ANALYSIS IMPACT OF CHANGES IN
ATTITUDE, KNOWLEDGE AND SKILLS
AFTER ATTENDING TRAINING ON EMPLOYEE
PERFORMANCE IMPROVEMENT
(Case Study in PT. Riau Prima Energy Pangkalan Kerinci- Riau, Indonesia)

Zulfan

Abstract
This research aims to determine the correlation between Training factors like
Attitude, Knowledge and Skill partially influence to the employee Performance,
determine the Training factors jointly have significant impact on employee
performance, and determine which factors of the Training factors more
dominant influence to the employee Performance.
The research was conducted in PT.Riau Prima Energy Pangkalan Kerinci, Riau.
This research use two kinds of data, Primary data obtained from respondents
through questionnaires, interviews and field observation. The secondary data
from study literature. The research methodology using survey research methods
and non experimental nature, Processing the data using parametric statistic and
statistical analysis Product moment correlation and multiple correlation, with
total population of 250 persons and samples taken at random as many as 40
people, as well as the technique of data collection using questionnaire Likert
scale, interview and observation in the field. The analysis in this research consist
of four variables, the variables are Attitude, Knowledge, Skill and Performance.

The hypothesis tested indicates that:
(1) There is correlation and significant effect partially between employee Attitude after training on their Performance.
(2) There is correlation and significant effect partially between employee Knowledge after training on their Performance.
(3) There is correlation and significant effect partially between Skill of employee after training on their Performance.
(4) There is correlation and significant effect Collectively between Attitude, Knowledge and Skill of employee after training on their Performance.
(5) Training factor “Skill” is most dominant factor affecting the performance of employee.

BACKGROUND

The fast growing of the science and technology is followed by the economic development and changing of activities in the business sector. In recent days, many companies are not solely product quantity oriented, but they also consider product quality as a paramount. Service, punctuality, and the access to get certain type of products are determination factors of the success of the company. However all of those factors must be supported by qualified and highly performed workforces. The strong competition in the business world in facing globalization requires human resource with high performance. By improving human resource in the company, will result improvement in the productivity. Increasing the performance of human resource in the company can be gained by applying continues training to the employees.

PT. Riau Prima Energy is a power plant company, established in 1992, it operates five boilers. Power Boiler-1 capacity is 202 Ton/h, Power boiler-2 capacity is 468 Ton/h, Recovery Boiler-1,2, and 3 each has capacity of 599 Ton/h with output pressure of 84 Bar. To generate electricity PT. Riau Prima energy owns 6 units of steam turbine with the following capacity: Turbine 1 27MW, turbine2&3 53 MW, Turbine 4,5,6 100MW. The total generation power is 433MW. But nowadays power consumption for the pulp and paper mill and PLN Pangkalan Kerinci is about 260 MW. This means the power consumption is about 60% of the total available power to operate the system of electric power generation, PT RPE consists of some departments: Power side department, Recovery side department, Mechanical maintenance, instrument, Electrical, PSD, DCS, Accounting, and Human resource department. PT RPE employees 250 employees. President director is a superior to
some managers: Production Manager, Maintenance Manager, Finance manager, and Human resource manager. At this time most of the electric power generated is used in the pulp and paper production at PT. RAPP.

The problem of PT. RPE since it was established is caused by the high technology equipments, some of the employees are unable to optimally operate those high-tech equipments, thus they need undergo training prior to operate those equipment. The employees of PT.RPE come from various backgrounds of ethnic and education so the differences in attitude, knowledge, and skill among of employees are very obvious. This will strongly affecting the performance of the employees. The operation of the company requires the employees who have well attitude, highly skilled, and good knowledge. In brief all of the employees must have high performance. To improve the performance of employees Human Resource Department of PT RPE has established training center with reliable facilities.

**TYPES OF EMPLOYEE TRAINING**

**A.1 Mandatory Training**

This training is given to new employees. The period of this training is about one week. This training includes: company regulation, company overview, fire and safety, first aid, cleanliness of the working environment (Five-S), and procedure of securing the equipments before and after the job.

**A.2 Minimum Training**

This training is compulsory that must be given to the employees who have worked for more than a year. Their skills, knowledge, and attitude should be enhanced to do their jobs. The materials of this training are suited to the needs of the employees. This training could be technical training or non-technical training which is needed at their level.

