

# **The Mediated Effect of Job Satisfaction on the Relationships between Leadership Effectiveness, Organizational Support, Working Environment and Ability: The Case of State-Owned Electricity Company in Indonesia**

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**Abstract:** *This study aims at measuring the effects of leadership effectiveness, organizational support, and working environment on working ability with job satisfaction as a mediating variable at PT. PLN (State-Owned Electricity Company) in Aceh Region. Of 163 employees of PT PLN in the Aceh Region, 116 of them were selected as the sample of the study using a stratified random sampling technique. The data were analyzed using structural equation modelling (SEM) with AMOS program. The study found that: 1) the leadership effectiveness, organizational support, and working environment have an effect on job satisfaction; 2) the leadership effectiveness and organizational support has no effect on working ability; 3) the work environment affected the ability to work; 4) the job satisfaction influenced work ability; 5) the leadership effectiveness and working environment affected the ability to work through job satisfaction as a mediator; and 6) the organizational support has no effect on working ability through job satisfaction as the mediating variable. These findings implied that to improve the working ability and job satisfaction, the leadership effectiveness need to be further enhanced to support the company with a conducive working environment.*

**Keywords:** *leadership effectiveness, organizational support, work environment, job satisfaction, and work ability*

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Date of Submission: 14-09-2018

Date of acceptance: 29-09-2018

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## **I. Introduction**

PT. Perusahaan Listrik Negara (PLN) is a stated-owned electricity company in Indonesia. Electricity was like primary needs for society because it influences almost every aspect of life such as the economy, education, and health sectors. PT. PLN business activities starting from national electricity supply, national electricity supports, and other activities. Thus, there will be a big workload for PT PLN employees. In running the company activities, PT. PLN has a vision and missions. The vision of PT PLN is “to be recognized as world class company that is growing, excels, and is trustworthy through its reliance on human potential”. Meanwhile, the missions of PT. PLN are: (a) to run the business and other related fields, oriented toward the satisfaction of customers, company members, and shareholders; (b) to make electrical power a medium by which to improve the quality of the life for the public; (c) to strive to make electrical power a driving force for economic activities; and (d) to operate an environmentally friendly business. PT. PLN also has motto “electricity for a better life”.

However, in reality, public opinion regarding those various activities run by PT. PLN tends to be negative than positive. This is reflected in the number of the company’s performance target which has not realized in public. It happens because of customer's complaint and comment on the customer services given by PT. PLN in social media, electronic media, and newspapers (Basri et al., 2017). For example, a number of PT. PLN customers declared a renunciation upon the termination and the removal of electricity meter conducted unilaterally by PT. PLN. The removal and the termination of electric current are conducted unannounced and discernment. A customer complained that PT PLN exploits his right as a customer in order to be able to install the latest electricity meter, pre-paid electricity (Medan Bisnis, 2013).

The above-mentioned complaints indicates that PT. PLN mission in running the business and other related fields, oriented toward the satisfaction of customers, company members, and shareholders, is still not managed optimally. This has caused PT. PLN Aceh Region has focus and improve things which are commonly being complained about by customers. Therefore, employees must have sufficient work ability in handling customer needs. The working ability of employees would support the company’s vision and mission. Hence, the leaders of PT. PLN, especially Aceh Region have to evaluate services and handle people complaints. Work demands, resources, work process, and all work cultures affect work ability, and good work ability norms. It resulted in employees having to have work control (Hasselhorn, 2008).

Work control, attitude, and motivation have a direct effect on job satisfaction. Job satisfaction determined employee attitudes toward work. Employees who have high job satisfaction would give attention to the quality of work and would feel responsible to the company. Job satisfaction decreases turnover and absences which basically can save company cost, including at PT. PLN Aceh Region. The problem faced by PT. PLN Aceh Region is there are still employees who have activities outside the company during working hours due to financial reasons. However, the researchers indicated that the problem was not caused by financial factor but also by various factors such as leadership effectiveness, organizational support, and work environment at PT. PLN Aceh Region.

