new members (Al-Alawi et al., 2007; Park et al., 2004). In this study the intended organizational culture is, organizational culture that can support the implementation of knowledge sharing from the opinions of Al-Alawi et al., (2007), namely: (1) organization structure, at this time the company managers realize that the bureaucratic structure will inhibits knowledge sharing activities, so Al-Alawi et al., (2007) suggests that with a sloping organizational structure that can facilitate the flow of information between divisions

(2) information systems, the implementation of knowledge sharing in companies must be supported by the company's information system, so that information can be spread widely well (3) trust, trust between colleagues, and employee confidence in superiors is a factor in organizational culture that has a strong influence on knowledge sharing (Lee et al., 2010; Mooradian et al., 2014; Renzl, 2008). Interpersonal trust in the workplace has been proven to lead to an increase in the overall exchange of knowledge and to enhance colleagues' understanding of new knowledge gained from colleagues, to be absorbed easily and be put to good use (Mooradian et al., 2014) (4) communication, communication climate constructive, open exchange of information, accessibility of colleagues, and cooperative interaction can positively influence knowledge donating and knowledge donating (Van Den Hooff & Ridder, 2004) (5) motivation, intrinsic motivation and extrinsic motivation are the main determinants of a person's general behavior for conducting knowledge sharing (Lin, 2007) (6) reward system, employees need strong motivators to be willing to provide their knowledge, managers consider the importance of horizontal information sharing collaboration so that designing reward systems to support these processes becomes important (Al-Alawi et al., 2007) (7) leadership, leadership becomes important in supporting the implementation of knowledge sharing, by directing and providing motivation by a leader to his subordinates in order to provide the best knowledge and (8) processes, processes are various activities that occur in the company, such as how activities between workers, worker activities with superiors, activities with customers, suppliers and systems. Many research results describe that organizational culture has a significant positive effect on the implementation of knowledge sharing (Al-Alawi et al., 2007; Durmusoglu et al., 2014; Islamy, 2013; Islamy & Nurjaman, 2018; Nir et al., 2012; Wu, 2017). There are other research results which suggest that market culture has a negative effect on knowledge sharing (Wiewiora et al., 2010). Islam and Hasan (2015) revealed that the culture of formalization and centralization had a negative effect on the implementation of knowledge sharing. In the research of Lee et al. (2016) there was a hypothesis which was rejected, namely hierarchical culture had a positive effect on knowledge sharing.

H_1: There is a positive relationship between organizational culture and knowledge sharing in organizations.

2.3 Job Satisfaction

Job satisfaction can be defined as the feelings that employees have about a job in general, describing individual satisfaction with the current job, achievement and responsibilities (Park & Kim, 2006). Positive feelings about work that result from job evaluation are the definition of job satisfaction. The main causes of job dissatisfaction according to Robbins & Judge, (2013) are (1) work itself, (2) pay, (3) promotion, (4) supervision, (5) cowokers. There is a theoretical model regarding the behavior of employees who are dissatisfied with work according to Robbins & Judge, (2013), there are at least four responses, (1) Exit, leading to the active response of employees by leaving the company. (2) Voice, refers to the active response of employees but employees want to build the company to be better, by giving advice and input to the company. (3) Loyalty, leads to passive responses from employee job dissatisfaction (4) Neglect, passive responses but does not want to build a company, is shown by the behavior of neglect and bad behavior in the workplace. Organizational culture has an influence on employee satisfaction (Redman & Tzeng, 2002; Tsai, 2011; Wallace & J, 1995; Wong, 2016a). Various forms of communication within the organization and the relationship between employees and superiors have an influence on employee job satisfaction, conversely if organizational culture is poor, organizational culture that does not fit with employees as individuals will reduce the level of employee job satisfaction (Sami et al., 2011).

H_2: There is a positive relationship between organizational culture and job satisfaction in organizations.

Job satisfaction is an expression of individual behavior, satisfaction from psychological and emotional perspectives derived from employee insights and job assessments that are influenced by the needs, and expectations of individual employees (Malik et al., 2018). Park & Kim, (2006) explained that the greater involvement of employees in decision making, behavior that illustrates a high spirit in sharing knowledge that can build communication and productive work groups will increase job satisfaction. Leaders who motivate employees to work collaboratively, smooth communication that makes it easy to share knowledge in the company will affect employee job satisfaction, supervisors who are more concerned with employees than production can also increase employee job satisfaction (Tufail, 2016). Raisi & Forutan's (2017) research results revealed that knowledge sharing has a positive and significant effect on interaction satisfaction among employees, promotion decisions, satisfaction of wages and rewards, and knowledge sharing has a significant positive effect on workplace conditions.

