The Influence of Occupational Safety and Health on Employee Performance which is Mediated by Employee Work Motivation at PT PIP

Suyatno

Universitas Sultan Ageng Tirtayasa Email: suyatno.akun2@gmail.com

Ranthy Pancasasti

Universitas Sultan Ageng Tirtayasa Email: ranthy@untirta.ac.id

ABSTRACT

Employee performance is an aspect that must be considered by every company. Because if the employee's performance is not good, it will affect the progress and development of the company in the future. However, in recent years the performance of employees at PT PIP has decreased. Many factors affect the decline in employee performance at PT PIP, one of which is the occurrence of work accidents due to inconsistent implementation of Occupational Safety and Health, resulting in decreased employee motivation.

This study aims to examine and analyze the variables that can affect employee performance with Occupational Safety and Health at PT PIP through employee motivation as mediation. Updates in this research have not been found in previous research discussing efforts to improve employee performance by implementing the Occupational Safety and Health program and employee motivation at PT PIP.

Research Limitations: The limitations in this study are only to analyze efforts to increase employee performance with Occupational Safety and Health and employee motivation at PT PIP. In this study, a quantitative descriptive method was used. There are 2 types of data sources used in this study, namely primary data and secondary data. The population in this study were all permanent employees of PT PIP. In this study, a saturated sample was used for the sampling method, which means that all the people in the population are used as the sample. As a result, all permanent employees of PT PIP or 103 respondents became the research sample.

Based on the research results show that Occupational Safety and Health has a positive effect on employee performance but not significant. Occupational Safety and Health has a positive and significant effect on employee motivation. Employee motivation has a positive effect on employee performance. Employee motivation mediates the effect of Occupational Safety and Health on employee performance.

Keywords: Occupational Safety and Health, Employee Motivation, Employee Performance

Received: 15 August 2023; Accepted: 25 September 2023; Published: December 2023.

How to Cite:

Suyatno, et.al. (2023). The Influence of Occupational Safety and Health on Employee Performance which is Mediated by Employee Work Motivation at PT PIP. *Journal of Business and Behavioural Entrepreneurship*, 7(2), 74-84. https://doi.org/10.21009/JOBBE.007.2.02

INTRODUCTION

In this research, the author conducted a case study at PT PIP. PT PIP is a state-owned power plant located on Jalan Raya Bojonegara, Margasari Village, Pulo Ampel District, Serang Regency, Banten. The company has 103 permanent employees and is assisted by outsourcing staff. PT PIP is a steam gas power plant company with a total capacity of 740 MW, namely two gas turbines (GT) each with a capacity of 240 MW and one steam turbine (ST) with a capacity of 260 MW.

Many factors influence employee performance in a company, including at PT PIP, one of which is Occupational Safety and Health. Realizing the importance of implementing the Occupational Safety and Health program at PT PIP as one of the human rights for employees and efforts to improve employee performance in the company, the company needs to prioritize and take serious steps to ensure employees feel safe and protected in terms of safety and health. If employees feel safe and protected, they will work with a sense of comfort, which will ultimately increase their performance to the maximum.

However, in recent years there has been a decline in employee performance at PT PIP so it is necessary to evaluate the causes of this decline in performance. Apart from that, in the last few years there have also been several work accidents due to employees' lack of consistency in implementing Occupational Safety and Health. Research needs to be carried out, because it is suspected that the decline in employee performance at PT PIP is related to occupational safety and health problems which can affect employee work motivation so that employee performance tends to decline in recent years. This research aims to examine the influence of Occupational Safety and Health on employee performance which is mediated by employee work motivation at PT PIP.

The business phenomenon in this research is the decline in employee performance and the occurrence of work accidents due to employee inconsistency in implementing Occupational Safety and Health which has occurred in the last few years.

Table 1. PT PIP Employee Performance Achievements 2017-2022

Year	Target	Score (%)
	(%)	
2017	100	98,32
2018	100	95,12
2019	100	98,03
2020	100	97,35
2021	100	85,53
2022	100	86,72

Source: HR Department data PIP, 2023

Based on the table of PT PIP employee performance achievements above, it can be seen that employee performance has fluctuated and has tended to decline in recent years.

Table 2. Work Accident Data at PT PIP for 2017-2022

Year	Number of Work accident	Number of Victims
2017	0	0
2018	1	1
2019	0	0
2020	1	1
2021	1	2
2022	1	2

Source: Work Accident Data at PT PIP, 2023

Based on the PT PIP work accident table above, it can be seen that from 2017-2022 there were 4 work accidents with a total of 6 victims.

