WORK ENVIRONMENT AND COMPETENCE ON SATISFACTION AND PERFORMANCE OF IN A DEVELOPMENT PLANNING AGENCY

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ABSTRACT

Physical or non physical work environment is an influential factor which is necessary to support the employees activities in finishing their jobs. This study aimed to analyze and examine direct effect of work environment on work satisfaction, indirect effect of work environment on employees performance through work satisfaction, direct effect of competence on work satisfaction, indirect effect of competence on employees performance through work satisfaction, and the effect of work satisfaction on work performance. This study was conducted at the Development Planning Agency in Maluku. The population of the study was 117 employees who were working for the Development Planning Agency in Maluku. Saturated sample technique was used in this study. Data was collected through interviews and questionnaires. Data was analyzed using path analysis. The descriptive results of the research showed that respondents provided good responses toward the work environment variable as it achieved 3.96 as the mean score. The mean score of competence variable was 3.92, of work satisfaction was 4.13, and of employees performance was 3.89. The results of statistical data analysis proved that work environment (such as comfortable rooms for work, good lighting, internet facility provision, good interaction among colleagues, good relationship between the supervisor and the subordinates) had a positive and significant direct effect on work satisfaction with significance value of 0.000 < 0.05. In addition, work environment had positive and significant indirect effect on employees performance through work satisfaction with significance value of 0.000 < 0.05.

INTRODUCTION

The success and performance of a public organization in providing service for dynamic communities are determined by the ability of the organization to quickly respond to the environment changes (Pablo et al., 2007). The flexibility of the organization is reflected in its operational, structural, and strategic hierarchy. In a good working environment, employees will be able to work well, safely, and comfortably (Piercy, 2009). Therefore, every corporation or institution has to provide good working environment for the employees so that they can work to achieve the organizational objectives. A comfortable work place will improve the employees performance (Putri et al., 2019).

Competence factor also contributes to the improvement of the employees performance (Abbas et al., 2014). An employee who works based on his/her competence can perform optimally (Qu et al., 2016). Besides, work satisfaction is also crucial for the employees self actualization. According to Robbins (2008), work satisfaction is an individual attitude toward his/her job where high work satisfaction positively influences the performance.
Helistiawan (2008) in his research found out that work environment had a significant effect on the workers performance and their competence also affected their performance significantly. In addition, Srivastava (2008) researched the effect of work environment and competence on the performance of the employees who work for small industrial companies. This study was conducted to 360 employees. The results indicated that non physical work environment had a more significant effect compared to physical work environment on the performance of the employees.

Gunaseelan and Ollukkaran (2014) and Imran et al. (2012) conducted a study on the effect of work environment factors and competence on workers performance. These research findings showed that work environment strongly affected the performance of the employees. Besides, Naharuddin and Sadegi (2013) and Jain and Kaur (2014) were more focused on investigating the effect of the physical dimension of work environment and competence on workers performance through work satisfaction. Their research findings proved that a good physical work environment could improve the performance of the employees. Zaim and Nurnisma (2013) and Ismail and Abidin (2010) in their research successfully found that employees competence had a significant impact on their performance through work satisfaction.

This phenomenon occurred at the Development Planning Agency in Maluku. Thus, this study aimed to analyze and examine direct effect of work environment on work satisfaction, indirect effect of work environment on employees performance through work satisfaction, direct effect of competence on work satisfaction, indirect effect of competence on employees performance through work satisfaction, and the effect of work satisfaction on work performance of the employees who were working at the Development Planning Agency, Maluku.

METHOD

This research belonged to an explanatory research. It employed a survey. The location of the research was at the Development Planning Agency in Maluku. Population in this research was 117 employees who were working at the Development Planning Agency in Maluku. Saturated sample was used in this study. There were two sources of data, which are primary data which was obtained directly from interviews with the respondents and questionnaires, and secondary data which was collected from other parties as to complement the primary data.

Research variables are identified as independent variables (Work environment and competence, intervening variable was work satisfaction) and dependent variable (Employees performance). The scales to measure these variables are based on Likert scale with five alternative answers: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5). There were two concepts used to measure the data quality, reliability and validity.

