

The Effect of Training and Work Environment on Employee Performance in the Fire Department

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ABSTRACT

This study aims to determine whether there is an influence of Training and Work Environment on Employee Performance in the Fire Department. The sampling technique was carried out using a saturated sample technique obtained by 88 samples. The method used is quantitative method. This study used multiple linear regression analysis, and hypothesis test using t test and F test. The results of the study conducted in the t test (partial) training variable had an effect on performance with a sig value of $0.004 < 0.05$ and a calculated t value of $6.173 > t_{table} 1.988$. The work environment variable did not have a significant effect on performance by obtaining a t count of $1.689 < t_{table} 1.988$ with a sig of $0.095 > 0.05$. The results obtained from the F test (simultaneous) variables of training, work environment and performance affect simultaneously with the calculation results F calculated at $42.885 > 3.10$ with a sig value of $0.000 < 0.05$.

INTRODUCTION

Human Resources is an important factor in an organization that cannot be separated, because the progress and success of the organization holds on to the human resources owned by the organization. Human Resources support the running of an organization in order to achieve its goals. Human Resources (HR) is an important thing and must be owned by an organization to achieve organizational or company goals, because Human Resources are the main part of the organization compared to other parts of resources such as capital and technology, humans participate and play an active role in carrying out

the activities of an organization because those who can control other factors are humans themselves (Syafrina, 2019). It is necessary to hold efforts to improve and improve humans and the formation of quality human resources because they see the importance of the role of human resources (Mantiri, 2019).

In achieving its goals, breast milk organizers are expected to be able to have human resources with good performance. Optimal performance can be achieved if an employee in carrying out their duties with a feeling of security, comfort and happiness when carrying out the duties or work they are responsible for (Jumawan, 2021). Because performance is the ability that must be possessed by every employee to perform the duties and responsibilities given by the organization to employees. The better the performance of individuals in an organization, the more benefits the organization will get (Herawati, 2019).

Training is created to achieve organizational goals, which will help achieve the goals of individual workers. Training is referred to as a common activity because with training, employees or workers will shape workers to be more skilled and will be more useful (Sunarto A., 2022). Organizations must pay maximum attention to their employees by increasing the potential, knowledge and skills of employees, especially in the face of rapidly developing technological developments (Wahyuningsih, 2019). The work environment is something that exists among workers and that can affect them in carrying out the tasks charged such as cleanliness, air temperature, work safety, lighting and others. A working environment condition is called good if employees can carry out work activities optimally, healthy, safe, and comfortable (Ardianti et al., 2018). Non-physical work environments are conditions related to work relationships, such as relationships with superiors and relationships with subordinates, or relationships with colleagues (Fauziyyah & Rohyani, 2022).

The Fire Department is an implementing element of the government that is given responsibility in carrying out the task of handling fires and disasters. The density of settlements and the number of factories have a good impact but can also have a bad impact on the environment. namely the creation of an environment that is prone to security disturbances and increased risk of fire that can cause large losses to the community. Fire events can cause many losses such as casualties and cause damage to the surrounding environment. To anticipate the occurrence of fires, fire prevention and suppression efforts are needed in terms of human resources, arrangements and supporting equipment based on the potential for fire and other disasters.

In human resource development, training is very important because it is a means of improving skills and general knowledge for employees (Andayani & Hirawati, 2021). Training is something that must be considered to find out the development of employees. Training conducted on Fire Department

employees has been carried out, training is carried out once a year, and training is carried out in stages. Training should be done regularly and optimally because in an organization, training is something that must be considered to find out the development of employees. In addition to training, the work environment plays an important role because it can create a safe and comfortable working atmosphere. A good and conducive environment can make employees feel happy and at home in carrying out their duties so that their performance will increase (Supriyanto, 2018). The work environment should have a good layout and sufficient space so that it can make employees comfortable when carrying out their work because employees who work in good environmental conditions will create high productivity so as to get results in accordance with the goals to be achieved.