**A.3 Supplementary Training**

This training is given to the employees who have worked for more than a year and who have undergone mandatory training and minimum training but they are considered by their superior or by themselves still need to undergo training to improve skill and knowledge. The materials of this training are suited to the needs of the employees. This training could be technical training or non-technical training.

**PURPOSES OF THE RESEARCH**

Based on the background of the problem and problem statements that have been described above, the purpose of this research:
some managers: Production Manager, Maintenance Manager, Finance manager, and Human resource manager. At this time most of the electric power generated is used in the pulp and paper production at PT. RAPP.

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PURPOSES OF THE RESEARCH

Based on the background of the problem and problem statements that have been described above, the purpose of this research:
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1. knowing which training factors in the form of attitude, knowledge, and skill have influence to improve the performance of the employee of PT RPE
2. knowing which training factor is more dominant to the employee performance

ADVANTAGES OF THIS RESEARCH

This research is expected to be useful for:
1. Becoming an input to the management of PT RPE in making company policy, particularly in the human resource development, such that employee performance will be improved in the future, so the company can achieve its goals.
2. The results of this research is also expected to contribute the business world and add scientific theory to the human resource management discipline

THE FRAME OF IDEAS

Training is an attempt to develop human resource, mainly to develop intellectual ability and personality. Therefore an organization/company need to develop employee skill into the desired direction.

Based on theory and literature survey that have been explained in the previous chapter, next the conceptual frame will be induced, and will be used as a guide, and reflects the thinking process, also a base for hypothesis formulation. This frame is shown in figure 2-1 bellow.

![Diagram](image)

Figure 2.1 : Basic frame of formulating hypothesis
During training, the participants are expected to get benefit or change for themselves:

First: Changing in attitude including coaching of manner through training of team building, achievement enhancing that emphasizing in physiological approach, also physical and discipline coaching.

Second, knowledge in the form of Employees are also given Basic Supervisory Management Training (BSM) and leadership. The purpose of BSM training is to give information to employees how to be a supervisor or a good leader by teaching basic management including: Planning, organizing, staffing, directing, and controlling.

The purposes of leadership training are to train employees how to understand leadership, leadership type, and how to develop personal leadership and organizational leadership and how to motivate and develop subordinate.

Third, Skills that include technical and non-technical skills. Technical skills include: Operating equipments, maintenance of equipments, trouble shooting, and Standard Operation procedure. Non-technical skills include report writing, presentation technique, effective meeting, seminar, and group discussion.

Based on that appraisal, the training participant can perceive whether the training have benefits and influence to the daily jobs.

The idea frame above is very appropriate, since theoretically every training participant always get valuable knowledge directly or indirectly. Schematically the idea frame can be depicted as the figure below.

![Figure 2.2 Idea Frame](image-url)
RESEARCH HYPOTHESIS

Based on problem statement and theory studies that have been described previously, the hypothesis of the research is proposed as follow:
1. The attitude of employee after undergoing training in partial has significant effect to the employee performance.
2. The knowledge of employee after undergoing training in partial has significant effect to the employee performance.
3. The skill of employee after undergoing training in partial has significant effect to the employee performance.
4. Attitude, knowledge, and skill of employee all together have significant to the employee performance.
5. Skill training is a dominant effect to job performance

RESEARCH METHOD

The method of research conducted to the employees to PT RPE is survey research method and non experimental. Meanwhile the type of research is explanatory research with the purpose to explain how significant the influence of independent variable of attitude, knowledge, and skill of the employees after undergoing training through examining hypothesis.

POPULATION AND SAMPLE

The population of this research is all of the 250 employees of PT RPE Pangkal kerinci. From that population will be chosen random samples. According to suharsini, quoted in Gandang Sungkawa (2001:62) in taking the samples, where the population is less than 100, can be taken 50%, if more than 100, the sample can be taken 10-15%, meanwhile according to Husen Umar (2002:108) the minimum acceptable number of samples for descriptive-correctional is 30 subjects. Hence based on those opinions the number of samples in this research is 40 employees (16% from the total number of employees)

DATA COLLECTION TECHNIQUE

In this research, data collection is done by literature survey and field survey. The data gained from literature survey is a secondary data about the theory that support this research. Field survey is done to collect primary data which come from the research object in the field. The data collection technique is done by using questioner for, that is a list of questions that were disseminated to the respondent.
Identification of Research Variable

