EFFECTS OF OCCUPATIONAL HEALTH AND SAFETY CULTURE ON EMPLOYEES’ PERFORMANCE AT AGILITY INTERNATIONAL Ltd., SEMARANG BRANCH

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Abstract
This study aims to determine effects of occupational health and safety culture on employees’ performance. To obtain these objectives, questionnaire was distributed to 51 Warehouse Department employees at Agility International Ltd., Semarang Branch. Non Probability sampling namely Simple Random Sampling was used as sampling technique. This study used Rating Scale. SPSS 22nd version and Microsoft Excel 2013 was used to process and test data. Result of this study shows that top management commitment, regulations and procedures, workplace environment, and employees’ involvement have significant effects on employees’ performance partially and simultaneously. The coefficient of determination (Adjusted R Square) is 0.917.

Keywords: occupational, health, safety, culture, employees’ performance

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Introduction

Human resources have a very important role for the achievement of a company's goals. To achieve the goals, an active role of employees who want to contribute energy and thought to the company are needed. It is expected that the company able to compete other companies due to having a good employees’ performance (Kreitner and Kinicki, 2011: 14).

Along with the increase of company using the heavy equipment in their operations and strict governmental supervision about occupational health and safety, employees cannot be separated from health and safety issues while working. By ensuring occupational health and safety, company shows responsibility to provide protection to its employees. Eventually it can encourage employees’ motivation. Mangkunegara (2009: 163) states that occupational health and safety program is a way to keep employee in a safe and health condition while doing the job.

Agility International Ltd. is a company engaged in field logistics and transportation services. In the daily operation, it has the possibility of accidents and occupational diseases caused by unsafe behavior and condition. Company must ensure health and safety of employees, because accidents or unintended incidents can cause injury and production disruption due to loss of working hours that will decrease employees’ performance.

According to safety report trend from 2011-2015, it can be concluded that the level of near-misses increased from less than 100 cases in 2011 became more than 900 cases in 2015. Where it had not met target yet. In the company, near-misses become one of indicators showing performance. It becomes a tool to measure either company has a good or a bad employees’ performance. If company has high number of near-misses, it will cause employees’ performance low. If occupational health and safety culture has been fulfilled, it will lead employees work more effectively and efficiently, so that performance increases.

Based on the increase of company using the heavy equipment in their operations, strict governmental supervision about occupational health and safety, and the increase number of near-misses in the company, the writer conduct a research discussing performance of employees and take title “Effects of Occupational Health and Safety Culture on Employees’ Performance at Agility International Ltd., Semarang Branch”.

Statement of Problems and Objectives

According to background, this study is intended to find out how to improve employees’ performance through top management commitment, regulations and procedures, work environment, and employees’ involvement of Agility International Ltd., Semarang Branch. Based on statement of problems, the followings questions were developed:

a. How is the effect of top commitment management on employees’ performance at Agility International Ltd., Semarang Branch?

b. How is the effect of regulatory and procedures on employees’ performance at Agility International Ltd., Semarang Branch?

c. How is the effect of work environment on employees’ performance at Agility International Ltd., Semarang Branch?

d. How is the effect of employees’ involvement on employees’ performance at Agility International Ltd., Semarang Branch?

e. How is the effect of top management commitment, regulation and procedures, work environment, and employees’ involvement on employees’ performance at Agility International Ltd., Semarang Branch?

This study was conducted with the following objectives:

1. To analyze the effect of top management commitment on
employees’ performance at Agility International Ltd., Semarang Branch.

2. To analyze the effect of regulation and procedures on employees’ performance at Agility International Ltd., Semarang Branch.

3. To analyze the effect of work environment on employees’ performance at Agility International Ltd., Semarang Branch.

4. To analyze the effect of employees’ involvement on employees’ performance at Agility International Ltd., Semarang Branch.

5. To analyze the effect of top management commitment, regulation and procedures, work environment, and employees’ involvement on employees’ performance at Agility International Ltd., Semarang Branch.

Literature Review

Performance

According to Mathis & Jackson (2002: 78), performance is basically what employees do or do not do. Employees’ performance also show how much their contributions to organizations, such as output quantity, output quality, output time period, work attendance, and cooperative attitude.

