Human Resources Training and Development Activities: The Analysis of Their Roles in Increasing the Performance of the Company

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Abstract

This study investigates the role of training and development activities on company performance. The research data was obtained from Indonesia and Singapore from 2012-2021. This study uses panel analysis to answer the research question. This study produced various findings in each country and the training aspect used as measurements in this study. The element of training cost in Indonesia has a significant relationship with company performance, but different results were found in the context of Singapore. Furthermore, the aspect of training duration in Indonesia and Singapore contradicts the initial hypothesis developed in this study. This study contributes to regulators and company management in developing policies regarding training and development.

Keywords: Human Resources Training; Human Resources Development; Company Performance

Introduction

Training and development is one aspect of human resource management that is an important factor in organizational performance. Training and development can improve employee skills and knowledge, support employee self-development and satisfaction, and achieve a competitive advantage, performance (Kloutsiniotis & Mihail, 2017), and organizational goals (Berber & Lekovic, 2018). Several previous studies have found the importance of training effectiveness (assignments in training), training methods, quality of assignments, to personal training in supporting performance (Berber & Lekovic, 2018; David & Cobeau, 2015), but it is still a question whether these large training costs can encourage better performance.

A report published by the International Labour Organization states that so far, 96 percent of investment in digital labour platforms has been concentrated in countries in Asia with $US 56 billion, North America $US 46 billion, and Europe with $US 12 billion compared to countries in Africa, Latin America and Arab countries. (ILO, 2021). This proves that the needs of companies and regulators in obtaining and improving the quality of employees have become the main focus.

Although there have been several previous studies regarding the impact of employee training and development (Berber & Lekovic, 2018), whether the number of training costs incurred is in line with organizational performance is still a question. Policies related to whether these relatively large funds can
benefit the organization or just become a waste need to be considered by the organization. In addition, investment in training and development is also considered expensive and potentially ineffective in providing benefits to the organization (Bowers, 2017; Kraiger et al., 2004; Wright & Geroy, 2001).

On the other hand, several experts state that investment in employee training and development is very important because various benefits can be obtained, such as increasing skills, speed in carrying out assignments, and increasing employee performance (Dukhan et al., 2017; Madarisa & Noer, 2017). Even according to (Kraiger, 2003) companies that invest more funds for employee development experience an increase in overall company performance compared to companies that invest less. (Brahmana et al., 2018) argue that increasing training and development activities in companies is considered more important than other financial factors in improving company performance.

Previous research on the relationship between training and development policies and company performance still found differences. (Hsu & Wang, 2012; Subramaniam & Youndt, 2005) found that human resource factors have a significant impact on organizational performance. The results of a study by (Pepra-mensah, 2018) stated that investments in human resources in the form of training and higher education levels could not only increase their income, but the training also increases work productivity so that the company will benefit from this activity and also become a tool for value creation and human risk management.

However, Rowland et al., (2017) argue that there are still not many findings regarding the impact of training on performance. (Tharenou et al., 2007) argue that training and development can be seen as a negative thing because companies never measure the output of training and development activities carried out, on the other hand, these activities are also considered a waste, this is because sometimes companies allocate budgets for training and development is only to fulfill the obligations of government regulations (Brahmana et al., 2018; Tharenou et al., 2007). Therefore, it is essential for an organization to ensure that the key success factors, one of which is the policy of improving human resources, such as training and development, is one of the company's focuses.

In contrast to previous researchers who mostly focused on developing countries, this study aims to determine the effect of training and development on company performance with a sample of companies in Singapore and Indonesia. Sampling in this country aims to compare policies in developed countries, namely Singapore with developing countries, Indonesia. The policy differences between the two countries may provide different results and analyses from previous research.

