

MEASUREMENT OF KNOWLEDGE SHARING IN JELEKONG BANDUNG INDONESIA

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Abstract

Purpose: Jelekong is a village in the suburbs of Bandung. The village is famous for its variety of art, puppet, and painting. This study wants to know how people in Jelekong share their knowledge to improve the social well-being of the community.

Methodology: This research is a descriptive study. Sampling technique uses stratified cluster sampling. Collecting data on the 67 community leaders in the village of Jelekong indicates that knowledge sharing instruments are reliable and valid. The reliability coefficient is calculated using Cronbach alpha showed that Cronbach alpha coefficient is 0.911. The validity is calculated using confirmatory factor analysis showed that $p = 1$ and RSMEA = 0.

Main Findings: The result shows that knowledge sharing in Jelekong, in general, is quite good, but still have poor ability in aspects of ICT capability and build mutual trust. Therefore, Jelekong society needs to be given training to have the potential of ICTs and build mutual trust in sharing knowledge to improve the social well-being of the community.

Implications/Applications: The results of the study can be applied by the authorities in understanding the technological needs of society. In addition, they can develop different training programs and techniques that promote knowledge sharing, so knowledge can be shared easily and quickly to overcome various problems in the society.

Keywords: *Measurement of knowledge sharing, society's well-being, Opportunistic behaviour, Indonesia, Community.*

INTRODUCTION

This research is a part of ALG's (Academic Leadership Grant) research from Universitas Padjadjaran titled "Society Development for Achieving Psychological and Social Well Being".

This research is based on Indonesia nowadays condition with a lot of poverty on its citizen. Those poverties happened because there were many unimproved human resource potential, thus they are not able to face their problems. In other words, human suffers because the lack of stability between human resources and its power. The same thing happened because of the decreasing psychological condition (verbally and emotionally) which causes a lack of appreciation from others. Poverty as an effect from the unimproved and unused psychological condition is the cause of people for not being able to face and solve their problem.

In this research, there will be an assessment of the people condition from the targeted village by Universitas Padjadjaran for this research. The village is located in Jelekong, Bandung. Jelekong is a village in the suburbs of Bandung. The village is famous for its variety of art, puppet, and painting. The assessment held for knowing the social and psychological well-being which described the condition of the human resources. The intervention will be given to the people of the village which been selected to be assessed. This intervention was done in order to increase the social well-being of the people.

One variable which will be measured in this research is knowledge sharing. Knowledge defined as a whole cognitive and skill used by human for problem-solving. Simply said, the capacity to do something effectively. The type of knowledge includes: know-that, know-what, know-how, know-why, and care-why.

In this era of changes, human capital such as knowledge and individual skill are the basic things need more than physical capital. That being said, the era of changes also known as the era of knowledge. The era of knowledge offers unlimited resources because of the human capital to produces the knowledge is also unlimited. The knowledge has grown and nourished when it was shared to the others.

The organization should create a conducive environment for information sharing which will have developed the growth of knowledge. The organization needs a flexible and creative individual who wants to share information. Thus, the organization from the era of changes will be specified with the increase of information availability and the success of organization will be determined by the skill of using that information to modified or identified chances for the organization ([Bandmir, & Mehrpouyan, 2015](#); [Alahoul, Azizan, & Alwi, 2016](#); [Bizon, 2016](#); [Bo Shing & Xiaodie, 2017](#); [Due Au, 2016](#)).

Knowledge Management is expected to help the creation of learning the culture for the organization itself so there will be a learning process in the organization. Moreover, this thing is expected to create a learning organization. The main focus of learning organization is developing knowledge so it could differentiate the capability for short-term survival, also the capacity and skill needed for innovation and long-term profit ([Karim, Elyas, Mahmood, & Hossein, 2017](#); [Ketsiri & Pajongwong, 2016](#); [Liu & Dong, 2016](#); [Neminno & Gempes, 2018](#)).

Knowledge is the learning result from individual which accumulated become an organization knowledge. Individual knowledge is all unique, therefore the combination of individual knowledge in the organization will produce a different organization knowledge.

Organization competition nowadays centered on how to develop better strategical knowledge than the others. Knowledge defined as a whole cognitive and skill used by human for problem-solving.

Generally, there is two types of knowledge: “tacit knowledge” and “explicit knowledge”. Tacit knowledge is knowledge from outside one’s brain, meanwhile explicit knowledge is knowledge in a document or other form than human’s brain. Explicit knowledge can be planted or saved in the facility, product, process, service, and system.

