The Effect of Knowledge Sharing and Knowledge Management on Performance of Stain Gajah Putih Mediated by Job Satisfaction

*Harsono, Said Musnadi and Teuku Roli Ilhamsyah Putra
Magister Manajemen, Universitas Syiah Kuala, Indonesia

Abstract

This research is to examine the effect of knowledge sharing and knowledge management on the performance of Central Aceh STAIN Gajah Putih employees mediated by job satisfaction, Aceh Barat. The population of this study is the employees of the Central Aceh STAIN Gajah Putih, which is located in Gampong Sumber Batu, Meureubo District, and West Aceh Regency with a total of 122 people. The research model is analyzed using Structural Equation Modeling (SEM). The results of research on the Central Aceh STAIN Gajah Putih prove Knowledge sharing, knowledge management, job satisfaction, and STAIN employee performance are going well. There is the influence of knowledge sharing on employee performance, there is the influence of knowledge management on employee performance, there is the influence of knowledge sharing on job satisfaction, there is the influence of knowledge management on job satisfaction, Then there is the effect of job satisfaction on employee performance, There is an indirect effect of knowledge sharing on employee performance, There is an indirect effect of knowledge management on employee performance. These findings contribute academically, especially to the renewal of the theory of causality and can be a reference for practical leaders, especially those in the Central Aceh STAIN Gajah Putih. The novelty of this research lies in the combination of previous causality research models, with new objects. The knowledge variables are the focus of discussion about their effects on other variables. The limitation of the study is on the number of variables studied and the research scope.

Keyword: knowledge sharing, knowledge management, Employee Performance, Job Satisfaction.

1. Introduction

The Islamic State Campus (STAIN) located in Takengon, Central Aceh, Indonesia, its history began with the hopes of the people in the Gayo highlands who collaborated with the Central Aceh District Government to continuously improve the quality of their human resources. Underlying this desire, the Regional People's Representative Council (DPRD) issued Decree Number: 421/4/06/1984 on July 28, 1984 concerning the Proposal for Establishment of Private Universities. With the support and wishes of various communities, in recent years STAIN Gajah Putih have continued to improve themselves in improving their status, which were originally private Islamic High Schools (STAI that do not yet belong to the state) to become STAIN Gajah Putih that have been under the country, which in this study called STAIN, which is located in the
Central Aceh region, Indonesia. The expectation of the status change was only achieved in 2012. In this study, the problem was focused on the performance of STAIN employees.

To achieve its main goal, which is to educate the nation, the high level of competition in the world of education, and organizational development and with the change in status, STAIN Gajah Putih Takengon continues to strive to improve the performance of human resources (HR). The human resources owned by the STAIN organization are one of the main factors for the development of the organization to be better, especially to provide services to the community in accordance with the main tasks and functions of the STAIN, so that efforts to improve existing human resources become the main strategy in achieving competition which until now increasingly stringent in the face of globalization. Therefore, increasing the quality of human resources is intended so that the organization can unite perceptions or perspectives between employees and superiors to achieve organizational goals by providing work motivation, direction, guidance, and strong coordination for work, from a leader to his subordinates.

In addition, the performance of STAIN campus employees will be able to achieve maximum results if supported by the knowledge sharing owned by the organization. All employees are expected to be able to continue to explore and cultivate their knowledge so that it is not just dependent and fixed on the existing system. Every employee in an organization has its role to improve the progress of the organization. Each STAIN employee must focus on increasing their individual knowledge gained from their daily experience, and also the knowledge that can be transferred between individuals, so that it will be more easily explained in the form of documents, or also in the form of practice and training and others. In this case, the authors classify it into procedural forms of work and technology, skills possessed by employees and the creation of a good attitude among employees so that these employees can produce a good performance, high quality, and with a large amount of work quantity. This certainly can lead to the progress of the STAIN campus.

