

Impact of Work from Home on Work Stress Symptoms in Employees X of North Sulawesi Province

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Abstract

Work stress is an imbalance of task demands with a person's work ability that creates tension through physical and emotional responses. The purpose of this study was to find out the impact of Work from Home on the symptoms of worker work stress. The research method used is quantitatively descriptive with cross-sectional design. The sample in this study was 63 employees who had filled out research instruments. The research intrusion used is an online questionnaire filled out through Google Form through the WhatsApp Group platform. Variable Work from Home uses two indicators, namely the work environment factor and workload. Using a statistical analysis of multiple linear regression statistics, researchers stated that the work environment had no significant effect on employee work stress symptoms and that work had a positive and significant effect on employee work stress symptoms during Work from Home.

Keywords: *Work from Home, Occupational Health, Work Environment, Workload, Symptoms of Work Stress.*



A. INTRODUCTION

Currently, all countries in the world are shocked by a global pandemic called Corona Virus Disease (COVID-19). This virus attack has had a huge impact on human life in the world and has changed many important aspects of life such as health, economy, politics and also security. It should be noted that COVID-19 has become a major threat to all organizations in the world, this has led to changes in working methods as well as human interaction within the organization. Shifting work methods are changes in the organization in assigning duties and responsibilities to its employees by "prohibiting" its employees from working in the office and gathering in a room. This ban is not intended to destroy the performance of the organization but rather aims to prevent the spread of COVID-19, which until now continues to increase the number of victims in Indonesia. The concept of Work from Home (WFH) has been the subject of discussion and the theme of global studies by researchers in the last 10 years, but this global phenomenon is beginning to emerge when the COVID-19 attack comes and becomes an alternative strategy for many organizations.

In Indonesia, Working from Home (WFH) has not become a work culture in organizations, there are still some organizations that have given flexibility to work for their employees, especially government employees as civil servants. In addition, the advancement of information technology in the current era of the industrial revolution has greatly changed the working order and culture of the organization, where the organization is required to transform from all aspects to build its competitive advantage strategy. The development of technology and information has not only impacted organizations, but people's lifestyles and social lives have also changed so that the demand for specialized services for the community is certainly an important priority for many organizations. Today, technology has changed people's attitudes as well as social lives, gender differences are no longer the limitations of qualifications and specifications in many occupations that no longer look at gender but rather on skills and knowledge of human resources, (Kumar & Aithal, 2016)

However, the WFH they do is not because the office as a facility provided by the employer is inadequate but rather done to prevent the spread of COVID-19 which is currently increasingly widespread. In reality, WFH is not fully understood by employees, they feel many dilemma conditions such as the mindset that the house is where they rest while work is generally done in the office. These dilemma conditions sometimes create conflict in the family although WFH creates flexibility of time and place, see (McCloskey, 2018). However, WFH has shortcomings such as lack of performance as a team and also a supervisory system that is not maximal by the manager, but in addition to its shortcomings, the results of the study also showed that WFH provides flexibility and discretion for employees to do their work without being supervised directly by supervisors or managers (Kossek & Thompson, 2016).

Central of Statistics Agency Indonesia is a Non-Ministerial Government Agency that is directly responsible to the President. The task, function and authority of BPS is to carry out government duties in the field of statistics in accordance with the laws and regulations. Its function is; review, structure and formulate policies in the field of statistics; coordinate national and regional statistical activities; determination and maintenance of basic statistics; development and facilitation of the activities of government agencies in the field of statistical activities and the implementation of general administration development and services in the field of planning, business, organization and governance, staffing, finance, archival, public relations, law, equipment and households (Central Bureau of Statistics, 2021)

With these tasks and functions, employees are faced with changes to the new work system, namely working from home. All duties and functions of BPS employees are carried out at home during the work from home implementation policy by agencies to prevent the occurrence of COVID-19 transmission. Working from home of course a lot of exposure that will be able to interfere with the work activities of an employee. Exposure can be exposure to environmental factors that include economic uncertainty, political uncertainty, technological advances, and

terrorism; organizational factors that include task demands, role demands, interpersonal demands, and organizational structure; and individual factors that include family issues, economic problems, innate personality characteristics (Robbins, 2003).

Changes in the work system or work shifts that are usually done in the office environment now require employees to work from home can potentially arise symptoms of work stress so that employee work productivity will decrease. Stress can also have a negative impact on the possibility of employee health problems such as: decreased immune system so that it is not uncommon to cause abdominal pain, ulcers, diarrhea, nausea, increased heart rate and blood pressure etc; if the immune system decreases eating will affect the mental health of employees; and personality changes (Arwin, Ciamas, Siahaan, Vincent, & Rudy, 2019).

