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EFFECT OF WORK ENVIRONMENT AND OCCUPATIONAL HEALTH SAFETY ON EMPLOYEE PERFORMANCE AT PT. SCHNEIDER ELECTRIC BATAM

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ABSTRACT

The purpose of this research is to ascertain the following: (1) the influence of the work environment on employee performance; (2) the effect of occupational health safety on employee performance; and (3) the effect of the work environment and employee health safety on employee performance. This is a quantitative study using the survey approach. The population in this research was 300, with a total of 171 samples gathered using the Slovin formula computation. Proportionate Stratified Sample is the sampling method employed. Multiple Linear Regression is used to analyze the data. The findings of this research reveal that the work environment has a little influence on the performance of PT Schneider Electric Batam personnel. Occupational health and safety have a marginal influence on the performance of PT Schneider Electric Batam personnel. Simultaneously, the work environment and occupational health and safety have a substantial impact on the performance of PT Schneider Electric Batam personnel.

Keywords: Occupational Health Safety, Employee Performance, Work Environment

INTRODUCTION

There is a lot of competition in the industrial sector. Competition in the industrial sector must involve the presence of human resources. In an organization, human resources play an important role, because good human resources will have a positive impact on an organization. With good performance results from employees, the company's goals will be more easily achieved.

Employee performance is an employee's work that can be assessed based on quantity and quality. Employees with good performance are able to work according to targets with the results obtained but with good quality in the sense that there are not many defective or rejected goods. Good employee performance can benefit not only the company but can benefit one employee with another because cooperation in the company is very necessary. To improve employee performance so that they can work with good quality and quantity, several factors are needed, namely the work environment and occupational safety and health. This was also expressed by Rahmawati et al., (2021) who said that the most important factor to improve employee performance is the work environment in which the employee works. A good and conducive work environment also plays a role in improving employee performance. This work environment relates to everything that affects employees in their activities which consist of a physical and psychological work environment. A good work environment has an impact on the comfort

of employees in working so that they are able to optimize their performance. The work environment in several studies shows a fairly large work contribution to improving employee performance (Pratiwi & Fatah, 2021). In addition to work environment factors, occupational safety and health Additionally, a variety of variables contribute to employee performance improvement. Occupational Health and Safety (K3) is one of the safeguards targeted at all possible dangers in the workplace, guaranteeing the safety and health of workers and others on the job, as well as the safe and effective use of all production sources (Indrianiand Siregar, 2021). Occupational safety and health must really be implemented in a company. The number of work accidents in the Riau Islands (532) ranks third highest after West Answer (857) and Banten (838) in the second quarter of 2020 which was obtained from the government's official website (one data from the Ministry of Manpower). The high number of accidents is due to the large number of industries that stand, especially in the city of Batam. PT Schneider Electric adalah salah satu industry yang ada di kota Batam. PT Schneider Electric Batam adalah perusahaan manufaktur yang menyediakan contactor, pushbuttons, pilot light, light tower, bell/buzzer, contact block, sensor, PLC (Programmable Logic Control), MCB (Miniature Circuit Breakers), dan VSD (Variable Speed Drive). This business is a large enterprise based in Mukakuning..

Based on observations, there is a high number of turnovers for the last 3 years. Table 1.1 is a table of employee turnover data for the last 3 years.

tabel 1 Turnover 2019 – 2021 PT Schneider Electric Batam Number of Employes

Year	beginning of the year	Enter	Out	End of Year	Turnover
2019	1.232	120	134	1.218	10,9%
2020	1.218	145	130	1.233	10,6%
2021	1.233	170	198	1.205	15,9%

Source: HRD PT Schneider Electric Batam, 2021

Based on the turnover table for the last 3 years, it is known that in 2019 there was a turnover of 10.9%, then in 2020 it decreased by 10.6% and in 2021 there was a high increase to 15.9%. The high number of turnover is thought to be an influencing factor.

The high number of turnovers has an impact on employee performance, based on observations made, information is obtained that employee performance is less than optimal so that it is not uncommon for employees who are not able to meet the work targets given, and many reject goods are also produced. From result.

The observation is suspected of having work environment factors and occupational safety and health. From the company's records regarding the number of work accidents for the last 3 years from 2019-2021, it can be seen in table 1.2

Table 2 Work Accident PT Schneider Electric Batam 2019-2021

Year	Minor Accident	Serious Accident
2019	23 case	10 case
2020	27 case	9 case
2021	30 case	25 case

Source: HRD PT Schneider Electric Batam, 2021

Based on Table 2, it is known that work accident cases are still common, in 2019 there were 23 cases of minor accidents and 10 cases of serious accidents. In 2020 there were 27 cases of minor accidents and 9 cases of serious accidents. In 2021 there will be 30 cases of minor accidents and 25 cases of serious accidents. It can be concluded that there was a significant increase from 2019-2021 in minor accidents, while there was a significant increase from 2020-2021 in cases of serious accidents. The increase in accident cases greatly affects employee performance.