Inferential statistics was used to test the relationship between variables of the performance of the employees at the Development Planning Agency in Maluku. Data was analyzed using Path Analysis with a software program called SPSS for Windows 21.
Paths according to the hypotheses were formulated as follows:

\[ Y_1 = P Y_1.X_1 + P Y_1.X_2 + e_1 \]
\[ Y_2 = P Y_2.X_1 + P Y_2.X_2 + e_2 \]

RESULT AND DISCUSSION

The results of this research had fulfilled the assumption test of path analysis required as BLUE.

**Hypothesis 1: Work Environment and Competence Had a Significant Direct Effect on Work Satisfaction at the Development Planning Agency in Maluku**

Recapitulation of the results of the first path analysis to test the effect of work environment and competence on work satisfaction at the Development Planning Agency in Maluku is described as follows:

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Beta</th>
<th>T</th>
<th>Significance</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>X1</td>
<td>0.467</td>
<td>3.809</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>0.277</td>
<td>2.540</td>
<td>0.013</td>
<td>Significant</td>
</tr>
</tbody>
</table>

\[ R = 0.827 \]
\[ R_{\text{Square}} = 0.685 \]
\[ \text{Adjusted } R_{\text{Square}} = 0.657 \]

*Source: Primary Data, Analyzed in 2014*

Work environment had a significant direct effect on work satisfaction at Development Planning Agency in Maluku. It was proved by the significance value of \( t (0,000) < 0.05 \). had a significant direct effect on work satisfaction at Development Planning Agency in Maluku. It was proved by the significance value of \( t (0,013) < 0.05 \). So, it can be concluded that the hypothesis
which said that work environment and competence had as significant direct effect on the work satisfaction at the Development Planning Agency in Maluku. Ha was accepted (Ho was rejected).

Hypothesis 2: Work Environment and Competence Had a Significant Indirect Effect on the Work Performance through Work Satisfaction of the Employees at the Development Planning Agency in Maluku

Recapitulation of the results of the second path analysis to test the effect of work environment had a significant indirect effect on the work performance through work satisfaction of the employees at the Development Planning Agency in Maluku.

Table 2. Recapitulation of the Results of the Second Path Analysis

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Beta</th>
<th>T</th>
<th>Significance</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y2</td>
<td>X1</td>
<td>0.175</td>
<td>2.333</td>
<td>0.022</td>
<td>Significant</td>
</tr>
<tr>
<td>X2</td>
<td></td>
<td>0.705</td>
<td>12.059</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1</td>
<td></td>
<td>0.786</td>
<td>11.549</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

\[ R = 0.993 \]
\[ R_{Square} = 0.986 \]
\[ Adjusted \ R_{Square} = 0.985 \]

Source: Primary Data, Analyzed in 2014

Table 2 describes the results of statistical calculation of the second path analysis as follows:
1) Work environment had a significant indirect effect on the work performance through work satisfaction of the employees at the Development Planning Agency in Maluku. It was confirmed by the significance value of \( t (0.022) < 0.05 \).
2) Competence had a significant indirect effect on the work performance through work satisfaction of the employees at the Development Planning Agency in Maluku. The significant value of \( t (0.000) < 0.05 \).

So it can be concluded that work environment and competence had a significant indirect effect on the work performance through work satisfaction of the employees at the Development Planning Agency in Maluku. Ha was accepted (Ho was rejected).

Hypothesis 3: Work Satisfaction Had a Significant Effect on the Work Performance of the Employees at the Development Planning Agency in Maluku

The results of the third hypothesis testing was obtained from the results of the second hypothesis testing. Based on the results of statistical calculation of the second path analysis above, it can be concluded that: work satisfaction had a significant effect on the work performance of the employees with significant value of \( t (0.000) < 0.05 \). Ha could be accepted (Ho was rejected): work satisfaction had a significant effect on the work performance of the employees at the Development Planning Agency in Maluku.
Path Analysis

Path analysis can be done through identification of the path coefficient on each path from trimming theory (Solimun, 2002). The technique to calculate direct coefficient was similar to regression, that was to use p and t test. The insignificant path was then eliminated so that a model could be generated to support empirical data. The path coefficient of indirect effect was obtained by multiplying the path coefficient of variables mentioned in the model.