If we depart from the phenomenon of STAIN employee performance, it seems that performance is still low. One factor that can affect the performance of STAIN employees is job satisfaction. The problem faced by employees at STAIN regarding satisfaction is that there are still many employees who are not satisfied in their work scope so that the expected performance achievement is not achieved as expected. Another thing about the still low performance of STAIN employees can be seen from the imbalances that occur in independence and effectiveness while working, so that knowledge sharing and knowledge management are needed, so that knowledge services become better and can provide satisfaction to stakeholders.

In order to improve employee performance, knowledge sharing is needed, that is, the knowledge possessed by employees that is inherent in each employee, such as employee confidence in the organization, values shared by employees, work experience, and knowledge within themselves. Each employee. Knowledge sharing has a role in creating higher knowledge that has to do with the work of each employee in the STAIN environment. Given the importance of knowledge sharing consisting of various employee activities to share knowledge with other employees. With the implementation of knowledge sharing culture like this, STAIN can very quickly find out developments in the latest internal and external conditions and can adapt to changes in the environment that occur more quickly.

Knowledge management capabilities at STAIN are also needed to improve the performance and job satisfaction of STAIN employees. Knowledge management capabilities include several things including the use of knowledge in carrying out their duties, then being able to share knowledge with other employees so as not to miss the different kinds of knowledge from
each employee. In addition, the reflection of knowledge possessed by employees must also be evaluated from both positive and negative aspects, so that employees will get knowledge that is indeed useful and in accordance with their main duties as STAIN employees, and must be able to identify knowledge, especially from reliable sources (valid).

2. Literature Study

Employee Performance

The success achieved in an organization is determined by the performance (job performance) of employees. Employees are the planners, movers and controllers of the organization to achieve their goals. All companies will certainly try to improve the performance of their employees in pursuit of organizational goals that are continually updated according to existing challenges. Employee performance leads to individual or someone's performance as measured by the standards and criteria set by the company. Management in achieving high performance of human resources (HR) is intended to increase the overall value of the company. (Mas’ud, 2004). (Soeprihanto, 2009)

Reveals the performance of the work of an employee during a certain period compared to various possibilities, for example standards, targets / targets / criteria that have been determined at the beginning and have been mutually agreed. According to (Ou et al., 2014) more performance is a combination of behavior with achievement of what is expected and the choice or part of the terms of the task that exist in each individual in the organization. Meanwhile according to (Mangkunegara, 2013) performance can be explained as a result of work in quality and quantity that can be achieved by an employee in carrying out their duties in accordance with the responsibilities given to him.

As for the indicators of employee performance (Parlinda & Wahyuddin, 2004) are (1) the quality of work produced; (2) The quantity of work that I produce; (3) timeliness of completion of work that has been charged; (4) able to complete the work effectively can complete the work in accordance with the specified time; (5) can carry out any work without the assistance of other colleagues; and (6) has a commitment in maintaining personal and organizational integrity

Job satisfaction

(Soetrisno, 2016) said job satisfaction is an attitude of an employee at work related to or related to work situations, cooperation between employees, rewards received at work, and matters related to physical and psychological factors. This attitude at work is the result of a number of specific attitudes of individuals and social relationships of individuals outside of work, giving rise to the general attitude of the individual to the work he faces. (Mangkunegara & Waris, 2015) revealed about job satisfaction, which is the difference between expectations imagined by someone from the contribution of work done with reality. Based on these opinions, it can be concluded that job satisfaction is someone's response to what they expect when working with what they get after they finish the job. This can be determined by the work situation, and cooperation between employees, rewards and other factors. If there is a small difference between what is expected and what is obtained then that person will have a feeling of satisfaction, and vice versa.

