THE INFLUENCE OF INTELLIGENCE ON PERFORMANCE
(Study on Permanent Employee of PT. Pindad (Persero) in Turen, Malang, East Java)

Ratika Fratiwi
Mochammad Al Musadieq
Arik Prasetya
Fakultas Ilmu Administrasi
Universitas Brawijaya
Malang
Email: ratikafra@gmail.com

ABSTRAK
Penelitian ini bertujuan untuk mengetahui dan menjelaskan pengaruh dari faktor-faktor kecerdasan (kecerdasan intelektual, kecerdasan emosional, dan kecerdasan spiritual) secara parsial dan simultan terhadap kinerja karyawan. Pengumpulan data dilakukan dengan kuisiner yang disebarkan kepada 80 orang karyawan tetap PT. Pindad (Persero). Berdasarkan hasil analisis regresi berganda menunjukkan bahwa secara parsial dan simultan variabel bebas mempunyai pengaruh signifikan terhadap kinerja karyawan. Hal ini ditunjukkan dengan nilai signifikansi t untuk kecerdasan intelektual 0.04 (0.04<0.05), kecerdasan emosional 0.00 (0.00<0.05), kecerdasan spiritual 0.00 (0.00<0.05). Hasil uji simultan diperoleh signifikansi F sebesar 0.000<0.005 dan mampu memberikan kontribusi terhadap kinerja karyawan sebesar 46.9%, sisanya 53.1% dipengaruhi oleh variabel lain yang tidak diteliti dalam penelitian ini.

Kata Kunci: Kecerdasan Intelektual, Kecerdasaan Emosional, Kecerdasan Spiritual, Kinerja Karyawan

ABSTRACT
This study aims to identify and explain the influence of intelligence (intellectual intelligence, emotional intelligence, spiritual intelligence) partially and simultaneously on employee performance. Data collecting conducted by distributing questionnaires to 80 permanent employees of PT. Pindad (Persero). Based on the result of multiple linear regression showed that partially and simultaneously independent variable have significant influence on employee performance. This is indicated by the significant value of t for Intellectual Intelligence 0.04 (0.04<0.05), Emotional Intelligence 0.00 (0.00<0.05), Spiritual Intelligence 0.00 (0.00<0.05). Test result obtained by simultaneous F significance of 0.000<0.005 and to provide on contributions to employee performance of 46.9% while the rest value of 53.1% is affected by other than the three variables that mentioned in this study.

Key Word: Intellectual Intelligence, Emotional Intelligence, Spiritual Intelligence, Employee Performance
A. INTRODUCTION

Joining Indonesia in the Asean Economic Community (AEC) on 31 December 2015 demanding the performance of the company to survive the increasingly fierce business competition. With the growing issues that happen requires the employee to be better prepared, open and flexible in managing their works. When employees work under stress, depressed, and unhappy, then their productivity can be very low. It takes grateful mood, work focused behavior, positive thinking, strong work collaboration relationship between employees, and professional work ethic, to produce productive companies (Djajendra, 2016). Mangkunegara (2010: 1) explained that human resource management is very important for companies to manage, organize, and utilize employees so that it can function productively for the achievement of corporate objectives. The company's development depends on the labor productivity in the company. Therefore, the human resources is the most important and crucial to the functioning of the overall management of the company so that the company should treat it wisely.

Performance of human resources is the actual job performance or achievements reached by someone (Mangkunegara, 2010). Thus the performance of human resources is the quality and quantity of work achieved based on the standards set in a specific time.

There are many factors that affect the performance of human resources (HR). Rahmatullah (2003) explained that HR performance is influenced by three factors: individual factors consisting of: ability and expertise, background, demography, work motivation and work discipline, psychological factors consisting of: perception, attitude, personality, and learning, and organizational factors consisting of: system or form of organization of resources, leadership, communication, work environment, work culture, organizational culture, awards, structure, training and job design. This study focuses HR performance improvement through internal factors (individual), employees, the ability. The ability of a person is determined by its intelligence, according to Chippendale (2001) there are three main intelligence in human which are Intellectual, emotional, and spiritual intelligence.

Intellectual Intelligence is intellectual ability, analysis, logic, and reason. This intelligence is the intelligence to receive, store, and process information into facts (Widodo, 2012: 77). Emotional intelligence is a form of someone’s personality that is reflected from any behavior to react and interact with others. Emotional intelligence demands to learn recognizing and appreciating the feeling of self or others. Responding to all possibilities that occur properly, implementing the emotional energy effectively in life and daily work.