Based on the results of previous research conducted by (June & Siagian, 2020) entitled "The Influence of Occupational Safety and Health and the Work Environment on the Performance of PT Lautan Lestari Shipyard Employees", it shows that occupational safety and health and the work environment partially have a significant effect on employee performance. Likewise, research conducted by (Trisnawati & Kurniawan, 2021) entitled "Analysis of Occupational Safety and Health and Work Discipline on Employee Performance", shows that occupational safety and health have a positive and significant impact on employee performance.

However, on the contrary, based on research conducted by (Utama, 2022) entitled "The Influence of Occupational Health Safety and Work Environment on Employee Performance at PT Terminal Peti Kemas Belawan (Pelindo)", shows that occupational health safety has a negative and significant effect on employee performance. Likewise, research conducted by (Wangi at al., 2020) entitled "The Impact of Occupational Health and Safety, Work Load, and Physical Work Environment on Employee Performance",

shows that occupational safety and health do not have a positive and significant influence on employee performance.

Referring to several of the research results above which show that there are different and inconsistent results in the research results, the researcher is of the view that research needs to be carried out to determine the influence of Occupational Safety and Health on employee performance which is mediated by employee work motivation at the PT PIP company. The researcher hopes that the results of this research will be useful and can answer the problems faced by the company.

RESEARCH METHOD

In this scientific research, the researcher uses a type of research that is quantitative descriptive and causal. Quantitative research methods are research methods that use a systematic approach to collect data that can be measured numerically, and then analyzed using statistical techniques to gain a deeper understanding of a phenomenon (Sugiyono, 2019). The descriptive method is a type of research that aims to describe or describe a phenomenon or situation that exists in a population or research sample, without any manipulation or control of variables (Sugiyono, 2019). Quantitative descriptive research aims to observe and review a problem to obtain an overview and information about something (Sirait, 2021). A causal relationship is a cause-and-effect relationship between an independent variable and a dependent variable which is the core of research (Sugiyono, 2017). Researchers use the cause-and-effect method to support the hypothesis that Occupational Safety and Health and the work environment influence employee performance through work motivation.

In this research there are 2 sources of data, namely primary data and secondary data. Primary data is data obtained directly from the data provider. In this research, primary data was obtained directly from PT PIP employees. Primary data collection was carried out through the use of a questionnaire containing questions or statements related to the research variable indicators. Secondary data refers to data that comes from sources that do not provide direct access to the data collector. Secondary data sources can be library studies, literature, or other sources, including relevant data collections related to PT PIP and will be used to collect information in this research.

The population in this study were 103 permanent employees of PT PIP. The sampling method in this research is to use saturated samples. According to Sugiyono (2019), saturated sampling is a sample selection technique where all members of the population are used as research samples. As a result, all PT PIP employees, totaling 103 respondents, became the sample for this research. Samples were obtained from respondents through distributing questionnaires on google form.

RESULTS AND DISCUSSION

Researchers used SmartPLS 4 software to analyze the data in this research. The number of respondents who provided feedback was 103 respondents. Based on gender, the majority of respondents were male, namely 93.2%. Based on the age of the respondents, the majority of respondents were 20-30 years old, 47.5%. Based on work period, the

majority of respondents had a work period of 1-5 years, 47.6%. Based on the latest level of education, the majority of respondents had a Diploma 3 (D3) education, 65%.

The first stage was a data quality test using the SEM PLS algorithm. Test results are as follows:

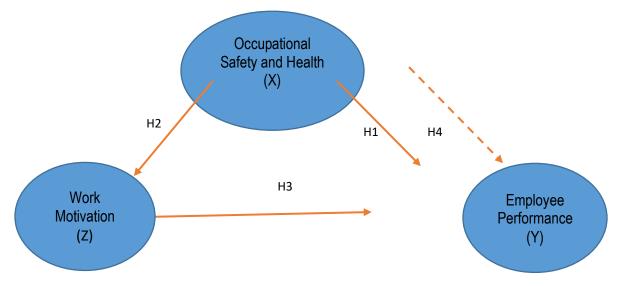


Figure 1. Research Framework Model

The outer model test results are displayed in the following table:

