



## The relationship between training and development strategies, employee performance, and organizational performance

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### Abstract

This study aims to analyze the influence of training and development strategies on organizational performance through mediating employee performance. This study involved 70 respondents from PT INKA Multi Solutions (IMS) level manager employees. The SPSS software is used to test the influence between variables. This study finds that training and development strategies have significant effect on organizational and employee performance. Moreover, this study also finds that employee performance mediates the influence of training and development strategies on organizational performance.

Keywords: Training and development strategies, employee performance, organizational performance

### 1. Introduction

The increasing business growth in Indonesia requires companies to make strategies. The purpose of making this strategy is so that the company can continue to exist and develop. One of the companies whose business is growing is PT INKA Multi Solusi. This company is a subsidiary of PT Industri Kereta Api (Persero) and is engaged in constructing and trading railroad components or spare parts and land transportation products. From the primary data obtained in 2018, PT INKA Multi Solusi could sell railway components (spare parts) at a price of Rp. 1.8 trillion in 2016 and Rp. 2.6 trillion in 2017. This situation requires PT INKA Multi Solusi to continue to improve its organizational performance.

According to Cook and Hunsaker (2001 in Reza, 2014), organizational performance refers to attitudes that will be assessed as workers' contributions to organizational goals. Niazi (2011), in his research, stated that employee performance is one of the factors to predict organizational performance. According to Rahadi (2010:5), employees are a precious asset of a company, so that the company must manage with the goal is to contribute to the best performance. Jones 2002: 92 in Rahadi, 2010: 5) states that many things cause employee performance to be poor, including individual abilities, leadership abilities (managers), process gaps, environmental problems, personal situations, and motivation. Therefore, we need a program that can contribute directly to the company so that employee performance is always good by providing training and development facilities.

Training and development provide the criteria needed by employees to work better on their duties/jobs, which in turn impact organizational performance. The same is expressed by ni Niazi (2011), his research stating that training and development can improve organizational performance. According to Nankervis, Compton, and McCarthy (1999 in Ng'ang'a, 2013), training and development programs effectively provide the knowledge and skills required to complete the work of employees who impact employee performance and have an effect on the overall achievement of organizational goals. Therefore, a company that wants to continue to improve organizational performance needs a strategy

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for the training and development process. Ideally, the more trained and satisfied employees with the job can help companies improve organizational performance (Raza, 2014).

This study is a modification of the research of (Niazi, 2011). This research was conducted at PT INKA Multi Solusi by taking the object of research on manager-level employees. This study examines the relationship between training and development strategies consisting of three elements: learning organizations and strategies from appropriate training and development; training needs analysis and formal training on organizational performance with employee performance as a mediating variable. Based on these ideas, take the research question to determine how well and how well companies implement strategies for employee training and development that will impact employee performance and organizational performance.

## **2. Literature Review**

### **2.1 Training and Development Strategy**

Strategy is a potential action requiring top management decisions and large company resources (David and David, 2015: 11). Susanto (2014) explains that strategy is a decision and action to achieve company goals at every level of the organization so that the conclusion regarding strategy is top management's action to achieve future-oriented company goals.

Training is crucial to improve employee performance (Sultana et al., 2012). According to Jagero et al. (2012), companies use training to build abilities and improve employee skills and knowledge. The way that is usually done is to provide new information to employees with the aim that employees can carry out work efficiently.

The development is to establish, expand, transform, and adapt to the existing knowledge, understanding, and skills (Kaswan, 2012). Goals and development programs concerning the broader aspects increase an individual's ability to anticipate changes that may occur in unplanned or planned changes.

This definition can be concluded that the notion of a training and development strategy is an act of top management and company resources to build, improve and expand the ability of employees to achieve company goals. Niazi (2011) defines training and development strategies into three dimensions, namely:

- 1) Learning organizations and strategies from appropriate training & development; namely to create a win-win solution both in terms of organization and workers so that the performance of employees and increased organizational performance.
- 2) Training needs analysis is a tool to identify training needs to reduce the gap between current performance and standard performance. The training needs analysis provides a measure of the skills of workers before training and after training.
- 3) Formal training, which is an important factor used to improve organizational performance. In this case, formal training must be adjusted to the results of the implementation and evaluation of the company.