From the results of the observation that many cases are due to employee negligence in the use of work protective attributes, many employees ignore the use. Then the uncomfortable work environment such as the inappropriate location of the tools, as in the room which can be seen in Figure 1.1



Figure 1.1 Work Environment

a narrow work space due to a trolley that is not neatly arranged by each operator can cause employees to bump into each other, this can result in work accidents, poor lighting so that with a work duration of 8 hours with less lighting it will feel very tiring for the eyes of employees, the room at the production site the temperature is also very high, making it easier for employees to sweat so they need to drink water more often, from these factors it causes employees not to focus and time is

THEORITICAL REVIEW

Work Environment

Is one of the safeguards targeted at all possible dangers in the workplace, guaranteeing the safety and health of workers and others on the job, as well as the safe and effective use of all production sources. (Kawet, 2016). Another opinion was expressed by Sedarmayati in Chasanah (2019) which states that the work environment is the materials and tools that are all faced, the environment of the workers around them, the methods of work, as well as individual or groupwork arrangements. The work environment has an important role in shaping or influencing one's health. An environment that is very risky for the occurrence of diseases and accidents due to work such as in factories that produce waste that is at risk of causing disruption to human health (Faizah et al., 2021).

According to Buhannudin in June & Siagian (2020) The work environment is an area for a number of groups in which there are supporting facilities so that the company's objectives are met in accordance with its purpose and vision.

The work environment is everything that surrounds employees and influences their performance on given duties. (Karina et al., 2020). A good work environment will be able to improve performance, preferably an inadequate work environment will reduce performance and ultimately reduce employee performance motivation. For example, noise in the work environment can interfere with employees in carrying out their work. (Karina et al., 2020).

Based on the opinions of the experts above, the work environment may be defined as everything that surrounds an employee's job. A good work environment can improve employee performance so that employee production can be met in accordance with the target. In line with the statement from Sofyandi in Wibowo & Widiyanto (2019) which says that According to Sri Rejeki dalam Wibowo & Widiyanto (2019) Occupational health and safety is a thought and effort to ensure the integrity and perfection, both physically and spiritually of the workforce in particular, and of humans in general, the results of work towards a just and prosperous society. According Kasmir in Wibowo & Widiyanto wasted, so the amount produced is not in accordance with the target, besides that it also causes a lot of goods produced defective or rejected.

Based on this background, the researcher is interested in conducting research with the title "The Influence of Work Environment and Occupational Health and Safety on Employee Performance at PT Schneider Electric Batam".

Conducive work environment provides a sense of security and allows employees to work optimally. The indicators of the work environment are as follows (June & Siagian, 2020):

1. Lighting on the job site
Good lighting in a room will make employees feel comfortable and able to improve performance so that employees can achieve the targets set by the company. Good lighting is lighting that fits the area of the room so it doesn't feel too bright or too dim so your eyes don't get tired easily.
2. Safety in the work environment
High job security is a priority for employees because with the minimum work risk, the higher the employee's performance. Suasana kerja
3. A good working atmosphere between employees and employees, as well as between employees and superiors will provide more enthusiasm for employees so as to create a comfortable atmosphere and can optimize employee work. Perhatian dan dukungan pimpinan
4. Bosses who can take good care of employees and always provide support to their employees can increase morale for employees. Penggunaan waktu di lokasi kerja
5. Good use of time at work locations will have a positive effect on improving employee performance by always achieving work targets.

Occupational health safety

Occupational Health and Safety (K3) is a situation that must be achieved in the workplace with all efforts based on science and profound thinking in order to safeguard employees, people, their job, and culture via the continual deployment of accident prevention technology in compliance with laws and regulations.. applicable (Parashakti & Putriawati, 2020). Meanwhile, according to Mody in E. Wibowo & Utomo (2016) said that safety is a protection of employees from injury caused by accidents related to work.

(2019) said that occupational health safety is a comprehensive protection activity and an effort to keep employees from getting an accident while carrying out their activities and staying healthy while working. Mangkunegara in Juniarti & Halin (2018) argues that occupational safety and health is a thought generated by employees in accordance with their role in the company.

According to experts, occupational health safety is an endeavor to protect oneself from work-related dangers in order to reduce work-related accidents. Because an employee's first concern should be workplace safety and health. **Occupational Health Safety Indicator**

The indicators of Occupational Health and Safety are as follows (June & Siagian, 2020):

1. Working environment conditions
Good working environment conditions can provide comfort, safety and can minimize work hazards. Adequate environmental conditions can improve employee performance in terms of quality and quantity and the fulfillment of production targets.