The First Path Analysis (PY1.X1 and PY1.X2)

Based on the first path analysis results, it can be concluded that work environment and competence had a significant direct effect on work satisfaction at the Development Planning Agency in Maluku.

Work environment path was called PY1.X1 with path coefficient (PY1) value of 0,467 and significance t of 0,000. This indicated that work environment had a significant effect on work satisfaction at the Development Planning Agency in Maluku with significant value of t (0,000) < 0,05.

The path of competence to work satisfaction was PY1.X2 with path coefficient (PY1) value of 0,277 and significance t (0,013) < 0,05. It showed that competence had a significant effect on work satisfaction at the Development Planning Agency in Maluku with significant value of t (0,013) < 0,05.

The effect of work environment on work satisfaction at the Development Planning Agency in Maluku is described by the following graph:

Figure 2. The First Path Analysis Model

The equation model for the first path analysis was:

\[ Y_1 = 0.467 + 0.277 + e_1 \]

The value of \( e_1 \) calculated based on the determinant coefficient (R square) for the structural equation path of was 0,685. It means that data variation which can be described by the model was 0,685 (68,5%), meanwhile the rest was 31,5 (31,5%). In other words, information contained in the data (68,5%) could be explained by the model, and the rest (31,5%) was explained by other variables (which cannot be seen in the model) and error.
The Second Path Analysis (PY2.X1, and PY2.X2 through PY1Y2)

Based on the second path analysis results, it can be concluded that work environment had a significant direct and indirect effect on work performance through work satisfaction at the Development Planning Agency in Maluku.

The path of work environment to the employees performance was called PY2.X1 with path coefficient value (P) of (0.175) and significance t of 0.022. It indicated that work environment had a significant direct and indirect effect on work performance with significance value of t (0.022) < 0.05.

The path of competence to work performance was PY2.X2 with path coefficient value (P) of 0.705 and significance t (0.000) < 0.05. It indicated that competence had a significant direct and indirect effect on work performance with significance value of t (0.000) < 0.05.

The effect of work environment and competence on employees performance through work satisfaction at the Development Planning Agency in Maluku is described by the following graph:

![The Second Path Analysis Model](image)

**Figure 3.** The Second Path Analysis Model

The equation model for the second path analysis was:

\[ Y2 = 0.175 + 0.705 + 0.664 + e_2 \]

The value of \( e_1 \) calculated based on the determinant coefficient (R square) for the structural equation path of was 0.986. It means that data variation which can be described by the model was 0.986 (98.6%), meanwhile the rest was 1.4 (1.4%). In other words, information contained in the data (98.6%) could be explained by the model, and the rest (1.4%) was explained by other variables (which cannot be seen in the model) and error.

**Final Model**

Based on the first path analysis, it was found that work performance and competence had a direct and indirect effect on employees performance through work satisfaction with significant value of \( t < 0.05 \). Then, final model of the path analysis can be reflected in the following picture:
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![Figure 4. Final Model](image)

**Direct Effect**

Based on the results of the first and third path analysis, it was found that path coefficient value of (PY1) was:

1) 0.467 for the path of work environment to work satisfaction (PY1.X1);
2) 0.541 for the path of competence to work satisfaction (PY1.X2)

**Indirect Effect**

Based on the model of the first and second path analysis, the indirect effect can be described as follows:

1) The path of work environment to work performance through work satisfaction was called indirect effect. It was calculated by multiplying the value of direct effect of work satisfaction with work satisfaction or PY1X1 with correlation coefficient value of direct effect of employees satisfaction on work performance or PY1Y2. Then, the value of indirect effect of work satisfaction on PY2 through supervision was PY2.X1 X PY1X2 = 0.467 X 0.222 = 0.2189
2) The path of competence to employees performance was called indirect effect. It was calculated by multiplying the path coefficient value of competence with work satisfaction or PY2.X2 with coefficient value of direct effect of employees performance to performance or PY2.Y1. Therefore, the value of indirect effect on PY2 through Y1 was PY1.X2 X PY2.Y1 = 0.541 X 0.210 = 0.2959