THEORETICAL REVIEW

Performance is the result of work in quality and quantity obtained by an employee in carrying out his duties in accordance with the responsibilities given by the company to him (Prayudi, 2020). Performance is an overview of the level of achievement of the implementation of an activity program or policy in realizing the goals, objectives, vision, and mission of the organization as outlined through the organization's strategic plan (Setiawan & Khurosani, 2018).

Performance indicators according to (Dwianto et al., 2019).

1. Quality
2. Quantity
3. Execution of duties
4. Responsibility

Training is an activity that can produce, increase the ability of employee productivity and can shape employees to be more disciplined, so that they have certain skills and expertise (Gustiana et al., 2022). Training is an effort to improve employee performance in their current jobs or in other jobs such as the next position (Hendra, 2020).

Indicators from the training include (Wahyuningsih, 2019):

1. Types of training
2. Training objectives
3. Material
4. Method
5. Participant qualification

The work environment is all the conditions that are around the workers, so that both directly and indirectly can affect him in carrying out the tasks charged. A good and pleasant environment will be able to generate enthusiasm and enthusiasm for work, and vice versa if the work

environment is not pleasant it will be able to reduce enthusiasm and enthusiasm for work (Hasibuan & Bahri, 2018).

Work environment indicators (Setiawan & Khurosani, 2018):

1. Description
2. Hygiene
3. Noise
4. Security
5. Movement space
6. Collaborate
7. Relationships between colleagues and relationships between superiors of an organization.

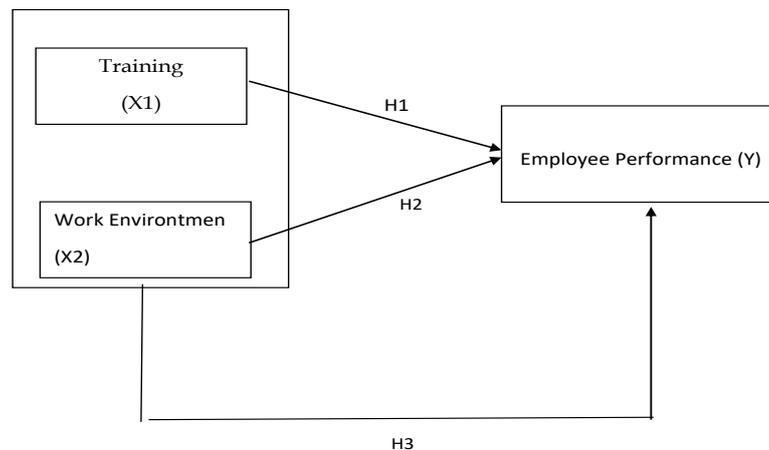


Figure 1 Thinking Framework

Based on the late frame of mind, namely the Effect of Training and Work Environment on Employee Performance. Thus it can be formulated as follows:

H1: Training Affects the Performance of Fire Department Employees

H2: Work Environment Affects the Performance of Fire Department Employees

H3: Training and Work Environment Affect the Performance of Fire Department Employees

METHODOLOGY

The method used in this trial is a quantitative method, using SPSS. Quantitative research is a research method based on the philosophy of positivism, used to examine certain populations or samples, sampling techniques are generally carried out randomly, data collection using research instruments, quantitative or statistical data analysis aims to test hypotheses that have been determined (Fajri et al., 2022).

RESULTS

Validity Test

It is known from the SPSS results above that the calculated r value obtained by each variable statement has a calculated r value that is greater than the table r value which has a value of 0.209 so that it can be concluded that the statements on the n training variables, work environment and performance are declared valid.

Reliability Re Test

Table 1 Reliability Test

No	Variable	Alpha Cronchbach	Criterion	Information
1.	Training	0,839	>0,60	Reliable
2.	Work Environment	0,735	>0,60	Reliable
3.	Performance	0,800	>0,60	Reliable

The table above shows that the *Alpha Cronchbach* value obtained from the Training variable (X1) is 0.839, Work Environment (X2) is 0.735 and Performance (Y) is 0.800. Which means that the *Alpha Cronchbach* value of each variable is greater than 0.60. So the statements in this questionnaire are reliable or trustworthy.