H_3: There is a positive relationship between knowledge sharing and job satisfaction in organizations.
H_4: Knowledge sharing has a positive mediating effect on the relationship between organization culture and job satisfaction.

3. Method

3.1 Procedure and participants

Researchers distributed questionnaires to lecturers and heads of study programs, totaling 259 lecturers in 50 groups (study programs) from 27 universities in Indonesia. Characteristics of respondents in this study were, 144 male lecturers (55.60%) and 115 female lecturers (44.40%). Characteristics based on recent education include 202 Masters lecturers (77.99%) and 57 lecturers (22.01%). The type of data in this study is primary data using printed questionnaires and online questionnaires.

Testing the validity is based on using the Confirmatory Factor Analysis method and using AMOS 22.0 Testing the hypothesis in this study by implementing hierarchical linear modeling (HLM) using HLM 8.0 software.
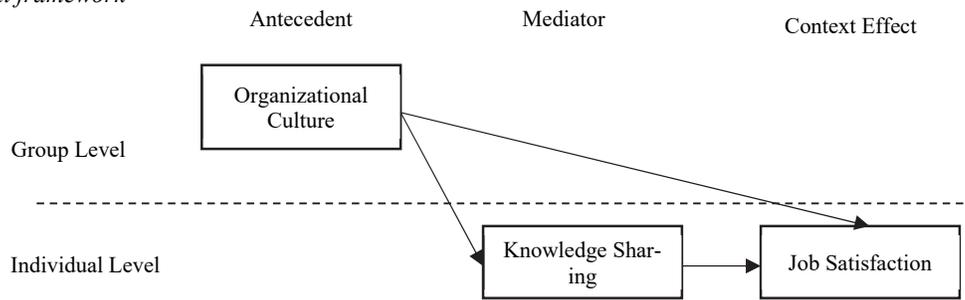
3.2 Conceptual framework

Fig. 1. A multi-level for job satisfaction outcomes

3.3 Measures

Researchers develop research surveys in gathering information about organizational culture variables, knowledge sharing and job satisfaction in the context of individual and group behavior. Individual level variables consist of two variables namely knowledge sharing and job satisfaction, and group level variables are organizational culture. In the instrument each indicator is measured on a 5-point Likert scale. The construction of measurement variables in this study is shown in Table 1.

Table 1
Constructs, Survey Items, and References

Constructs	Survey item (indicator)	References
Knowledge sharing	*Knowledge Collecting* 1. Colleagues within my department tell me what they know, when I ask them about it 2. Colleagues within my department tell me what their skills are, when I ask them about it 3. Colleagues outside of my department tell me what they know, when I ask them about it 4. Colleagues outside of my department tell me what their skills are, when I ask them about it 5. Social software and communication tools which support information and knowledge collection are used in our company 6. I am interested in the new knowledge colleagues give 7. I apply the new knowledge that I got from colleagues *Knowledge Donating* 8. When I've learned something new, I see to it that colleagues in my department can learn it as well 9. I share the information I have with colleagues within my department 10. I share my skills with colleagues within my department 11. When I've learned something new, I see to it that colleagues outside of my department can learn it as well 12. I share the information I have with colleagues outside of my department 13. I share my skills with colleagues outside of my department 14. When I am preparing a document, I am willing to write down what I know for my colleagues to refer to	(Dysvik et al., 2015; Goh & Sandhu, 2014; Kim & Lee, 2013; Mustafa, 2015; van den Hooff & de Leeuw van Weenen, 2004; Van Den Hooff & Ridder, 2004; Vries et al., 2006)
Organizational culture	*Organization structure* 1. Participative decision-making 2. Ease of information flow *Information systems* *Trust* 3. Sharing feelings and perceptions 4. Sharing personal information *Communication* 5. High level of face-to-face interaction 6. Teamwork discussion and collaboration *Motivation* 7. Trust the knowledge that I have *Reward system* 8. Existence of rewards for knowledge sharing 9. Effectiveness of knowledge sharing rewards *Leadership* 10. The supervisor encourages me to think about problems from a new	(Al-Alawi et al., 2007; Lin, 2007; Masa'deh et al., 2016)

Perspective	
11. The supervisor encourages me to rethink opinions that have never been doubted in the past	
Processes	
12. Business processes support knowledge sharing	