Factors Influencing Performance

According to Wirawan (2009: 7) employees’ performance is influenced by three factors:

1. **Faktor lingkungan eksternal organisasi seperti kehidupan ekonomi, kehidupan politik, kehidupan sosial, budaya dan agama masyarakat, dan kompetitor.**

2. **Faktor lingkungan internal organisasi seperti kebijakan organisasi, strategi organisasi, kompensasi, kepemimpinan, dan teman sekerja.**

3. **Faktor internal karyawan seperti bakat dan sifat pribadi, kreativitas, pengetahuan dan ketramplan, kompetensi, pengalaman kerja, keadaan fisik, keadaan psikologis, etos kerja, disiplin kerja, motivasi kerja, sikap kerja dan kepuasan karyawan.**

Performance Goals

According to Wibowo (2010: 63), performance goal is a specific statement describing outcome to be achieved, when, and by whom the goal to be achieved. It can be calculated, observed, and measured. The followings are elements performance goal:

- **Performers**, people who perform performance.
- **Action**, actions or performance performed by performers.
- **Time element**, indicates time when job is done.
- **Evaluation method**, how the assessment of work results can be achieved.
- **Place**, indicates where the work is done.

Performance Indicators

Moeheriono (2014: 113-114), states that performance indicators can be grouped into the following six categories:

1. Effective
2. Efficient
3. Quality
4. Timeliness
5. Productivity
6. Safety

Occupational of Health and Safety

According to Dyanita (2017), occupational health and safety is a promotion and improvement of physical, mental, and welfare levels of each occupation, prevent employees from occupational diseases, protect employees from risks and factors that may interfere with health, place and organize employees to adapt to their environment and to facilitate adaptation of employees to their respective jobs.

Occupational of Health and Safety Purpose

According to Jerussalem and Khayati (2010: 29), in principle the goals of occupational health and safety are:
1. Menjamin keselamatan operator dan orang lain
2. Menjamin penggunaan peralatan aman dioperasikan
3. Menjamin proses produksi aman dan lancar

Top Management Commitment
According to Mathis & Jackson (2002: 245), organization has responsibility for health, safety, and security at company usually falls on bosses and managers, a human resources manager or safety expert can help coordinate health and safety programs, investigate occupational accidents, produce safety material program, and conduct formal training on occupational safety. However, managers and superiors in each department also play a key role in maintaining a safe working environment and a healthy employee.

Regulations and Procedures
The purpose of establishment of work safety regulations and procedures is to control dangers in workplace, to protect employees and the possibility of accidents, and to regulate workers' performance so as to create a good safety culture (Ramli as cited by Karina and Erwin, 2013).

Workplace Environment
Work environment should be clean and safe from any hazards that may occur to machines and installations; but otherwise, the environment should be friendly, harmless and does not cause damage to machines and installations. In that case, no goods, obstacles, garbage or dirt harm or can interfere the employee in performing task (Indah et al, 2015: 272).

Employees’ Involvement
Involvement of employees in the implementation of occupational health and safety in company is expected to increase knowledge of employees about the importance of occupational health and safety, this is in accordance with that expressed by Kania et al, (2016) “Oleh karena perlu diadakan safety meeting secara rutin oleh seluruh pekerja di masing-masing bagian kerja dan lintas departemen agar mereka juga terlibat dan memiliki pemahaman yang sama dalam hal pentingnya masalah keselamatan”.

Method
Population of this study was 60 Warehouse Department employees at Agility International Ltd., Semarang Branch. This study used Simple Random Sampling as sampling technique. Questionnaire was distributed to Warehouse Department employees randomly regardless of sub-department. This study used Rating Scale to analyze data. According to Sugiyono (2014: 139), Rating Scale is more flexible, not only measure attitudes but also measure respondents' perceptions of other phenomena such as ability, knowledge, process of activities and others.

Theoretical framework of this study discusses effects of top management commitment, regulations and procedures, workplace environment, and employees’ involvement on employees’ performance. It can be seen at Figure 1.

Data analysis was used:
Validity and Reliability Test
Instrument used in this study was questionnaire. First, instrument was tested whether instrument used in this study was feasible or not. Instrument test were validity and reliability test. Next, compare r correlation with r table where df = n-4 with sig 5%. If correlation is > r table, then an instrument was stated valid.

Description Analysis
This analysis was conducted to obtain a descriptive description describing respondents' perceptions of questions asked.
Classic Assumption Test
In this study, classic assumption test consists of normality test, multicollinearity test, heteroscedasticity test, and linearity test.

Multiple Linear Regression Analysis
Multiple linear regression analysis was used to identify effects of top management commitment, regulations and procedures, workplace environment, and employees' involvement variables on employees' performance.

