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ON THE JOB TRAINING DESIGN IN IMPROVING PERFORMANCE AT 4.0 ERA: STUDY ON AUTOMOTIVE INDUSTRY IN INDONESIA

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Abstract: At 4.0 era of industrial revolution, training's role becomes more important for organizations because it will increase effectiveness and efficiency not only for individuals but for organizations. Many things affect performance, but the most important factor in improving performance is training. This study aims to evaluate On the Job Training design implementation at PT YXZ and see how the variables in the OJT design contribute to improving employee performance. Sampling technique method is probability random sampling with the Slovin formula according to the number of employees of each unit. The population in this study were all permanent employees with a total of 1,665. Samples were taken from various positions and tenure. The number of samples obtained was 323 employees. The results of the validity and reliability test are known that the Cronbach's Alpha value of each indicator is above 0.9 so it can be said that all indicators have a very good level of reliability. The Pearson Product Moment correlation value is above 0.8 so that the measuring instrument is considered valid. Based on the results of the frequency distribution, it was found that according to OJT, 70.51% respondents had been implemented quite well. The results of the simultaneous regression test resulted in a $P_{value} = 0.000$ ($P< 0.05$) which means that Ho was rejected and Ha was accepted. The value of how much influence the overall indicator on the effectiveness of OJT is displayed in the regression model as follows, OJT Factor Value = 2,422 + 0.015 (total value of OJT Implementation items). The results of this study prove that the design model in OJT have a significant influence in to performance.

Keywords : Training, On the Job Training, Performance, Employee

INTRODUCTION

Career development is the number one topic in many employees' minds. Today, organizational success depends on whether employees are

involved in learning and self-development or not. According to a recent national survey, the biggest contributor to employee turnover is not salary or supervision, but "whether there are adequate opportunities for professional development." Leaders who carry out their functions effectively assume themselves responsible for providing these opportunities. However, while there are many actions that leaders can take, there are also methods they must follow if they want employees to be involved in their own learning and development (Bullock, 2012).

The most common personal development in almost all organizations is through training. According to (Bramley, 2003) training is a process that facilitates learning activities to encourage employees to work more effectively. Training helps employees to get a clear view of what they are doing (Karim, Huda, & Khan, 2012). According to (Pilbeam & Corbridge, 2002) there are 4 main stages of the training process namely identification of training needs, training planning and design, training implementation, and training evaluation as shown in the cycle below. This research focuses on evaluating the implementation of training results.

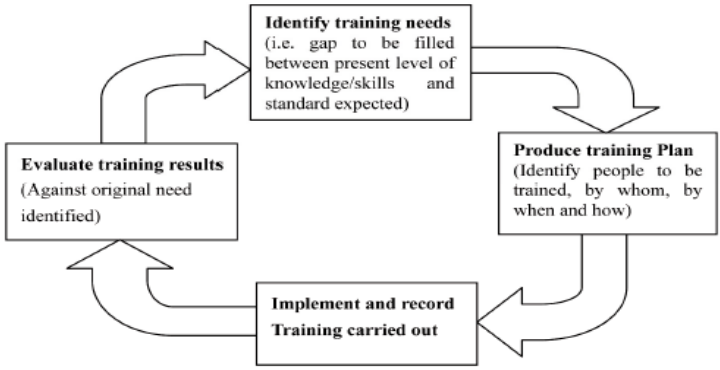

Figure 1: Training Design Cycle

At 4.0 era of industrial revolution, training become more important for organizations because it will increase effectiveness and efficiency not only for individuals but for organizations. Many things affect performance, but the most important factor in improving performance is training. Organizational performance depends on the performance of its employees because the role of humans as corporate assets plays a very

important role for the growth and performance of the organization itself (Abdul, Khan, Khan, & Khan, 2011). Many researchers also find the same results regarding the important role of training for employee performance that will have an impact on organizational performance. One of the results of research conducted by (Iftikhar & Din, 2009) in the health sector shows significant results between the role of training and development on performance improvement.