Work From Home (WFH) is an employee's work from home. Work from home activities are the company's efforts in ensuring the health safety of employees from the COVID-19 pandemic outbreak and complying with government regulations related to work from home policies (Rakha, 2021). The advantage of work from home is that there is no need to spend transportation costs or gasoline costs. Not stuck in traffic resulting in delays in work. Can minimize the level of work stress experienced, one of the triggers of stress is the accumulation of work that must be completed. If employees can manage their time well, Work from Home certainly won't be a problem. When the stress felt is not a burden, of course, work productivity will increase (Purwanto, 2020). The disadvantage of Work From Home is that it can lose work motivation. The reasons are quite diverse for example; The work atmosphere is not as expected, the atmosphere of the house is not like in the office, distracted by social media and other entertainment. When someone loses work motivation, you should take a break and not force themselves (Purwanto, 2020).

Work stress is a state that is felt by individuals in the work environment that provides stress physiologically, psychologically and individual attitudes that are considered threatening (Hayati, Maslihah, & Musthofa, 2020). Symptoms of work stress are divided into 3 categories, namely; a) physical symptoms that occur in the metabolism of organs such as increased heart rate, increased blood pressure, headaches, and abdominal pain that we experience should be wary; 2) psychological symptoms that occur attitude changes such as tension, anxiety, boredom, irritability etc.; 3) Behavioral symptoms are changes where a person's productivity decreases, absenteeism increases, eating habits change, smoking increases, drinks a lot, can't sleep, talk unsettled (Marihot, 2009). Symptoms of work stress are grouped into 3 aspects, namely; 1) physiological symptoms, which are included in these symptoms are abdominal pain, increased heart rate and shortness of breath, increased blood pressure, headache, heart attack; 2) Psychological symptoms. Aspects of work stress are divided into two parts, namely operational stressor and organizational stressor. Operational stressors are stressors related to the work done, namely the potential for traumatic incidents in the line of duty. Operational stress is not only triggered by

stressors found when in the work environment, but family life as well. Organizational stressors are stressors associated with the organization and work culture in which they work. Organizational stressors can arise for example from an authoritarian commander or lack effective communication skills (Hayati et al., 2020).

The triggers for work stress include environmental factors. The state of the organizational environment that undergoes uncertain changes can cause stress such as superior behavior, togetherness, security and safety at work. (Robbins in Hayati et al., 2020). Other factors include excessive job demands or tasks (Robbins in Hayati et al., 2020) excessive workload associated with poor psychological well-being such as depression, distress, fatigue, and burnout as well as lower levels of physical health (Bowling et al. in Hayati et al., 2020). Individual factors include a person's personal life, such as family issues, the economy and personality characteristics of the individual himself (Robbins, in Hayati et al., 2020).

In addition, the absence of trust in colleagues becomes a stress stimulus because it harbors its own personal problems (Sonya in Hayati et al., 2020). Other impacts of work stress include poor health including gastrointestinal problems, sleep disorders, and fatigue, decreased psychological well-being, lower performance at work, decreased job satisfaction, decreased work motivation and negative effects on cognitive function, information processing, learning and working memory (Hayati et al., 2020).

Based on the description above, the purpose of this study is to find out the impact of Work from Home on stress symptoms in BPS employees.

B. METHOD

The method used in this study is quantitative descriptive with cross sectional research design. Respondents in this study as many as 63 employees of the Central Statistics Agency of North Sulawesi Province. The data collection technique used is an online questionnaire 5 scale Likert through the google form platform disseminated through the WhatsApp Group Staffing Agency of North Sulawesi Statistics. Measurements included environmental factors, workload, and stress symptoms, questionnaire adopted from Lynn Holdsworth the Psychological of teleworking, Manchester University to measure work environment factors, questionnaire from NIOSH Generic Job Stress Questionnaire, Organizational Science and Human to measure workload, questionnaire from Hunsaker &Cook, Managing Organizational Behavior, Addison Wesley Pub. Comp America to measure stress symptoms. Data collection is carried out from May 2021-August 2021. Data analysis used multiple linear regression statistical analysis in SPSS v.25 for MacOs.