For top management, a decisive step in training and development strategy is the most important activity as it aims to achieve the vision and mission of the organization/company (Ma'arif and Kartika, 2012: 16).

### **2.2 Employee Performance**

Employee performance is a work performance, namely the comparison between work results that are seen in real terms with the work standards set by the organization (Dessler, 2006). According to Mangkunegara (2000: 67, in Mangkunegara, 2005: 9), employee performance is the result of work in terms of quality and quantity achieved by an employee in carrying out his duties according to the responsibilities given to employees, while employee performance according to Mangkuprawira, (2007) is the output of the process. Certain work carried out in a planned manner at the time and place of the organization concerned. Referring to the definitions put forward by Dessler and Mangkuprawira, it can be concluded that the notion of employee performance results from a planned work process achieved by employees by the work standards set by the organization. Employee performance is a significant factor in an organization because it affects the success of an organization.

John Miner (1988, in Edison et al., 2016 : 195) states that there are indicators that serve as benchmarks for assessing performance, namely:

- 1) Quality; includes: error rate, damage, accuracy.
- 2) Quantity; includes: the number of tasks or jobs produced.
- 3) Use of time in work; includes rates of absenteeism, tardiness, effective working time or hours lost.
- 4) Cooperation with others in the works.

John Miner's thinking emphasizes more on employee time attendance, so indicators are developed leading to product completion. Indicators of employee performance is more emphasis on the completion of the products developed by Edison et al., 2016: 195 - 196) as follows:

- 1) Target; is the fulfillment of the quantity of the product, work, or the nominal amount of money produced.
- 2) Quality; is an important element because the resulting quality becomes a strength in maintaining customer loyalty.
- 3) Time of completion; is a timely settlement to ensure certainty in the distribution and delivery of work. This is an asset to give trust to customers.
- 4) Being obedient; is the fulfillment of targets that must be quality and timely and must be done in a correct, transparent and accountable manner.

### 2.3 Organizational Performance

Cook and Hunsaker (2001, in Raza, 2014) state that the reference for organizational performance is the attitude that is assessed or measured as the contribution of workers to organizational goals. Raza (2014) states that the philosophy evaluated is related to management skills, especially line management, to use resources professionally according to competence. Lusthaus et al. (2002) defines organizational performance into three dimensions, namely:

- 1) Organizational capacity; merupakan kemampuan organisasi dalam memanfaatkan sumber daya yang ada atau tersedia.
- 2) Organizational motivation; is an essential personality of the organization.
- 3) The external environment; is a crucial factor in determining the level of available resources and the ease with which the organization can carry out its activities.

### 2.4 Theoretical Framework

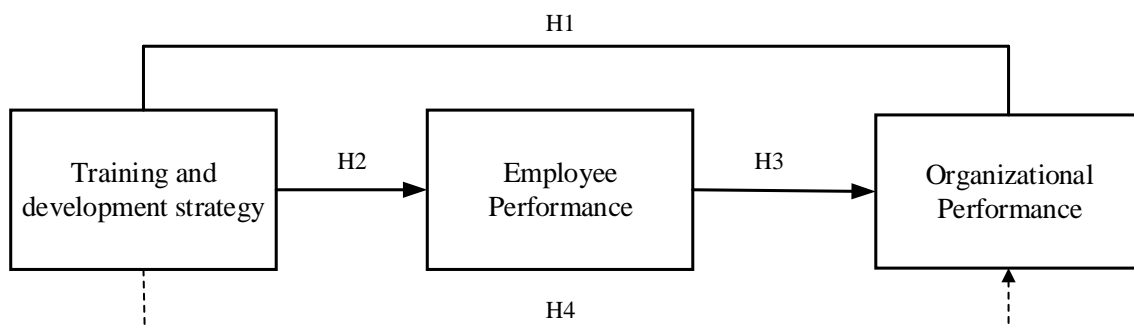


Figure 1. Research Conceptual Scheme

The research model explains that training and development strategies affect organizational performance (H1), training and development strategies affect employee performance (H2), employee performance affects organizational performance (H3), and employee performance mediates the relationship between training & development strategies and organizational performance (H4).