Table 3. SmartPLS 4 Algorithm Test Result Data

	Construct Reliability and Validity – Overview				R-Square	
	Cronbach' s alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	R- square	R-square adjusted
Occupatio nal Safety and Health	0.902	0.919	0.926	0.715		
Employee Performa nce	0.859	0.884	0.898	0.638	0.406	0.394
Work Motivatio n	0.872	0.871	0.907	0.662	0.354	0.348

Source: Research data processing with SmartPLS 4, 2023

Table 4. Data on SmartPLS 4 Algorithm Test Result

	Outer Loading	Collinearity Statistics (VIF)
KK1 <-	0.794	2.164
Employee Performance		
KK2 <-	0.765	1.891
Employee Performance		
KK3 <-	0.776	2.210
Employee Performance		
KK4 <-	0.822	2.190
Employee Performance		
KK5 <-	0.834	2.496
Employee Performance		
KKK1 <-	0.803	3.318
Occupational Safety		
and Health		
KKK2 <-	0.848	2.164
Occupational Safety		
and Health		
KKK3 <-	0.834	2.664
Occupational Safety		
and Health		
KKK4 <-	0.865	3.349
Occupational Safety		
and Health		
KKK5 <-	0.877	3.304
Occupational Safety		
and Health		
MK1 <- Work	0.724	1.443
Motivation		
MK2 <- Work	0.839	2.306
Motivation		
MK3 <- Work	0.861	2.615
Motivation		
MK4 <- Work	0.811	2.099
Motivation		
MK5 <- Work	0.828	2.280
Motivation		

Source: Research data processing with SmartPLS 4, 2023

The results of the validity test prove that each indicator is acceptable and able to explain the latent variable. Based on table 4.2, the outer loading value obtained is ≥ 0.70 for each indicator, so these indicators already have good convergent validity values. This is also supported by the results of measuring the Average Variance Extracted (AVE) value, where the value is ≥ 0.50 according to the results presented in table 4.1. With these results, the indicators have good convergent validity values.

Meanwhile, the results of the reliability testing presented in table 4.1 show that the Cronbach's Alpa and Composite Reliability values are > 0.70, so it can be concluded that

the latent variable has a good reliability value, has good reliability in making measurements. This result is also supported by the R Square measurement results which are presented in table 4.1. The measurement results show an R Square value above 0.26, meaning the model in this study is good or fit.

Then the inner model test was carried out using bootstrapping. The test results are displayed in the following image:

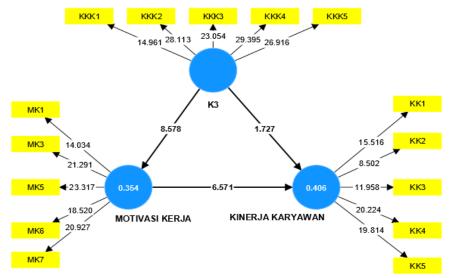


Figure 2. Inner Model Test Results.

Source: Research data processing with SmartPLS 4, 2023

Below are the results of the Inner Model (Bootstrapping) test:

Table 5. Inner Model Test Results (Bootstrapping)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistics (O/STDEV)	P value
Occupational Safety and Health -> Employee Performance	0.127	0.123	0.073	1.727	0.084
Occupational Safety and Health -> Work Motivation	0.595	0.599	0.069	8.578	0.000
Work Motivation -> Employee Performance	0.554	0.555	0.084	6.571	0.000

Occupational	0.330	0.333	0.069	4.776	0.000
Safety and Health					
-> Work					
Motivation ->					
Employee					
Performance					

Source: Research data processing with SmartPLS 4, 2023

Based on the results of the inner model test shown in table 4.3 above, it can be seen that the biggest influence is the influence of K3 on work motivation with a T-statistic value of 8.578, the second biggest influence is the influence of work motivation on employee performance with a T-statistic value of 6.571. Furthermore, the smallest influence is the influence of K3 on employee performance with a T-statistic value of 1.727.

Then in the table of indirect effects (Specific indirect effects) above it can be seen that the influence of K3 on employee performance which is mediated by work motivation has a T-statistic of 4.776.