C. RESULT AND DISCUSSION

Characteristics of Respondents Here are the results of an analysis of the distribution of respondents' characteristics carried out:

Table 1. Respondent Characteristics Data

Characteristics of Respondents (n = 63)		Frequency	Frequency
Age	22-29	28	44,4
	30-39	20	31,7
	40-49	12	19,0
	>50	3	4,8
Gender	Man	29	46,0
	Woman	34	54,0
Work Duration	1-8 Hour	56	88,9
	9-16 Hour	7	11,1
Work Experience	<2 Year	6	9,5
	<5 Year	20	31,7
	<10 Year	10	15,9
	>10 Year	27	42,9
Education	High school	6	9,5
	Bachelor	47	74,6
	Master	8	12,7
	Academy	2	3,2
Education	Marry	39	61,9
	Unmarried	24	38,1
Living Status	Own	26	41,3
	Family	37	58,7

Based on the data in table 1 above, showing the characteristic frequency of 63 respondents showed the frequency seen from the characteristics of age with the largest frequency of 28 at the age of 22-29 years with a percentage of 44.4% while the smallest was at the age of 50 years and above, namely with a percentage of 4.8%, Gender with a percentage of men by 46%, and Women by 54%, judging by the duration of work during WFH 1-8 hours worked at 88.9%, and at 9-16 hours with a percentage of 11.1%, The most work experience was over 10 years of work at 42.9%, the lowest with less than 2 years of work experience at 9.5%, from the largest level of education with graduates of strata 1 (S1) of 74.6% and the lowest education graduates from the academy by 3.2%, the highest marriage status with marital status of 61.9%, and judging from the highest life status is in the status of living with a family of 58.7%.

Factors Causing Work Stress

Work Environment Factors Here is the weighting recapitulation data on work environment (WE) factors:

Table 2. Working Environment Factor Value

WE	Strongly Disagree	Disagree	Less Agree	Agree	Strongly Agree	N	Score	Mean	%
WE1	4	12	28	14	5	63	193	3,06	24,32
WE2	6	11	11	22	13	63	214	3,40	26,96
WE3	4	11	14	18	16	63	220	3,49	27,72
WE4	4	9	26	17	7	63	203	3,22	25,58
WE5	1	8	11	9	34	63	256	4,06	32,26
WE6	4	8	11	23	17	63	230	3,65	28,98
WE7	10	14	19	11	9	63	184	2,92	23,18
Total							1500	3,40	27,00

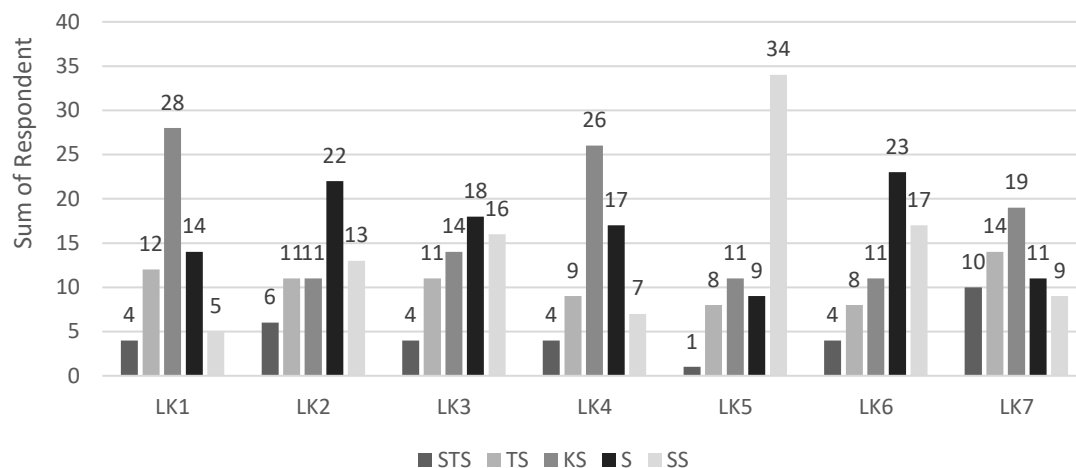
**Figure 1. Environmental Factor Value Graph**

Table 2 and Figure 1 show that the factors that most affect the work environment are an increase in internet and electricity costs (WE5) with an average of 4.06, decreased work productivity (WE1) with an average of 3.06, a slowdown for career development (WE4) with an average of 3.22, decreased transportation costs incurred (WE6) with an average of 3.65, and an increase in working hours to be longer (WE3) with a percentage of 3.49.