Based on problem statement and hypothesis that have been explained, hence the variables that will be observed in this research are:

- Independent variables (X):
  - Attitude (X₁)
  - Knowledge (X₂)
  - Skill (X₃)

- Dependent variable is performance (Y)

Attitude Variable

Attitude of employees who have undergone education and training after taking leadership and management coaching by leadership training and BSM training, also taking mental and discipline coaching through achievement enhancing-1 training, these training are directed to enhance the performance. The Indicators used are:

- a. Obedience to the company regulation
- b. Obedience to the order of the superior and discipline in working
- c. Politeness
- d. Giving service to other employees and build a good teamwork
- e. Reporting the results of the work to superior honestly

Knowledge variable

Knowledge that gained by employee after undergoing education and training. They undergo mandatory training, minimum training, and supplementary training can be directed to increase performance.

The indicators are:

- a. Doing job by using working method
- b. Always use scientific theory or system to solve the problem
- c. Attempting to get novel working system in doing the job
- d. Have a broad knowledge of the job
- e. To solve problem, they always discuss nicely

Skill variable

Skills that processed by employees who have undergone education and training related to their jobs after undergoing minimum training (both of technical and non-technical) which is intended to enhancing the performance of employees.

The indicators are:

- a. Proficient in doing the job from superior
- b. Ready and able to do other people's job
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c. Possessing skills in various tasks of the job
d. Capable of doing the tasks quickly and as wanted by superior
e. Finish the task within the time limit

Performance Variable
The work result and the degree of success that reached by employees who have undergone education and training in accordance to the criteria required by their jobs.

The indicators are:
a. Possessing skills and mastering in all aspects of their jobs
b. Possessing high experience in their jobs
c. Committed in doing jobs
d. Reach the average of the working result that have been fixed in term of quality and quantity
e. Greatly responsible to their jobs
f. Dare to take risk of the job
g. Attempt to get novel ways in doing the jobs

To measure independent variables \((X_1, X_2\text{ and } X_3)\): Education and training factors use Likert scale:

1. If the answer is a, the score is 1
2. If the answer is b, the score is 2
3. If the answer is c, the score is 3
4. If the answer is d, the score is 4

To measure independent variable \((Y)\): Performance by using Likert scale:

1. If the answer is a, the score is 1
2. If the answer is b, the score is 2
3. If the answer is c, the score is 3
4. If the answer is d, the score is 4

<table>
<thead>
<tr>
<th>No.</th>
<th>Job title</th>
<th>No. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Operator</td>
<td>28</td>
</tr>
<tr>
<td>2.</td>
<td>Team Leader</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Supervisor</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Superintendent/Manager</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Source: PT. Riau Prima Energy
### Description of Respondent based on grade

<table>
<thead>
<tr>
<th>No.</th>
<th>Grade</th>
<th>No. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>C-1</td>
<td>28</td>
</tr>
<tr>
<td>2.</td>
<td>C-4</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>D-1</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>D-2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Source: PT. Riau Prima Energy

### Description of Respondent based on length of service

<table>
<thead>
<tr>
<th>No.</th>
<th>Length of service (Years)</th>
<th>No. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>5.</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Source: PT. Riau Prima Energy

### Description of Respondent based on educational background

<table>
<thead>
<tr>
<th>No.</th>
<th>Educational background</th>
<th>No. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>High school</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td>Diploma III</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>Bachelor degree</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Source: PT. Riau Prima Energy

**ANALYSIS OF MODEL**

Looking at problem statement and hypothesis that has been described above, so this research uses statistic model with double linear regression technique, according to Sugiyono (1998: 168-169) this statistic technique is often to be used many researchers who used quantitative approach. The intention of the researchers using this analysis technique for prediction is to perform prediction, that is how far the values of dependent variables, if the independent variable is altered. Basically correlation analysis technique and regression are closely related. Correlation technique is used to analyze the strength of the relationship between variables, while regression analysis technique is used to predict the change of certain variable if other variable is changed.