As it is generally known, the leader is the most important structure in the organizations. An organization will succeed or fail mostly depends on leadership. Not only the leadership factor, company must provide support to employees and leader because everything is done by the organization to them, there will be faith from employees (Kambu et al., 2011). When workers have a supportive situation, naturally they will have good resources to overcome work demands which result in job satisfaction and the elevation of work ability. Work ability is influenced by the work environment. According to Ilmarinen et al. (2009), the work environment is one of the important things related to work ability. Thus, this study aimed to empirically explore the effects of leadership effectiveness, organizational support, and working environment on working ability and job satisfaction at the PT. PLN in Aceh Region.

The rest of the study is structured in the following sequences. Section 2 discusses the previous related literatures, while in Section 3 provides the research method. Section 4 discusses the finding of the study, and finally Section 5 concludes the paper.

## **II. Literature Review**

### **Working Ability**

Work ability is different from work achievement because the resources target related to the work demand (Maertens et al., 2012). Some researches argued that work ability is an important determining factor for productivity and loyalty in workplace (Feldt, 2009). According to Slamet et al. (2016), the indicators of measurement ability are as follows knowledge, training, experience, skill, and work commitment.

### **Job Satisfaction**

Job satisfaction is employees' attitude on their work such as positive emotional condition regarding their work, how far an individual is satisfied with their jobs, and the fulfilment of their personal needs, equity, and fairness of organization (Chin and Azizi, 2017). Indicators of job satisfaction according to Tasios and Giannouli (2017) are the job itself, salary, promotion, supervision, colleagues.

### **Leadership Effectiveness**

Leadership effectiveness is leader's ability in "reading" the current and future challenges and adjust his style with the situation, in order to be effective in running its function as the leader such as planning, organizing, briefing and supervision (Kayword and Leidner, 2002). The success of a leader can be seen from how he adjusts his leadership attitude and behavior with the current situation. Indicators of leadership effectiveness developed from the Multifactor Leadership Questionnaire (MLQ) by Bass and Riggio (2006) are as follows ideal influence, inspirational motivation, intellectual stimulation, and individual consideration.

### **Organizational Support**

Organizational support is a proud feeling of employees by providing salaries and meeting the needs of employees (Stamper and Johlke, 2003). The company that provides sufficient support and pays attention to its employees can be trusted, accepted, and wanted. In addition, organizational support likely increases employees' hope that their efforts do not go waste (Yoon, 2004). Indicators of organizational support according to Eisenberger et al. (2002) are as follows employee benefit, superior support, appreciation, and performance standard.

### **Working Environment**

According to Jain and Kaur (2014), the work environment is a part where employees do their work. The work environment can cause a feeling of safety which helps them in doing their work. There are two dimensions which form work environment from those dimensions; indicators were made by Samson et al. (2015), as follows:

- a. Physical Work Environment. The indicators include direct contact environments such as lighting, facilities, and intermediaries environment namely temperature.
- b. Non-Physical Work Environment. The indicators include cooperation and familiarity.

### III. Research Methods

This study was carried out on employees of PT. PLN in Aceh Region from October 2017 to April 2018. A total 116 respondents (both male and females) of aged  $\geq 21$ , years were selected in this study. The sample size was estimated on the basis of a stratified random sampling design. The target population from which we randomly selected our sample was considered 163. We assumed that the error tolerance of 5%. The sample size actually obtained for this study was 116 employees. The study population was drawn from employees of PT. PLN Aceh Region the indicated leadership effectiveness, organizational support and work environment of profile empirical phenomena seem to demand a notion of backward causation for our understanding of them before improve to job satisfaction and work ability between from October 2017 to April 2018. Employees were divided into 11 groups according to job description.

After written informed consent was obtained, a well-designed questionnaire was used to collect the data of the recruited employees retrospectively. The questionnaire included socio-demographic characteristics such as age, gender, level of education, years of service, and job description. In every subject, a semi-quantitative work ability, job satisfaction, leadership effectiveness, organizational support, and work environment frequency questionnaires are provided to collect detailed information about employee responses to each indicator.