Workload Factor

The following is the weighting recapitulation value on the workload factor (WF):

Table 3. Workload Factor Value

WF	Strongly Disagree	Disagree	Less Disagree	Agree	Strongly Agree	N	Score	Mean	%
WF1	1	7	22	15	18	63	231	3,67	29,11
WF2	2	10	20	16	15	63	221	3,51	27,85
WF3	1	13	19	16	14	63	218	3,46	27,47
WF4	9	10	24	8	12	63	193	3,06	24,32
Total							863	3,42	27,18

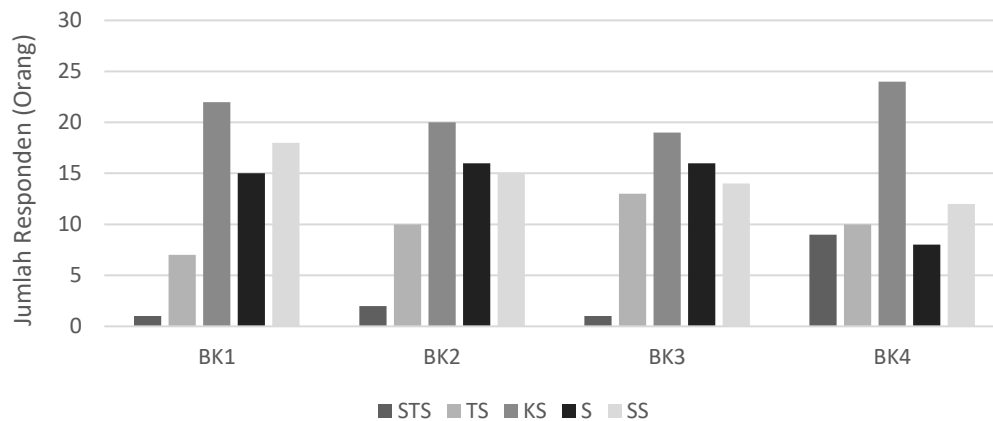


Figure 2. Workload Factor Value Graph

Based on Table 3 and Graph 2 which shows the weighting value of each indicator on the workload factor, from the weighting above shows an increase in workload during WFH (BK1) with an average of 3.67, an increase in working time during WFH (BK2) with an average of 3.51, the tasks / projects given are increasing (BK3) with an average of 3.46, and do not have a work lag time during WFH with an average of 3.06.

Investigating Symptoms of Stress

Here are the values of stress symptom factors (SF):

Table 4. Values of Stress Symptom Factors

SF	Strongly Disagree	Disagree	Less Disagree	Agree	Strongly Agree	N	Score	Mean	%
SF1	8	15	23	8	9	63	184	2,92	23,18
SF2	11	21	18	3	10	63	169	2,68	21,29
SF3	6	9	10	22	16	63	222	3,52	27,97
SF4	14	21	15	4	9	63	162	2,57	20,41
SF5	14	19	12	7	11	63	171	2,71	21,55
SF6	7	14	16	15	11	63	198	3,14	24,95
SF7	13	23	12	6	9	63	164	2,60	20,66
SF8	20	18	11	7	7	63	152	2,41	19,15
Total							1422	2,82	22,40