This regression technique is used to analyze between one variable and other...
variable in which conceptually have causal and functional relationship. If there is no conceptual relation between variables, thus the regression analysis is not performed, but only correlation analysis will be performed. Hence regression analysis is performed after correlation analysis. If correlation coefficient is high, regression coefficient will have positive value (rise) on the other hand if correlation coefficient is negative, regression coefficient will also have negative value (drop).

Accordingly this research will perform analysis to the influence of training (X) to the performance (Y) of employees in PT RPE Pangkal Kerinci, Riau. The model of analysis that will be used to find out whether there is any influence of training to the enhancement of employee job performance:

1. Linear regression with the following formula:

\[ Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 \] …………… (1)

Where:
- \( Y \) = Employee performance
- \( b_0 \) = Intercept that describing the average of influence of all variables
- \( b_1, b_2, b_3 \) = Regression coefficient of each independent variable to dependent variable
- \( X_1, X_2, X_3 \) = Education and training factors

2. Double determination coefficient (\( R^2 \)) and double correlation coefficient (\( R \)), with the following formula:

\[ R^2 = \frac{JKR}{Jky} \] …………… (2)

Where:
- \( JKR \) = Sum of the square of regression
- \( Jky \) = Sum of the square of y

3. The test of the significant of linear regression and double correlation

To find out whether double correlation coefficient (\( R \)) and regression coefficient are significant, the F test will be performed by using the formula below:

\[ F = \frac{R^2 / k}{\left(1 - R^2\right) / (N - 1 - k)} \] .......................... (3)

Where:
- \( k \) = The number of X variables
- \( N \) = number of cases (the amount of observation data)
Hypothesis formula:

\[ H_0: b_1 = b_2 = b_3 = 0 \]
All of the regression values are equal to zero or independent variables do not have influence to dependent variables.

\[ H_1: b_1, b_2, b_3 \neq 0 \]
Where all of regression coefficients are not equal to zero or the independent variables do not have influence on dependent variables. Next by looking at \( F_{\text{table}} \) (N-k-1) at the actual level that has been determined previously, and then comparing with \( F_{\text{hitung}} \). If \( F_{\text{hitung}} > F_{\text{table}} \), so \( H_0 \) is refused and \( H_1 \) is accepted with the result of the research is being significant, this means independent has notable influence on dependent variable.

4. Partial Determination Coefficient \((r^2)\) and Partial Correlation Coefficient \((r)\)
Partial Determination Coefficient \((r^2)\) is used to look at the contribution of dependent variable partially in explaining dependent variable. While Partial Correlation Coefficient \((r)\) is used to look at the strength of relation between one independent variable and its dependent variable.
To look at how dominant each variable can be seen by comparing partial coefficient \((r)\). Higher partial correlation coefficient \((r)\), so dependent variable shows its domination to its dependent variable, and vice versa.

5. Test of the significance of partial correlation
To look at the significance of partial correlation coefficient, the t test will be conducted with the following formula:

\[
t = \frac{r \bar{Y}_i (i - 1) (i + 1) \ldots k}{\sqrt{1 - r^2} Y_i (i - 1) (i - 1) \ldots k} \quad N - k - 1
\]

Partial correlation coefficient is said meaningful if \( t_{\text{hitung}} > t_{\text{table}} \) so \( H_0 \) is refused, and \( H_1 \) is accepted. From the t test, the most dominant influence is performing t test with the lowest probability value, and highest partial determination coefficient \((r^2)\).

**THE RESULTS OF RESEARCH**

Description of research variable, in this case is based on data collection and data processing from questioners and documents of dependent variable and independent variables. Independent variable (training) and dependent variable (performance) are measured by using scale that is assumed to have same interval.

The result of the sum of the score of each variable is divided into the number of question, then the average score of the answers is categorized into class limit.
Description of independent variable (\(X_1\)) : attitude

Table 4.1 Attitude of Employees After Undergoing Training

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 - 1.75</td>
<td>Insufficient</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>1.76 - 2.50</td>
<td>Fair</td>
<td>4</td>
<td>10.00</td>
</tr>
<tr>
<td>2.51 - 3.25</td>
<td>Good</td>
<td>36</td>
<td>90.00</td>
</tr>
<tr>
<td>3.26 - 4.00</td>
<td>Excellent</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Processed respondent’s answer

Based on the result of questioner data in table 4.1 above, about 40 respondents after undergoing training, apparently there is no respondent with insufficient attitude (0%), fair 4 respondents (10%), good attitude 36 respondent or the majority of respondent (90%) and there is no respondent with excellent attitude (90%).