After the data of the questionnaires submitted on the questions submitted has been collected, the data will be analyzed and processed by the method of data analysis. Data was analyzed using SEM the tools of application software AMOS (Ferdinand, 2012).

### IV. Findings and Discussion

#### Testing Instrument

The following table are presented testing the validity and reliability of research instrument for each variable. Table 1 show that all correlation values of each indicator above 0.5 and two items is not valid. Thus two indicators can be removed and the overall items have valid questions. While the C.R value obtained from the above 0.7 for the whole variables so it can be concluded that the instrument was valid research data.

**Table 1: Validity and Reliability Test.**

Indicator with valid variables			Loading factor	C.R
KP1	<---	Work Ability	0.682	0.870
KP2	<---	Work Ability	0.637	
KP3	<---	Work Ability	0.681	
KP4	<---	Work Ability	0.620	
KP5	<---	Work Ability	0.720	
KS1	<---	Job Satisfaction	0.536	0.833
KS2	<---	Job Satisfaction	0.569	
KS3	<---	Job Satisfaction	0.830	
KS4	<---	Job Satisfaction	0.690	
KS5	<---	Job Satisfaction	0.431	
EK1	<---	Leadership Effectiveness	0.759	0.889
EK2	<---	Leadership Effectiveness	0.837	
EK3	<---	Leadership Effectiveness	0.820	
EK4	<---	Leadership Effectiveness	0.516	
DO1	<---	Organizational Support	0.533	0.834
DO2	<---	Organizational Support	0.970	
DO3	<---	Organizational Support	0.604	
DO4	<---	Organizational Support	0.352	
LK1	<---	Physical Work Environment	0.760	0,960
LK2	<---	Physical Work Environment	0.604	
LK3	<---	Physical Work Environment	0.627	
LK4	<---	Non-Physical Work Environment Non-	0.798	
LK5	<---	Physical Work Environment	0.839	

#### Testing Assumption in SEM

Assumptions in SEM analysis are normality, and no outliers. For normality testing used software AMOS. The results is a Mahanalobis distances point minimum value 7.394 and maximum value 67.422, comparing with chi -Squared seen value of the Chi-Squared distribution that is know on  $DF = 178$  and  $P = 0.05$ . Founded that point  $67.422 \leq 210.130$ . So, concluded that all of the observation points are not outliers.

#### SEM Model Goodness of Fit

The results of goodness of fit overall model testing is attempt to know if the hypothesis model is supported by empirical data, show on Figure 1 as follow.

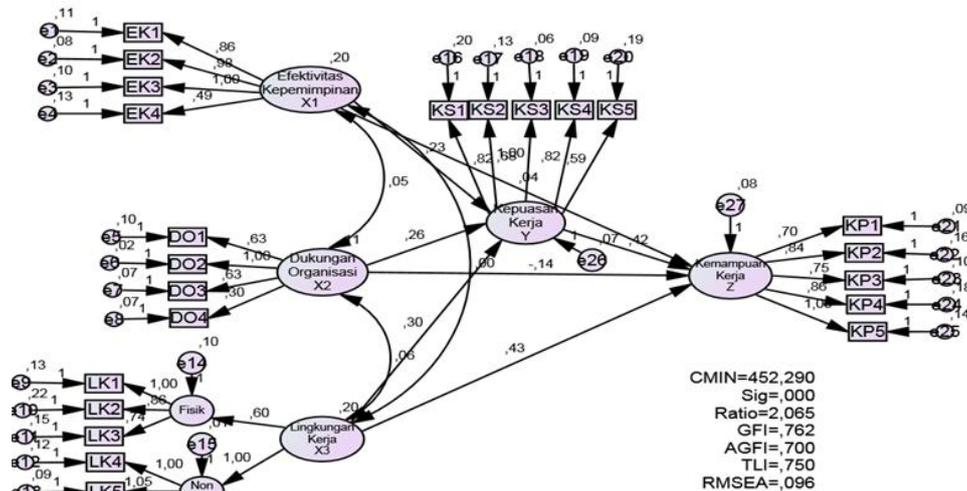


Fig. 1 SEM Model Test

However, this criterion is not the best as an indicator model if the chi square / df value is more than 2, and RMSEA is greater than 0.08, thus concluding that the SEM needs to eliminate invalid and modified indicators, show on Figure 2 as follow.