In this study the researchers built indicators based on opinions from Luthans because it is more in accordance with the circumstances to be measured (Mangkunegara & Waris, 2015) yaitu
Knowledge Sharing

Knowledge sharing has an important role in increasing individual competence in the organization, because with the implementation of knowledge sharing, tacit and explicit knowledge can be channeled, implemented, and developed. (Trivellas, Akrivouli, Tsifora, & Tsoutsa, 2015) states that with a culture of knowledge sharing can develop new general competencies in individuals and sharpen an existing competency, such as communicating, creating new ideas, solving problems, prioritizing things, interpersonal relationships, creativity, planning, and teamwork. The phenomenon of management that often occurs precisely because of the lack of information needed by employees to maximize him in carrying out his duties. The application of knowledge sharing is expected to meet the information and knowledge needs of employees in order to carry out their duties properly.

Knowledge sharing refers to an increase in performance through the competence of employees or individuals to produce decisions in solving problems. Research conducted by (Yazhou & Jian, 2013) explained knowledge sharing cannot directly affect employee performance, but must be through or mediated by innovation capability and intellectual capital variables. From this research, the research conducted is currently modified by using work decisions as mediation to enrich the research model, by using research models related to previous knowledge sharing. Because, the focus between knowledge and job satisfaction possessed by employees is equally important to consider for improving employee performance in an organization. Besides the past few decades, competencies are often used for the basis of employee performance appraisal (Zaim, Yaşar, & Ünal, 2013).

Knowledge sharing indicators according to (Lumbantobing, 2011) consists of: (1) Knowledge from coworkers, (2) Personal knowledge from seniors, (3) Sharing knowledge, (4) Sharing lessons, (5) Sharing reports and documents, (6) Sharing procedures, (7) Sharing rules in the work environment and (8) Sharing instructions.

Knowledge Management

The so-called knowledge is now increasingly recognized as an asset that is indeed important in the organization. Recent thoughts explain knowledge as a force in organizations. In competition in the modern era, organizations that use knowledge are organizations that have an advantage in competition. Excellence in competition is formed through the full use of data and information combined, by utilizing a skill, idea, motivation and commitment from employees. (Luthans, 2012) said about ability can be interpreted as a skill that leads to the ability of a person to carry out various types of cognitive activities or are needed in an effective way. Another form of support that also supports the existence of knowledge is that existing knowledge in the organization must be disseminated and shared from one party to another to support the progress and development of the organization. (Wijayanto & Kismono, 2004). (Mahfud, 2016) described the main processes in knowledge management consisting of the creation of knowledge (creation), the use of knowledge (utilization) and knowledge sharing (sharing). Knowledge creation is an activity to create knowledge. That knowledge can be obtained from information that comes from individual experience and expertise. According to (Groff & Jones, 2003) Knowledge management is an attempt to produce a value from an organization's intellectual
property through the creation, storage, distribution, and application of knowledge to achieve organizational goals. (Sangkala, 2007) explained between knowledge management and competence in managerial have a relationship in increasing company productivity.

Measurement indicators for knowledge management variables that can be used in this study (Groff & Jones, 2003) namely (1) the use of knowledge, (2) sharing of knowledge, (3) reflection of knowledge and (4) identification of knowledge.

Research paradigm

Based on the discussion of the problem and research literature, the researcher formulates the paradigm and research hypothesis as follows.

**Figure 1. Research Model**

H1: Knowledge sharing, knowledge management, job satisfaction and employee performance are good.
H2: Knowledge sharing has an influence on job satisfaction.
H3: Knowledge management has an influence on job satisfaction.
H4: Knowledge sharing has an influence on employee performance.
H5: Knowledge management has an influence on employee performance.
H6: Job satisfaction has an influence on employee performance.
H7: Knowledge sharing has an influence on employee performance through job satisfaction.
H8: Knowledge management has an influence on employee performance through job satisfaction.

3. Research Methods

This research activity was carried out by STAIN Gajah Putih Takengon. The object of research is knowledge sharing, knowledge management, job satisfaction, and employee performance. The population in this study are employees of the STAIN Gajah Putih Takengon, which in this study is called STAIN, totaling 122 people. Sampling is determined by census technique which means, the sample takes the entire population.

