

Boredom Factor Automotive Workers When Working from Home (Study at PT. X)

Besar Tirto Husodo¹, Ekha Rifki Fauzi², Bagoes Widjanarko³, Bulan Prabawani⁴,
Hari Susanta Nugraha⁵
{besarundip4@gmail.com¹, ekharifkifauzi@upy.ac.id²}

Universitas Diponegoro, Indonesia^{1,3,4,5}
Universitas PGRI Yogyakarta, Indonesia²

Abstract. The Covid-19 pandemic, which is still ongoing until now, has resulted in workers being required to work from home or remotely. This condition has an impact on the mental, physical and behavioral health conditions of workers due to the change from the WFO system to the work WFH. This study aims to identify work stress factors during WFH among workers at PT. X. The research method used is a quantitative study with cross-sectional. The total population of this study were PT.X workers who had done WFH with a total of 924 people. The sampling technique used Stratified Random Sampling and the number of samples obtained 87 workers. The independent variables analyzed the variables of work conditions, work environment, and the environment outside of work. Measurement of work stress levels used the General Health Questionnaire (GHQ-12). Statistical analysis used Chi-square test and logistic regression analysis. The results showed that there was a relationship between the external environment (P-value = 0.008) (Sig = 0.006) and behavior changes when working at home. In this study, PT.X workers experienced behavior changes due to the unfavorable relationship between the external environment of the workers.

Keywords: WFH, Work Stress, Pandemic

1 Introduction

Since late December 2019, a new outbreak caused by Coronavirus Disease 2019 has spread in Wuhan, Hubei, and is spreading domestically and internationally rapidly [1]. The virus has been named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and will be transmitted from person to person [2]. The threat is so severe that the whole world is placed on lockdown in social prohibitions such as national and international transportation, markets or business transactions, schools and organizational activities, and all social-related and religious gatherings [3]. The impact of Covid-19 on the mental and physical health of the community is the subject of various results from previous studies, particularly on workers [4]. This pandemic has been proven in previous epidemics such as SARS-CoV in 2002, MERS-CoV in 2012, or Ebola between 2014 and 2016, the impact on mental health and stress has become important in workers [5]. There are two groups of workers that must be distinguished into essential and non-essential workers. Workers who have essential services have followed their normal work activities. In addition, there are groups of non-essential workers who have done continuous work from home through telework [6]. WFH with Telework has significantly improved comfort and is expected to be a job more widely used than in previous pandemic

eras. Negative and positive health impacts are known as the result of epidemics in the past [7]. The pandemic era is a new habit for workers to do work on a WFH basis. The impact of WFH policy certainly causes a variety of effects either negative or positive for the health of workers. The purpose of this study was to measure and assess the level of boredom of workers at PT. X while doing WFH during the COVID-19 pandemic.

2 Method

2.1 Design

The study used quantitative research with cross-sectional design. This design aims to understand the relationship between stimulants and responses. The observation approach is carried out jointly between free and bound variables. Each variable is observed only once during data retrieval.

2.2 Participant

The population of this study is an area of generalization consisting of objects and subjects that fit the criteria of inclusion. In this study population as many as 924 workers who carry out WFH (Work From Home).

2.3 Sampling

The study used purposive sampling with a population of 924 workers with a proportion of 50% if there was no prior data on prevalence in the population. Details of the 96% confidence coefficient and sampling error of 5% and $p= 0.5$.

2.4 Instrument

The study used questionnaires adopted from the GHQ-12 (General Health Questionnaire). In addition, respondents are required to be willing to fill out informed consent in this study.

2.5 Data Analysis

The study used univariate and bivariate analysis. Univariate analysis describes the characteristics of respondents, working conditions, and work environment. Bivariate analysis describes cross-tabulation to show free variables related to work conditioning, work environment and out-of-work to mental health boredom in WFH.

3 Result and Discussion

PT. X is a company focused on manufacturing, distributor, and motorcycle assembly business in Indonesia. PT. X carries out motor marketing and production activities in Indonesia and becomes a global actor for export to several countries.

The company's move to support the existence of WFH runs according to planning such as the creation of pt. X Mobile and business to employee. Prior to the WFH implementation policy, each employee is asked to plan the WFH to be approved by the supervisor through the application. When WFH planning has been approved to do its work, employees are required to scan in at selected locations according to the application (e.g. at home).

The scan has followed the schedule of working hours. Then in the afternoon, workers can carry out scans out according to the final schedule of working hours with the application as well. Other activities, such as meetings, are usually conducted through online applications, such as Zoom, or Skype. Training activities are conducted with the Learning Management System (LMS), a kind of internal platform for interactive online learning.

