
The Effect of Workload on Employee Performance with Work Stress as an Intervening Variable

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Abstract

The purpose of this study was to determine the effect of workload on employee performance with work stress as an intervening variable at the Department of Trade Department of Malang City's Diskopindag. This research is explanatory research. The research population consisted of 30 employees at the Department of Industry and Trade Cooperatives of Malang City. Sampling using total sampling so that the entire population is used as a research sample of 30 employees. The data collection technique is a questionnaire. The data analysis technique used is path analysis with the Structural Equation Modeling (SEM) method which is operated using smartPLS 4.0. The results of the study prove that workload has a significant effect on employee performance, workload has a significant effect on work stress, work stress has a significant effect on employee performance and workload has a significant effect on employee performance with work stress as an intervening variable.

Keywords: *Employee Performance, Workload, Work Stress.*

Abstrak

Tujuan penelitian ini untuk mengetahui pengaruh beban kerja terhadap kinerja karyawan dengan stres kerja sebagai variabel intervening pada Diskopindag Bagian Perdagangan Kota Malang. Penelitian ini merupakan penelitian eksplanatori. Populasi penelitian sebanyak 30 karyawan di Diskopindag Bagian Perdagangan Kota Malang. Penentuan sampel menggunakan total sampling sehingga seluruh populasi dijadikan sampel penelitian sebanyak 30 karyawan. Teknik pengumpulan data yaitu kuesioner. Teknik analisis data yang di gunakan yaitu menggunakan retang sekala dan analisis jalur dengan metode Structural Equation Modeling (SEM) yang dioperasikan menggunakan smartPLS 4.0. Hasil penelitian membuktikan bahwa beban kerja berpengaruh signifikan terhadap kinerja karyawan, beban kerja berpengaruh signifikan terhadap stres kerja, stres kerja berpengaruh signifikan terhadap kinerja karyawan dan beban kerja berpengaruh signifikan terhadap kinerja karyawan dengan stres kerja sebagai variabel intervening.

Kata kunci: Kinerja karyawan, beban kerja, stres kerja.

INTRODUCTION

In facing competition in the global era, an organization or institutional body must make changes in all areas of the organization, so that this becomes a challenge for an organization. The search for human resources is one of the organizational preparations to face the challenges that exist. Personnel

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efficiency or personnel effectiveness is an important aspect that needs to be considered in an organization because it is needed in carrying out operational activities to achieve organizational goals. According to Mangkunegara (2006) human resource performance is the implementation of work or work results (output) achieved by a person both in quality and quantity provided by someone at a certain time in accordance with the responsibilities assigned to him.

Workload is a number of jobs that affect the workforce physically and mentally and are their responsibility (Mahawati, 2021). The scope of work of employees is determined according to the type of work in the form of organizational work standards. The amount of work that is too large or too small will have an impact on the inefficiency of workers at work. Stress is usually based on behavior, psychological symptoms, and incompatibility between people and their environment, which makes a person unable to effectively deal with the various demands placed on him. In addition, work stress is caused by excessive workload, which drains employees' energy. The results of research on the effect of workload and working hours on employee performance at by Neksen, et al. (2021) prove that workload has a significant positive effect on employee performance. As for research on the effect of workload and physical work environment on work stress in Padang sub-district office employees by Zulmaidarleni, et al. (2019) shows that workload has a positive and significant effect on work stress of East Padang District Office employees. The results obtained show that a higher workload given to employees will encourage increased work stress for employees of the East Padang District Office. Research conducted by Ekhsan & Septian (2021) shows that there is a positive and significant influence between work stress and employee performance.