### 3. Method, Sample, and Data Analysis

The population in this study is manager-level employees of PT INKA Multi Solutions (IMS) several 85 people. This research sample technique uses saturated samples, amounting to 70 people. This study uses data analysis techniques with regression based on the steps suggested by Baron & Kenny (1986). In this test, there are 3 regression models:

$$OP = \alpha + \beta_1 TDS + \varepsilon \dots\dots\dots (1)$$

$$EP = \alpha + \beta_1 TDS + \varepsilon \dots\dots\dots (2)$$

$$OP = \alpha + \beta_1 TDS + \beta_2 EP + \varepsilon \dots\dots\dots (3)$$

Notes:

$\alpha$  = Regression constant

TDS = Training and development strategy

EP = Employee Performance

OP = Organizational Performance

$\beta_1$  = Training and development strategy regression coefficients

$\beta_2$  = Employee performance regression coefficient

$\varepsilon$  = Error

#### 4. Results

The data in the study were obtained from the output of a questionnaire distributed to research respondents, several 70 employees at the manager level of PT INKA Multi Solusi (IMS). Respondent characteristics are presented in 5 categories: age, gender, education level, position, and years of service.

Table 1. Characteristics of employees at the manager level of PT INKA Multi Solusi (IMS)

Characteristics	Classification	Frequency	Percentage (%)
Age	24 - 29 years	11	15,71
	30 - 35 years	19	27,14
	36 - 41 years	11	15,71
	42 - 47 years	10	14,29
	≥ 48 years	19	27,14
	Total	70	100
Gender	Male	51	72,86
	Female	19	27,14
	Total	70	100,00
Education Level	Senior High School	6	8,57
	Diploma	9	12,86
	Bachelor	53	75,71
	Postgraduate	2	2,86
	Total	70	100,00
Position	Head of Section	40	57,14
	Head of Departement	20	28,57
	Head of Division	5	7,14
	Head of Sub Section	5	7,14
	Total	70	100,00
Years of Service	1 - 5 years	40	57,14
	6 - 10 years	13	18,57
	11- 15 years	0	0,00
	16 - 20 years	2	2,86
	21 - 25 years	10	14,29
	26 - 30 years	5	7,14
Total	70	100,00	

Table 1 shows most respondents were aged 30-35 years and  $\geq 48$  years as many as 37.14% or 19 people, 24-29 years and 36-41 years as many as 15.71% or 11 people and at least 42-47 years old as many as 14, 29% or ten people. The data also shows that the research respondents were dominated by male employees as much as 72.86% or 51 people, while female employees were 27.14% or 19 people.

The grouping of respondents based on the highest education shows that the most increased education of respondents is dominated by bachelor, namely 75.71% or 53 people, diploma by 12.86% or nine people, senior high school by 8.57% or by six people, and S2 by 2.86% or two people. Meanwhile, the grouping of respondents based on position shows that most respondents have a position as head of a division, namely 57.14% or 40 people, head of department 28.57% or 20 people, head of a division, and head of subdivision is 7.14% or five people. In addition, most respondents have a work period of 1 - 5 years, namely 57.14% or 40 people, 6 - 10 years, which is 18.57% or 13 people, 21-25 years, namely 14.29% or ten people, 26-30 years, namely 7.14% or five people and 16-20 years, namely 2.86% or two people.

The reliability test of the research instrument used Cronbach Alpha  $> 0.60$ . The results showed that all statement instruments were reliable because they had a value  $> 0.60$ .

Table 2. Reliability Test Results

Variable	Cronbach Alpha	Information
Training and development strategy	0.8976	Good
Employee performance	0.9087	Good
Organizational performance	0.9673	Good

After the reliability test was carried out, the normality test was carried out. This test aims to test whether confounding or residual variables have a normal distribution in the regression model. Data is normally distributed if the significance value is more significant than 0.05 ( $p > 0.05$ ). This study used the Kolmogorov-Smirnov (K-S) test to test for residual normality. The results of the normality test in this study are shown in Table 3 below.