Job satisfaction	*Work itself*	(Hussein et al., 2010; Knoop, 2010; Saba, 2011)
	1. I am satisfied with my job performance	
	2. I am satisfied with the company's concern for my welfare and life balance	
	3. I am content in my job	
	Pay	
	4. I am satisfied with my pay	
	5. I am satisfied with my bonus	
	6. I am satisfied with my incentive	
	Promotion	
	7. I am satisfied with my chances for promotion	
	8. I am satisfied with my learning opportunities	
	9. I have the opportunity to apply my personal expertise	
	Supervision	
	10. I am satisfied with my director's leadership	
	11. 11. My boss gave a good example	
	Cowokers	
	12. I am satisfied with my relationship with colleagues	
	13. Cooperation between colleagues works very well	
	14. I have never had a problem with a colleague	

4. Results

4.1 Confirmatory factor analysis (CFA)

Because the variables in this study were collected from the same source, a confirmatory factor analysis (CFA) was performed. Survey items are said to be valid if they have a factor loading value> 0.5 (Hair et al., 2014). Based on Fig. 2 and Table 2, all loading factor values> 0.5, so all items are declared valid. The CFA results showed an adequate match (p <0.05, AGFI 0.812, CFI 0.930, TLI 0.925, GFI 0.831 and RMSEA 0.45).
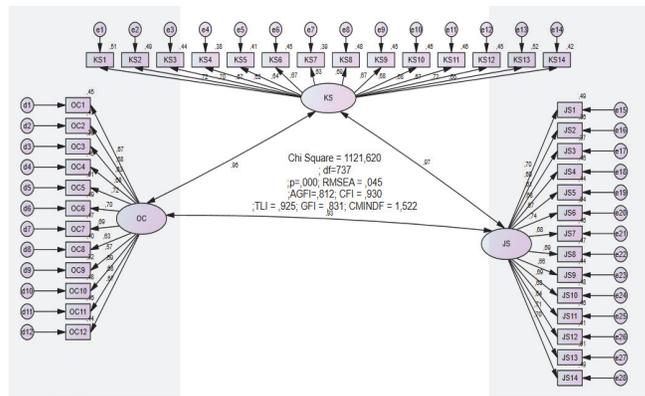
Fig. 2. Results of Confirmatory Factor Analysis Model Estimation

Table 2
Results of Confirmatory Factor Analysis Model Estimation

Organizational Culture		Knowledge sharing		Job satisfaction	
Indicator	*Factor Loading*	Indicator	*Factor Loading*	Indicator	*Factor Loading*
OC12 ← OC	0.666	KS1 ← KS	0.715	JS1 ← JS	0.697
OC11 ← OC	0.677	KS2 ← KS	0.701	JS2 ← JS	0.597
OC10 ← OC	0.690	KS3 ← KS	0.667	JS3 ← JS	0.610
OC9 ← OC	0.570	KS4 ← KS	0.620	JS4 ← JS	0.678
OC8 ← OC	0.633	KS5 ← KS	0.640	JS5 ← JS	0.666
OC7 ← OC	0.688	KS6 ← KS	0.671	JS6 ← JS	0.736
OC6 ← OC	0.697	KS7 ← KS	0.627	JS7 ← JS	0.680
OC5 ← OC	0.716	KS8 ← KS	0.693	JS8 ← JS	0.688
OC4 ← OC	0.682	KS9 ← KS	0.669	JS9 ← JS	0.661
OC3 ← OC	0.626	KS10 ← KS	0.681	JS10 ← JS	0.690
OC2 ← OC	0.683	KS11 ← KS	0.676	JS11 ← JS	0.679
OC1 ← OC	0.669	KS12 ← KS	0.670	JS12 ← JS	0.638
		KS13 ← KS	0.723	JS13 ← JS	0.715
		KS14 ← KS	0.649	JS14 ← JS	0.697

4.2 Test of hypotheses

Hierarchical linear modeling (HLM) is a statistical method developed for cross-level research. Before conducting a hypothesis test with HLM, it is necessary to do an ICC test (interclass correlation coefficient) ICC value must be greater than 0.1. ICC testing is done at the group level, and in this study organizational culture is a variable that is at the group level, ICC results obtained 0.175. Furthermore, hypothesis testing can be done with HLM. By using HLM 8.0 software, the results of hypothesis testing are as follows:

Table 3
Hypothesis Testing Results 1

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
For INTRCPT1, β_0					
INTRCPT2, γ_{00}	3.878435	0.018917	205.035	48	<0.001
OC_MEAN2, γ_{01}	0.716444	0.059073	15.548	48	<0.001

Equation:
$KS1_{ij} = \gamma_{00} + \gamma_{01} \times OC\_MEAN2_j + u_{0j} + r_{ij}$

Table 3 describes hypothesis testing 1 using HLM 8.0 software, and the result supports H1. Thus, Organizational culture has a significant positive effect on knowledge sharing with values $\gamma = 0.716$ with $\rho = <0.001$.