Training will only be effective in achieving organizational goals if it is matched between the needs of employees and the organization itself (Lee, Esen, & DiNicola, 2017). The way to match organizational needs with individual needs is through on the job training. On-the-Job Training (OJT) can be defined as a process designed as a medium of learning, development, and personal growth through real work experience. Leaders play an important role in OJT, not only focusing on teaching, but facilitating learning by involving their employees in the development process. This means providing resources (for example, assignments, information, feedback, access to relevant parties, and one-on-one counseling) and support throughout the process.

OJT is an effort to implement the results obtained from the training. For this reason, the design of a training program and its implementation in OJT is very important because it will affect the results of the development program. This is in line with the opinion (Armstrong, 2000), its important for organizations to design training carefully. The design of training must be inline with the needs of employees (Ginsberg, 1997). Organizations that develop good training designs will get good results (Partlow, 1996). This shows that training design plays the most important role where poor training design will only waste time and money (Tsaur & Lin, 2004).

According to the the research mentioned above, the researchers intend to evaluate On The Job Training design at one of automotive industry and see how the variables in the OJT design contribute to improving employee performance. Subject of this study came from one of largest manufacturing company engaged in the automotive field. Subject has been active for more than 40 years in Indonesia. In their journey, subject has produced cars, engines, components as well as diesel and jigs. In

addition to meeting domestic needs, these four types of products are also exported to various countries.

There are 4 variables of OJT designs that will be examined in this study. These variables are Identify Suitable Work, Assign Work, Monitor and Lead to Complete Work, Give a Sense of Achievement (Personal Growth). The four design variables will be seen simultaneously together with their role in improving employee performance. The questionnaire developed refers to the Kirkpatrick evaluation level at level 3, behavior implementation ("Kirkpatrick Level 3 Survey Questions," n.d.).

RESEARCH METHODOLOGY

This study uses non-experimental methodology / EPF with the following steps,

Problem and Hypothesis Formulation

According to the background at introduction, the research questions are,

- How far has OJT been implemented?
- Is there a positive and significant effect on performance?

Based on these questions, the hypothesis in this study is

Ha: There is a positive and significant effect between OJT and performance

Ho: There is no positive and significant effect between OJT and performance

Formulation of Measurement Tools

Before starting data collection, researcher formulate questionnaire based on expert judgement and thorugh literature study. IV in this study is OJT's Design and DV is Performance. For IV, it was tested using a questionnaire in form A and Focus Group Discussion with General Manager Level, where each of the 4 OJT variable designs was made as an independent variable to be tested for its effect on DV. Meanwhile, to measure DV, questions in the form B of questionnaires are used to measure the real performance of respondents and how they assess the role of OJT in achieving performance. The measurement scheme and measurement techniques are based on the following figure.