To put it simply, knowledge management is a conversion from tacit and share the knowledge in an organization. Technically, knowledge management is a process for an organization to produce value from intellectual and knowledge-based assets. The scope of knowledge management stressed for the organization environment and intended to excavate tacit knowledge from the certain employees and make it explicit, therefore the knowledge could be distributed to the other employee and made it an organization asset. However, for a bigger and global environment, knowledge management is not limited as a conversion effort for tacit knowledge to explicit, but also remember the goals: “share” and “produce added value”.

Knowledge sharing is one method or step in the knowledge management cycle used to give a chance to the member of a group, organization, institution or company to share knowledge they have to the other members. Knowledge sharing could only have been done if every member of the organization has a broad chance to articulate their opinions, ideas, critics, and comments to the other members. This is where knowledge sharing take its important role to increase their ability to think and produce some sort of innovation.

Knowledge sharing is defined as the interchange of knowledge among two or more individuals to create new knowledge (Paulin & Suneson, 2012; Van den Hoff & de Ridder, 2004; Nuchso, Tuntivivat, & Klayklung, 2016, Fan, & Fujimoto, 2018; Gatpandan & Ambat, 2017; Husain & Husin, 2017; Irai & Lu, 2018; Jarjusey, 2017).

Cabrera and Cabrera (2005); Owusu (2016) mention that the behavior of interchange knowledge is affected by some factors, such as social ties or pattern and frequency of interaction with others, a shared language which unites people, trust, norm for sharing, group identification, perceived cost, perceived rewards, self-efficacy and expectations of reciprocity. Furthermore, Le (2016) explain internal motivation also influence knowledge sharing. Anybody will be confident that the shared-knowledge will be beneficial. This internal motivation is giving more impact than external motivation such as rewards in the form of money or people positive judgment. Bock and Kim (2002); Alshehhi, (2016) see that people who believe knowledge sharing will broaden their social relation also have positive attitude. Otherwise, evaluation apprehension will prevent knowledge sharing.

Knowledge sharing is expected to solve various issues within organizations. Thus, psychological and social wellbeing of the society will be improved.

Based on the explanation above, the main problem in this research is: How is the knowledge sharing on Jelekong’s community leaders?

According to the result of this research, the government should create the appropriate intervention program in order to upgrade the knowledge sharing ability as one of the aspects to improve the psychological and social wellbeing.

RESEARCH METHOD

Generally, this research conduct action research model. The data will be collected in the beginning, then the intervention program will be done. The process of data collection is done as assessment to find out the psychologist condition of subject and map any potency there.

This preliminary research is a descriptive study to gain psychometric properties from the developing measurement instrument.

Variables of knowledge sharing will be measured based on following aspects:

- The intention of knowledge sharing to improve society’s well-being
- The pleasure of knowledge sharing to improve society’s well-being
- Support of knowledge sharing to improve society’s well-being
- Information and communication technology (ICT)ability in knowledge sharing
- Giving the knowledge to improve society’s well-being
- Mutual trust in knowledge sharing
- The relationship built caused by knowledge sharing

- Knowledge sharing contribution to society's well-being
- Opportunistic Behavior

This research will be conducted in Jelesong, Bandung. The population taken is around the area under Universitas Padjadjaran development. The unit analysis used is the public figures characterized below:

1. Formal and non-formal public figure on Jelesong
2. Domicile on Jelesong.

The data is collected by using cluster sampling from 67 respondents.

The collected data will be analyzed to find out the level of reliability and validity of the measurement instrument. The reliability is calculated by using internal consistency method. Internal consistency method is a method to prove reliability of an instrument by using a single measurement instrument. According to [Kaplan \(2001\)](#) there are some procedures to evaluate source of variation from the single measurement instrument:

1. Split half method
2. Spearman-Brown correction
3. Kuder Richardson 20 (KR 20) and Kuder Richardson 21 (KR 21)
4. Alpha Cronbach

Alpha Cronbach is the most general and used reliability verification procedure since this coefficient describes the variation of measurement statement both in dichotomous and polytomous format. For that reason, Alpha Cronbach coefficient is the most general reliability coefficient to evaluate internal consistency ([Kaplan, 2001](#)).