Table 1. Frequency Distribution of Characteristic Respondent and Independent Variable

Variable	Category	N (%)
Age	17-25	35 (16,1)
	26-35	52 (49,4)
	36-45	18 (20,7)
	46-55	12 (13,8)
Gender	Man	52 (59,8)
	Woman	35 (40,2)
Educational Level	Middle/High School	20 (23)
	Diploma/Bachelor Degree	59 (67,8)
	Master/Doctoral Degree	8 (9,2)
Marital Status	Marriage	67 (77)
	Single	20 (23,8)
Number of Children	0	33 (37,9)
	1	15 (17,2)
	2	26 (29,9)
	3	12 (13,8)
	4	1 (1,1)
Work Bored	Bored	35 (40,2)
	Not Bored	52 (59,8)
Working Condition	Bad	51 (58,6)
	Good	36 (41,4)
Work Environment	Bad	44 (50,6)
	Good	43 (49,4)
Environment Outside of Work	Bad	42 (48,3)
	Good	45 (51,7)

Most of the respondents were male (59.8%), with an early adulthood (49.4%), D3/S1 education level (67.8%), and the majority married (77%). Working conditions with the level of boredom when WFH is a correlated factor in work that can put pressure on workers when the pressure is excessive. There are indicators of working conditions such as type of work, job title/ job schedule, length of work period, interpersonal relationships, assignments, obligations, supervision, workload, and responsibilities. The results of cross-tabulation stated that the percentage of people who got bored was greater in the group that had a perception of good working conditions (44.4%) while people who did not get bored were greater in the group that had a perception of poor working conditions (62.7%). Chi-square analysis and regression logistics say that there is no relationship (p -value=0.501) (Sig.=0.165) between working conditions and boredom in workers working from home at PT.X.

Then there is also no significant relationship of PT employees. X who is WFH with the workload received, does not bore so it does not affect work schedules and rest periods. Workers with heavy workload categories and getting tired of estimating that their work is

heavy and takes time, which can still be overcome by a pause when workers feel tired [8]. This makes the workers increase in energy. Workers also become more flexible in working so that they are more free to determine the right working hours in line with workers' conditions [9]. In this study it has been found that the condition of WFH does not affect cooperation between workers. Because nowadays technology has advanced significantly which makes it easier in communication. The use of communication technologies such as telephone and video is positively correlated with the level of job satisfaction that works remotely (teleworking) for workers [10]. The difficulties that workers get at the beginning of WFH make it difficult to adapt in cooperation with communication. In addition, the workload becomes heavier and more difficult for the knowledge transfer process [11]. Workers feel a heavy workload requires them to adapt to new conditions. Then workers get bored of work that can have an impact on employee performance [12].

Table 2. The Relationship between Working Conditions, Work Environment, and Environment outside of work with Work Stress on Workers who Work From Home

Variable	Work Bored		Not Bored		Total	%	P-Value	Sig.	Exp	Lower	Upper
	n	%	n	%							
Working Conditions											
Bad	19	37,3	32	62,7	51	100	0.501	0,165	0,492	0,181	1,338
Good	16	44,4	20	55,6	36	100					
Working Environment											
Bad	19	43,2	25	56,8	44	100	0,570	0,929	0,929	0,340	2,538
Good	16	37,2	27	62,8	43	100					
Environment Outside Work											
Bad	23	54,8	19	45,2	42	100	0,008	0,006	4,238	1,514	11,862
Good	12	26,7	33	73,3	45	100					

The relationship of the work environment with boredom that WFH is the perception of workers to the work environment that impacts workers in work. Indicators of the work environment such as facilities, location, noise, work temperature, and so on. The study assessed the work environment based on workers' perceptions of work sites, and the facilities obtained by workers. The results of cross-tabulation stated that the percentage of people who got bored was greater in the group that had a perception of a bad work environment (43.2%) while people who did not get bored were greater in the group that had a good perception of the work environment (62.8%). Chi-square analysis and logistic regression say that there is no relationship (p -value=0.570) (Sig.=0.886) between the work environment and the level of boredom of workers who are WFH in PT. X. There is no worker relationship between PT. X who is WFH by not paying attention to the work site when WFH is disturbing so that it makes workers depressed. In this study it has been found that the majority of workers PT. X who are currently WFH does not get their work facilities such as desks, chairs, and laptops / personal computers. So workers feel back pain and tailbone pain.