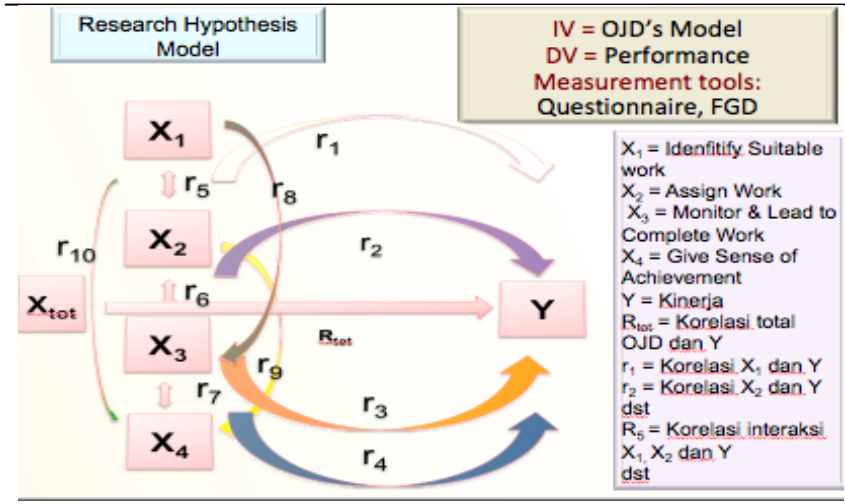

Figure 2: Correlation' Scheme among IV and DV

Based on the results of studies and comparisons of various sources and based on the working conditions of subjects, obtained 100 items to measure IV (Form A) and 8 items to measure DV (form B) which later is expected to provide an overview of the effectiveness of OJT through the competence of mentors in implementing Identify Suitable Work, Assign Work, Monitor and Lead to Complete Work, Give a Sense of Achievement (Personal Growth). The validity and reliability of the measuring instruments were obtained through a Pilot Test conducted by taking 31 people as respondents. To ensure the accuracy of the measuring instrument, the researchers also re-tested the validity and reliability of the measuring instrument by using a sample of 219 respondents. After testing the validity and reliability, 39 items were selected that had the highest internal consistency index and were then used as the final measurement tool.

Validity and reliability checks are used to measure the level of accuracy and precision of the items compiled in this pilot test in measuring the effectiveness of OJT.

The validity test is performed to see the level of validity of all items in all indicators. Pearson product moment correlation test is used to test the validation with the following hypothesis:

H_0 = there is no correlation between variable i with total value (invalid statement)

H_1 = there is a correlation between i variable and total value (valid statement) significant level () = 5% Critical area: reject H0 if $t_{test} > t_{(1-\alpha,n-2)}$ atau $-t_{test} < -t_{(1-\alpha,n-2)}$

Following are the results of validity and reliability of the OJT's Scale.

Validity & Realibility result

Indicator	Nilai Cronbach's Alpha
Identify Suitable Work	0.946
Assign Work	0.947
Monitor and Lead to Complete Work	0.812
Give a Sense of Achievement (Personal Growth)	0.951

Correlation		Identify Suitable Work	Assign Work	Monitor and Lead to Complete Work	Give a Sense of Achievement (Personal Growth)
Identify Suitable Work	Pearson Correlation	1	.888**	.804**	.840**
	Sig. (2-tailed)		0	0	0
Assign Work	Pearson Correlation		1	.855**	.874**
	Sig. (2-tailed)			0	0
Monitor and Lead to Complete Work	Pearson Correlation			1	.808**
	Sig. (2-tailed)				0
Give a Sense of Achievement (Personal Growth)	Pearson Correlation				1
	Sig. (2-tailed)				

Ket : Nilai Alpha Cronbach minimal 0.6, nilai Pearson Correlation minimal 0.4 dan nilai sig. 2 tailed min 0.05
Pada hasil uji alat ukur, nilai alpha cronbach >0.8, nilai Pearson >0.8 dan nilai sig.2-tailed 0.00 berarti alat ukur sangat baik untuk memprediksi implementasi OJD dan pengaruhnya terhadap kinerja.

Figure 3: Validity and Reability Result

It can be seen that the Cronbach's Alpha Value of each indicator is above .9 so it can be said that all indicators have a very good level of reliability. The Pearson Product Moment correlation value is above .8 so that the measuring instrument is considered valid.

The Cronbach Alpha coefficient is one of the widely used instrument reliability tests. Another method is Confirmatory Factor Analysis (CFA). There are a number of assumptions that must be met before conducting a CFA. Assumptions that must be fulfilled are between items and indicators must be strongly correlated in a bivariate manner. In addition, between variables must correlate with each other in a multivariate manner. This was tested by Bartlett's Test and identification of data adequacy with Keizer-Meyer-Olkin (KMO).

The following Bartlett tests were performed with Chi-square test statistics using a 5% significance level. Hypothesis H_0: $\rho = 0$ (Data from PT XYZ's On the Job Training has no multivariate relationship) H1: $\rho \neq 0$ (Data from PT XYZ's On the Job Training has a multivariate relationship) And to identify the adequacy of data for all indicators using Keizer-Meyer-Olkin (KMO). The data shows that its sufficient to be factored if it has a KMO value greater than 0.5. The results of the analysis are shown in the following table.