Table 4
Hypothesis Testing Results 2

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
For INTRCPT1, β_0					
INTRCPT2, γ_{00}	3.318431	0.021378	180.678	48	<0.001
OC_MEAN2, γ_{01}	0.690618	0.066004	13.324	48	<0.001

Equation:
$JS1_{ij} = \gamma_{00} + \gamma_{01} \times OC\_MEAN2_j + u_{0j} + r_{ij}$

Table 4 describes hypothesis testing 2 using HLM 8.0 software and the result supports H2. Therefore, Organizational culture has a significant positive effect on job satisfaction with a value of $\gamma = 0.690$ with $\rho = <0.001$.

Table 5
Hypothesis Testing Results 3

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
For INTRCPT1, β_0					
INTRCPT2, γ_{00}	3.489869	0.036512	264.647	49	<0.001
For KS1 slope, β_1					
INTRCPT2, γ_{10}	0.683764	0.020910	45.124	208	<0.001

Equation:
$JS1_{ij} = \gamma_{00} + \gamma_{10} \times KS1_{ij} + u_{0j} + r_{ij}$

Table 5 describes hypothesis testing 3 using HLM 8.0 software and the result supports H3. Thereby, Knowledge sharing has a significant positive effect on job satisfaction with a value of $\gamma = 00{,}684$ with $\rho = <0.001$.

Table 6
Hypothesis Testing Results 4

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
For INTRCPT1, β_0					
INTRCPT2, γ_{00}	3.840915	0.014472	265.409	48	<0.001
OC_MEAN2, γ_{01}	0.017355	0.051521	0.337	48	0.738
For KS1 slope, β_1					
INTRCPT2, γ_{10}	0.789685	0.024826	37.847	208	<0.001

Equation:
$JS1_{ij} = \gamma_{00} + \gamma_{01} \times OC\_MEAN2_j + \gamma_{10} \times KS1_{ij} + u_{0j} + r_{ij}$

Table 6 explains hypothesis testing 4 using HLM 8.0, and the result supports H4. Organizational culture has a positive and significant influence on job satisfaction of lecturers with knowledge sharing as a mediating variable with a value of $\gamma = 0.789$ with $\rho = {<}0.001$. Based on the overall results of hypothesis testing that has been done, the regression value has a direct relationship between organizational culture and job satisfaction of lecturers and has a smaller value than the indirect effect. The indirect effect is the knowledge sharing variable as a mediating variable. So, it can be said that if universities want to increase job satisfaction of lecturers with organizational culture as an antecedent variable, they must include the knowledge sharing variable as a mediating variable.