The following are hypothetical answers from the research results:

- a. H₁: Occupational Safety and Health influence the performance of PT PIP employees. Based on table 4.3 above, the results of measuring the path analysis of the relationship between K3 and employee performance have a fairly small original sample value of 0.127 or 12.7%. Meanwhile, the T-statistic is 1.727 < T-table 1.96 and the P value is 0.084 > 0.05. These results show that Occupational Safety and Health has an influence on employee performance and is not significant.
- b. H₂: Occupational Safety and Health influence the work motivation of PT PIP employees.
 - Based on table 4.3 above, the results of measuring the path analysis of the relationship between K3 and work motivation have an original sample value of 0.595 or 59.5%. Meanwhile, the T-statistic is 8.578 > T-table 1.96 and the P value is 0.000 < 0.05. These results show that Occupational Safety and Health has a positive and significant effect on work motivation.
- c. H₃: Work motivation influences the performance of PT PIP employees. Based on table 4.3 above, the results of measuring the path analysis of the relationship between work motivation and employee performance have an original sample value of 0.554 or 55.4%. Meanwhile, the T-statistic is 6.571 > T-table 1.96 and the P value is 0.000 < 0.05. These results show that employee work motivation has a positive and significant effect on employee performance.
- d. H₄: Employee work motivation mediates Occupational Safety and Health on employee performance.
 - Based on table 4.3 above, the results of measuring the indirect path analysis (indirect effects) between Occupational Safety and Health on employee performance which is mediated by work motivation has an original sample value of 0.330 or 33.0%. Meanwhile, the T-statistic is 4.776 > T-table 1.96 and the P value is 0.000 < 0.05. These results show that employee work motivation mediates the relationship between the influence of Occupational Safety and Health on employee performance.

CONCLUSION

PT PIP employee performance can be improved by implementing and improving the Occupational Safety and Health program so that employee work motivation will increase and employee performance will also increase. Based on the research results and discussion, it can be concluded as follows:

- 1. There is a positive but not significant influence between Occupational Safety and Health on employee performance. The better and more effective the implementation of K3 at PT PIP, the better the employee performance will be, even though the impact is not significant.
- 2. There is a positive and significant influence between Occupational Safety and Health on employee work motivation. The better the K3, the more it will motivate employees to perform even better.
- 3. There is a positive and significant influence between employee work motivation on employee performance. The more motivated employees feel, the more likely they are to take initiative, perform tasks with enthusiasm and be committed to achieving good work results.
- 4. Based on the results of research data, it proves that employee work motivation mediates the relationship between Occupational Safety and Health and employee performance. When a company carries out its K3 role well, a safe, risk-free and supportive working atmosphere will be created. Employees feel protected and appreciated by the company, so work motivation and employee performance will increase.

REFERENCES

- Damayanti, R., Nurlaela, N., & Usman, S. (2019). Pengaruh Keselamatan Kerja Dan Kesehatan Kerja Terhadap Kinerja Karyawan PT Pulau Lemon Manokwari. *UNEJ e-Proceeding*.
- Juniarti, N., Halin, H., & Roswaty, R. (2017). Pengaruh Keselamatan Dan Kesehatan Kerja Terhadap Kinerja Karyawan Pt Putera Sriwijaya Mandiri Palembang. *Jurnal Ilmiah Ekonomi Global Masa Kini*, 8(2), 111-116.
- Trisnawati, T., & Kurniawan, S. (2021). Analisis Keselamatan Dan Kesehatan Kerja Serta Disiplin Kerja Terhadap Kinerja Karyawan. *Akmenika: Jurnal Akuntansi dan Manajemen*, 18(1).
- Diningsih, I. P. (2021). Pengaruh Program Keselamatan Dan Kesehatan Kerja, Beban Kerja Terhadap Kinerja Karyawan Yang Dimediasi Oleh Stress Kerja Pada Mitra Pengguna Jasa Layanan Balai Keselamatan Dan Kesehatan Kerja Medan (Doctoral dissertation).
- Wangi, V. K. N., Bahiroh, E., & Imron, A. (2020). Dampak Kesehatan Dan Keselamatan Kerja, Beban Kerja, Dan Lingkungan Kerja Fisik Terhadap Kinerja Karyawan. *Jurnal Manajemen Bisnis*, 7(1), 40-50.
- June, S., & Siagian, M. (2020). Pengaruh keselamatan dan kesehatan kerja dan lingkungan kerja terhadap kinerja karyawan PT Lautan Lestari Shipyard. *Jurnal Apresiasi Ekonomi*, 8(3), 407-420.