Table 1: Table of KMO Variabel OJT

Indicator	KMO	Appr. Chi Square	Significance
Identify Suitable Work	0.474	774,488	0.00
Assign Work	0.738	845,733	0.00
Monitor and Lead to Complete Work	0.516	860,522	0.00
Give a Sense of Achievement (Personal Growth)	0.678	676,680	0.00

Based on the results of the independence test in the table above, it can be seen that the significance of Chi-square from Bartlett's Test is 0,000, which means that the significance is less than α of 0.05. So, the decision is Reject Ho, then it is concluded that between the data variables is dependent or has a multivariate relationship

It is also known that the Kaiser-Mayer-Olkin (KMO) value of the Identify Suitable Work variable is less than 0.5, it means that the data from the variable is not enough to be factored. This causes all variables cannot be analyzed by factor to see the distribution of factors from the survey results. However, based on the results of observations of reliability and validity testing, at pilot test data were declared valid and reliable so that they could proceed to the next analysis.

Sampling Method

The sampling technique used is the probability random sampling with the number of samples according to the Slovin formula. The research uses the Slovin formula because in sampling, the numbers must be representative so that the results of the study can be generalized and the calculation does not require a table of the number of samples, but can be done with formulas and simple calculations. The Slovin formula is described as follows

$$n = \frac{N}{1+e^2}$$

The population in this study were all permanent employees with a total of 1,665. Samples were taken from various positions and tenure. The number of samples obtained was 323 employees using the Slovin formula method. For Focus Group Discussion activities to carry out a qualitative measurement of the level of effectiveness of OJT, FGD participants were drawn from the sample selected to be survey respondents according to the information gathering needs and ability of selected participants.

The respondents who returned the questionnaire can be seen in the following figure.

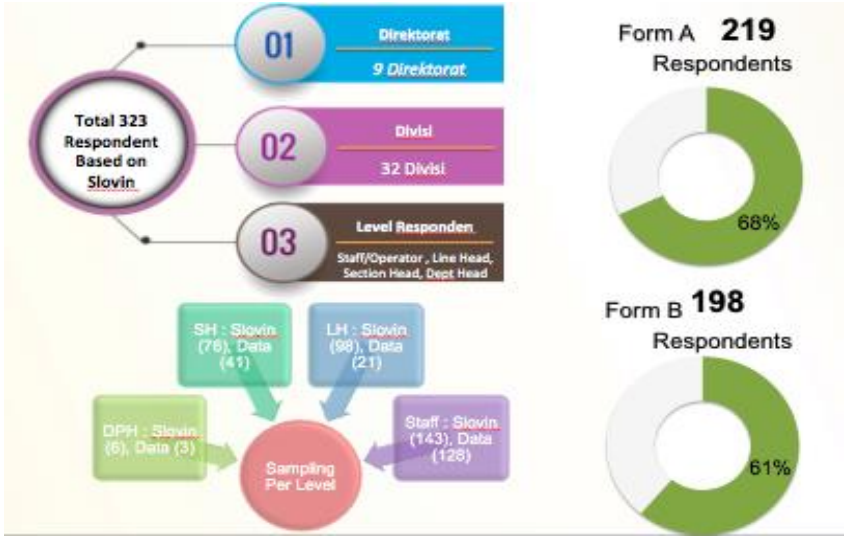

Figure 4: Sampling Distribution

Data Collection

Data collection has done by using two methods, questionnaire to get quantitative and qualitative data and Focus Group Discussion to explore a broader understanding in interpreting data. The FGD was conducted to obtain deeper information on a matter that was considered crucial to be explored further. Data collection with this FGD is qualitative and

enriches the results of statistical analysis of the questionnaire data so that the analysis and recommendations can be richer and more accurate and reliable in making decisions for management.