Agustian (2001) defined spiritual intelligence as the ability to give meaning to the worship of every behavior and activity through the steps and thoughts, and integralistic thinking and principled only because of God. Spiritual intelligence allows a person to think creatively, visionary, create or even change the rules, which makes the person work better.

In this research, the researcher will compare intellectual intelligence, emotional intelligence, and spiritual intelligence to know which one of the three intelligences is influencing more of the PT. Pindad (Persero) employee performance. PT. Pindad (Persero) is a state-owned enterprise which is engaged in the defense industry. One of the things done by the management of PT. Pindad (Persero) in order to improve the performance of employees is to provide training in emotional intelligence and spiritual intelligence to the employees. PT. Pindad (Persero) realize that emotional and spiritual intelligence are significant in the development of employees, it is proven on one of the general strategy that applied to employee development of the company, which is includes the dimensions of intellectual, spiritual intelligence, emotional intelligence and moral intelligence. Twice a month PT. Pindad (Persero) organize spiritual activities that are meant to overcoming or preventing the occurrence of conflict. Based on what is produced by PT. Pindad (Persero) and the workload that must be done, intellectual intelligence must be the most important thing. But with the statement issued by Goleman on emotional intelligence, and also efforts made by PT. Pindad (Persero) to improve performance and reduce the problem at work through spiritual approach, then PT. Pindad (Persero) was chosen as the research location. To know which of the three main intelligences have the most influence in employee performance.

B. LITERATURE REVIEW

1. Intelligence

Intelligence is the “mental quality that consists of the abilities to learn from experience, adapt to
new situations, understand and handle abstract concepts, and use knowledge to manipulate one’s environment”, Sternberg (2017).

Three Main Intelligences

1. Intellectual Intelligence

Intellectual is intellectual ability, analysis, logic, and reason. This intelligence is the intelligence to receive, store, and process information into facts (Widodo, 2012: 77).

2. Emotional Intelligence

Robbins (2008: 151) defined emotional intelligence as a collection of skills, abilities and non-cognitive competencies that affect a person's ability to succeed in the face of environmental demands and pressures.

3. Spiritual Intelligence

Spiritual intelligence (SQ) is the intelligence to deal with and solve the problem of meaning or value, namely the intelligence to put our behavior and life in the context of broader and rich meaning, the intelligence to judge that action or way of life someone is more meaningful than others, Zohar & Marshall (2000:3).

2. Performance

Performance is the result of work in accordance with the objectives of the organization, the quality of work, quantity of work, efficiency, and effectiveness criteria (Gibson et al, in Riani, 2011).

3. Hypothesis Model

The hypothesis formulated in this study as follows:

- Intellectual Intelligence $X_1$
- Emotional Intelligence $X_2$
- Spiritual Intelligence $X_3$
- Employee Performance $Y$

**Figure 1. Hypothesis Model**

Source: Data Processed by Author on May 19, 2017

H1: Intellectual Intelligence has significant influence on employee performance.

H2: Emotional Intelligence has significant influence on employee performance.

H3: Spiritual Intelligence has significant influence on employee performance.

H4: Intellectual, Emotional and Spiritual Intelligence simultaneously have significant influence on employee performance.

C. RESEARCH METHOD

Research on “The Influence of Intelligence on Performance” (Study on Permanent Employee of PT. Pindad (Persero) in Turen, Malang, East Java). This research uses explanatory research through quantitative approach. Explanatory research is known to describe the influence of the variables tested using statistical testing. The number of samples taken in this study were 80 permanent employees of PT. Pindad (Persero) Turen. The method used to determine the amount of sample is stratified random sampling technique. In this method, the sample size is determined by dividing the population into homogeneous groups called strata, and then drawn at random from each stratum, Arikunto (2009).

1. Descriptive Statistical Analysis

   One of the descriptive analysis method which is often used in social research is descriptive percentage. Descriptive analysis of the percentage is calculated by the total frequency of observations divided by the number of respondents multiplied by 100 percent, Nasution (2006) in Pradana (2012).