The list of questions is asked and assessed using a Likert scale. Data were analyzed using Structural Equation Modeling (SEM) technique. The SEM equation model is a collection of statistical techniques that allow simultaneous testing of relatively complex relationships (Hair, Hult, Ringle, & Sarstedt, 2016). SEM is able to enter latent variables into the analysis. Before
testing the hypothesis, confirmatory factor analysis (CFA). CFA in SEM needs to be done to ensure that the indicators are fit (Silva & Alwi, 2008). To test mediation variables, this study uses the Sobel test.

In this study, researchers construct constructs for each variable studied based on previous theories, and the binding conditions for the measurement of organizational performance under study, namely:

2. Spiritual Job Satisfaction with measurement indicators (1) Perceived happiness, (2) Relationships among colleagues, (3) Relationships with leaders, (4) Employees are able to overcome boredom, (5) Employees have an attitude of respect and (6) Employees feel comfortable.
4. Knowledge management with measurement indicators (1) knowledge usage, (2) knowledge sharing, (3) knowledge reflection and (4) knowledge identification.

4. Results and Discussion

Analysis of the structural model that explains the effect test between variables is presented in the following path diagram:

Figure 2. Structural Equation Model (SEM) Test Results
The results of testing the structural equation model (SEM) for testing hypotheses after going through the fulfillment of SEM assumptions, are more clearly found in the following table:

**Table 1. Standardized Regression Weights Structural Equational Model**

<table>
<thead>
<tr>
<th>Endogen</th>
<th>Eksogen</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>Knowledge Sharing</td>
<td>0.250</td>
<td>0.087</td>
<td>4.368</td>
<td>***</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Knowledge Management</td>
<td>0.174</td>
<td>0.038</td>
<td>6.053</td>
<td>***</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>Knowledge Sharing</td>
<td>0.343</td>
<td>0.088</td>
<td>3.068</td>
<td>***</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>Knowledge Management</td>
<td>0.280</td>
<td>0.118</td>
<td>3.220</td>
<td>***</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>Job Satisfaction</td>
<td>0.305</td>
<td>0.080</td>
<td>6.125</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Questionnaire / Primary Data, 2020 (though)

From the results of testing the direct effect on the table above can be seen that:

1. **Effect of Knowledge Sharing on STAIN Employee Performance**
   The test results on the influence model of knowledge sharing on employee performance obtained a CR value of 4.368 on a probability number of 0.000. Both numbers obtained can be accepted for terms in accepting H1 namely CR value of 4.368 which has been greater than 1.96 with a probability that has been smaller than 0.05. From the figures, it can be explained that the knowledge sharing held by each STAIN employee has an effect on employee performance. The magnitude of the effect of knowledge sharing on employee performance is worth 0.343. This indicates that the better knowledge sharing will have a positive influence on the performance of STAIN employees.

2. **Effect of Knowledge Management on STAIN Employee Performance**
   The test results on the influence model of knowledge management on employee performance obtained a CR value of 6.053 on a probability number of 0.000. Both numbers obtained can be accepted for conditions in accepting H2, namely a CR value of 6.053 which has been greater than 1.96 and a probability that has been smaller than 0.05. From the figures, it can be illustrated that the knowledge management owned by STAIN affects the performance of STAIN employees. The magnitude of the influence of knowledge management on employee performance is worth 0.280. This illustrates that the better knowledge management STAIN has on employee performance.

3. **Effect of Knowledge Sharing on STAIN Job Satisfaction**
   The results of tests on the model of the influence of knowledge sharing on job satisfaction obtained a CR value of 3.068 on a probability number of 0.000. Both numbers obtained can be accepted for the conditions in accepting H4, namely the CR value of 3.068 which has been greater than 1.96 and the probability that has been smaller than 0.05. From the figures, it can be revealed that knowledge sharing has an effect on job satisfaction of STAIN employees. The magnitude of the effect of knowledge sharing on employee job satisfaction is worth 0.250.