The Office of Cooperatives, Industry and Trade (Diskopindag) is the agency that administers government affairs in the cooperative, industrial, micro-enterprise and trade sectors. Workload is one of the causes of poor performance due to excessive workload. The workload can be a barrier to achieving effective employee performance. At the Malang City Diskopindag trade section, there are employees who feel that they have a heavy workload because the job targets are perceived to be too high, such as monitoring the prices of basic commodities in an effort to maintain price stability and collect participant data on people's market management socialization. Based on the targets and performance achievements of the Malang City Diskopindag Commerce Department employees in 2022, individual work indicators in monitoring the prices of basic commodities in an effort to maintain the stability of employee prices have not been able to reach the target, because only 7 basic commodities can be monitored while the target has been set as many as 9 staples. In addition, only 35 participants out of 75 target participants were able to be reached in the socialization of people's market management.

As a result, employee performance to achieve work goals is not optimal. Based on this phenomenon, the authors conducted research on the variables that affect the performance of employees who fail to achieve optimal results. Therefore, the purpose of this study was to determine the effect of workload on employee performance with work stress as an intervening variable in the Department of Industry and Trade Cooperatives of Malang.

LITERATURE REVIEW

According to Mangkunegara (2006) human resource performance is the implementation of work or work results (output) achieved by a person both in quality and quantity provided by someone at a certain time in accordance with the responsibilities assigned to him. Employee performance indicators according to Wirawan (2009) are quality of work, working quantity, and punctuality.

Workload is a number of jobs that affect the workforce physically and mentally and are their responsibility. Every job is a burden for the creator and each employee has his own ability to handle

this workload as a workload, which can be in the form of physical, mental, or social workload (Mahawati, 2021). According to Koesomowidjojo (2017), workload indicators are targets to be achieved, working conditions, and the use of working time. Stress is caused by stimuli and these stimuli can be physical or psychological and individuals respond to these stimuli in different ways. Therefore, stress is defined as a person's adaptive response to stimuli that place excessive psychological or physical demands on them (Moorhead & Griffin, 2013). Indicators of work stress according to Robbins & Judge (2016) are physiological symptoms, psychological symptoms, and behavioral symptoms.

The results of previous research became the basis for conducting this research. This research model uses one independent variable (workload), one intermediary variable (work stress) and one dependent variable (employee performance). The relationship between workload variables and employee performance is formulated based on research Yana (2019), Alpin, et al. (2021), Jeky, et al. (2018) found that workload has a significant effect on employee performance. The relationship between workload variables and work stress is formulated based on research Agastya & Satrya (2018), Zulmaidarleni, et al. (2019), Devy, et al. (2021) found that workload has a significant effect on work stress. The relationship between work stress and employee performance is formulated based on research Chadek, et al. (2018), Ehsan (2020), Hartono, et al. (2020) found that opinion of work stress has a significant effect on employee performance. The framework in this study can be seen in Figure 1. Based on the research framework, the following research hypotheses can be proposed:

H1: Workload has a positive and significant effect on employee performance

H2: Workload has a positive and significant effect on work stress

H3: Job Stress has a positive and significant effect on employee performance

H4: Workload has a positive and significant effect on employee performance through work stress