**Indirect Effect of Work Environment and Competence on Work Satisfaction of the Employees at the Development Planning Agency in Maluku**

The research findings show that there was a positive significant effect of work environment and competence on work satisfaction of the employees at Development Planning Agency in Maluku. It indicates that work environment which was measured by indicators/items: cool temperature, good air circulation, good lighting, good environment to work (without noise), clean work place, bright painting color, sufficient work facilities, good relationship between supervisor
and subordinates or vice versa, and among colleagues had a positive significant effect on the performance of the employees at the Development Planning Agency in Maluku.

Cool temperature of the rooms is an important thing to consider. Good circulation of air can make the employees work better. In addition, good lighting, good environment to work (without noise), clean work place, bright painting color, sufficient work facilities, good relationship between supervisor and subordinates or vice versa, and among colleagues were also proved to improve the employees performance.

Competence which was measured by indicators of knowledge: using appropriate knowledge to finish the job, understanding the administration system at the workplace, understanding the service system at the workplace and indicators of motives including: good emotions control, such as prioritizing public interests was proved to improve the work satisfaction of the employees at the Development Planning Agency in Maluku.

Descriptively, work environment which consists of physical and nonphysical one obtained good mean score from the respondents (3.96). Therefore, this result supports the results of the study conducted by Srivastava (2008) who did a research on the effect of physical and nonphysical work environment on the behaviors of the employees and organization effectiveness. It was conducted to 360 employees at an industrial company. The research findings proved that nonphysical work environment had a more significant effect on the workers behaviors compared to the physical work environment. Naharuddin and Sadegi (2013) and also Gunaseelan and Ollukkaran (2014) conducted a study on work environment factors which influenced employees performance. The results of the research indicated that work environment strongly affected the employees performance. It also supported the results of the study conducted by Nurmasitha and Lubis (2003). Their research reported on the effect of competence and work environment on employees performance (a study conducted at the Department of Population and Civil Registration in Sidoarjo Regency). Imran et al. (2012) used work environment as one of the variables in his research to see its effect on employees performance and found that work environment had a positive and significant effect on the employees work satisfaction. This empirical study revealed that work environment could promote the employees spirit to work harder. This research finding also approved of the results of the research by Talakua (2013) entitled the effect of transformational leadership style and work environment on the performance of the employees at Bank Tabungan Negara Ambon.

The research findings explained that nonphysical work environment had an effect on employees performance. Zaim and Nurnisma (2013) and Ismail and Abidin (2010) have also supported the concept of work environment developed by Sedarmayanti (2001) who defines it as one of the most influential factors in improving employees performance. A good work environment is the one which helps the employees to work optimally, feel healthy, secured, and comfortable. Therefore, the creation of good work environment will determine the success of an organization. On the other hand, if work environment is not comfortable enough, the employees will be demotivated and as a result, it will decrease their performance. In addition, good interaction between colleagues, supervisor and subordinates also improve the employees performance.
The Effect of Work Environment and Competence on Work Performance through Work Satisfaction the Employees at the Development Planning Agency in Maluku

The results of the statistical analysis showed that work environment and competence had a positive and significant indirect effect on the employees performance through work satisfaction. The hypothesis was accepted. This study has proved that physical and nonphysical work environment with indicators of knowledge: using appropriate knowledge to finish the job, understanding the administration system at the workplace, understanding the service system at the workplace and indicators of motives including: good emotions control, such as prioritizing public interests were proved to improve the work performance of the employees at the Development Planning Agency in Maluku.

Competence with indicators of self concept including was measured by indicators of knowledge: using appropriate knowledge to finish the job, understanding the administration system at the workplace, understanding the service system at the workplace and indicators of motives including: good emotions control, such as prioritizing public interests was proved to improve the employees performance at the Development Planning Agency in Maluku.