Table 3. Normality Test Results

	Unstandardized residual
N	70
Mean	0.000
Std. Deviation	0.359
Kolmogorov-Smirnov Z	0,439
Asymp.Sig. (2-tailed)	0,991

Table 3 shows that the data is normally distributed where the significance value is 0.991 ( $P > 0.05$ ). This value proves that there is no significant difference between the distribution of the research data and the standard normal distribution.

Multicollinearity testing aims to test whether the regression model found a perfect correlation between the independent variables. The multicollinearity test in this study was conducted by evaluating the Tolerance and Variance Inflation Factor (VIF) values. The multicollinearity test results are shown in Table 4 below.

Table 4. Multicollinearity Test Results

Variable	Tolerance	VIF
Training and development strategy	0,760	1,315
Employee performance	0,760	1,315

The criteria used are a tolerance value of more than 0.10 and a VIF value of not more than 10. The multicollinearity test results in table 4 show that the tolerance value is more than 0.10 and the VIF value is not more than 10, so it can be concluded that there is no multicollinearity between the independent variables.

This study also uses the heteroscedasticity test. The goal is to determine the scattered research data is normal or not. In this case, using heteroscedasticity is tested using a scatter plot model, namely: 1) If the dots form a certain pattern (wavy widened then narrowed), then heteroscedasticity occurs; 2) If there is no clear pattern, the dots spread above and below or around the number 0 on the Y axis, there will be no heteroscedasticity (Ghozali, 2006). Our result (upon request) shows that the study did not occur heteroscedasticity problems.

The final step in this research is to test the hypothesis. This study used Baron & Kenny's (1986) regression analysis with the help of the SPSS 17.0 program. In Baron & Kenny's (1986) regression analysis, there are three regression models: (1) the independent variable (training and development strategy) is regressed with the dependent variable (organizational performance); (2) the independent variable (training and development strategy) is regressed with the mediating variable (employee performance); (3) the mediating variable (employee performance) is regressed with the dependent variable (organizational performance); (4) the independent variable (training and development strategy) and the mediating variable (employee performance) are regressed with the dependent variable (organizational performance), for more details, see Table 5 below.

Tabel 5. Summary of Regression Analysis Results

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
	<b>Organizational Performance</b>	<b>Employee Performance</b>	<b>Organizational Performance</b>
Training and Development Strategy	4.601*	4.629*	2.426*
Employee performance			4.175*
F	21.166	21.430	21.856
Adj. R <sup>2</sup>	0.226	0.228	0.377

Information: \*  $p < 0.05$

From table 5 it can be seen that training and development strategies affect organizational performance with a significance level of  $p < 0.05$ ; so that **hypothesis 1 is supported** in this study. The adjusted R<sup>2</sup> value is 0.226; it means that the training and development strategy variables can explain 22.6% of organizational performance variables. The remaining 77.4% can be explained by other variables not included in this research model.

From table 5, it is also found that the results of training and development strategies affect employee performance with a significance level of  $p < 0.05$ ; so that **hypothesis 2 is supported** in this study. The adjusted R<sup>2</sup> value is 0.228; the training and development strategy variables can explain 22.8% of the employee performance variables. The remaining 77.2% can be explained by other variables not included in this research model.

Table 5 also shows that employee performance affects organizational performance with a significance level of  $p < 0.05$ ; so that **hypothesis 3 is supported** in this study. The adjusted R<sup>2</sup> value is 0.377; it means that the training and development strategy variables can explain 37.7% of the organizational performance variables. The remaining 62.3% can be explained by other variables not included in this research model.

Hypothesis 4 examines the mediating role of employee performance in the effect of training and development strategies on organizational performance. Based on the results of hypotheses 1, 2, and 3, it shows that training and development strategies affect organizational performance, the training and development process affect employee performance, and employee performance affects organizational performance, so **hypothesis 4 is supported**. The impact of mediating employee performance in this study is partial mediation. The results are significant in the first hypothesis, namely the effect of training and development strategies on organizational performance.