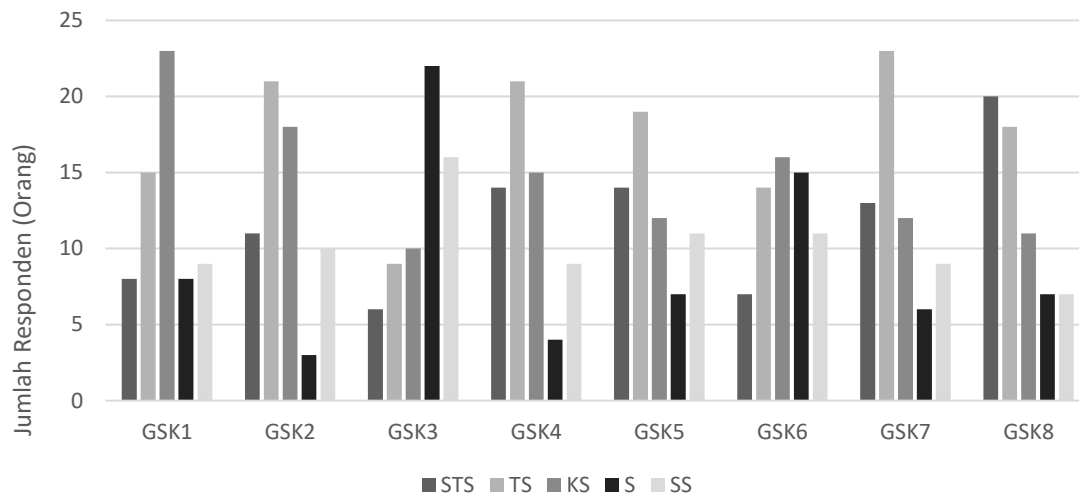


Figure 3. Graph of Values of Stress Symptom Factors

Based on Table 4 and Figure 3 which is the weighting value of stress symptom factors, shows that the factor that most affects stress symptoms with an average of 3.52, where the part feels less concentration during WFH (GSK3), then with an average of 3.14, the occurrence of negligence or easy forgetting during WFH (GSK6) and feeling excessive tired during WFH (GSK1) with an average of 2.92.

Work Stress Level Analysis

Here is a table of stress symptom levels based on the characteristics of respondents:

Table 5. Results of Stress Symptom Levels Based on Respondent Characteristics

Characteristics of Respondents	Variable	Stressor		Symptoms of Stress	Average	Information
		Work Environment	Workload			
Age	22-29 Year	3,48	3,56	2,91	3,32	Moderate
	30-39 Year	3,44	3,39	2,69	3,17	Moderate
	40-49 Year	3,11	3,06	2,66	2,94	Moderate
	>50 Year	3,57	3,83	3,54	3,65	High
Gender	Man	3,27	3,39	2,72	3,13	Moderate
	Woman	3,62	3,46	2,91	3,33	Moderate
Duration of Work	1-8 Hour	3,4	3,38	2,83	3,20	Moderate
	9-16 Hour	3,43	3,82	2,71	3,32	Moderate
Work Experience	<2 Year	3,24	3,92	2,9	3,35	Moderate
	<5 Year	3,54	3,45	2,93	3,31	Moderate
	<10 Year	3,43	3,35	3,08	3,29	Moderate
	>10 Year	3,33	3,32	2,63	3,09	Moderate
Education	High School	3,24	2,72	2,42	2,79	Moderate
	Bachelor	3,34	3,35	2,78	3,16	Moderate
	Master	3,8	3,83	3,27	3,63	High
	Akademy	3,79	3,17	3,25	3,40	Moderate

Marriage	Married	3,38	3,33	2,74	3,15	Moderate
Status	Unmarried	3,43	3,57	2,96	3,32	Moderate
Living Status	Own	3,4	3,61	2,92	3,31	Moderate
	Family	3,4	3,3	2,75	3,15	Moderate

In Table 5 above shows the level of stress symptoms felt based on the characteristics of respondents that the level of stress with a high category is felt by respondents aged 50 years and above with an average stressor of 3.83 for workload stressors, and work environments of 3.57, and those with education Strata 2 (S2) with high stress level categories have an average of 3.8 for work environment stressors and an average of 3.83 for workload stressors.

Data Normality Test

Here is the presentation of the analysis data for the data normality test.

Table 6. Results of the One-Sample Kolmogorov-Smirnov Test

Unstandardized Residual			
N			63
Normal Parameters ^{a, b}	Mean	0,000	
	Std. Deviation		593003333
Most Extreme Differences	Absolute	0,101	
	Positive	0,101	
	Negative	-0,068	
Test Statistic		0,101	
Asymp. Sig. (2-tailed)		0,181^c	

a Test distribution is Normal.

b Calculated from data.

c Lilliefors Significance Correction.

Based on Table 6 above shows the results of the Kolmogorov-Smirnov data normality test that the results of the normality test conducted, it was found that the data had been distributed normally with a significance of $p > 0.05$ with a *p-value* of 0.181.

Multicollinearity Test

Here is a table of multicollinearity test analysts:

Table 7. Multicollinearity Test Results

Collinearity Statistics		
Variable	Tolerance	VIF
Work Environment	0,755	1,324
Workload	0,755	1,324

Based on table 7 above can be seen the results of the multicollinearity test indicate that the regression model does not experience multicollinearity disorders. At the tolerance value of each variable greater than 0.1 which is 0.755. Then from the calculation of VIF (inflation factor of the default deviation of squares) also shows that the vif value of each variable is less than 10, from the results of the above test it can be concluded that there is no multicollinearity between free variables in the regression model.