Description of independent variable (\(X_2\)) : Knowledge

Table 4.3 Knowledge of employees after undergoing training

<table>
<thead>
<tr>
<th>Limit Class</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>1.00 - 1.75</td>
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<td>90.00</td>
</tr>
<tr>
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<td>0.00</td>
</tr>
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<td></td>
<td><strong>40</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Processed respondent’s answers

Based on the result of questioner data in table 4.3 above, about 40 respondents after undergoing training, apparently there is no respondent with insufficient knowledge (0%), fair 4 respondents (10%), good knowledge 36 respondent or the majority of respondent (90%) and there is no respondent with excellent attitude (0%).

Description of independent variable (\(X_3\)) : skill

Table 4.5 Skill of employees after undergoing training

<table>
<thead>
<tr>
<th>Limit Class</th>
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<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>1.00 - 1.75</td>
<td>Insufficient</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>1.76 - 2.50</td>
<td>Fair</td>
<td>8</td>
<td>20.00</td>
</tr>
<tr>
<td>2.51 - 3.25</td>
<td>Good</td>
<td>32</td>
<td>80.00</td>
</tr>
<tr>
<td>3.26 - 4.00</td>
<td>Excellent</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Processed respondent’s answers
Based on the result of questioner data in table 4.35 above, from 40 respondents after undergoing training, apparently there is no respondent with insufficient skill (0%), fair8 respondents (20%), good skill 32 respondent or the majority of respondent (80%) and there is no respondent with excellent attitude (0%).

Description of independent variable (Y): Performance

<table>
<thead>
<tr>
<th>Limit Class</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>40</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Processed respondent’s answers

Based on the result of questioner data in table 4.3 above, 40 respondents after undergoing training, apparently there is no respondent with insufficient or fair performance (0%), all of 40 the employees have good performance, and there is no respondent with excellent performance (0%).

MODEL ANALYSIS AND PROOF THE HYPOTHESIS

Regression model analysis

To get regression equation, the calculation of the collected data is performed. From the result of calculation and the results of SPSS program:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$ (Attitude)</td>
<td>0.250</td>
</tr>
<tr>
<td>$X_2$ (Knowledge)</td>
<td>0.063</td>
</tr>
<tr>
<td>$X_3$ (Skill)</td>
<td>0.522</td>
</tr>
<tr>
<td>Constant</td>
<td>0.619</td>
</tr>
</tbody>
</table>

Adjusted Square : 0.847

R Square : 0.884

F Ratio : 91.071

Multiple R : 0.940

Significant : 0.000

Based on the above calculation, the following equation is got:

$$Y = 0.619 + 0.250 X_1 + 0.063 X_2 + 0.522 X_3$$
Figure 4.1 Percentage of Training regression coefficients

- $X_1$: Attitude
- $X_2$: Knowledge
- $X_3$: Skill

From above equation, can be deduced:

1. The value of attitude variable coefficient after attending performance training is 0.250. If attitude factor ($X_1$) raise by 1 unit, so the performance will increase 0.250 with the assumption the factors of skill and knowledge are constant.

2. The value of the knowledge variable coefficient after attending performance training is 0.063. If the knowledge factor ($X_2$) raise by 1 unit, so the performance will increase 0.063 with the assumption the factors of skill and attitude are constant.

3. The value of skill variable coefficient after attending performance training is 0.522. If attitude factor ($X_1$) raise by 1 unit, so the performance will increase 0.522 with the assumption the factors of attitude and knowledge are constant.

Note the figure 4.1 about the percentage of training regression coefficient, the highest block diagram is the skill variable or 52.2% will increase the performance, if there is an addition of one unit of the skill variable. Second is the attitude variable or 25.0% will increase the performance, if there is an addition of one unit of the attitude variable. Last is the knowledge variable or 6.3 % will increase the performance, if there is an addition of one unit of the knowledge variable.

**Determination and Correlation Coefficients ($R^2$ and $R$)**

The regression calculation results determination coefficient ($R^2$) with the value of 0.884 this means the three independent variables together influence the
dependent variable (performance) with the value of 84.4% and the rest 16.65% is influenced by other variables which are not observed in this research. Meanwhile the correlation coefficient (R) from the above equation is 0.940. This matter describe the positive indication of the strong relationship between independent variables all together and dependent variable.