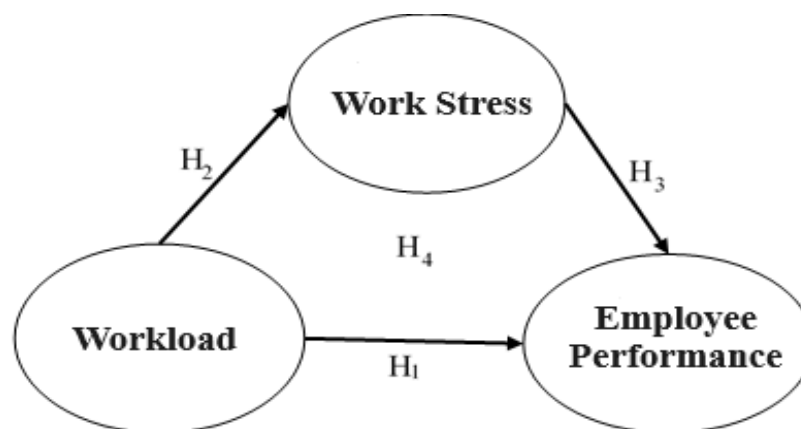


Figure 1. Research Framework

RESEARCH METHODS

The type of research used is explanatory research. The location of the research was carried out at the Department of Industry and Trade Cooperatives of Malang City which is at Jalan Simpang Terusan Danau Sentani No.3, Madyopuro, Kec. Kedungkandang, Malang City. The population in this study was 30 employees of the Malang City Diskopindag trade section. The sample used in this study amounted to 30 respondents, which means that all samples were used. In this study, questionnaires were used as a data collection method, where respondents were given a series of questions that were analyzed

on a Likert scale. Analysis of the range of scales and paths used as data analysis techniques. The data obtained was processed with smartPLS 4.0. Partial Least Square (PLS).

RESULTS AND DISCUSSION

The research was conducted on 30 respondents from the Department of Industry and Trade Cooperatives of Malang City is dominated by men in the range age more than 50 years and mostly work more than 10years. The characteristics are based on gender, level of education, age, and length of work presented in table 2 below

Table 1. Respondent Characteristics

Information	Items	Respondent	Percentage
Gender	Male	18	60%
	Female	12	40%
Age	<20 years	2	7%
	20 - 30 years	4	13%
	31-40 years	6	20%
	40-50years	7	23%
	>50 years	11	37%
Level of Education	Senior High School	9	30%
	Diploma	4	13%
	Bachelor/S-1	17	57%
Length of Work	<5 Years	6	20%
	5 – 10 Years	8	27%
	< 10 Years	16	53%

Source: Data processed (2023)

Table 2. Range of Workload Variable Scale (X)

No	Item	Respondent's Answer					Σ	Score	Information
		STS/1	TS/2	N/3	S/4	SS/5			
1	X.1	2	7	18	3	0	30	82	Low
2	X.2	3	9	16	2	0	30	77	Low
3	X.3	3	9	15	3	0	30	78	Low
4	X.4	4	7	16	3	0	30	78	Low
5	X.5	2	10	14	4	0	30	80	Low
6	X.6	3	6	19	2	0	30	80	Low
Total								475	
Average								79	Low

Source: Data processed (2023)

Based on Table21, it can be seen that the average value of the distribution of respondents' answers to the Workload variable (X) is 79 which indicates that Workload can be said to be low and the average value leads to conditions that are not too burdensome for employees.

Table 3. Scale Range of Work Stress Variables (Z)

No	Item	Respondent's Answer					Σ	Score	Information
		STS/1	TS/2	N/3	S/4	SS/5			
1	Z.1	1	6	21	2	0	30	84	Low
2	Z.2	1	9	14	6	0	30	85	Low

No	Item	Respondent's Answer					Σ	Score	Information
		STS/1	TS/2	N/3	S/4	SS/5			
3	Z.3	4	6	14	6	0	30	82	Low
4	Z.4	3	5	18	4	0	30	83	Low
5	Z.5	5	3	14	8	0	30	85	Low
6	Z.6	4	1	18	7	0	30	88	Moderate
Total								507	Low
Average								85	

Source: Data processed (2023)

Based on Table 3, it can be seen that the average value of the distribution of respondents' answers to the work stress variable (Z) is 85 which indicates that work stress can be said to be low and this average value leads to conditions where employees do not feel too stressed with the work being done.