2. Air setting
The air temperature in the production room is very important for the health and safety of employees. Temperature regulation must pay attention to the area of the production site, the number of employees in it.
3. Lighting Setting
Adequate lighting settings that are not too bright and not too dark provide eye comfort. So that the work process can run smoothly. Penggunaan alat kerja
4. The use of adequate work tools is important in the application of occupational health and safety.
5. Physical and spiritual state
Physical and mental health is an important assessment for employee health safety. Employees with a healthy physical condition will avoid work accidents because they can focus when working and a healthy spiritual state can also minimize work accidents.

Employee Performance

Mangkunegara in (Handayani, 2020) states that employee performance is something that can be assessed based on vision or assessment with indicators. Assessment can be done by observing how well it works, how much gain is based on the target. John in (Noratta, 2021) defines performance as a standard in the work system in an organization where performance is always observed and demands for improvement if it is not optimal.

Harsuko in (Rosmaini & Tanjung, 2019) giving a statement about employee performance is as a view for superiors to observe their employees in carrying out their work. According to Ginting in Saputra (2020) said that performance is the result obtained by the company which is profit-oriented and non-profit-oriented which is produced in a certain period. The point here is that when the performance obtained produces something that is profitable in the form of money, then indirectly the company will certainly get other benefits, for example a good image of the company, the quality and productivity of good employee performance.

According to expert view, performance is the outcome of work obtained by employees which can be seen from various perspectives, namely the quality of good work and targets that can be met in a job. **Employee Performance Indicators**

The indicators according Wibowo in (Marjaya, et al., 2019) ialah:

1. *Goals*
is the basis of individuals doing good actions to get good results.
2. *Standart*
Every activity carried out such as employees who work in an organization has demands to meet predetermined work standards.
3. *Feed Back*, is good feedback that is always felt by every individual at work, what is done sincerely will definitely get the desired thing.
4. *Tools*
The tools used are very influential in improving the quality and results obtained.
5. *Competence*
Competent employees are capable of managing their jobs in accordance with the time constraints imposed; these employees also exhibit superior performance.
6. *Motive*
The reason a person works well is because the individual has a specific motive or goal.
7. *Opportunity*
Opportunities or opportunities can make employees compete in maintaining their position, because basically there are currently many applicants but lack of job opportunities, this is where employee performance can be observed.

RESEARCH METHOD

This research is a quantitative research with survey method. This research was conducted at PT. Schneider Electric Batam, which is located on Jl. Banyan Kabil, Sei Beduk District, Batam City. The population in this study was 300 people who were then taken as many as 171 samples obtained from the results of the calculation of the Slovin formula. The sampling technique used is Proportionate Stratified Sampling. This study used a questionnaire instrument for data collection which was distributed via google form as many as 3 variables, each variable consisting of 10 question items with 5 alternative answers. The analysis used is the Multiple Linear Regression test.

RESULTS AND DISCUSSION

RESULTS

Multiple Linear Regression Analysis Test Results

Table 3 Multiple Linear regression Analysis Test Results

Model	Coefficients ^a			t	Significance
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	8.193	2.702		3.033	.003
X1	.011	.081	.009	.138	.890
X2	.744	.068	.716	10.919	.000

a. Dependent Variable: Y

Source: Data Processing with SPSS 25, 2021

Based on Table 3, Multiple Regression Analysis Test Results, it is known that the significance values and coefficients have been tested using SPSS.

$$= + 1. 1 + 2. 2 + 3. 3 +$$

$$= - 6,578 + 0,0961 + 0,2762 + 0,7193$$

From the regression equation it can be assumed:

- a. Constant = 8.193, if the other independent variables have a value of 0 then it can be assumed that the employee performance value is 8.193.
- b. The work environment coefficient is 0.11, it can be assumed that if the other variables are 0 but the work environment variable has an increase

Coefficient of Determination Test Results

of 1 time, the employee's performance will increase by 0.11. This can be explained by the illustration that if the work environment is comfortable and a good environment continues to be improved, employee performance will also increase. The coefficient of Occupational Health and Safety is 0.744, so it can be assumed that if other variables remain or do not increase, while occupational health safety increases by 1 time, then employee performance will increase 1 time or 0.744. This can be explained by the illustration that if safety and health in a company continue to be considered and improved, employee performance will increase.

Table 4 Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std.error of the Estimate
1	0.721	0.520	0.515	4.781

Source: Data Processing with SPSS 25, 2021

The result of the coefficient of determination test is 0.520 or equal to 52%. This figure means that the work environment and Occupational Health and Safety simultaneously affect employee performance by 52%. While the rest (100% -52% = 42%) is influenced by other variables outside this regression equation or variables that are not studied.