2. Inferential Analysis

   This study uses multiple linear regression analysis, to test the influence of the independent variable on the dependent variable.

   a. Multiple Linier Regression Analysis

   This analysis used to determine the relationship between independent variables with dependent variable whether each independent variable associated positive or negative to predict the value of dependent variable when the independent variables increase or decrease. The formula used is a multiple linear regression equation as follows:

   $Y = a + b_1X_1 + b_2X_2 + b_3X_3$

   Information:
   - $Y$: employee performance
   - $a$: intercept or constants
   - $b_1, b_2, b_3$: regression coefficients
   - $X_1$: intellectual intelligence
   - $X_2$: emotional intelligence
Test interaction is often called by Moderated Regression Analysis (MRA) which is particular application of multiple linear regression where the regression equation include an element of interaction (multiplication of two or more independent variables), Ghozali (2006).

b. Classical Assumption Test

Variables used will be analyzed further by using the classical assumption test in order to determine of there is a deviation from the existing variables and to obtained statistical conclusions that can be justified. Classical assumption test include Normality Test, Multicolinearity Test, and Heteroscedasticity Test.

c. Coefficient Determination

According to Gujarati (2006) $r^2$ is an overview that says how well the regression line match the sample data. Magnitude of $r^2$ is known as the coefficient of determination (sample) and the magnitude of the most commonly used to measure the contrary of the regression line. $r^2$ measures the proportion of the percentage of total variation in Y that explained by regression model. There are 2 characteristic of $r^2$, namely:

a. $r^2$ is not a negative quantity

b. the boundary is $0 \leq r^2 \leq 1$ since part of the squares described (ESS) can not be greater than the total sums of squares (TSS). $r^2$ is 1 means “perfect match” because the whole of $Y_1$ can be explained by the regression. $r^2$ is 0 means there is no correlation between $Y_1$ and $X_1$.

$r^2$ test used to measure the contribution of the independent variable. $r^2$ has a value between 0 until 1 ($1 > r > 0$). The higher the value of $r^2$ in a regression or value closer to number 1 make the better regression. In contrast, if the value of a regression $r^2$ are getting smaller, the conclusions from these regressions are not trustworthy. This value is generally written in terms of percent.

d. Hypothesis Testing

**Partial Test (t test)**

Testing is done to see how strong the influence of each independent variable on the dependent variable (partially).

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**Simultaneous Test (F test)**

F test was used to test whether the overall independent variable influence on the dependent variable.

**D. RESULTS & DISCUSSION**

1. Descriptive statistical analysis

Based on the analysis per item on the Emotional Intelligence, it can be concluded that the average level of respondents answer (grand mean) is 4.07 which is the average of respondents who answered are agree about the statement given. Result of verbal, numerical and figure indicator included in good category, with all the mean answers are all above 4, but seen from research result, indicator of figure is lower than the other indicator.

Based on the analysis per item on the Emotional Intelligence, it can be concluded that the average level of respondents answer (grand mean) is 4.07 which is the average of respondents who answered are agree about the statement given. Based on the results of the study, self-awareness, self-management, motivation, empathy, and relationship management indicators are all included in good category because the mean of each statement is categorized as agreed and strongly agree, but the empathy indicator is the lowest point with 3.88.

Based on the analysis per item on the Spiritual Intelligence, it can be concluded that the average level of respondents answer (grand mean) is 4.35 which the average of respondent who answered are strongly agree about the statements. Indicators of absolute honest, open-minded, self-knowledge, focus on contribution, and spiritual non-dogmatic are all included in the good category because the mean of each statement is mostly included in the category strongly agree, with focus on contribution indicator is the indicator with lowest mean.

Based on the analysis per item on the Employee Performance, it can be concluded that the average level of respondents answer (grand mean) is 4.05 which the average of respondent who answered are agree. The employee performance of permanent employee of PT. Pindad (Persero) can already be declared good, especially in arrival, with indicator of quality is the lowest aspect.
2. Inferential Analysis
   a. Multiple Linear Regression Analysis

   **Table 1. Regression Equations**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>11.162</td>
<td></td>
<td>2.046</td>
<td>0.044</td>
</tr>
<tr>
<td>X1</td>
<td>0.176</td>
<td>0.178</td>
<td>2.093</td>
<td>0.040</td>
</tr>
<tr>
<td>X2</td>
<td>0.425</td>
<td>0.425</td>
<td>4.401</td>
<td>0.000</td>
</tr>
<tr>
<td>X3</td>
<td>0.396</td>
<td>0.396</td>
<td>4.184</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed on August 24, 2017