VERIFYING HYPOTHESIS

F-Test

To show that the independent variables all together have significant influence to dependent variable. F-test is carried out to verify the first hypothesis. From the result of calculation in table 4.5, is obtained $F_{hitung} = 91.071$, while $F_{table} (5\%) = 3.252$. Because $F_{hitung} (91.071) > F_{table} 3.252$ at the actual level of 0.05 so $H_0$ is refused and $h_1$ is accepted. Hence the first hypothesis that stated the factors of training consist of attitude, knowledge, and skill all together have significant influence to job performance.

T-test

This test is performed to find out independent variables in which partially have significant influence to dependent variable. T-test is performed by $t_{hitung}$ for each variable in $t_{table}$ at actual level = 0.05

According to the calculation of t-test, thus can be founded out the influence of training factors to the performance of employees in PT RPE, thus the comparison between $t_{hitung}$ and $t_{table}$ as follow:

Table 4.10 Result of partial test of independent variables

<table>
<thead>
<tr>
<th>Variable (X)</th>
<th>Score</th>
<th>Deviation Standard</th>
<th>$t_{hitung}$</th>
<th>$t_{table}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude (X1)</td>
<td>0,250</td>
<td>0,060</td>
<td>4,133</td>
<td>1,685</td>
</tr>
<tr>
<td>Knowledge (X2)</td>
<td>0,063</td>
<td>0,067</td>
<td>0,949</td>
<td>1,685</td>
</tr>
<tr>
<td>Attitude (X3)</td>
<td>0,522</td>
<td>0,053</td>
<td>9,896</td>
<td>1,685</td>
</tr>
</tbody>
</table>

Source : Result of SPSS calculation

According the result of t-test above, partially $X_1$ and $X_3$ have significant influence to the dependent variable (Y) because $t_{hitung} > t_{table}$ or in other words the training factors that consist of attitude and skill have significant influence to the job performance. Hence can be stated that $X_1$, and $X_3$, $h_0$ are refused and is $h_1$ accepted. Meanwhile the knowledge variable ( $X_2$ ) has no influence to performance, because $t_{hitung} < t_{table}$ so variables $X_2$, $h_0$ are accepted and $h_1$ is refused.

Looking at the result of data analysis with regression model and the hypothesis verification, indicating training factors of:
(1) Attitude
(2) Knowledge, and
(3) Skill,

Apparently all together they have influence to employee performance at PT RPE. This can be seen by the existence a determination coefficient \( (R^2) \) with the value of 0.884 this means 84.4% dependent variable is influenced by its independent variables. Next reinforced by the result of F-test, where \( F_{\text{hiuq}} (91,071) \) is greater than \( F_{\text{hiuq}} (91,071) \). Therefore the first hypothesis that stated the training factors of attitude, knowledge, and skill all together have influence to the employee job performance at PT RPE is proven to be right.

When noticing and analyzing the result of the research that was conducted at PT RPE, the determination factor \( (R^2) \) with the value of 0.884 that means 88.4% performance variable is influenced by attitude, knowledge, and skill variable. In other words a proposition can be formulated: The influence of attitude, knowledge, and skill with the value of 88.4% to the performance. Meanwhile the rest of 11.6% outside those three observed variables above are also influencing job performance. The contribution or influence of those three observed independent variables is 88.4%. In other world those training factors all together have significant influence to the performance of employees in PT RPE.

The relevant explanation to the significance of the contribution or influence of the training factors of attitude, skill, and knowledge to the performance of employees at PT RPE, is referring to the opinion of Whitmore (1997: 104) which stated “performance” has two meanings. Based on whitmore's opinion can be concluded that the employees of PT RPE have performed the functions that required in achieving the second meaning of performance according to whitmore. Further more by referring to Byars and Rue (1994:310), the work achievement or performance indicate the level of the completion of work that carry out by an individual. Achievement or performance indicates how well an individual fulfills the work requirements. Employees in PT RPE have showed high level of job completion considering the determination coefficient of 0.884 or in other words the training factors in the form of attitude, knowledge, and skill of the employees all together contribute as high as 88.4% to performance. Meanwhile if noticing the opinion of As'ad (1995:47) that stated the job achievement or performance is the outcome that achieved by someone according to the standard that has been set up for someone, it also proven that employees have showed their achievement according to the standard that has been set up for them by PT RPE. This can be seen in table 4.4, where all employees have showed good performance (100%).