The findings of the study indicate that:

The Work Environment Variable (X1) has a significance value of $0.890 > 0.05$, indicating that the work environment has no meaningful influence on employee performance. On the basis of these findings, the assertion H1 is rejected.

The Occupational Health Safety (X2) variable has a significance value of $0.000 < 0.05$, so it can be concluded that there is a significant effect of Occupational Health Safety on Employee Performance. Based on these results, the statement H2 is accepted.

F Test Results

The results of the f test were obtained through an analytical test using SPSS. This test is useful for knowing the correlation between variables simultaneously. Based on table 6 the results of the F test, it is known that the significance value is $0.000 < 0.05$, it can be concluded that the work environment and occupational health and safety simultaneously have a significant effect on job satisfaction..

DISCUSSION

4.6.1 The influence of the work environment on employee performance

From the results of data analysis, obtained t count $0.138 < 0.67593$ with a significance value of $0.890 > 0.05$, so it can be concluded that the work environment variable partially has no significant effect on employee performance..

The work environment is everything that is around employees when they work. The work environment, such as a clean, comfortable, air- conditioned workplace with good air circulation, arrangement of goods according to their function. A good work environment will definitely make employees comfortable at work, but the absence of influence of the work environment on employee performance can be due to other things, such as when in a factory with poor air circulation but employees must continue to work to meet daily targets. Sometimes, an uncomfortable environment does not make employees stop working, because basically employees work for their own purposes other than comfort. These results support previous research by (Nabawi, 2019) which proves that the work environment partially has no significant effect on employee performance.

4.6.2 Effect of Occupational Health and Safety on employee performance

From the results of data analysis, obtained a significance value of $0.000 < 0.05$, so it can be concluded that the Occupational Health and Safety variable has a positive and significant effect on employee performance.

Occupational Health and Safety is a priority for workers and also superiors, the priority is being safe and healthy at work. Safety can be improved in various ways, such as giving a danger sign in every place that has a high risk in the work, warning to always use personal protective equipment. Employees who are healthy and safe will work well and according to targets. So it can be said that occupational safety and health is very important for employees because it can affect work activities. If an employee is injured, the employee cannot meet his work targets. These results support previous research by (Chasanah, 2019) which concludes that the work safety variable has an influence on performance, if work safety is good then employee performance will be better.

4.6.3 Effect of work environment and occupational health and safety on employee performance

From the results of data analysis, obtained a significance value of $0.000 < 0.05$, so it can be concluded that the variables of the work environment and Occupational Health and Safety have a positive and significant effect on employee performance..

A good environment can provide a high level of safety for employees, for example in a factory there is a large room that contains piles of industrial products that smell like machines and in that place the employees work, while air circulation is very minimal, from this example it can cause a lot of damage. health problems such as shortness of breath due to odors produced by lack of air circulation, mixed places can cause employees to walk less focused and hit production goods which can cause damage to goods or injury to employees. From this, it greatly affects employee performance because good employee performance comes from a healthy body and a supportive environment for health and safety. These results support research by (Bhastary dan Kusri, 2018) That the results of simultaneous testing of the independent variables Occupational Safety and Health (K3) and the Work Environment simultaneously have a significant effect on the dependent variable Performance (Y) of employees at PT.Samudera Perdana by 68.4% and the remaining 31.6% are other variables not examined in this research.

CONCLUSION

Based on research conducted at PT Schneider Electric Batam using 171 respondents with the title "The Effect of Work Environment and Occupational Health and Safety on Employee Performance at PT Schneider Electric Batam" it was concluded that the work environment partially had no significant effect on employee performance at PT Schneider Electric Batam. Occupational Health and Safety partially has a significant effect on the performance of employees of PT Schneider Electric Batam. Work environment and Occupational Health and Safety simultaneously have a significant effect on the performance of employees of PT Schneider Electric Batam.

SUGGESTION

Suggestions based on this research are:

1. For Companies

In order to further improve a good and comfortable work environment for employees so that employees feel at home at work and can be comfortable when working so that it is easier for employees to achieve work targets. It is also hoped that the company will be stricter and always improve occupational health safety in terms of safety equipment, and supervision for employees to avoid work risks.

2. For employees

In order to pay more attention to the environment around the workplace to always maintain cleanliness together and contribute ideas to continue to improve a good work environment. And to always improve ways to take care of yourself for the safety and health of employees at work.

3. For Academics

As a contribution of knowledge for others so that they can find out the influence of the work

environment and Occupational Health and Safety on employee performance. With this research, it can be used as a guide on how to improve employee performance.

4. For the next researcher

So that it can be used as a reference for future research, both with the same variable or with different variables, and it is hoped that good results will be obtained.

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