The regression equations were obtained based on Table 1 as follows:

\[ Y = 11.162 + 0.176 X_1 \text{ (Intellectual Intelligence)} + 0.425 X_2 \text{ (Emotional Intelligence)} + 0.396 X_3 \text{ (Spiritual Intelligence)} \]

The value of dependent variable would be predicted by the independent variable. In this study, the dependent variable is the Employee Performance of permanent employee of PT. Pindad (Persero) Turen, and the value predicted by variables of Intellectual Intelligence \( X_1 \) is 0.176, Emotional Intelligence \( X_2 \) is 0.425, and Spiritual Intelligence \( X_3 \) is 0.396. The regression of coefficient of all variables have a positive sign which shows that if the independent variable have increased, so the Employee Performance of permanent employee of PT. Pindad (Persero) will be increased as well.

b. Classical Assumption Test

**Figure 2. Residual Test**

Source: Primary Data Processed on August 24, 2017

Normality test is performed to determine the value of the residual scattered normal or not, if the data data is spread around the diagonal line and shows that pattern of normal distribution, then the regression model fulfills the assumption of normality, otherwise if data is spread far from the diagonal line then regression model did not meet the assumption of normality. From the figure 2 can be seen that the data is spread around the diagonal line and did not spread so much, so it can be concluded that the data has fulfill the assumptions of normality.

**Table 2. Multicolinearity Test**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Constant</td>
<td>0.951</td>
</tr>
<tr>
<td>X1</td>
<td>0.722</td>
</tr>
<tr>
<td>X2</td>
<td>0.749</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed on August 24, 2017

In the test result found that overall tolerance values are >0.1 so it can be concluded that there is no multicolinearity between independent variables. Multicolinearity test can also be done by comparing the value of VIF (Variance Inflation Factor) with the score of 10. If the value of VIF >10 then it occured multicolinearity. Here are the test result of each independent variable:

- VIF for Intellectual Intelligence is 1.051
- VIF for Emotional Intelligence is 1.386
- VIF for Spiritual Intelligence is 1.335

From the result can be concluded that there is no multicolinearity between independent variables. Thus the absence of multicolinearity in the assumption test can be fulfilled.

**Figure 3. Heteroscedasticity Test**

Source: Data Processed on August 24, 2017

The result obtained that scatterplot diagram spreads and does not form a specific pattern, so there is no heteroscedasticity. It can be concluded that the residual variance is homogeneous.
(constant) or there are no heteroscedasticity phenomenon.

c. Coefficient Determination

**Table 3. The coefficient of determination (r²)**

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>.699</td>
<td>.489</td>
<td>.469</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed on August 24, 2017

Table 3 show the regression model has a coefficient of determination (adjusted r²) of 0.469 it can be concluded that the contribution of independent variables Intellectual Intelligence (X1), Emotional Intelligence (X2), Spiritual Intelligence (X3) can affect the dependent variable of Employee Performance of permanent employee of PT. Pindad (Persero) Turen, Malang (Y) by 46.9% and the remaining 53.1% are affected by other factors that not discussed in this study.

d. Hypothesis Testing

**Table 4. The t test Result**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>11,162</td>
<td>5,454</td>
<td>2,046</td>
<td>.044</td>
</tr>
<tr>
<td>X1</td>
<td>.353</td>
<td>.169</td>
<td>.176</td>
<td>2,093</td>
</tr>
<tr>
<td>X2</td>
<td>.429</td>
<td>.098</td>
<td>.425</td>
<td>4,401</td>
</tr>
<tr>
<td>X3</td>
<td>.463</td>
<td>.111</td>
<td>.396</td>
<td>4,184</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed on August 24, 2017

The t test is done by comparing the tcount of each independent variable with a value of ttable with a degree of error of 5% (α=0.05).

a. Intellectual Intelligence (X1)

Result of hypothesis testing regression coefficient Intellectual Intelligence (X1) can be written variable X1 has a regression coefficient that has been standardized at 0.176. Obtained tcount at 2.093 and gained a significance value of 0.040. Values tcount test statistic is greater than ttable (2.093 > 1.986) and a significant value smaller than α = 0.05. This test shows that H0 rejected and Ha is accepted, it can be concluded that the variable Intellectual Intelligence (X1) significantly affects the Employee Performance of PT. Pindad (Persero) variable (Y).

b. Emotional Intelligence (X2)