Normality Test

Table 2 Normality Test

One-Sample Kolmogrov-Smirnov Test		
		Unstandardized Residual
N		88
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.54657988
Most Extreme Differences	Absolute	.077
	Positive	.066
	Negative	-.077
Test Statistic		.077
Asymp. Sig. (2-tailed)		.200 ^{c,d}

It can be seen in the table above the value of Asymp. Sig. (2-tailed) of 0.200 > 0.05 which means that the normality test on this study data is normally distributed and the data used in this study is good and feasible to use.

Using the P-Plot model

It spreads around diagonal lines, which means that the regression model satisfies the normality assumptions

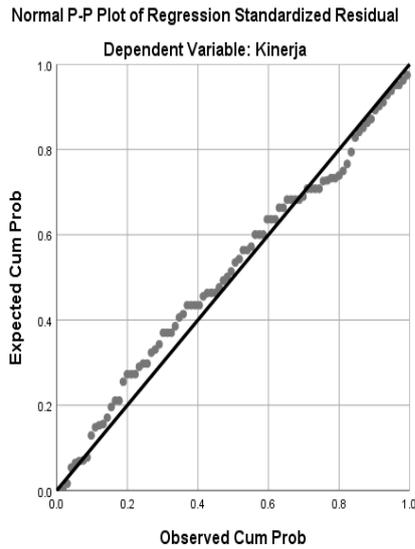


Figure 2 P-Plot

Multicollinearity Test

Table 3 Multicollinearity Test

Free Variable	Account		Information
	Tolerance	BRIGHT	
Training	0,626	1.597	No multicollinearity
Work Environment	0,626	1.597	No multicollinearity

In the table above, it can be seen that the tolerance value obtained by the training variable is 0.626 and the VIF value is 1,597 and in the work environment variable, a *tolerance* value of 0.626 and a VIF value of 1,597 are obtained . Then there is no multicollinearity

Heteroscedasticity Test

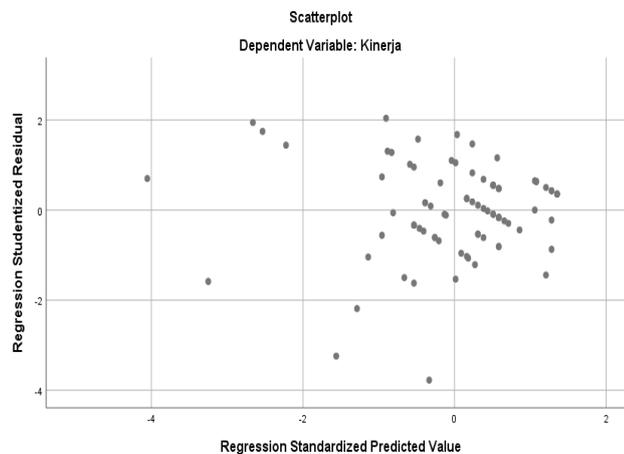


Figure 3 Heteroscedasticity Test

In the picture above, it shows that the points spread randomly and do not form a certain pattern. This can show that heteroscedasticity does not occur in regression models.

Multiple Linear Regression Analysis

Table 4 Multiple Linear Regression Analysis

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Itsself.
	B	Std. Error	Beta		
(Constant)	4.777	1.635		2.921	.004
Training	.427	.069	.597	6.173	.000
Lingkungan_Kerja	.114	.068	.163	1.689	.095

a. Dependent Variable: Performance

Equation of multiple linear regression analysis test results:

$$Y = a + b_1.x_1 + b_2.x_2 + e$$

$$Y = 4.777 + 0.427 X_1 + 0.114 X_2$$

The above equation is explained as follows:

1. Constant = 4.777
This means that if the training and environment variables are assumed to be 0, then employee performance has a value of 4.777.
2. The value of the coefficient in the training variable (X1) 0.427 means that every increase in 1 training value, it is followed by an increase in performance of 0.427.
3. The value of the coefficient in the work environment variable (X2) is 0.114 which means that every increase in 1 work environment value is followed by an increase in performance of 0.114.