Hypothesis Test
Coefficient of Determination (R^2)
Ghozali (2011: 59), states that coefficient of determination measures how far the ability of model in explaining variation of dependent variable. Small value of coefficient determination means the ability of independent variables to explain variation of dependent variable is very limited. A value close to one means independent variables provide almost all of information needed to predict variation of dependent variable.

t Test
Statistical t test basically indicates how far the influence of one independent variable to dependent variable by assuming other independent variable is constant (Ghozali, 2013: 62). Based on Lupiyoadi and Ikhsan (2015: 131), basis of decision making in this test are as follows:
1. If t- calculation < t- table or significant value > 0.05, so H0 is received and H1 is rejected.
2. If t- calculation > t- table or significant value < 0.05, so H1 is received and H0 is rejected.

F Test
F statistical tests basically show whether all independent variables included in model have a simultaneous effect on dependent variable. If F calculation > F table and the value of significant is smaller than alpha 0.05 (P ≤ 0.05), then H0 is rejected. Contrarily, if F calculation > F table and the value of significant is bigger than alpha 0.05 (P ≥ 0.05), then H0 is received.
Result and Discussion

Validity Test

In this test, questionnaire was assessed whether it was valid or not by comparing $r$ count to $r$ table with degree of freedom (df) = $n - 4 = 51 - 4 = 47$, it was obtained $r$ table = 0.2759. If $r$ table < $r$ count then it was declared valid.

Table 1 Validity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sub-Variables</th>
<th>Indicators</th>
<th>$r$ count</th>
<th>Significance</th>
<th>$r$ table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Commitment</td>
<td>A1</td>
<td>0.817</td>
<td>0.000</td>
<td>0.215</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>0.878</td>
<td>0.000</td>
<td>0.215</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A3</td>
<td>0.864</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A4</td>
<td>0.834</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A5</td>
<td>0.892</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A6</td>
<td>0.863</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Occupational Health and Safety Culture</td>
<td>B1</td>
<td>0.822</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B2</td>
<td>0.861</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td>0.871</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>0.868</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B5</td>
<td>0.897</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C1</td>
<td>0.792</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>0.876</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>0.877</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td>0.826</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C5</td>
<td>0.831</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Workplace Environment</td>
<td>D1</td>
<td>0.876</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>0.920</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>0.807</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>0.810</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D5</td>
<td>0.806</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E1</td>
<td>0.878</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>0.841</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>0.753</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>0.857</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E5</td>
<td>0.879</td>
<td>0.000</td>
<td>0.275</td>
<td>Valid</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 1, it can be seen that the overall indicators’ value is positive and bigger than $r$ table. In addition, their significance also less than 0.05. It can be concluded that all indicators used in this research passed validity test or stated valid.

Reliability Test

Reliability implies an indicator is reliable enough to be used as a data collection tool (Lupiyoadi and Ikhsan, 2015: 54). As a measuring tool, questionnaire also should be reliable which has a fixed result, although done repeatedly to get an appropriate research. Variable is stated reliable if its Cronbach Alpha is more than 0.60.

Table 2 Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sub-Variables</th>
<th>Cronbach Alpha</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health and Safety Culture</td>
<td>Top Management Commitment</td>
<td>0.927</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Regulation &amp; Procedures</td>
<td>0.885</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Workplace Environment</td>
<td>0.887</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Employees’ Involvement</td>
<td>0.914</td>
<td>Reliable</td>
</tr>
<tr>
<td>Employees’ Performance</td>
<td>0.914</td>
<td>Reliable</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2018
Table 2 shows Cronbach Alpha’s value of all variables is more than 0.60 it is concluded that questionnaire is reliable.

Respondents Description Analysis
Respondents’ description aimed to recognize respond of respondents against research variables, included top management commitment (X1), regulation and procedures (X2), workplace environment (X3), employees’ involvement (X4), and employees’ performance (Y). Results of descriptive analysis in this study are as follows:

a. Top Management Commitment
Respondents’ answers regarding top management commitment have an excellent interpretation of 3.63.

b. Regulations and Procedures
Respondents’ answers regarding regulations and procedures have a good interpretation of 3.47.

c. Workplace Environment
Respondents’ answers regarding workplace environment have a good interpretation of 3.33.

d. Employees’ Involvement
Respondents’ answers regarding employees’ involvement have a good enough interpretation of 3.05.

e. Employees’ Performance
Respondents’ answers regarding employees’ performance have a good interpretation of 3.40.