Results of hypothesis testing of regression coefficient Information Services (X2) can be written that X2 has a regression coefficient that has been standardized by 0.425. Obtained tcount of 4.401 and obtained a significance value of 0.000. Values tcount test statistic is greater than ttable (4.401 > 1.986) and a significant value smaller than α = 0.05. This test shows that H0 rejected and Ha is accepted, it can be concluded that the variable Emotional Intelligence (X2) significantly affects the Employee Performance of PT. Pindad (Persero) (Y).

c. Spiritual Intelligence (X3)

Results of hypothesis testing regression coefficient opinions (X3) has a value of regression coefficients that have been standardized 0.396. Obtained tcount of 4.148 and obtained a significance value of 0.000. Values tcount test statistic is greater than ttable (4.148 > 1.986) and a significant value smaller than α = 0.05. This test shows that H0 rejected and Ha is received, it can be concluded that the variable Spiritual Intelligence (X3) significantly affects the Employee Performance of permanent employees of PT. Pindad (Persero) variable (Y).

**Table 5. The F test Result**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>669,667</td>
<td>3</td>
<td>223,222</td>
<td>24.226</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>700,283</td>
<td>76</td>
<td>9,214</td>
<td>24.226</td>
<td>.000</td>
</tr>
<tr>
<td>Total</td>
<td>1,369,950</td>
<td>79</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data Processed on August 24, 2017

Based on Table 5, it can be seen that the value df1 = 3 and df2 = 76 the values of F table obtained at 2.723. Based on Table 5, hypothesis testing regression models simultaneously using the F test and can be seen Fcount is larger than Ftable (24.226 > 2.722) and the significance of 0.000 which is smaller than alpha (α) = 0.05. It can be concluded that H0 rejected and Ha accepted, it means that there are significant simultaneously effect between variables Intellectual Intelligence (X1), Emotional Intelligence (X2), Spiritual Intelligence (X3), to the variable Employee Performance of permanent employee of PT. Pindad (Persero) variable (Y).

**E. CONCLUSIONS AND RECOMMENDATIONS**

Conclusions

1. Based on the calculation of descriptive statistical analysis, it can be known that the average of each variable calculation on Intellectual Intelligence (X1), Emotional Intelligence (X2), Spiritual Intelligence (X3), and Employee Performance (Y), show that the majority of respondents tend to agree about the implementation of Intelligences in PT. Pindad (Persero).
overall grand mean are in the interval >4 which state the positive result which means the permanent employee of PT. Pindad (Persero) in Turen, Malang, East Java has inteligencia needed for the sustainability of the company.

2. To determine the partial effect of independent variables of Intellectual Intelligence (X1), Emotional Intelligence (X2), Spiritual Intelligence (X3) of the Employee Performance of permanent employee in PT. Pindad (Persero) which is conducted by the testing of t-test. Based on the results showed that there are three variables that have significant influence on the Employee Performance of permanent employee in PT. Pindad (Persero) Turen Malang namely Intellectual Intelligence, Emotional Intelligence, and Spiritual Intelligence. Based on the results of the t test showed that the variables Emotional Intelligence has the bigger t value and beta coefficients. So that the Emotional Intelligence variable has the strongest influence compared to other variables, the Emotional Intelligence has a dominant influence on Employee Performance.

3. The simultaneously effect for each independent variable on the Employee Performance of permanent employee of PT. Pindad (Persero) was done by testing the F-test. From the results of multiple liner regression analysis obtained that independent variables have significant influence simultaneously to the Employee Performance of permanent employee of PT. Pindad (Persero). It can be concluded that the testing of the hypothesis stated that there are simultaneously effect between an independent variable to dependent variable named Employee Performance of permanent employee of PT. Pindad (Persero) is acceptable.

Recommendation
Based on the conclusions above, there are some suggestions which is expected to be helpful for the faculty as well as for other party in need. The recommendations are:

1. Hopefully company will conduct emotional intelligence and spiritual intelligence training on a regular basis because it is evident that emotional intelligence and spiritual intelligence affect the performance of the employees.

2. Despite obtaining the highest research results (grand mean), it is better if the company must still improve the emotional intelligence of employees because emotional intelligence gives a significant effect on employee performance. Companies can conduct training or seminars on emotional intelligence.

3. Companies need to improve intelligence to employees so that employees can work in accordance with existing norms. The cultivation of this value of spiritual intelligence can be done by providing training on the norms or good values in the interaction with other employee.

REFERENCES