**Literature Review**

**Training and Development**

Human resources are the main factor in the success of an organization. Even with the existing machines, capital, and raw materials, the company's goals will not be achieved without humans who are able to manage them well (Uddin, 2012). Therefore, humans who manage the company must have certain skills and competencies to achieve the company's goals. To fulfill specific competencies and skills, the company can fulfill them by holding training and development for employees. Training and development have an important role in the company due to several things, such as: first, improving the quality of the existing workforce because the training and development program focuses on specific areas so that employees are more proficient by participating in the program. Second, training and development improve the quality of the work and are more updated on the development of new technology and knowledge. Lastly, training and development make employee work more efficient and accurate (Uddin, 2012).
Training can be defined as a systematic learning process that provides employees with competencies, such as knowledge, skills, and abilities (Milhem et al., 2014) (Abushamsieh et al., 2014; Lepak & Gowan, 2016). There is a process of increasing skills, adopting regulations, and forming attitudes in training (Berber & Lekovic, 2018). Training is a crucial human resource development activity because it has broad implications, namely the development of human capital (Dowling et al., 2013 in Berber & Lekovic, 2018), encouraging employees to carry out their current work effectively and efficiently (Lepak & Gowan, 2016), and can improve overall performance (Berber & Lekovic, 2018).

As for development, it refers to a learning experience that is more focused on the long term to prepare employees for different tasks and functions (Lepak & Gowan, 2016). Both training and development performance is crucial for organizations. This is because it is impossible for them to grow and compete in a highly competitive business world without having competent employees (Kloutsiniotis & Mihail, 2017). On the other hand, training and development activities are not only seen as a positive thing in the company but sometimes these activities are seen as a waste of budget. This view develops because sometimes companies do not measure the success of their training and development activities and it is only for fulfilling government regulations (Brahmana et al., 2018; Tharenou et al., 2007).

Performance

Studies on human capital theory have been discussed by many researchers before. Empirical studies state increased education and training encourage worker productivity in the company. This productivity causes an increase in income from individuals and organizational performance (Marginson, 2017). Profit and growth are a measure of the performance of a company. The higher the profit and growth that management can generate, the more justification that management has managed the company well (Nikandrou et al., 2008; Selvam et al., 2016). The increase in profit and growth is also considered a signal to potential investors that the company can provide maximum returns for them in the future (Al-Matari et al., 2014). Profitability can be measured by several proxies such as Return on Assets (ROA), Return on Equity (ROE), or net income before interest, taxes, depreciation/amortization (Earnings Before Interest, Taxes, Depreciation, and Amortization – EBITDA). Innovativeness is shown by patents, resulting in the ability to introduce new products to the market (Hagedoorn & Cloodt, 2003). This study measures organizational performance based on its net profit level, namely ROA.

Previous Studies

The human capital theory states that the return of a person or organization can be influenced by the amount of their investment in humans (Sweetland, 1996). Investment in people in the company can be in the form of benefits in physical and mental health as well as training and development related to employee job desks. Increasing the level of education and training and development related to the job desk of employees is considered the most crucial investment in human development (Sweetland, 1996). This is because increasing the level of education and training and development activities can increase the knowledge and existence of employees as well as the company's competitive advantage (Noe, 4; 2010).

Training and development can improve employee skills, knowledge, attitudes, and behavior (Rowland et al., 2017), and increase the level of work involved, which in turn has a positive effect on employee and company performance (Abugre & Nasere, 2020). However, the impact of training and development on organizational performance can be either positive or negative. On the one hand, training can help employees detect reporting errors, while on the other hand, training impacts accurate accounting and tends to report lower profits due to prudence (McKenzie & Woodruff, 2014).

Several studies have found that the most important factors of training and development that have an impact on performance are the form of training in the form of projects, the existence of a development center, international-level assignments (Berber & Lekovic, 2018) or the quality of assignments (David & Cobeau, 2015) and the suitability of training with needs (Jayawarna et al., 2007) to support sustainable
performance (Ji et al., 2012). However, the role of training and development on performance is also
influenced by cultural, institutional, and organizational factors (Nikandrou et al., 2008), organizational
size (SME, large, very large) (Berber & Lekovic, 2018), as well as the role of corporate governance so
that spending on training does not in vain (Brahmana et al., 2018).

However, the duration of training in which employees who received additional training time in
the form of mentoring contributed to performance was more significant than employees who attended
general/standard training only (McKenzie & Woodruff, 2014). In addition, the expenditure for training
and development reflects optimal and quality training (Lopez-Cabralez et al., 2009), as well as
organizational commitment (Huerta et al., 2006). The amount of training costs will optimize performance
achievement (Kraiger, 2003).