## 5. Discussion of Research Results

### 5.1 The influence of training and development strategies on organizational performance

The study results statistically indicate that the training and development strategy has a significant effect on organizational performance, so that **hypothesis 1 is supported**. The study results reveal that managers always have a training and development strategy (learning organizations and methods from appropriate training & development, can analyze training needs, and formal training) to improve organizational performance. This is evident from the existence of a learning organization created to provide win-win solutions to organizational problems. PT IMS also conducts a training needs analysis based on performance gaps before conducting training and development activities to pinpoint training needs. In this case, the training and development program is adjusted to allocate company funds so that no funds are wasted freely for training and development activities. In addition, PT IMS always aligns strategic objectives with organizational goals when training and development activities occur. The results of this study are in line with research by Niazi (2011), which states that there is a relationship between training strategies and development on organizational performance.

### 5.2 The influence of training and development strategies on employee performance

The study results statistically indicate that the training and development strategy has a significant effect on employee performance so that **hypothesis 2 is supported**. The study results explain that the actions of managers always build, improve, and expand employee employability through the training and development strategies they create. In this case, the manager can create a learning organization and a training and development strategy by the organization's business strategy. This is shown by how managers always provide job challenges to employees with targets to improve business so that employees feel challenged to create a win-win solution. Managers also conduct a training needs analysis to reduce the gap between current employee performance and predetermined performance. In this case, the company also has a counseling/direction program to help a manager analyze the needs of his employees. In addition, managers also hold formal training as a strategy to improve employee performance that is tailored to the results of the implementation and performance evaluation of the company. The results of this study are in line with research by Niazi (2011), which states that there is a relationship between training strategies and development on employee performance.

### 5.3 Effect of employee performance on organizational performance

The study results statistically indicate that employee performance has a significant effect on organizational performance, so **hypothesis 3 is supported**. The study results explain that the work process achieved by employees is always planned by the work standards set by the organization. In this case, managers always monitor performance management and evaluate employee performance so that employees always carry out their work responsibly. The company also has good career management; this causes employees always to try to meet their job targets effectively. Working conditions like this are what improve organizational performance. The results of this study are in line with the research of Ma'arif and Kartika (2012), which revealed that there is a relationship between employee performance and organizational performance.

### 5.4 The influence of training and development strategies on organizational performance through employee performance

The results of the study statistically indicate that employee performance mediates the effect of training and development strategies on organizational performance, so **hypothesis 4 is supported**. The effect of mediation in this study is partial mediation because, in the first hypothesis, the results are significant. This is thought to occur because managers can create appropriate training and development strategies (learning organizations and strategies from appropriate training & development, can analyze training needs, and formal training) to improve the organization's performance. On the indirect effect, in improving organizational performance, training and development strategies can involve employee performance because every organization has work standards that employees must achieve, such as the number of targets that must be achieved by employees, how employees meet job targets in a transparent manner, and error rates, which must be minimized by employees, the most effective time to complete

work, and working with others.

Training and development strategies can assist managers in improving employee performance by analyzing appropriate training needs before providing formal training. In addition, managers need to create learning organizations to have a win-win solution in solving work challenges. When a training and development strategy is able to improve employee performance, this will assist training and development strategies in improving organizational performance. The results of this study are in line with the research of Niazi (2011), which reveals that there is positive support for employee performance mediation in training and development strategies for organizational performance.

## 6. Conclusion, Limitation, and Future Research Directions

### 6.1 Conclusion

Based on the analysis of research result and discussion of this study, we draw the following conclusions. First, there is a significant effect of training and development strategies on employee performance. Second, there is a significant effect of training and development strategies on organizational performance. Third, there is a significant effect of employee performance on organizational performance. Fourth, by the calculation of path analysis, the direct influence of training and development strategies on organizational performance is greater than the indirect effect of training and development strategy variables on organizational performance through employee performance. Because the results are significant, it can be concluded that the training and development strategy has a significant effect on organizational performance through employee performance as a mediating variable with partial mediation.

### 6.2 Limitation and future research

The limitation of this study is that secondary data related to supporting documents can be examined more deeply to provide a deeper picture of the results of this study. Future research can involve other variables that can improve organizational performance. In addition, training and development strategies can be used as a mediating variable or control variable to bridge the relationship between employee performance and organizational performance.

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