On the other hand, the calculation validity of the instrument is conducted by using the validity construct. According to [Kaplan \(2001\)](#), validity construct is a method used to see the link between the result and the measurement instrument with theoretical concept. So the validity construct is related to the theoretical construct problem which is the base of measurement instrument. Validity constructs itself is a continuous process with the development of concept regarding the measurement characteristic or aspects. Improved construct validity can be viewed as a concept that unifies all evidence of validity for all types of validity including content validity and criteria validity ([Kaplan, 2001](#)).

There are several procedures that can be used to prove the construct validity. According to [Cohen \(1988\)](#), these procedures are:

1. Homogeneity
2. Differences in measurement results due to experience/intervention
3. Differences in measurement results due to differences in different groups and ages
4. Convergent
5. Discriminant
6. Factor analysis

From the above procedures, factor analysis is the most accurate procedure to proof construct validity, because with factor analysis convergent and discriminant evidence of construct validity can be obtained ([Cohen, 1988](#)). Therefore, construct validity in this research will be done by using confirmatory factor analysis.

RESULTS

Calculating the reliability of the measuring instrument using Alpha Cronbach gives the result $\alpha = 0.911$, with the total item correlation as follows:

Table 1: Item Analysis of Measuring Instruments for Knowledge Sharing

No	Total Item Correlation	No	Total Item Correlation
I1	.425	I18	.321
I4	.458	I19	.807
I5	.710	I20	.660
I6	.134	I23	.376
I7	.278	I24	.494
I8	.239	I25	.398

No	Total Item Correlation	No	Total Item Correlation
I9	.279	I26	.610
I10	.565	I27	.748
I11	.653	I28	.778
I12	.402	I29	.361
I13	.725	I30	.390
I14	.473	I31	.666
I15	.668	I32	.717
I17	.629		

It can be concluded that the knowledge sharing instrument is a reliable instrument with good items. Calculating the validity of the measuring instrument using confirmatory factor analysis gives the following results:

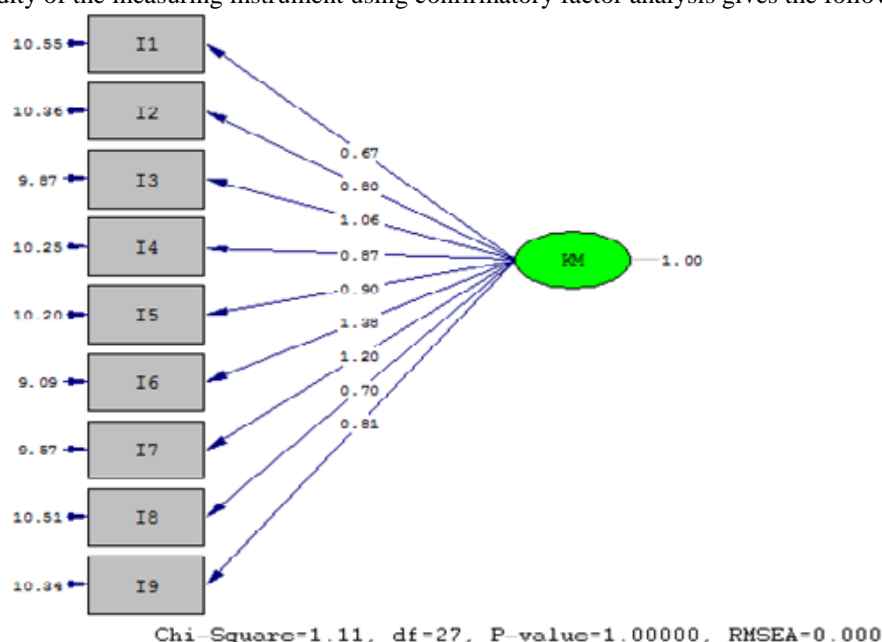


Figure 1: Confirmatory Factor Analysis of Knowledge Sharing Measures

Information:

- Aspect 1 is the intention of knowledge sharing to improve society's well-being
- Aspect 2 is the pleasure of knowledge sharing to improve society's well-being
- Aspect 3 is the support of knowledge sharing to improve society's well-being
- Aspect 4 is Information and communication technology (ICT)ability in knowledge sharing
- Aspect 5 is giving the knowledge to improve society's well-being
- Aspect 6 is mutual trust in knowledge sharing
- Aspect 7 is the relationship built caused by knowledge sharing
- Aspect 8 is knowledge sharing contribution to society's well-being
- Aspect 9 is opportunistic behaviour

Based on the picture above, it can be seen that the knowledge management measurement is a valid measuring instrument with the value of $p = 1$ and RSMEA = 0.