5. Discussion

Topics around culture and organizational structure have attracted the attention of academics and practitioners in the study of knowledge management (Samadi, 2018; Islam & Hasan, 2015). The essence of culture is a system of shared values that guides the activities of group members in the organization, it can be said that organizational culture is a type of social control so that one day, culture can be the way organizations determine organizational strategies (Durmusoglu et al., 2014). Organizational culture is a general belief system of organizational members that illustrates the spirit and mutual understanding among members. Joint understanding between members can increase trust between members, commitment, collaboration which will ultimately influence knowledge sharing activities among members (Nir et al., 2012). Organizational culture is an important factor in supporting the effective implementation of knowledge sharing within organizations, because in organizational culture there are norms about knowledge sharing and can create an environment where every individual in the organization feels motivated to share their knowledge (Wu, 2017). An organizational culture that supports knowledge sharing can produce a more effective achievement because it instills a culture of standardization that always chooses communication and information (Islam et al., 2011). The results show that organizational culture has a positive and significant effect on knowledge sharing, this is the same as the results of Al-Alawi et al., (2007) study which explains that organizational culture, trust, communication, information systems, organizational structure and reward systems have a positive and positive influence significant on knowledge sharing. Issa's (2008) research result explained that culture will increase mutual trust in organizations, and the role of IT is not so motivating employees in sharing their knowledge, because not all types of knowledge can be shared using IT. In facing obstacles in implementing knowledge sharing, companies can change their culture so that the implementation of knowledge sharing can work well (Jones et al., 2006). Hierarchy culture has a negative effect on knowledge sharing while clan culture has a positive effect on knowledge sharing (Lee et al., 2016). The research of Shao et al., (2012) shows that development culture, hierarchical culture, and rational culture have positive and significant effects on knowledge sharing but group culture has no significant effect on knowledge sharing. There is a positive and significant relationship between collaborative culture and the effectiveness of knowledge sharing, facilitation, mentors have a positive effect on the effectiveness of knowledge sharing, but there is a negative relationship between monitor roles and knowledge sharing (Yang, 2007). Organizational culture has a positive effect on knowledge sharing trust has a positive effect on the implementation of knowledge sharing (Nir et al., 2012). So, it can be concluded that most of the results of previous studies reinforce the results of this study. The importance of analyzing the literature on job satisfaction and what factors can influence it (Park & Kim, 2006). With so many organizations and institutions all over the world, it is only natural that the welfare, physical and mental health of employees, happy rural areas, social welfare and employee job satisfaction become objects of extensive theoretical and research interest (Belias & Koustelios, 2017). Employee job satisfaction reflects that the needs and desires of employees are met, it seems that individuals tend to experience a level of job satisfaction When their abilities, values and experience can be utilized and matched with work environment (Bellou, 2008). Therefore, it can be said that if the culture of the organization matches the individual values of employees, it can remind employees to feel comfortable at work, which in turn will increase job satisfaction. Employee behavior results from organizational culture and environment, if the organizational environment has a friendly environment and can motivate employees can affect employee job satisfaction (Wong, 2016a). A strong culture is a system of rules that is able to describe how people should behave, have the same values and code of conduct with individual employee values, and a strong organizational culture helps employees in completing individual employee goals which will ultimately affect employee job satisfaction and goals organization (Tsai, 2011). The results showed that organizational culture had a significant positive effect on job satisfaction, this was confirmed by the results of research by Azanza et al., (2013); Belias & Koustelios, (2017); Bellou, (2008); Tsai, (2011); Tseng, (2017) and Saffar and Obeidat (2020) who revealed that organizational culture influences employee job satisfaction. Job satisfaction promotes positive employee behavior, the influence of organizational culture values is needed to increase job satisfaction, although findings indicate that employees are more likely to experience job satisfaction when organizational processes and evaluations are fair (Bellou, 2008). The results of the study of Brazil et al., (2010) suggested that culture type group had a positive effect on job satisfaction, but hierarchical culture type, rational culture and developmental culture had a negative effect on employee job satisfaction. While research Chang & Lee, (2007) found that organizational culture does not significantly influence employee job satisfaction. Clan organizational culture has a positive and significant effect on employee salary satisfaction, coworkers, opportunity for promotion and work itself but does not have a significant effect on supervision. Adhocracy culture has a significant positive effect on coworkers, but does not significantly influence pay, opportunity for promotion, work itself and supervision, market culture has a positive and significant effect on coworkers, but does not significantly influence pay, opportunity for promotion, work itself and supervision, then hierarchy culture has a significant positive effect on salary satisfaction and work itself, but it does not significantly influence coworkers, opportunity for promotion and supervision (Dadgar et al., 2013). Clan culture and adhocracy have a

positive effect on job satisfaction, but market culture and hierarchy have a negative effect on employee job satisfaction (Lund, 2003).

The results have shown that knowledge sharing had a positive and significant effect on employee job satisfaction. There are other research results, conducted by Hussein et al., (2010) that knowledge sharing has a significant positive effect on job satisfaction, if employees are happy to provide knowledge and receive knowledge they will be more adaptable and responsive to changes in the business environment and can do work and increase job satisfaction (Hussein et al., 2010). Raisi and Forutan's (2017) research results show that there is a positive and significant relationship between the culture of sharing knowledge with job satisfaction components, research also shows that job satisfaction is an important factor in sharing knowledge and various institutions are looking for an optimal organizational climate to increase employee satisfaction gain competitive advantage. Tufail Research, (2016); Wong (2016b) pointed out the indirect effect between organizational culture on job satisfaction with knowledge sharing as a mediating variable and the research is in line with the results of this article's research. Research in this article shows that the indirect effect between organizational culture on job satisfaction has a higher regression value when compared to the direct effect.

7. Suggestion

There are suggestions for further research, first, the design of future research can add one level in multilevel analysis, namely adding organizational levels in accordance with organizational behavior theory, for example individual levels (diversity, personality, values, emotions, motivation, perception, stress, performance, citizenship behavior), group level (group structure, group roles, communication, leadership, conflict), and organizational level (organizational structure, organizational culture, human resource management, productivity). Thus, it will produce three levels of data, and will produce even sharper analysis. Second, further research can be carried out in different industries.

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