Test t

Table 5 Test t
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Itsself.
	B	Std. Error	Beta		
	(Constant)	4.777	1.635		2.921
Training	.427	.069	.597	6.173	.000
Lingkungan_Kerja	.114	.068	.163	1.689	.095

a. Dependent Variable: Performance

The training variable (X1) obtained a calculated t value of $6.173 > 1.98827$ (t table) with a sig of $0.004 < 0.05$ (α) a significance value smaller than 0.05 this means that training has a significant effect on the performance variable, the decision H1 is accepted.

In the work environment variable (X2) obtained t count of $1.689 < 1.98827$ (t table) with a sig of $0.095 > 0.05$ (α) the significance value is greater than 0.05, this means that the work environment partially does not have a significant effect on the performance variable so that H2 is rejected.

Test F

Table 6 Test F

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Itself.
1 Regression	209.983	2	104.992	42.885	.000 ^b
Residual	208.096	85	2.448		
Total	418.080	87			

a. Dependent Variable: Performance

b. Predictors: (Constant), Lingkungan_Kerja, Training

It can be seen that F count is $42.885 > 3.10$ (F table) with a sig value of $0.000 < 0.05$ significance value less than 0.05. This means that the training variable and the work environment simultaneously have a significant effect on the performance variable, hence H3 is accepted.

Test Coefficient of Determination (R²)

Table 7 Test Coefficient of Determination (R²)

Model Summary ^b				
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709 ^a	.502	.491	1.565

a. Predictors: (Constant), Lingkungan_Kerja, Training

b. Dependent Variable: Performance

Based on the table above, it is known that the value of R Square is 0.502 or 50.2%. Which means that 50.2% of the performance variables of Bekasi City Fire Department Employees can be known by variations of the two independent variables, namely training variables and work environment. The remaining 49.8% was explained by other causes that were not studied in the variables in this study.

DISCUSSION

The Effect of Training on Performance

Based on the test results and data analysis that has been carried out resulting in a t-test calculation (partial) that training has a significant effect on performance, H1 is accepted. Training is a way to train employees in improving knowledge and skills that can support improvements in their performance. These results are in line with research conducted by (Astuti et al., 2021; Mutholib, 2019; Sulaiman & Badan, 2018) stated that training has a significant effect on employee performance and considers training very important in carrying out work. Training activities can run effectively because they use methods that are in accordance with the type of training needed, it can make trainees have high enthusiasm when attending training, because training activities are easily accepted and can be a benefit for employees. This means that if the training is carried out well, it will improve employee performance

The Effect of Work Environment on Performance

Based on the test results and data analysis that has been carried out, the calculation of the t test (partial) work environment partially does not have a significant effect on performance. Then the work environment cannot affect employee performance. then H2 is rejected because employees have professionalism in their field of work that has been formed in Fire Department employees even though conditions are inadequate, and there is noise in the work environment which causes reduced comfort in working but the work environment is considered as an external factor of the employees. This study has results in line with previous research conducted by (Arwin et al., 2021; Gita Dea et al., 2020; Kariyamin et al., 2020) with the results of the work environment is not one of the variables that affect employee performance. Workenvironment is not the only factor driving performance improvement in employees. The work environment is considered as an external factor of an employee so that environmental factors, both the physical environment and the psychic environment, cannot directly affect the improvement of performance in employees.

The Effect of Work Environment and Training on Performance

Based on the results of the F test (simultaneous), it was obtained that the training variable and work environment simultaneously or simultaneously had a significant effect on the performance variable. Training aims to improve the ability and knowledge of employees, therefore training that runs effectively can improve employee performance. Supported by a work environment that makes employees comfortable in carrying out their work so that to improve performance must be supported by both, namely training and work environment. Therefore, training and work environment have a significant effect on the performance of Bekasi City Fire Department employees. This is in line with research conducted by (Habibi & Setyaningrum, 2022; Huda & Sholeh, 2019; Monika et al., 2022) the work environment simultaneously influences employee performance at PT. Toyota Logistra Pingloka Indonesia.