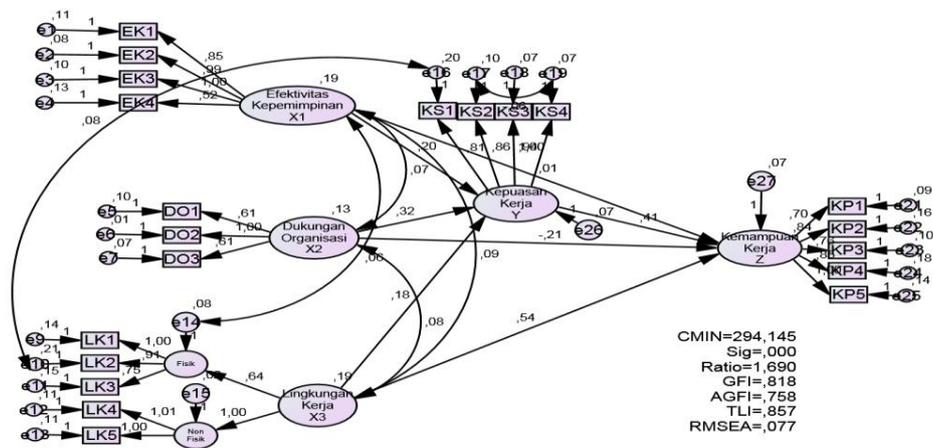


Fig. 2 Indicator Removal and Modification Test

Sudarso (2016) states that marginal criteria can be used as goodness of fit, meaning that this study can be continued even though it still has a model that is categorized as marginal but statistically and according to theory, the model that has been made meets criteria. Furthermore, Table 2 reported the hypotheses testing.

Table 2: Hypothesis Testing

	C.R	P-value	Remarks
Job Satisfaction ← Leadership Effectiveness	2.465	0.014	Accepted
Job Satisfaction ← Organizational Support	2.026	0.024	Accepted
Job Satisfaction ← Work Environment	2.264	0.043	Accepted
Work Ability ← Leadership Effectiveness	0.377	0.706	Rejected
Work Ability ← Organizational Support	-1.161	0.246	Rejected
Work Ability ← Work Environment	2.444	0.015	Accepted
Work Ability ← Job Satisfaction	2.255	0.024	Accepted
Work Ability ← Job Satisfaction ← Leadership Effectiveness	1.702	0.088	Accepted
Work Ability ← Job Satisfaction ← Organizational Support	1.418	0.155	Rejected
Work Ability ← Job Satisfaction ← Work Environment	1.680	0.092	Accepted

Note: Significance level < 10%, CR > 1.65 (T-table)

### **The Effect of Leadership Effectiveness on Job Satisfaction**

The result of this study indicates that leadership effectiveness has a positive impact on job satisfaction. It means that the more leadership effectiveness felt by the employees, job satisfaction level felt by the employees of PT PLN Aceh Region will also increase. This study is in line with a study by Arshadi and Zare (2015).

### **The Effect of Organizational Support on Job Satisfaction**

The result indicates that organizational support has a positive and significant impact on job satisfaction. In other words, the bigger organizational support means the higher job satisfaction level felt by the employees of PT PLN Aceh Region. This study is in line with studies by Miao (2011) and Arshadi and Zare (2015).

### **The Effect of Work Environment on Job Satisfaction**

The result indicates the work environment has a positive and significant impact on job satisfaction. It means that the better work environment designed, the higher job satisfaction level felt by the employees of PT PLN Aceh Region. This study is in line with a study conducted by Jain and Kaur (2014).

### **The Effect of Leadership Effectiveness on Work Ability**

The result of this study was different compared to Arshadi and Zare (2015) which is supported by Robbins's argument where leadership effectiveness only has an impact on the careers of PT PLN Aceh Region employees and not a determining factor for job satisfaction and personality. However, Robbins (2017) also highlighted that leadership effectiveness gave advantages to employees' psychological condition. It can be concluded that this study is in accordance with Robbins's argument (2017).