Multiple Linear Regression Test

Multiple linear regression tests are performed to determine the influence of independent variables and variable dependents as follows:

Table 8. Multiple Linear Regression T Test Results

Variable	t	Sig.
(Constant)	-0,211	0,833
Work Environment	1,575	0,12
Workload	4,950	0,00

a Dependent Variable: Symptoms of Work Stress

Based on table 8 above shows that the results of the double linear regression T test conducted obtained a significance value for the variable work environment <0.05 which is p-value 0.12 which means that there is no significant influence between the work environment and stress symptoms. As for variable workload obtained a significance value of <0.05 which is p-value 0.00 which means that there is a significant influence between workload and stress symptoms.

Table 9. Multiple Linear Regression F Test Results

Model	F	Sig.
Regression	22,968	0,000b
Residual		
Total		

a) Dependent Variable: Symptoms of Work Stress

b) Predictors: (Constant), Workload, Work Environment

In table 9 showing the results of the F test conducted, you can see the significance value obtained p-value 0.000 which means that there is an influence of the work environment and the constant workload on stress symptoms.

The purpose of this study is to find out the effect of the impact of Work from Home (WFH) on symptoms of work stress on employees. The impact of WFH is measured by two indicators, namely the work environment and workload. From the results of a statistical analysis of multiple linear regression conducted showed that for variable work environment there is no significant influence on the symptoms of work stress in employees who do work during work from home. As for variable workload there is a significant influence on the symptoms of stress experienced by workers during work from home.

The results of the data analysis found that the level of stress with a high category was in respondents over the age of 50 years with an average of 3.65. Age is an internal or individual factor that a person has that can affect the occurrence of work stress. Workers with older ages cause organs and physical health conditions to weaken, making them more at risk for stress (Zulkifli, Shinta, & Akbar, 2019). This is in line with research conducted by Zulkifli et al., (2019) said that stress is caused by physiological factors that experience a weakening in a person's physical abilities characterized by visual ability, thinking, remembering and hearing. The older a person is the more prone to stress.

The results of descriptive data analysis of respondents' characteristics in addition to age characteristics are also found in the characteristics of education levels that have a high work stress category that is found at the level of education strata 2 (S2) where an average of 3.63 are obtained which belongs to the high category. According to Suerni, (2012) the higher the level of education, the higher the skills and knowledge so that they are able to control stress. This happens because someone with a high level of education has the ability and intellect so it is required to process information in doing difficult work (Suerni, 2012).

The results of the weighting value analysis on environmental factors during WFH showed that 27.72% experienced longer working hours. This is a result of technological uncertainty which according to Robbins, (2003) states the factor of the work environment in the form of technological uncertainty that includes the skills and experience of a person who is very short resulted in doing work for a long time to be completed and consequently a long delay in work, the uncertainty causes stress to a worker. This all resulted in a decrease in work productivity that was experienced from the results of the study there were 24.32% of respondents experiencing a decrease in work productivity.

The results of the weighting value analysis on workload factors during WFH showed that 29.11% of respondents experienced an increase in workload during WFH. This is all due to the workload received during WFH from tasks (tasks) that are physical such as work stations, workplace layout, environmental conditions, work attitudes, ways of transport, lifting loads. While the tasks that are mental include great responsibility, complexity of the work done, the emotions of workers during WFH and work time and psychological work environment. And from internal factors that include somatic factors, namely gender, age, body size, nutritional status, health conditions of workers who can potentially cause stressors in the form of excessive workload (Tarwaka, Solikhul, & Sudiajeng, 2004).

In line with the results of research conducted by Fitriani, (2018) stated that there is a positive and significant influence between workload and work stress by 11%. From the results of the tabulation of weighting factor symptoms of stress obtained the result that 27% of respondents experienced a lack of concentration in performing work tasks during WFH. That's because physiological symptoms that appear that can affect a person's concentration of work in work such as increased blood pressure, headaches, heart palpitations and psychological symptoms shown in the form of tension, anxiety, irritability, boredom and likes to delay work so that the level of stress triggered is higher. In line with the research conducted by (Perdana, 2020) obtained symptoms of stress from each type of work pegged high category with an average of 3.63.

From the results of statistical analysis conducted using multiple linear regression interpretations, it was found that environmental factors did not positively and significantly affect the symptoms of stress caused as evidenced by a value of p-value 0.12 which means $p > 0.05$. As for the workload factor there is an influence on the symptoms of work stress indicated by a value of p-value 0.00 which means the

value $p < 0.05$. It can be concluded that there is a positive and significant influence between workload on employee stress symptoms.

D. CONCLUSION

From the research that has been done, there are several results that can be concluded as follows: 1) There was no effect on the positive work environment on employee X's stress symptoms with a p-value of 0.12; and 2) There is an effect of workload on the symptoms of employee stress X with a p-value of 0.00.

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