Descriptively, the respondents provided good responses toward the competence indicated by the mean score of 3.92. It revealed that the employees competence helped improve their performance. This results is in contrast with the results of the study conducted by Adha and Ibrahim (2013) entitled the effect of loyalty and employees competence on employees performance of public service. It proved that variable X (employees competence) had no effect on variable Y (public service performance). Zaim and Nurnisma (2013) supported the findings of the research conducted by Nurmasitha and Lubis (2003) on the effect of competence and work environment on the quality of the service. The results of this study are also in line with the concept developed by Zwel (2000) who states that competence can be affected. There are several factors that can influence individual’s competence including beliefs and values, skills, experiences, personality traits, motivation, emotional issues, cognitive level, and organizational culture. This study supports the concept suggested by Palan (2007) which defines competence as something that can be developed to improve the employees performance. It refers to knowledge, information and the results of learning, skills, self concepts and personal image, personal characteristics, consistency of responses toward situation or information, motivation, psychological need, or other impulses that initiate actions.

The Effect of Work Satisfaction on Employees Performance at the Development Planning Agency in Maluku

The research findings revealed that work satisfaction had a positive and significant effect on employees performance. The hypothesis was accepted with significance value of 0.005.

Descriptively, the respondents provided good responses toward employees performance as the mean score reached 3.90. This finding is in line with the results of the study conducted by Masruhkin and Wardin (2004). The results of their analysis showed that work satisfaction had a significant effect on employees performance. The empirical relationship between work satisfaction
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and employees performance is always changing and inconsistent (Greene, 1972). Greene (1972) state that the connection between work satisfaction and employees performance cover three things: First, work satisfaction results in performance; second, the performance results in work satisfaction; and Third, reward as a causal factor influences work satisfaction and employees performance (Greene, 1972). Vroom (1964) in Iaffaldano and Muchinsky (1985) have reviewed 20 studies on the relationship between work satisfaction and performance. The result indicated that both variables had a median correlation.

This study is in line with the concept developed by Nawawi (2001) who states that benefits for the employees and for the manager are as follows:

1) Benefits for the employees: improving their work quality, clarifying standards to achieve, providing accurate and constructive feedback to performance in the past, providing information on strengths and weaknesses, developing a plan to improve performance and minimize errors, providing an opportunity to communicate to the supervisor, improving the understanding of personal values, providing an opportunity to discuss problems and offering solutions, obtaining a clear view of what is expected and what is needed to be done, providing a clear view of work context, providing an opportunity to discuss passion, have a counseling, or training, improving harmonious relationships with the supervisor.

2) Benefits for the assessor: having an opportunity to measure and identify performance tendency to improve the old management, having an opportunity to develop a full general view of an individual and department work, providing an opportunity to develop good supervision system, identifying personal values, work satisfaction improvement, and better understanding of employees anxiety, improving dignity among managers, providing an opportunity to explain purpose and priority of the assessment, mediating the gaps between individuals, groups, and department, providing an opportunity for the managers to explain what is expected by the company to the employees, mediating the interpersonal relationship between employees and manager, improving the employees motivation by focusing on their personal needs, providing a chance for the managers to reevaluate what has been done and to revise targets and to arrange new priority, identifying an opportunity to rotate or fix the employees work.

CONCLUSION

The respondents provided good responses toward physical and nonphysical work environment with the mean score of 3.96. Work environment was proved to have a significant direct and indirect effect on employees performance through work satisfaction at the Development Planning Agency in Maluku.

The respondents provided good responses toward competence with the mean score of 3.92. It was proved that competence had a significant direct and indirect effect on employees performance through work satisfaction at the Development Planning Agency in Maluku.

The respondents provided good responses toward employees performance with the mean score of 3.92. It means that the indicators of work satisfaction such as being content with the job,
having a chance to get promoted and getting incentive had a positive significant effect on employees performance at the Development Planning Agency in Maluku.

REFERENCE
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