If the result of this result is consulted with Sagir's opinion (1994: 11-12), where
Sagir has stated that the working productivity or work achievement can be influenced by some factors, including: (1) Training and education background; (2) Production machinery; (3) Marking scheme; (4) Working environment and health condition; (5) Level of salary; Hence one of the factors above apparently match with the condition in PT RPE, this factor is education and training background, which has a strong influence in the employees performance.

Employees of PT RPE have showed their ability in working after they attended training. This case is understood because ability is the capacity of an individual to perform various tasks in various jobs. Next, the ability of an individual is built by two factors: Intellectual ability and physical ability. Therefore, it can be said that employees of PT RPE admit the training factors have significant contribution to job performance, intellectual ability, and physical ability.

Looking at the table 4.10, the regression coefficient of skill variable \(X_1\) = 0.250, knowledge variable \(X_2\) = 0.063, and skill variable \(X_3\) = 0.522. This case indicates those three variables all together have influence to performance, however the average of increase in score of the influence of independent variable, apparently the skill variable is higher than attitude and knowledge variables. Attitude variable is higher than knowledge variable. Also based on table 4.10, can be seen that the value of determination coefficient is very high = 0.884 (88.4%) in other words independent variables all together have significant influence. Based on the value of double correlation coefficient = 0.940 so independent variables all together have strong relationship with dependent variable (performance).

Meanwhile, in determine which training factor has a dominant influence to employees performance, can be seen from the degree of influence of each independent variable partially to employees performance by using partial correlation coefficient \(r\), that can be looked from the values of partial correlation coefficient in the table 4.11 bellow.

<table>
<thead>
<tr>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>0.744</td>
<td>0.575</td>
<td>0.881</td>
</tr>
</tbody>
</table>

Source Attachment 3 (SPSS calculation)

The partial influence of each training factor to job performance can be expressed as follow:

1. Attitude factor \(X_1\)

Partial correlation \(r\) between \(X_1\) (attitude) to \(Y\) (performance) is 0.744. This indicates the attitude of the employees of PT RPE is good and partially the attitude
factor has strong influence to performance
2. Knowledge factor ($X_3$)
   
   Partial correlation ($r$) between $X_3$ (attitude) to $Y$ (performance) is 0.575. This indicates the attitude of the employees of PT RPE is good and partially the attitude factor has strong influence to performance
3. Skill factor ($X_3$)
   
   Partial correlation ($r$) between $X_3$ (attitude) to $Y$ (performance) is 0.881. This indicates the attitude of the employees of PT RPE is good and partially the attitude factor has strong influence to performance

Giving attention to the explanation of each independent variable above, apparently the skill factor ($X_3$) has dominant influence to the performance of employees in PT RPE. With the value of partial correlation of 0.881 and the value of significance of 0.05. This indicates that the second hypothesis is proven to be right. The domination of the skill factor to the performance can be understood, because based on the observation result and interviews that carried out to the research subject, high skill due to participation in training program influence employee performance. This case is due to the nature if jobs at PT RPE require highly skilled human resource.

![Graph](image)

Figure 4.2 Percentage of the Value of Partial Correlation Coefficient of the $X_1$, $X_2$, $X_3$ variables to $Y$ Variable

<table>
<thead>
<tr>
<th>$X_1$</th>
<th>$X_2$</th>
<th>$X_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Knowledge</td>
<td>Skill</td>
</tr>
</tbody>
</table>

Related with the data analysis above, so the condition above agrees with what Flippo (1992:69) expressed. Education and training are related with the development of general knowledge and understanding of the environment and also developing the knowledge and skill of an employee. Next, the Flippo's expression is matched with the
data that collected from PT RPE, in this case the skill. Skill is a dominant variable to influence employees performance. Furthermore skill is a very important factor as Hashiun’s (1995:76) opinion that stated education and training is the development of theoretical skill, technical skill, conceptual, moral of employee. This opinion is also supported by Armstrong (1998:59) who expressed that education and training are the process to developing skill technically and managerially with theory and practical oriented. The other education and training factors, such as: Attitude and knowledge are mutually supporting in influencing employee performance at PT RPE.