Hypothesis Development

Training and development is a financial investment that reflects the organization's commitment to
improving its performance (Huerta et al., 2006). The amount of training and development costs can
indicate the organization's seriousness to provide optimal and quality training with value-added and
unique knowledge (Lopez-Cabralez et al., 2009). Company spending on internal training can predict
interpersonal and organizational learning practices (Sung & Choi, 2014), which in turn has an impact not
only on increasing the depth and breadth of employee knowledge, but also on employee behavior that is
in line with organizational goals (Lopez-Cabralez et al., 2009). The greater the investment spent on
training and development, the higher the performance that can be achieved (Nda & Fard, 2013). Another
opinion is that companies that are more productive, have greater resources for investment, involving their
employees in training, which in turn leads to higher income (Towo, 2020). Companies that invest more
funds in training are found to have higher performance (Kraiger, 2003). Therefore, the hypothesis that is
built is:

H1: Training costs (Training Cost per Employee) have a positive effect on company performance.

Not only related to costs, but the duration of training and development also reflects the
organization's expectations to provide adequate and appropriate training for the needs of the organization.
Additional training packages, which include training expenses and hours, can increase sales, productivity,
value, and organizational performance (Martins, 2022). The long duration of training will not interfere
with employee performance (Martins, 2022). The findings show that employees who were given
additional training duration in the form of mentoring resulted in a 20% higher income increase than
employees who only attended basic training with a shorter duration (McKenzie & Woodruff, 2014).
Therefore, the hypothesis that is built is:

H2: Duration of Training (Average Training Hours) has a positive effect on company performance.

Methods

Population and Sample

This research on the effect of training and development activities on company performance was
conducted on companies listed on the stock market in Indonesia and Singapore. Data was obtained
through Refinitiv Eikon with a total sampling of 64 Indonesian companies and 92 USA companies with
an observation period of 10 years, 2012-2021.
Data Analysis Techniques

The data analysis technique in this study uses the panel regression method using the Eviews 9.0 application. This study uses unbalanced panel analysis where the cross-sectional unit has an unequal number of time-series observations. There are several stages of analysis in panel data regression using eviews, namely:

1. Estimation of the regression model using panel data,
2. Selection of panel data regression model,
3. Classical Assumption Test

This regression analysis was conducted to see the effect of training and development activities (training cost per employee and average training hours) on company performance in Indonesia and Singapore. The regression equation model in this study is as follows.

\[ ROA_{it} = \alpha + \beta_1 TC_{it} + \beta_2 TH_{it} + \varepsilon_{it} \]

Keterangan:

- \( ROA_{it} \) = Return on Assets of firm i in period t
- \( \alpha \) = Constant
- \( \beta \) = Regression coefficient
- \( TC_{it} \) = Training Cost per employee at firm i in period t
- \( TH_{it} \) = Average training hours at firm i in period t
- \( \varepsilon \) = Error term

To estimate the model coefficients with panel data, the EVIEWS program provides several techniques, namely the Common Effect Model, Fixed Effect Model, and Random Effect Model. From the three models that have been estimated, which one is the most appropriate model according to the research objectives will be chosen. Test stages can be used as a tool in choosing a panel data regression model (CE, FE or RE) based on the characteristics of the data owned, namely: the Chow Test and Hausman Test.

<table>
<thead>
<tr>
<th>Hipotesis</th>
<th>Kriteria Pengujuan</th>
</tr>
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<tbody>
<tr>
<td>Chow-Test</td>
<td>H0: Common Effect (CE)</td>
</tr>
<tr>
<td></td>
<td>H1: Fixed Effect Model (FE)</td>
</tr>
<tr>
<td>Hausman-Test</td>
<td>H0: Random Effect Model</td>
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<tr>
<td></td>
<td>H1: Fixed Effect Model</td>
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</tbody>
</table>

Results and Discussion

This study aims to analyze the effect of training and development activities (training cost per employee and average training hours) on company performance in Indonesia and Singapore. The panel data testing of this research was carried out in each country separately. Thus there will be two-panel regression models will be used. Based on the results of the Chow and Hausman tests, the appropriate regression model to be used for Indonesian research data is the Fixed-Effect Model, while for Singapore
research data using the Random-Effect Model. The table below summarizes the results of the regression testing of the two countries.