- Simbolon, J. (2017). Pengaruh K3 dan Lingkungan Kerja Terhadap Kinerja Karyawan PT Dwi Lestari Nusantara. *J. Manajemen Bisnis*, 17, 25-26.
- Sari, D. N. (2019). Pengaruh keselamatan kesehatan kerja dan lingkungan kerja terhadap kinerja karyawan dengan kepuasan kerja sebagai variabel intervening pada pt kusuma nanda putra.
- Jayaputra, K. H., & Sriathi, A. A. (2020). Pengaruh Program Keselamatan Dan Kesehatan Kerja, Lingkungan Kerja, Serta Komitmen Organisasional Terhadap Kinerja Pegawai. *E-Jurnal Manajemen Universitas Udayana*, 3(2), 58-66.
- Arifin, A., AL, M. H., Supriaddin, N., & Nur, M. (2023). Pengaruh Keselamatan Dan Kesehatan Kerja, Melalui Motivasi Kerja Terhadap Kinerja Karyawan. *Journal of Economics and Business UBS*, 12(2), 806-821.
- Mutiarasari, P., & Djudi, D. (2017). Pengaruh Program Keselamatan Dan Kesehatan Kerja Serta Lingkungan Kerja Terhadap Motivasi Dan Kinerja Karyawan (Studi Pada Karyawan Pg. Kebon Agung Kabupaten Malang). Brawijaya University.
- Zebua, E. S. A., Telaumbanua, E., & Lahagu, A. (2022). Pengaruh Program Keselamatan Dan Kesehatan Kerja Terhadap Motivasi Kerja Karyawan Pada PT. PLN (Persero) UP3 Nias. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 10(4), 1417-1435.
- Denik, K., Al Musadieq, M., & Djudi, M. (2017). Pengaruh keselamatan kerja dan kesehatan kerja terhadap motivasi kerja (studi pada karyawan Taman Rekreasi Sengkaling (TRS)) (Doctoral dissertation, Brawijaya University).
- Fransiska, Y. (2020). Pengaruh komunikasi, beban kerja dan motivasi kerja terhadap kinerja pegawai pada Dinas Kependudukan Dan Pencatatan Sipil Labuhanbatu Utara (Doctoral dissertation).
- Suwanto, S. (2019). Pengaruh disiplin kerja dan motivasi kerja terhadap kinerja karyawan pada Rumah Sakit Umum Tangerang Selatan. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 3(1), 16-23.
- Arisanti, K. D., Santoso, A., & Wahyuni, S. (2019). Pengaruh Motivasi Kerja Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada PT Pegadaian (Persero) Cabang Nganjuk. *JIMEK: Jurnal Ilmiah Mahasiswa Ekonomi*, 2(1), 101-118.
- Anjani, A. (2019). Pengaruh Kompetensi dan Motivasi Kerja Terhadap Kinerja Karyawan. *Jurnal Inspirasi Bisnis Dan Manajemen*, 3(1), 1.
- Subariyanti, H. (2017). Hubungan motivasi kerja dan kepuasan kerja terhadap kinerja karyawan PTLR Batan. *Jurnal Ecodemica*, *1*(2), 224-232.
- Dwiyanti, N. K. A., Heryanda, K. K., & Susila, G. P. A. J. (2019). Pengaruh kompetensi dan motivasi kerja terhadap kinerja karyawan. *Bisma: Jurnal Manajemen*, 5(2), 121-130.
- Adha, R. N., Qomariah, N., & Hafidzi, A. H. (2019). Pengaruh motivasi kerja, lingkungan kerja, budaya kerja terhadap kinerja karyawan dinas sosial kabupaten Jember. *Jurnal Penelitian IPTEKS*, *4*(1), 47-62.
- Hasibuan, J. S., & Silvya, B. (2019, December). Pengaruh disiplin kerja dan motivasi terhadap kinerja karyawan. In *Prosiding Seminar Nasional USM* (Vol. 2, No. 1, pp. 134-147).
- Susanto, N. (2019). Pengaruh Motivasi Kerja, Kepuasan Kerja, Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada Divisi Penjualan Pt Rembaka. *Agora*, 7(1).

- Yanuari, Y. (2019). Analisis pengaruh motivasi kerja dan lingkungan kerja terhadap kinerja karyawan. *BASKARA: Journal of Business and Entrepreneurship*, 2(1), 45-54.
- Lusri, L. (2017). Pengaruh motivasi kerja terhadap kinerja karyawan melalui kepuasan kerja sebagai variabel mediasi pada karyawan PT. Borwita Citra Prima Surabaya. *Agora*, 5(1).