Data Analysis

The collected data is processed using statistical methods through the frequency distribution approach and multiple regression analysis. Frequency distribution looks at the description of the spread of answers by respondents to then analyzed the percentage of OJT implementation. Meanwhile, multiple regression analysis is used to see the effect of OJT on performance by correlating between Form A and Form B.

RESULT AND DISCUSSION

Homogeneity and Normality Test

Homogeneity test purpose to see whether the data taken has the same population variance. Data that has the same variance indicates respondents come from a uniform scope, giving the same interpretation in responding to the research conducted.

The following Bartlett tests were performed with Chi-square test statistics using a significance level of .05.

Hypothesis:

Ho: data from 39 homogeneous items
Ha: data from 39 items are not homogeneous

Table 2: Homogeinity Index

Bartlett's Test	
Approx. Chi-Square	1.214
Sig.	.562

Based on the above test, the significance value of .562 is greater than the significant level so that the hypothesis received is Ho, which is the data from 39 items are homogeneous. Furthermore, testing is carried out to identify whether the survey data are normally distributed. Testing the multivariate normal distribution by inferencing is carried out by correlation test that has been sorted with its chi-squre value. The hypothesis used is as follows:

H_0 : all items meet the assumption of a multivariate normal distribution

H_1 : all items do not meet the assumption of a multivariate normal distribution

Table 3: Data Normality Index

	Pearson Correlation	P-value
Value of dj^2 with Chi-Square	.008	.907

Tests above obtained a significance value of .907 more than a significance level of .05 which resulted in a decision of H_o failed to reject. This shows that all items meet the assumption of multivariate normal distribution.

OJT's Implementation Percentage

This analysis is carried out to see how well does the OJT implementation based on respondents' answers in the 39 items on questionnaire. This analysis will be divided into three parts, namely the Total OJT Implementation, OJT Implementation per Item and OJT Implementation per Indicator.

Analysis of the total implementation of OJT is analyzed by making the average value of the total score which includes the whole item and then divided by the maximum score to get the percentage of goodness. The analysis results are displayed as follows.

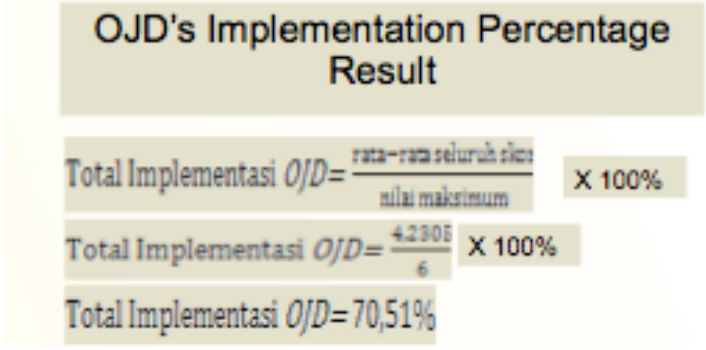

Figure 5: OJT's Implementation Percentage

Based on the above analysis, it was found that according to OJT respondents, 70.51% respondent agreed that OJT's Design had been implemented quite well.

Next, an analysis of OJT implementation per item was carried out and found the top 3 aspects that were implemented most often and the top 3 aspects that were still not implemented as follows,

The three items that give the highest percentage, i.e.

- The tasks that I carry out enable me to develop my abilities (item number 6) with a percentage of 77,093%.
- My supervisor gave me the opportunity to discuss the project before being assigned to me (item number 5) with a percentage of 76,941%.
- The assignment given to me made me feel challenged (item number 5) with a percentage of 75.342%.

While the three items with the lowest percentage are:

- My boss usually dictates how to solve problems based on the boss's version without pushing me first to find answers to the problems I face (item number 27) with a percentage of 61.796%.
- The employer provides regular, scheduled, and private feedback to evaluate the implementation of my assignment (item number 33) with a percentage of 65.525%.
- I only met with the supervisor at the beginning of the assignment and after the task was completed for reporting the results (item number 24) with a percentage of 65.982%.