CONCLUSIONS AND RECOMMENDATIONS

This study produced the following conclusions:

1. The results of the t test (partial) produce a calculation of the calculated t value of $6.173 > 1.98827$ (t table) with a sig of $0.004 < 0.05$ a signification value smaller than 0.05, this means that training has a significant effect on performance. Then H1 is accepted.
2. The results of the t test (partial) produce a t-test calculation (partial) obtained t count of $1.689 < 1.98827$ (t table) with a sig of $0.095 > 0.05$ signification value greater than 0.05. This means that the work environment has no significant effect on performance. Then H2 is rejected.
3. The results of the F test (simultaneous) obtained the calculation results F count of $42.885 > 3.10$ (F table) with a sig value of $0.000 < 0.05$ significance value less than 0.05. This means that training variables and work environment simultaneously or simultaneously have a significant effect on performance variables. Then H3 is accepted.

FURTHER STUDY

This study has limitations, namely the variables that are limited to this study are only using training variables and work environment. There are limitations in the use of questionnaires in research, because the answers given by respondents cannot show the real situation because there are differences in understanding in each respondent. It is expected that the next research will develop and expand other variables in the research on the effect of training and work environment on employee performance, such as adding variables of work discipline, compensation, motivation and other variables. It is expected to be used as a reference for future researchers

REFERENCES

- Andayani, T. B. N., & Hirawati, H. (2021). The Effect Of HR Training And Development On The Performance Of Employees Of Pt Pos Indonesia Magelang City Branch. *Ubhara Scientific Journal of Management*, 3(2), 11. <https://doi.org/10.31599/jmu.v3i2.982>
- Ardianti, F. E., Qomariah, N., & Wibowo, Y. G. (2018). (Case Study on Pt. Sumber Alam Santoso Pratama Karang Sari Banyuwangi) Effect Of Work Motivation , Compensation And Work Environment On Employee Work Satisfaction (Case Study At Sumber Alam Santoso Pratama Karang Sari Banyuwangi). 8(1), 13–31.
- Arwin, Yuliana, & Erika. (2021). The Influence of Leadership and Work Environment on Employee Performance Case Study at Pt Teguh Jaya

Mandiri. Scientific Journal of Bisma Cendekia, 1(2), 60–66.

- Astuti, R., Akbar, L. Y., & Hasibuan, L. S. (2021). The Influence Of Motivation And Training On The Performance Of Employees Of Pt.Deltamas Surya Indah Mulia Medan. National Seminar on Educational Technology and Humanities 2021, 8–13.
- Dwianto, A. S., Purnamasari, P., & Tukini, T. (2019). The Effect Of Compensation On Employee Performance At Pt. Jaeil Indonesia. *Jesya (Journal of Sharia Economics & Economics)*, 2(2), 209–223. <https://doi.org/10.36778/Jesya.V2i2.74>
- Fajri, C., Amelya, A., & Suworo, S. (2022). The Effect Of Job Satisfaction And Work Discipline On Employee Performance Of Pt. Indonesia Applicad. *Jiip - Scientific Journal of Educational Sciences*, 5(1), 369–373. <https://doi.org/10.54371/Jiip.V5i1.425>
- Fauziyyah, K., & Rohyani, I. (2022). The Effect Of Self Efficacy, Non-Physical Work Environment, And Work Discipline On Employee Performance At Pt Semestanustra Distrindo Depo Kebumen. *Student Scientific Journal of Management, Business and Accounting (Jimmba)*, 4(3), 330–343. <https://doi.org/10.32639/Jimmba.V4i3.112>
- Gita Dea, Ocky Sundari, & Johnson Dongoran. (2020). The Influence of Work Discipline and Work Environment on Employee Performance at PT Pln (Persero) Central Java Distribution Main Unit and D.I Yogyakarta Salatiga Customer Service Implementation Unit. *International Journal Of Social Science And Business*, Vol.4 No.1(1), 144–154.
- Gustiana, R., Hidayat, T., & Fauzi, A. (2022). Training and Human Resource Development (A Literature Review of Human Resource Management Science). *Jemsi*, 3(6), 657–666.
- Habibi, R., & Setyaningrum, R. P. (2022). The Influence Of Competence, Training And Physical Work Environment On Employee Performance Of Pt. Toyota Logistra Pingloka Indonesia Cikarang Timur. *Mirai Management Journal*, 7(2), 1–13. <https://doi.org/10.37531/Mirai.Vxix.2411>
- Hasibuan, S. M., & Bahri, S. (2018). The influence of leadership, work environment and work motivation on performance. *Maneggio: Scientific Journal of Master of Management*, 1(1), 71–80. <https://doi.org/10.30596/Maneggio.V1i1.2243>
- Hendra, H. (2020). The influence of organizational culture, training and motivation on employee performance at Tjut Nyak Dhien University Medan. *Maneggio: Scientific Journal of Master of Management*, 3(1), 1–12. <https://doi.org/10.30596/Maneggio.V3i1.4813>