Table 4. Range of Employee Performance Variable Scale (Y)

No	Item	Respondent's Answer					Σ	Score	Information
		STS/1	TS/2	N/3	S/4	SS/5			
1	Y.1	0	3	6	14	7	30	115	Moderate
2	Y.2	0	2	2	18	8	30	122	High
3	Y.3	0	7	7	14	2	30	101	Moderate
4	Y.4	0	3	9	16	2	30	107	Moderate
5	Y.5	0	2	8	17	3	30	111	Moderate
6	Y.6	0	5	5	16	4	30	109	Moderate
Total								665	Moderate
Average								111	

Source: Data processed (2023)

Based on Table 4, it can be seen that the average value of the distribution of respondents' answers on the employee performance variable (Y) is 111 which indicates that employee performance can be said to be sufficient and the average value leads to conditions where employees have sufficient quality work, sufficient quantity of work. enough and punctuality in working sufficiently. The results of the validity and reliability tests stated that the workload variable (X), employee performance (Y) and work stress variable (Z) were declared valid and reliable.

Table 5. Validity Test

	X	Y	Z
X.1	0,765		
X.2	0,757		
X.3	0,902		
X.4	0,769		
X.5	0,820		
X.6	0,814		
Y.1		0,708	
Y.2		0,848	
Y.3		0,863	
Y.4		0,845	
Y.5		0,938	
Y.6		0,850	
Z.1			0,920

	X	Y	Z
Z.2			0,847
Z.3			0,714
Z.4			0,780
Z.5			0,808
Z.6			0,833

Source: Data processed (2023)

Table 6. Reliability Test

	Cronbach's Alpha	rho_A	Composite Reliability	Information
X	0,891	0,896	0,917	Reliable
Y	0,918	0,926	0,937	Reliable
Z	0,901	0,911	0,924	Reliable

Source: Data processed (2023)

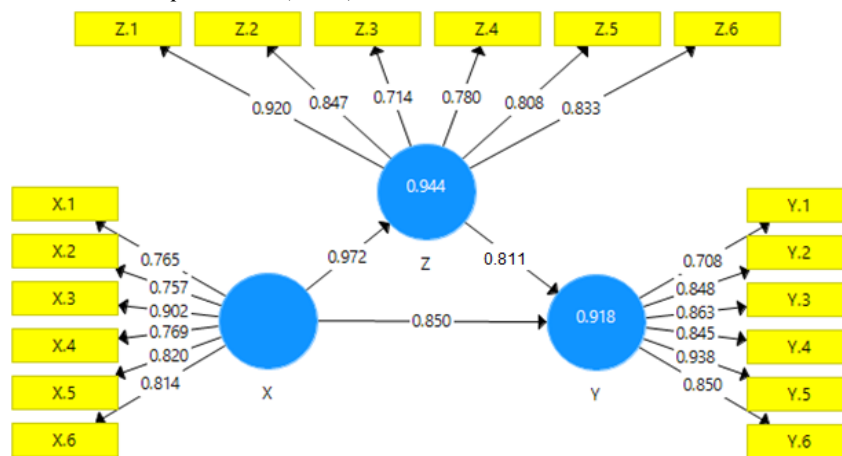


Figure 1. Outer Model

Based on the outer model, it is known that each variable indicator has an outer loading value of > 0.7 which indicates that a variable has explained 50% or more of the variance of the indicator or it can be considered that all the indicators used meet the requirements of convergent validity (valid).