Table 2. Panel Regression Result

<table>
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<tr>
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<th>ROA Indonesia</th>
<th>ROA Singapore</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>FEM β (p-value)</td>
<td>REM β (p-value)</td>
</tr>
<tr>
<td>Training Cost per Employee</td>
<td>TC 1.15** (0.001)</td>
<td>50.217 (0.711)</td>
</tr>
<tr>
<td>Average Training Hours</td>
<td>TH 0.01 (0.271)</td>
<td>-0.007 (0.903)</td>
</tr>
<tr>
<td>Adj-R Square</td>
<td>74.18%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level

Based on the results in the table above, the variables of training and development activities have different influences in Indonesia and Singapore. In Indonesia, the training cost variable shows its effect on company performance. The regression coefficient shows that the training cost positively affects the company's performance, while the average training hours do not affect the company's performance. In contrast to Indonesia, in the Singapore analysis, no training and development variable affects the company's performance. In the next section, we will discuss in more depth the results of the analysis conducted on the dependent variable of company performance with training and development activities.

Training Cost and Firm Performance

The company is an organization established to maximize the wealth of the owner. To achieve this goal, management must manage the company effectively and efficiently. Effective and efficient management can only be achieved by management who has adequate competence and skills. These competencies and skills can be achieved through training and development activities within the company. The effectiveness of investment in training and development has been discussed by previous researchers (Mohammed et al., 2021). Cost analysis is widely used to measure cost and benefit analysis, economic analysis, return on investment, and efficiency (Fletcher & Sottilare, 2014).

Cost analysis relates to how the company sacrifices much opportunity and resources to obtain greater value and benefits in the future. The costs incurred by the company for training and development activities can be used as the basis for the company in measuring the level of effectiveness of the training and development. In the context of training and education, the cost is also a measure of success regarding the effectiveness of the methods, techniques, and programs provided during these activities (Fletcher & Sottilare, 2014).

The costs incurred by companies to conduct training and development are controversial (Fletcher & Sottilare, 2014). These costs can be considered a profitable investment for the company in the future because these activities can increase the efficiency and quality of employees' work. On the other hand, the costs incurred are often considered a waste, due to the absence of planning that is in accordance with the program and the employee’s job desk.

The analysis of this study in Indonesia supports the proposition that employee training costs have a significant relationship to company performance. Companies with high assets tend to invest more of their resources in training and development activities (Huerta et al., 2006). With greater resources, companies can allocate greater funds so that they have more options and programs in training and development activities. The effect of these training and development activities will provide new experiences and competencies for employees (Dukhan et al., 2017; Madarisa & Noer, 2017; Tharenou et al., 2007).
Top management is the person who is responsible for setting goals, strategies, and programs in training and development activities (Kapur, 2018). Increasing the allocation of costs in training and development activities is a form of management commitment to optimizing the output of these activities (Lopez-Cabral et al., 2009). Increased costs and effective training and development programs can also increase employee commitment to the company. Furthermore, management’s courage in increasing the costs of training activities also increases the company’s overall performance (Nda & Fard. 2013).

On the other hand, the analysis results in Singapore do not support the hypothesis that has been built, and training costs do not have a significant relationship with company performance. This result can be explained by the findings of Huerta et al. (Huerta et al., 2006), who examined 106 companies and 250 employees, stating that companies in conducting training and development do not have adequate evaluation tools to measure the success of the given program. On the other hand, there is no supervision at the company's planning stage of the training and development program. Evaluation is only carried out after completing the training and development program. As a result, the effectiveness of the program, which is expected to improve the competence and quality of work of employees, is not achieved. Furthermore, it can be concluded that in this context, the costs incurred by the company in training and development activities cannot improve its overall performance.

### Training Duration (Average Training Hours) and Company Performance

The duration of training and development affects the depth and variety of competencies acquired. With a long duration, employees will get extensive material and more time to evaluate the knowledge obtained. On the other hand, a long duration will lead to more significant costs (McKenzie & Woodruff, 2014). In some cases, the duration of training conducted by the company is short-term (McKenzie & Woodruff, 2014). However, some companies provide training for their employees for a longer duration. The existence of training and development activities with short or long duration is expected to improve the company's overall performance.