Based on partial test as in table 4.11, there is one factor which is not significant in influencing the job performance of employees, that is knowledge variable. However if viewed from correlation coefficient with the value of 0.575 (see table 4.7), the relation between knowledge variable and performance variable is still strong.

Based on research result about performance, is achieved that training influence performance. One of the training factors, does not partially performance variable: knowledge variable ($X_x$) because $t_{\text{tung}}(0,949) < t_{\text{tab}}(1,943)$. However if viewed from partial correlation coefficient which has a value of 0.575, this indicates that there is a strong relationship between knowledge variable and performance variable.

Based on above explanation, can be concluded that there is a strong relationship between knowledge variable and performance variable, but knowledge variable does not significantly influence performance variable.

If viewed from the data of the questionnaire (see attachment), employees are good at doing their jobs, because they use working method. The use of working method is done after employees of PT RPE attend training program. The observation data indicate 90% of employees use working method rightly when they do their tasks, the rest 10% of employees are fair in using working method. Next, about 80% of employees use scientific theory well in solving problems, the rest 20% of employees use scientific theory fairly in solving problem. There are about 70% of employees good at finding new working method, the rest 30% are fair in finding new working method to complete their daily tasks. Subsequently, about 80% of employees after attend training have good perspective in their jobs, the rest 20% have fair perspective in their jobs.

Nonetheless, if viewed from the use of discussion to solve the problem, there is a tendency not use a discussion method in solving problem. Apparently there are only 32.5% of employees at PT RPE good at using discussion method, the 67.5% of employees are fair in using discussion method to solve problem.

Referring to the explanation above, can be expressed that the knowledge variable does not have partial influence to performance variable due to the discussion.
method does not always used by employees in solving problems, mainly technical problems.

This case is proven by the value of regression coefficient which is very small, that is 0.063 or the influence of knowledge variable to performance variable is only 6.3%.

In other words, by increasing one unit of knowledge variable, only raise performance variable by 6.3%, This situation can be explained by comparing attitude variable to skill variable in influencing performance variable. If we look at the double regression equation based on table 4.5:

\[ Y = 0.619 + 0.250X_1 + 0.063X_2 + 0.522X_3 \]

Can be said the knowledge variable (X_3) has small influence to performance variable. Regression coefficient with the value of 0.250 or if there is an addition of unit of attitude variable (X_1) will add performance variable (Y) by 25,0% - 6.3% = 18.7%, this means the influence of attitude variable is 18.7% greater than knowledge variable.

Next, if knowledge variable compared with skill variable, can be clearly seen the difference. The difference between knowledge variable and skill variable is: 52.2%-18.7% = 33.5%.

Based on the difference above, can be stated that skill is the training factor with the greatest influence to performance. In other words as the skill of the employee higher, the performance will be higher. In contrast with the knowledge, highly knowledgeable employee does not guarantee high performance. The knowledge variable will be influential if it combined together with other variables (skill, and attitude). This condition is supported by the result of analysis as in table 4.9, where the determination coefficient (R^2) with the value 0.884 or 88.4% those three independent variables are influential to performance variable.

**CONCLUSIONS**

Based on analysis and discussion of analysis previously, can be concluded;

1. The training factors of attitude, knowledge, and skills have partially or wholly significant influence to the employee performance at PT RPE.
2. The first hypothesis proofing is using F-test. Based on analysis F_{hitung} (ratio) = 91,071, meanwhile F_{table} with the significant level ( ) 5% = 3,252 with the significant level ( ) 5%, can be founded out that F_{hitung} (91,071) is greater than F_{table} (3,252). The double correlation coefficient (R) value of 0.940 indicates the strong positive relationship between three training factors (attitude, knowledge, skill) to the employees performance.

The double correlation coefficient (R^2) value of 0.884 indicates that the
performance variable that is caused by the combination of training factors (attitude, knowledge, and skill) is 88.4%, on the other hand 11.6% employee performance variable is caused by external variables.

3. Skill training factor has dominant influence to the employee performance. Hence the second hypothesis is proven to be right. This indicated by the value of partial correlation coefficient ($r$) of 0.881 and $t=9.898$ which is the highest compared the variables of attitude and knowledge.

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