Classic Assumption Test

Normality test
Result of normality test can be seen at Table 3.

Multicollinearity test
Result of multicollinearity test can be seen at Table 4. Based on Table 4, it can be seen that independent variables don’t have influence on each other. This is because tolerance value is more than 0.10, and VIF value is less than 10.
Heteroscedasticity test
Result of heteroscedasticity test can be seen at Figure 2 and Table 5. Figure 2 shows that there is no particular pattern because the irregular spread points above and below 0 on Y axis. In addition, significance value of Glejser Test are more than 0.05. So it can be concluded that there are no symptoms of heteroscedasticity.

Table 4 Multicollinearity test

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>.191</td>
<td>5.231</td>
</tr>
<tr>
<td>X1</td>
<td>.326</td>
<td>3.064</td>
</tr>
<tr>
<td>X2</td>
<td>.394</td>
<td>2.540</td>
</tr>
<tr>
<td>X3</td>
<td>.491</td>
<td>2.037</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2018

Figure 2 Scatter Plot

Source: Primary data processed, 2018

Table 5 Glejser Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.029</td>
<td>.624</td>
</tr>
<tr>
<td>X1</td>
<td>.007</td>
<td>.055</td>
</tr>
<tr>
<td>X2</td>
<td>.010</td>
<td>.045</td>
</tr>
<tr>
<td>X3</td>
<td>.004</td>
<td>.039</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2018

Linearity test
Result of linearity test can be seen at Table 6. Based on Table 6, it can be seen that significance value is 0.258 (bigger than 0.05), so this model has linear relationship between X variable and Y variable.
Table 6: Linearity Test

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>367,023</td>
<td>4</td>
<td>91,756</td>
<td>9.072</td>
</tr>
<tr>
<td>Linear</td>
<td>336,780</td>
<td>1</td>
<td>336,780</td>
<td>78.848</td>
</tr>
<tr>
<td>Residual</td>
<td>30,243</td>
<td>49</td>
<td>615</td>
<td>.479</td>
</tr>
<tr>
<td>Total</td>
<td>367,023</td>
<td>53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2018

Multiple Linear Regression Analysis
Effects of top management commitment (X1), regulation and procedures (X2), workplace environment (X3), and employees’ involvement (X4) on employees’ performance (Y) at Agility International Ltd., Semarang Branch was calculated by Multiple Linier Regression Analysis. Based on multiple regression calculation, can be seen at Table 7.

Table 7: Regression Analysis Result

Based on the calculation outcome and the estimated result of regression, here is the equation of multiple regressions:

\[ Y_{\text{(employees' Performance)}} = 0.070 + 0.493X_1 + 0.185X_2 + 0.187X_3 + 0.305X_4 + e \]

Those regression equation can be explained as follows:

1) Top Management Commitment Variable
According to Table 7, it can be known that significance value of top management commitment (X1) is 0.000. It means that variable gives a significant effect to employees’ performance. This result is in accordance with theory of Robbins and Judge (2011: 25), which states that one of management’s role is to improve quality and productivity of employees. If quality and productivity of employees increase, it will definitely improve performance. Moreover, according to theory of Geller as cited by Dyanita (2017), supervisors are required to cope their employees’ difficulties, improve motivation, skills and abilities. In addition, this result is also supported by research of Cristina, et al (2012) and Goje and Ayuba (2018) stating that top management commitment effects employees’ performance. This is also complemented by the result of a study by Yangho Kim (2015), which states that leadership is the most visible commitment to safety, which is vital for providing a positive safety culture.

2) Regulations and Procedures
As stated by Table 7, significance value for regulation and procedures (X2) is
0.020. It indicates that variable gives a significant effect to employees’ performance. In accordance with the research by Indah, et al (2015), it states that regulations are not only facilitates the proper selection and plant layout, but also on education and training for workers or personnel to obtain a level of ability and skills required. Moreover, it is also supported by theory of Ramli as cited by Karina and Erwin (2013), states that the purpose of work safety regulations and procedures’ establishment is to control the dangers in the workplace and to regulate the workers’ performance so as to create a good safety culture. In addition, the result is consistent with the research by Dwomoh et al (2013) stating that occupational health and safety policies have great impact on employees’ performance.