- Herawati, H. (2019). Unihaz Journal of Accounting - Jaz June Unihaz Journal of Accounting - Jaz June. 2(1), 16–25.
- Huda, K., & Sholeh, R. (2019). The Effect Of Training, Motivation And Work Environment On Employee Performance At Pt. Sumber Rukun Mandiri Mojokerto. *Inobis: Indonesian Journal of Business and Management Innovation*, 2(3), 369–381. <https://doi.org/10.31842/jurnal-inobis.v2i3.97>
- Jumawan, J. (2021). The effect of work experience and education level on employee performance and performance benefits as intervening variables. *Media Mahardhika*, 19(2), 342–351. <https://doi.org/10.29062/mahardhika.v19i2.258>
- Kariyamin, K., Hamzah, N., & Lantara, N. (2020). The influence of motivation, competence, and work environment on employee performance. *Governance*, 7(1), 10–18. <https://doi.org/10.52103/tatakelola.v7i1.65>
- Mantiri, J. (2019). The role of education in creating quality human resources in North Sulawesi Province. *Journal of Civic Education: Media for Pancasila and Civic Studies*, 3(1), 20. <https://doi.org/10.36412/ce.v3i1.904>
- Monika, A., Rusman, T., Suroto, S., & Maydiantoro, A. (2022). The effect of the work environment, training, and compensation on employee performance. *Economic Education and Entrepreneurship Journal*, 4(2), 133–150. <https://doi.org/10.23960/e3j/v4i2.133-150>
- Mutholib, M. (2019). The effect of job training and financial compensation on performance. *Liabilities (Journal of Accounting Education)*, 2(3), 222–236. <https://doi.org/10.30596/liabilities.v2i3.3993>
- Prayudi, A. (2020). The influence of transformational leadership style on employee performance with work motivation as an intervening variable (study on employees pd. Binjai City Development). *Journal of Management*, 6(2), 63–72. <http://ejournal.lmiimedan.net>
- Setiawan, I., & Khurosani, A. (2018). The effect of physical work safety and work environment on employee performance. *Journal of Business and Management Research Tirtayasa*, 2(1). <https://doi.org/10.48181/jrbmt.v2i1.3828>
- Solomon, M. O., & Badan. (2018). *Journal of Revitalization Journal of Management Science* Vol. 07, Number 02, June 2018 The Effect of Training and Work Environment on the Performance of Kediri City BPBD Employees Meri Oktavia Sulaiman Kediri City Regional Disaster Management Agency. The Effect of Training and Work Environment on the Performance of BPBD Kediri City Employees, 07, 172–179.

- Sunarto, A. (2022). The Influence Of Discipline And Job Training On Employee Performance At Pt. Kekal Jaya Makmur Tangerang. *Journal of Social Sciences*, 1(1), 27-36.
- Supriyanto, H. (2018). Employee Performance (Study on Employees of Lpp Radio Republik Indonesia Malang Station). 58(1), 141-146.
- Syafrina, N. (2019). Human Resource Management Eri Susan 1. *Journal of Educational Management*, 9(2), 952-962.
- Wahyuningsih, S. (2019). *Jurnal Warta Edition : 60 April 2019 The Effect of Training in Increasing Employee Work Productivity By | Issn : 1829-7463 Dharmawangsa University Journal Warta Edition : 60 April 2019 | Issn : 1829-7463 Dharmawangsa University. April.*