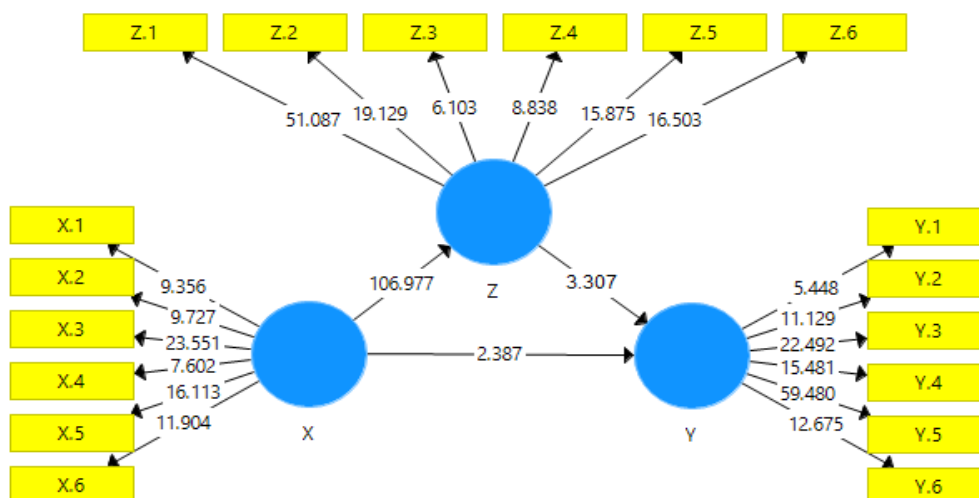


Figure 2. Path Analysis Result

Based on the inner model (structural model), it is known that the t-statistics value is more than 1.96, meaning that the workload variable (X) affects employee performance (Y) with a t-statistics value = 2.387 > 1.96. The workload variable (X) has an effect on work stress (Z) with a t-statistics value = 106.977 > 1.96. The work stress variable (Z) affects employee performance (Y) with a t-statistics value = 3.307 > 1.96. Meanwhile, the t-statistics value for each indicator is more than 1.96, meaning that all indicators form a good structural model.

Table 7. R Square Test

	R Square	Adjusted R Square
Y	0,918	0,912
Z	0,944	0,942

Source: Primary Data Processed (2023)

The evaluation results of the inner model show that the R Square value obtained for the Y variable is 0.918, meaning that the contribution of the influence of workload and work stress variables in predicting employee performance is 91.8%. Meanwhile, the R Square (R²) value of the Z variable is 0.944, meaning that the contribution of the workload variable to work stress is 94.4%. *Predictive Relevance (Q Square)* is used to assess how well the observed values generated by the model and its parameters are. The Q Square calculation results are as follows:

$$\begin{aligned}
 Q^2 &= 1 - \{(1-R_1^2)(1-R_2^2)\} \\
 &= 1 - \{1(1-0,918^2)(1-0,944^2)\} \\
 &= 1 - \{1(0,157)(0,108)\} \\
 &= 0,983 \\
 &= 98\%
 \end{aligned}$$

Based on the calculation results above, the Q Square or Q² test shows a predictive relevance value of 98%, which means that employee performance is influenced by workload and work stress variables by 98%, while 2% is influenced by other variables that have not been explained in the research model or error. These results indicate that the observed values have been reconstructed properly and it can be concluded that the model used in this study has predictive relevance. The results of hypothesis testing are known from the *Total Effects* output to determine the p-value, the results of the study are presented as follows.

Table 8. Total Effects Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
X -> Y	0,958	0,961	0,009	109,138	0,000
X -> Z	0,972	0,974	0,009	106,977	0,000
Z -> Y	0,811	0,851	0,003	100,307	0,000
X → Z → Y	0,508	0,506	0,065	7,785	0,000

Source: Primary Data Processed (2023)

Based on the hypothesis test in Table 8 it can be concluded that workload variable (X) has an effect on employee performance (Y) because p-value = 0.000 < 0.05 which indicates that workload has a positive and significant effect on employee performance. This means that if the workload increases, the employee's performance will be higher. It can be concluded that H₁ is acceptable which states

workload has a positive and significant effect on employee performance. The results of the analysis that has been presented prove that workload has a significant positive effect on employee performance at the Department of Industry and Trade Cooperatives of Malang City, meaning that the more workload increases, the higher employee performance. Therefore, a sufficient workload will improve employee performance. Workload that affects employee performance such as a lot of work and work targets that need to be achieved. The results of this study support Diana's research (2019) proving that workload has a significant effect on employee performance, where moderate workload can improve employee performance. These results are in accordance with the theory of Koesomowidjojo (2017) explaining that workload is a form of work performed by employees, where workload that is in accordance with work abilities supports increased employee performance.