After that, look at the percentage of goodness in the implementation of each indicator. This analysis uses the total value per indicator. The analysis results are displayed as follows.

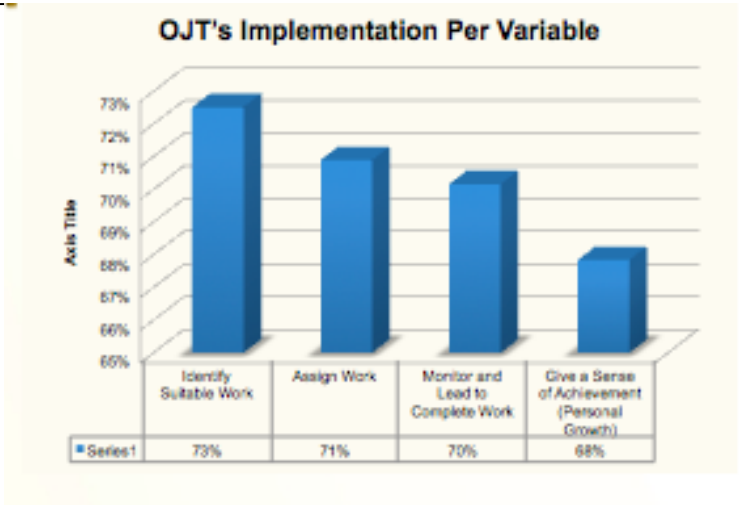

Figure 6: OJT's Implementation Per Variable

It is known that the process of Identify Suitable Work having been implemented well by respondents because it produced the largest percentage of the four indicators, with the percentage of 72.514%. While the indicator with the lowest percentage is Give a Sense of Achievement (Personal Growth) with a percentage of 67.842%.

Analysis of OJT's Effect on Performance

In this analysis, a regression test was used to see the effect of the Implementation method described by the indicators Identify Suitable Work, Assign Work, Monitor and Lead to Complete Work, Give a Sense of Achievement (Personal Growth) performance according to respondents' ratings.

This test is conducted to see whether the indicators Identify Suitable Work, Assign Work, Monitor and Lead to Complete Work, Give a Sense of Achievement (Personal Growth) have a significant effect if all the stages are carried out. The method used is a simple linear regression with the dependent variable Internal filling column: On The Job Training (superiors' support and guidance) in Form B, while the independent variable is the total respondent's answers on 39 items in Form A.

First step is testing the significance of the regression model. The hypothesis used in this test is as follows.

H_0 : There is no significant effect between OJT and performance
H_1 : There is a positive and significant effect between OJT and performance

Table 4: Multiple Regresion Index

Mean Square	$\mathbf{F_{hitung}}$	$\mathbf{F_{tabel}}$	$\mathbf{P_{value}}$
35.683	50.934	1.478	0.000

Simultaneous testing results in a P_{value} less than 0.05 which means that Ho is rejected. This shows that there is at least 1 item or indicator that has a significant effect on OJT results. The value of how much overall indicator has an effect on the performance is shown in the regression model as follows.

OJT Factor Value = 2,422 + 0.015 (total value of OJT Implementation items)

So, if the total value of OJT Implementation items increases by 1 (one) point, it will increase the OJT factor value by 0.015 with a constant value of 2,422. In other words, the results of this study prove that the design variables in OJT have a significant impact on performance improvement.

A test has performed to see whether the indicators Identify Suitable Work, Assign Work, Monitor and Lead to Complete Work, Give a Sense of Achievement (Personal Growth) significantly influence the value of the OJT factor. The method used is multiple linear regression with the dependent variable Internal fill column: On the Job Development (superiors' support and guidance) on Form B, while the independent variable is the total respondent's answers per indicator on Form A.

First step is doing simultaneous testing, namely testing the significance of the regression model. The hypothesis used in this test is as follows.