The overview of knowledge sharing can be seen in the following table and figure :

Table 2: Overview of Knowledge Sharing on Jelesong

NO	ASPECT	MEAN
1	The intention of knowledge sharing to improve society's well-being.	3.58
2	The pleasure of knowledge sharing to improve society's well-being	3.23
3	Support of knowledge sharing to improve society's well-being	3.29
4	Information and communication technology (ICT)ability in knowledge sharing	2.97
5	Giving the Knowledge to improve society's well-being	3.35
6	Mutual trust in knowledge sharing	2.93
7	The relationship built caused by knowledge sharing	3.34

8	Knowledge sharing contribution to society's well-being	3.43
9	Opportunistic behaviour	3.20

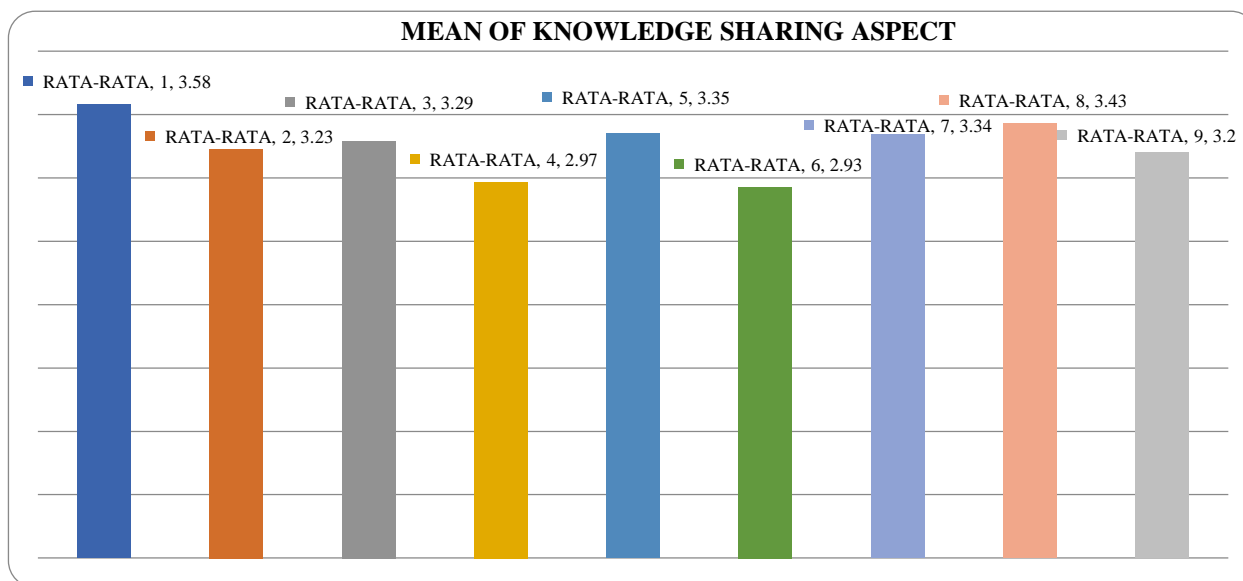


Figure 2: Overview of Knowledge Sharing on Jelekong

DISCUSSION

Reliability and validity calculation of knowledge sharing measurement shows that knowledge sharing measurement is a valid and reliable measuring instrument. Thus, this measuring instrument can be used to measure knowledge sharing.

The knowledge sharing measurement result shows that community leaders of Jelekong Village in general, already possess the quite well ability of knowledge sharing, however still possess not the good aspect of ability in ICT and building mutual trust. Society's condition which located in the suburban area, also low level of education and economy, which is alleged to be the cause of society's not good ability in ICT. The society already know many technologies by using various communication tools such as cell phone, however have not used these technologies to share knowledge to overcome the problem that they are facing. Therefore, society needs to be given ICT training to share knowledge, so knowledge can be shared easily and quickly to overcome various problems in the society.

The mutual trust that is allegedly also still low because of the society's low education and economy level, which have not realized the importance of building mutual trust to overcome many problems in society. Jelekong Society has not used to overcome problems together so their mutual trust is still not good. Therefore, it is necessary to give training to improve mutual trust to Jelekong Society as a means to improve psychological and social well-being.

ICT and building mutual trust training that will be done to Jelekong Society should also be part of the work plan of the village's apparatus as support from the village to improve psychological and social well-being.

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