Based on the results of hypothesis testing, it shows that the workload variable (X) has an effect on work stress (Z) because $p \text{ value} = 0.000 < 0.05$ which indicates that workload has a positive and significant effect on work stress. This means that if the workload increases, it will cause higher work stress. It can be concluded that H_2 is acceptable which states that workload has a positive and significant effect on work stress. The results of the analysis that has been presented prove that workload has a significant effect on employee work stress in the Department of Industry and Trade Cooperatives of Malang City, meaning that the more workload the higher the work stress. Workload that affects work stress such as targets that must be achieved, conditions of work that must be carried out are quite severe and the use of working time must be according to the target. The results of this study support the research of Puspitasari, et al. (2021) proving that workload has a positive and significant effect on work stress, meaning that if workload increases it will increase work stress by employees, while moderate workload will reduce work stress. These results are in accordance with the theory of Koesomowidjojo (2017) explaining that workload is a number of jobs that physically and mentally affect the workforce and are the responsibility of employees.

Based on the results of hypothesis testing, it shows that the work stress variable (Z) has an effect on employee performance (Y) because $p \text{ value} = 0.000 < 0.05$ which indicates that work stress has a positive and significant effect on employee performance. This means that if work stress increases, the employee's performance will be higher. It can be concluded that H_3 is acceptable which states that work stress has a positive and significant effect on employee performance. The results of the analysis that has been presented prove that work stress has a significant effect on employee performance at the Department of Industry and Trade Cooperatives of Malang City, meaning that the more work stress increases, the higher employee performance. Therefore, sufficient work stress will cause employees to have good performance because they are not pressured by the workload being carried out. The results of this study support the research of Sulastris & Onsardi (2020) proving that work stress has a significant effect on employee performance, this means moderate work stress can increase work ability so as to support increased performance. Work stress can arise in workers when faced with demands and work pressure that are not in accordance with their knowledge and skills. These results are consistent with the theory Rivai (2010) explaining that work stress is a condition of tension that affects one's emotions, thought processes, and conditions.

Based on the hypothesis test, it can be concluded that the workload variable (X) has an effect on employee performance (Y) with work stress (Z) as an intervening variable because $p \text{ value} = 0.000 < 0.05$ which indicates that workload has a positive and significant effect on employee performance through work stress as an intervening variable. This means that if the workload is higher, the work stress will be higher and if the work stress is higher, the employee's performance will be higher. And there is

work stress that influences and mediates the effect of workload on employee performance. It can be concluded that H4 is acceptable which states workload has a positive and significant effect on employee performance through work stress as an intervening variable. The results of the study prove that workload has a significant effect on employee performance with work stress as an intervening variable, the presence of work stress felt by employees at the Department of Industry and Trade Cooperatives of Malang City influences and mediates the effect of workload on employee performance. The results of this study support the research of Lukito & Alriani (2018) explaining that workload has a significant positive effect on employee performance, meaning that a moderate workload can improve employee performance. Meanwhile, research by Puspitasari, et al. (2021) shows that workload has a positive and significant effect on work stress. Based on the two previous studies, it can be understood that a moderate workload can reduce work stress levels thereby supporting increased employee performance.

CONCLUSION

Based on the formulation of the problem, hypothesis, research results, and previous discussion with the topic of the effect of workload on employee performance with work stress as an intervening variable at the Department of Industry and Trade Cooperatives of Malang City, the result was workload and work stress in the low category, and employee in the moderate category. Workload has a significant effect on employee performance, which means that the more workload increases, the higher employee performance. Workload has a significant effect on work stress, which means that the more the workload increases, the higher the work stress felt by employees. Work stress has a significant effect on employee performance, which means that the more work stress increases, the higher employee performance. Workload has a significant effect on employee performance through work stress as an intervening variable, which means that work stress felt by employees influences and mediates the influence of workload on employee performance.

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