4. **Effect of Knowledge Management on STAIN Job Satisfaction**
   The test results on the influence model of knowledge management on employee performance obtained a CR value of 3.220 and with a probability of 0.000. Both numbers...
obtained can be accepted for the conditions for accepting H5, namely a CR value of 3.220 which has been greater than 1.96 and a probability that has been smaller than 0.05. The magnitude of the influence of knowledge management on job satisfaction is worth 0.174. From the figures, it can be explained that STAIN’s knowledge management has an influence on increasing job satisfaction, especially in providing job comfort in various aspects of satisfaction.

5. Effect of job satisfaction on STAIN Employee Performance

The test results on the model of the effect of job satisfaction on employee performance obtained a CR value of 6.125 on a probability number of 0.000. Both numbers obtained can be accepted for conditions in accepting H2, namely the CR value of 6.125 which has been greater than 1.96 and the probability that has been smaller than 0.05. From the available figures, it can be explained that job satisfaction possessed by STAIN employees affects the performance of STAIN employees. The amount of influence of job satisfaction on employee performance is worth 0.305. This illustrates that the higher level of job satisfaction possessed by STAIN employees will further improve employee performance, because every employee has shared and managed the knowledge and insights they have.

6. The indirect effect of Knowledge Sharing, Knowledge Management, on employee performance through STAIN job satisfaction

The analysis of indirect effects on this research model is to explain the strength of the influence between one variable that has a line to the mediating variable and continued on the line that leads to the final variable in question. For a clearer difference, the direct effect is nothing but the coefficient of the line directly directed from one variable to another, while the indirect effect is an effect that appears through an intermediate variable or can be called mediation. Furthermore, for the total effect (total effect) is the effect that occurs in total from the various relationships that exist between variables in the model (Ferdinand, 2006), as explained in the following Figure

Figure 3. Effect of Variables in Flow Charts
Judging from the coefficient of results from structural equation modeling explains the direct and indirect effects, as explained in Table 2.

**Table 2: Direct Influence and Indirect Influence**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total Information</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The effect of knowledge sharing on employee performance through job satisfaction</td>
<td>0.343</td>
<td>0.250 x 0.305 = 0.076</td>
<td>0.419</td>
<td>Direct &gt; Indirect</td>
</tr>
<tr>
<td>2.</td>
<td>The influence of knowledge management on employee performance through job satisfaction</td>
<td>0.280</td>
<td>0.174 x 0.305 = 0.053</td>
<td>0.333</td>
<td>Direct &gt; Indirect</td>
</tr>
</tbody>
</table>

Source: Questionnaire / Primary Data, 2020 (processed).

In the number of direct influences in this research model, among the variables tested in this study are the variables of knowledge sharing, knowledge management and employee performance, showing the coefficient of all direct effects is greater than the number of coefficients of indirect influence.

To prove that there is a partial or simultaneous effect based on indirect relationship test between exogenous and endogenous variables, testing the mediation effect in this study focuses on using the approach stated by (Baron & Kenny, 1986). While the results of the study indicate that the testing effect of mediating knowledge sharing variables on employee performance can be explained as follows:

![Figure: 4 Testing the Effects of Mediating Knowledge Sharing on Employee Performance through Job Satisfaction](image)

Based on the test results above shows that the influence of knowledge sharing on employee performance tends to be positive, and the influence of job satisfaction on employee performance is also positive and significant, thus this test shows the indirect effect of knowledge sharing on employee performance through satisfaction employee work. However, testing for significance still needs to be done through the Sobel Test so that it can be ascertained whether the effect is significant or not, which will be shown in table 3. Significance testing to indicate whether the hypothesis is rejected or accepted.
The results showed that testing the mediating effect of job satisfaction variables in mediating knowledge management on employee performance can be explained as follows:

![Figure 5 Testing the Effects of Mediating Knowledge Management on employee performance through job satisfaction](image)

Based on the test results above shows that the influence of knowledge management on employee performance is positive and significant, thus this test shows the indirect effect of knowledge management on employee performance through job satisfaction. However, testing for significance still needs to be done through the Sobel Test so that it can be ascertained whether the effect is significant or not, which will be shown in table 3. Significance testing to indicate whether the hypothesis is rejected or accepted.