Ho: all indicators of OJT Implementation have no significant effect on OJT results
Ha: at least 1 indicator has a significant effect on OJT result.

H_0 : There is no significant effect between OJT and performance
H_1 : There is a positive and significant effect between OJT and performance

Table 5: Regression Index Per Variables

Model	*Unstandardized Coefficients*		t	P_{value}
	B	***Std. Error***		
Constanta Index	2.373	0.411	5.778	0.000
Identify Suitable Work	-0.001	0.014	-0.048	0.961
Assign Work	0.033	0.022	1.486	0.139
Monitor and Lead to Complete Work	0.025	0.021	1.218	0.225
Give a Sense of Achievement (Personal Growth)	0.009	0.017	0.522	0.602

Based on the table above, it is known that the constant value has a significant influence on the model. This shows that the design of the 4 variables cannot stand alone in contributing to the results of the OJT, in other words the 4 variables must be a unity in supporting performance.

DISCUSSION

Based on the results of the validity and reliability test of the measuring instrument used to be able to test IV and DV in this study using Cronbach's alpha statistical techniques, Pearson product moment internal consistency, and factor analysis found very valid and reliable results with Cronbach's alpha index above 0.9 and total internal consistency is above 0.8. Thus, this measurement tool can be trusted to measure the implementation of OJT and its influence on performance and the results of the analysis can be trusted as a factor for making decisions for management.

From the normality and homogeneity test, it is obtained that the data are homogeneous and normally distributed so that the parametric statistical test can be continued using regression techniques. The results of the calculation of the frequency distribution show that the implementation of OJT is already running at 70.51% which means that the training results obtained have been implemented quite well in daily work.

The OJT implementation variable design which is considered to have run well, namely the Identify Suitable Work variable have percentage number of 72.5%, means that employees feel that so far their supervisor or mentor has given tasks that fits in their needs. This is in line with

research (Ginsberg, 1997) that training will provide good results if it is tailored to the needs of employees. These results are also in line with the results of the study (Karim, Huda, & Khan, 2012) where training should be able to help employees to get a clear view of what they are doing.

But there are still variable designs that have not been implemented properly, namely Give a Sense of Achievement (Personal Growth) variable with a percentage of 67.842%. Based on the results of the FGD and the respondents' answers to Questionnaire on form B, this happens because the employer has already taken it for granted or considers that if the task is completed it is already part of the responsibility, but forgets that the assignment in OJT is important to do all stages including this stages so that employees able to get input and insight on their development. This is in line with research from (Karim et al., 2012) that "Feedback is very important ingredient in the evaluation process. Employees should be communicated with their performance during and after the training ".

Based on the results of the simultaneous regression test showed significant and positive results between OJT and performance. This shows that the OJT design does have a significant impact on performance improvement. This is in line with many other studies related to the role of training on performance such as research (Iftikhar & Din, 2009) which shows significant results between the role of training and development on improving performance.

The thing that needs to be developed in the next research is to increase the number of respondents so that population representation in the sample is more accurate. Researchers can also do it in several companies or industries so that research results can be generalized to a wider population.

CONLUSSION

Based on the results of the study it can be concluded that:

- The index of the validity and reliability of the measuring instrument is 0.9 so that the measuring instrument can be declared valid and reliable, meaning that the data obtained from the filling of the measuring instrument can be trusted for decision making.

- The distribution of data is homogeneous and normally distributed, meaning that the statistical test results are parametric and can be generalized to the population on automotive company.
- Based on the results of descriptive statistical analysis, the percentage of OJT competency implementation is 70.51%. This means that the current implementation of OJT is quite good although not ideal.
- The results of the frequency distribution on each indicator shows that the perceived competency percentage has been most implemented by 72.5% of respondents is variable of identifying suitable work and the lowest is the give sense of achievement of 67.8%.
- The regression test results show that there is a significant and positive influence between the implementation of OJT competencies and performance. OJT only shows the effect if the overall competency is implemented but does not have a significant effect if it stands alone.

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