The results of the analysis of training duration on performance in this study found the same results, both in Indonesia and Singapore. No significant effect was found between the two variables. The assumption that training can reduce sales fluctuations and increase profitability is not proven in this study. Drexler et al. (2012) argue that effective training may cause employees in the accounting field to be more alert and better at dealing with economic fluctuations in crisis conditions. However, on the other hand, this prudence has not been proven to increase revenue.

According to (Drexler et al., 2012), the duration of training that is held directly is not proven to produce better output for employee performance. There is no evidence that proximity in providing training can lead to changes in accounting practices and better overall performance. This is because, before starting the training, employees feel that the material to be delivered does not benefit their work (Drexler et al., 2012). In addition to this, the length or short duration of the training is considered relevant to improving performance depending on the relevance of the material to the employee's job desk given during the training.

The results of Khan, (2012) explain that training significantly contributes to employee performance, which will boost the company's overall performance. However, there are other factors that must be considered in addition to the training attended by employees, namely the motivation factor. The training will not significantly affect performance if the employee does not have high motivation to contribute to the organization's overall performance.
Conclusions and Contribution

This study examines the relationship between human resource development activities, namely training and development with company performance. This study looks at two main indicators of training and development held by the company, namely the training costs incurred by the company and the duration of the training that takes place during the activity. In the analysis conducted in Indonesia and Singapore, different results were found. The two countries were chosen to be studied for two reasons, first, Indonesia is a developing country while Singapore is a developed country. In our opinion, the differences in the company's perspective in this categorization in human resource development are interesting to study. Second, companies in both countries have unique characteristics in making decisions related to human resource development.

In the context of Indonesia, the aspect of training costs has a significant influence on company performance. This result is consistent with Dukhan et al., (2017) and Madarisa & Noer, (2017), which state that the training costs incurred are directly proportional to the material and competencies obtained by employees during training activities. With higher costs, the quality of the training provided will increase so that the competence and expertise of employees can develop to the maximum. This increase in competence and expertise makes the quality of employee work more efficient and precise so that the company's overall performance will increase.

Different from the results in Indonesia, the analysis in Singapore found an insignificant relationship between training costs and company performance. This result can be explained that Huerta et al. (Huerta et al., 2006), argue that the majority of companies do not have an adequate evaluation tool for training effectiveness. The company only evaluates post-training activities, but there is no analysis and evaluation related to the program and planning for the training activities. As a result, training activities expected to improve employee competencies so that company performance can increase do not occur. In this context, however large the training costs incurred, it does not affect the effectiveness of the training. The effectiveness of training is greatly influenced by the company's success, and supervision in determining the program, method, implementation, and evaluation of the results of the training activities carried out.

Longer training duration is expected to increase the variability and quality of the material delivered during the training activities. Our initial assumption of a relationship between training duration and overall firm performance was not confirmed in the analysis results in the two countries observed in this study. This result can be explained by the statement of (Drexler et al., 2012), which states that training carried out for employees in the accounting and finance divisions may be able to increase their vigilance in making decisions. However, on the other hand, there is no evidence that face-to-face training can improve the quality of decision-making in accounting practices and overall company performance. This is because, before training activities were carried out, employees assumed that the training carried out did not have a significant benefit in helping their work (Drexler et al., 2012) in this context, it can be concluded that the duration of training does not affect the competence and skills of employees which are expected to improve the company's overall performance.

Our findings have several implications, first in the area of study regarding human resource development. However, the analysis results in Singapore found no significant relationship between training costs and performance. However, in our opinion, companies in these countries should continue to allocate funds for training costs in accordance with the company's needs. In addition to complying with government regulations, this will improve the company's reputation so that it will attract potential investors in the future. Finally, to regulators and management, even though the analysis found different results in each country and the measurement of variables, must still consider aspects of training costs and training duration in HR development strategies, in addition to affecting the quality of the training provided, this will improve the practice of governance.
References


Sung, S. Y., & Choi, J. N. (2014). Multiple dimensions of human resource development and


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