For the conclusion of direct effects, based on the results of the analysis showed that all exogenous variables significantly influence endogenous variables and no significant variables were found. For indirect effects, if significance is found then the mediating variable will certainly function as a partial mediation. For this reason, the significance must first be tested through the Sobel test, which will be explained below, especially in Table 3 below.

7. Testing the Significance for the Hypothesis of Indirect Effects

In this research as a hypothesis of indirect effect, the hypothesis testing is carried out with a single test. The complete sobel test formula for calculating the significance of the indirect effect coefficient is as follows:

\[
z \text{ value} = \frac{ab}{\sqrt{b^2sa^2 + a^2ab^2}}
\]

- \(a\) = Correlation coefficient for X to Y
- \(b\) = Correlation coefficient for Y to Z
- \(ab\) = Results of the multiplication between the correlation coefficient X to Y and the correlation coefficient Yke Z
- \(Sa\) = Standard error for the coefficient a
- \(Sb\) = Standard error for the coefficient b
- \(Sat\) = Standard error on an indirect effect

The hypothesis states that knowledge sharing and knowledge management have an indirect effect on employee performance through job satisfaction. Testing the hypothesis of indirect effects can be seen in the following table:

<table>
<thead>
<tr>
<th>Table 3: Hypothesis Testing Results on Indirect Effects</th>
<th>Job Satisfaction</th>
<th>Employee Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Management</td>
<td>0.280</td>
<td>0.174</td>
</tr>
<tr>
<td>Sig: 0.000</td>
<td>0.053</td>
<td>Sig: 0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results showed that testing the mediating effect of job satisfaction variables in mediating knowledge management on employee performance can be explained as follows:
Thus, based on Table 3 above for each of the indirect effects of these variables, it turns out to prove the facts as follows:

1. Knowledge sharing indirectly influences the positive direction but is not significant on employee performance, which is explained through the path coefficient value of 0.076 and the z value value of 1.298 (<1.96).

2. Knowledge management indirectly influences the positive direction but is not significant on employee performance, which is explained through the path coefficient value of 0.076 and the z value of 1.549 (<1.96).

5. Conclusions

The results of the study found that there was an effect of knowledge sharing on STAIN employee performance, there was an influence of knowledge management on STAIN employee performance, there was an effect of knowledge sharing on STAIN employee job satisfaction, knowledge management influence on STAIN employee job satisfaction, then there was an effect of job satisfaction on employee performance, there was no indirect effect of knowledge sharing on STAIN employee performance through job satisfaction, and there was no indirect effect of knowledge management on STAIN employee performance through job satisfaction. These all findings become an update in the theories academically and a reference for the management persons in the STAIN. This contributes to be the renewal of the model fromt the several previous models. The limitation lies in the scope of the research.

The managerial implications are provided from the findings. In order to improve the performance and job satisfaction of STAIN employees based on knowledge sharing variable, what needs to be considered is especially related to sharing information and knowledge as well as instructions given by superiors in facilitating achieving organizational goals.

In connection with the existing knowledge management at STAIN, the knowledge management system should be built and continuously improved so that it can make a real contribution in improving employee performance, especially related to the reflection of knowledge carried out by each employee so that it can become a reference for improving organizational management in the future.

For employee performance improvement programs, what needs to be the attention of leaders is that employees must be willing to share knowledge with colleagues and have adequate management knowledge to be able to provide solutions to any problems that occur.

To increase job satisfaction, what needs to get attention and be implemented is that STAIN must be able to create conditions for employees to respect each other and overcome boredom.
References