3) Workplace Environment
Significance value for workplace environment (X3) is 0.016. It shows that variable gives a significant effect to employees’ performance. This result is in accordance with the research by Mathews and Khann (2016), Al-Qomari and Okasheh (2017), where work environment have great impact on employees’ performance. Moreover, it is supported by research of Indah et al (2015), it states that place and working environment should be clean and safe from any hazards so that no goods, obstacles, garbage, or dirt can interfere employees in performing their task. It is also complemented by research of Karina and Erwin (2013), they state that there is a relationship between employees’ social environment variable and OHS behavior. Finally, it can be concluded that if company has a good workplace environment, it will increase their OHS behavior and performance because there is no obstacles in completing their task.

4) Employees’ Involvement
Depend on Table 7, significance value for employees’ involvement (X4) is 0.000. It means that variable gives a significant effect to employees’ performance. In accordance with theory of Geller as cited by Kania (2016), states that a sustainable process in developing a total safety culture needs support from above but done by lower level employees. It takes more than the participation of employees, but it is the ownership of employees, commitment, and empowerment. Moreover according to Ramli’s theory as cited by Karina and Erwin (2013), safety culture will be more effective if management commitments are implemented in real and there is direct involvement of employees in safety. It is also complemented by research of Nindya (2017) where co-workers support has a strong association with safe behavior in company. In addition, this result is consistent with the research by Riza et al (2017) stating that job involvement give significant effect on employees’ performance.

Hypothesis Test

T Test
This test was done through t test by comparing t count with t table at = 0.05. If t count > t table, then H0 is rejected, while if t count < t table, then H0 is accepted. Table 8 are results of t test calculation using SPSS version 22 program.
Based on the Table 8, hypothesis test can be carried out with the following results:

1) Effects of top management commitment (X1) on employees’ performance
   Statistical test results of top management commitment variable is $T_{cal} > t_{tab}$ (5.242 > 2.011) and significance $0.000 < 0.050$, therefore $H_0$ is rejected and $H_1$ accepted, so that top management have a significant effect on employees’ performance.

2) Effects of regulations and procedures (X2) on employees’ performance
   Statistical test results of regulations and procedures variable is $T_{cal} > t_{tab}$ (2.405 > 2.011) and significance $0.020 < 0.050$, therefore $H_0$ is rejected and $H_1$ accepted, so that regulations and procedures have a significant effect on employees’ performance.

3) Effects of workplace environment (X3) on employees’ performance
   Statistical test results of workplace environment variable is $T_{cal} > t_{tab}$ (2.507 > 2.011) and significance $0.016 < 0.050$. Therefore $H_0$ is rejected and $H_1$ accepted, so that workplace environment have a significant effect on employees’ performance.

4) Effects of employees’ involvement (X4) on employees’ performance
   Statistical test results of employees’ involvement variable is $T_{cal} > t_{tab}$ (4.612 > 2.011) and significance $0.000 < 0.050$. Therefore $H_0$ is rejected and $H_1$ accepted, so that employees’ involvement have a significant effect on employees’ performance.

**F Test**

F statistical tests basically show whether all independent variables included in model have a simultaneous effect on dependent variable. If $F$ calculation $> F$ table and the value of significant is smaller than alpha $0.05$ ($P \leq 0.05$), then $H_0$ is rejected. Contrarily, if $F$ calculation $< F$ table and the value of significant is bigger than alpha $0.05$ ($P \geq 0.05$), then $H_0$ is received.

---

Table 8 $t$ Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>0.70</td>
<td>0.892</td>
<td>0.787</td>
</tr>
<tr>
<td>X1</td>
<td>0.493</td>
<td>0.094</td>
<td>0.484</td>
<td>5.242</td>
</tr>
<tr>
<td>X2</td>
<td>0.185</td>
<td>0.077</td>
<td>0.171</td>
<td>2.405</td>
</tr>
<tr>
<td>X3</td>
<td>0.187</td>
<td>0.075</td>
<td>0.162</td>
<td>2.507</td>
</tr>
<tr>
<td>X4</td>
<td>0.305</td>
<td>0.066</td>
<td>0.263</td>
<td>4.612</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

Source: Primary data processed, 2018
Table 9 F Test

<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>515,840</td>
<td>4</td>
<td>128,960</td>
<td>139,537</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>42,513</td>
<td>46</td>
<td>.924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>558,353</td>
<td>50</td>
<td></td>
<td>139,537</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X4, X3, X2, X1

Primary data processed, 2018

Table 9 shows that F_cal is bigger than F_tab (139,537 > 2,570) and its significance is 0.000 (less than 0.05). If significance of F_tab is 5% from df1 = k - 1 (5 = 1 = 4) and df2 = n – k (51-5 = 46), so value of F_tab is 2,570. It means top management commitment (X1), regulation and procedures (X2), workplace environment (X3), and employees’ involvement (X4) give significant simultaneously effect on employees’ performance (Y).