### **The Effect of Organizational Support on Work Ability**

The result indicates that organizational support has negative effects and not significant to work ability. It means that Organizational Support had low value and would cause the decrease of work ability of the employees of PT PLN Aceh Region. This argument is not consistent with the argument of Arshadi and Zare (2015). However, it was supported by Robbins (2017) who argued that organizational support such as superior support like guiding seen as an unnecessary factor for employees of PT PLN Aceh Region who had sufficient work ability and board knowledge. It can be concluded that this study is in accordance with Robbins's argument (2017).

### **The Effect of Work Environment on Work Ability**

The result indicates that the work environment has a positive and significant effect on Work Ability. It means that the more comfortable the work environment felt by the employees of PT PLN Aceh Region, there will be more initiative for employees to enhance their ability in their spare time. This argument is in line with Hasellhorn (2008) who argued that work environment influenced work ability.

### **The Analysis of the Effect of Job Satisfaction on Work Ability**

The result indicates that job satisfaction has a positive and significant effect on work ability. It means that the bigger job satisfaction felt by the employees of PT PLN Aceh Region, the better work ability. This study is in line with studies conducted by Hasellhorn (2008) and Arshadi and Zare (2015).

### **The Influence of Leadership Effectiveness on Work Ability Using Job Satisfaction as Mediator**

The result indicates that the exogenous variable influenced mediator (a) and mediator influenced endogen (b) even though exogenous did not influence endogen (c) and coefficient c' significant. It means that independent variable could not significantly influence dependent variable without mediating variable or so-called as full mediation (MacKinnon 2008). This study is in line with a study conducted by Arshadi and Zare (2015) which stated that leadership effectiveness has a significant influence on employees' work ability at PT PLN Aceh Region through job satisfaction. Thus, the hypothesis of this study is accepted.

### **The Influence of Organizational Support on Work Ability Using Job Satisfaction as Mediator**

The result indicates that exogen influenced mediator (a) and mediator influenced endogen (b) even though exogenous did not influence endogen (c) and coefficient c' did not significantly show the existence of mediation (MacKinnon 2008). This study does not in line with Arshadi and Zare (2015). However, this study is supported by Robbins's argument (2017) that even though organizational support such as appreciation can increase job satisfaction level, it cannot improve employees' work ability at PT PLN Aceh Region. Therefore, organizational support did not significantly influence work ability at PT PLN Aceh region through job satisfaction. Therefore the hypothesis of this study is accepted.

### The Influence of Work Environment on Work Ability Using Job Satisfaction as a Mediator

The result indicates that the exogen variable influenced mediator (a), exogen influenced endogen (b), coefficient c' is significant. It means that independent variable can directly influence dependent variable without using a mediator or so-called as partial mediation (MacKinnon 2008). This study is in line with Arshadi and Zare (2015) who found that the work environment significantly influences work ability at PT PLN Aceh Region through job satisfaction. Thus, the hypothesis of this study is accepted.

### V. Conclusion

This study explored the effects of leadership effectiveness, organizational support, and working environment on working ability with job satisfaction as a mediating variable at the State-Owned Electricity Company in Aceh Region. The study found that: 1) the leadership effectiveness, organizational support, and working environment have an effect on job satisfaction; 2) the leadership effectiveness and organizational support has no effect on working ability; 3) the work environment affected the ability to work; 4) the job satisfaction influenced work ability; 5) the leadership effectiveness and working environment affected the ability to work through job satisfaction as a mediator; and 6) the organizational support has no effect on working ability through job satisfaction as the mediating variable. These findings implied that to improve the working ability and job satisfaction leadership effectiveness need to be further enhanced to support the company with a conducive working environment. The manager should prioritize the job satisfaction of the employees because job satisfaction has a positive and significant effect on work ability. The processes that influence job satisfaction are leadership effectiveness, organizational support, and work environment to create capable and loyal employees.

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