Coefficient of Determination (R^2)
Result of Adjusted R Squared/coefficient determination test is Table 10.

Table 10 Adjusted R Square

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.951</td>
<td>.924</td>
<td>.917</td>
<td>.96135</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X4, X3, X2, X1
b. Dependent Variable: Y

Primary data processed, 2018

According the amount of Adjusted R Squared (0.917) at Table 10, top management commitment, regulations and procedures, workplace environment, and employees’ involvement as sub-variables of occupational health and safety culture give effect as much as 91.7% on employees’ performance. While the remaining 8.3% is given by other variables outside of occupational health and safety variable.

This result is supported by theory of Wirawan (2009: 7), it states that employees’ performance is influenced by external environmental factors, internal environmental factors, and internal factors of employees. Nowadays competitor with similar businesses, as part of external environment factor, continues to make improvement to their OSH performance. So that inevitably, to win competition the company must also improve its OHS performance. Moreover, strict governmental supervision about occupational health and safety also drives company to give OHS guarantee to its employees. In internal environmental factors, top management commitment, regulations and procedures become factors affecting performance. If company has a good management commitment, regulations and procedures of OHS, then performance will increase. This happens because employees feel safe and protected when doing a high risk job. Employees’ competence, motivation, behavior, discipline, and experience in
applying OHS while working as part of internal factors of employees also influence their performance.

**Conclusion and Recommendation**

**Conclusion**

Based on the study’s result on effect of occupational of health and safety culture on employees’ performance at Agility International Ltd., Semarang Branch, can be concluded that:

a. Based on T test and F test, it can be concluded that top management commitment, regulations and procedures, workplace environment, and employees’ involvement as sub-variables of occupational of health and safety culture variable have significant effect on employees’ performance partially and simultaneously.

b. Top management commitment, regulations and procedures, workplace environment, and employees’ involvement as sub-variables of occupational of health and safety culture give 91.7% significant effect on employees’ performance. The remaining 8.3% is effected by other variables outside of occupational of health and safety culture variable.

**Recommendation**

According to effect of occupational of health and safety culture on employees’ performance at Agility International Ltd., Semarang Branch’s result, recommendations that can be given are as follows:

a. Agility International Ltd., Semarang Branch should be able to maintain and increase top management commitment related to OHS, because the results of research show that it has the biggest effect on warehouse employees’ performance. The company should improve OHS performance through briefing at the beginning of each shift. Their leaders’ communication should be effective and efficient to notify or remind employees who perform unsafe acts and give praise to employees who follow workplace procedures. Moreover personal contact should be done as often as possible to influence employees’ attitudes, knowledge, and skills.

b. Agility International Ltd., Semarang Branch should also pay attention to employees’ involvement in OSH matters. The company should work with employees to create a good OHS culture in the workplace. It is recommended for the company to hold safety meeting involving employees and management. Employees may report, suggest and deliver something related to work safety. This solution can be applied to overcome the absence of reports into management when there is an OHS procedures’ offense.

c. The company is advised to improve and develop workplace environment, development is needed to meet needs as a good warehouse and get even better performance. The company should notice OHS signs, such as adds new and replaces damaged OHS signs. Increase security conditions on workplace also needed to satisfy warehouse employees. Many employees don’t have lockers to put their things. This makes them worry about their luggage and feel insecure.

d. Based on the research result, regulations and procedures gives the smallest positive effect on employees’ performance. Therefore, the company is suggest to do better in preparing regulations and procedures related to OHS. Easy to understand is the main requirement to compile regulations and procedures. Moreover appropriate sanctions should be applied if there are employees who break OSH regulations and procedures.

**Limitations**

This research has limitations, but with those limitations, it can be a reference and
improvement for future research. Limitations in this research are:
a. Respondents in this research are limited (51 respondents).
b. This research only examined some variables of occupational health and safety culture variable in accordance with conditions of the research object (Agility International Ltd., Semarang Branch).

References

Occupational Medicine & Health Affairs. Volume 5.