However, there are 42.5% who get back pain and neck pain [13]. Workers who get low back pain and neck pain are workers who use computers [14]. Workers of PT. X has also adapted to the working environment conditions during WFH, namely the flexibility of time and workplace so that it can overcome various distractions and make workers more comfortable [15]. Environmental relationships outside of work in workers that WFH is the perception of workers to the environment other than work that can put pressure on workers. The study assessed the environment outside of work based on workers' perceptions of

changing economic conditions, relocation, family, social or technological, and financial. Cross-tabulation results stated that the percentage of people who got bored was greater in the group that had bad environmental thinking outside of work (54.8%) while people who did not experience boredom were greater in the group that had a good environmental mind outside of work (73.3%). Chi-square analysis and logistic regression say that there is a relationship (p -value = 0.008) (Sig.=0.006) between the environment outside of work and the boredom of working on workers who are WFH at PT.X.

The OR value obtained from the external environment variable is 4,238, so it can be defined that workers who have bad thoughts about the outside work environment who have a relationship with boredom will feel bored 4,238 times greater than people who have good thoughts about the work environment. Lower Confidence Interval and Upper Confidence Interval values state the lower and upper limits of OR which means: at least thinking about the outside environment is at least 1,514 times more at risk of experiencing boredom at work during WFH and at most 11,862 times more at risk. I'm tired of working during WFH. There is a relationship that most of the workers of PT. X gets social changes to socialize directly with the surrounding environment such as neighbors and close relatives. This shows that there is a negative impact of WFH on workers on job satisfaction. The intent of the results of this study is that the importance of social relationships and WFH experience is strongly associated with low productivity and low job satisfaction which determines bored conditions for workers who work WFH [16]. This research has found workers of PT. X has coping behaviors such as shopping, and recreation then workers become bored because it is difficult to travel due to pandemics. Workers also found that during this WFH there was an increase in food purchases and consumption of pulses / internet. Workers also pay for electricity and the internet themselves, adding to financial spending. Workers did not find any disturbances from the family during the WFH. Families are supportive and able to adapt to the WFH work system. Workers can provide quality time with family and solve work-life-balance problems.

4 Conclusion

There was significant in the variables of out-of-work confinement (Sig.=0.006) with work stress in workers who were WFH at PT.X. And it was found that perceptions of the outside environment were less good at being associated with stress and experiencing 4,238 times greater stress than people who had a good perception of the outside environment. At least the perception of the outside environment at least more at risk by 1,514 times can experience work stress at the time of WFH and at most 11,862 times more at risk of experiencing work stress at the time of WFH.

References

- [1] M. M. Qun Li, P. . Xuhua Guan, P. . Peng Wu, and Et.al, "Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia," pp. 1199–1207, 2020, doi: 10.1056/NEJMoa2001316.
- [2] H. A. Rothan and S. N. Byrareddy, "The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak," *J. Autoimmun.*, no. February, p. 102433, 2020, doi: 10.1016/j.jaut.2020.102433.

- [3] A. O. Olaseni, O. S. Akinsola, S. F. Agberotimi, and R. Oguntayo, "Psychological distress experiences of Nigerians during Covid-19 pandemic ; the gender difference," *Soc. Sci. Humanit. Open*, vol. 2, no. 1, p. 100052, 2020, doi: 10.1016/j.ssaho.2020.100052.
- [4] J. J. Garcia-Iglesias *et al.*, "Impacto Del Sars-Cov-2 (Covid-19) En La Salud Mental De Los Profesionales Sanitarios: Una Revisión Sistemática," *Revis. Sist.*, vol. 94, no. 23, pp. 1–20, 2020.
- [5] J. Schwartz, C.-C. King, and M.-Y. Yen, "Protecting health care workers during the COVID-19 coronavirus outbreak: Lessons From Taiwan's Severe Acute Respiratory Syndrome Response," *Clin. Infect. Dis.*, vol. 71, no. 15, pp. 858–860, 2020.
- [6] R. Allande-cuss, S. Domínguez-salas, A. Dias, and G. Juan, "Health-related factors of psychological distress during the COVID-19 pandemic among non-health workers in Spain," *Saf. Sci.*, vol. 133, no. August 2020, pp. 1–10, 2021, doi: 10.1016/j.ssci.2020.104996.
- [7] A. Aguilera, V. Lethiais, A. Rallet, and L. Proulhac, "Home-based telework in France : Characteristics , barriers and perspectives," *Transp. Res. Part A*, vol. 92, pp. 1–11, 2016, doi: 10.1016/j.tra.2016.06.021.
- [8] H. Ibrahim, M. Amansyah, and G. N. Yahya, "Faktor - Faktor yang Berhubungan Dengan Stres Kerja Pada Pekerja Factory 2 PT . Maruki Internasional Indonesia Makassar Tahun 2016," *Al-Sliah Public Heal. Sci. J.*, vol. 8, no. 1, pp. 60–68, 2016, doi: 10.24252/as.v8i1.2082.
- [9] D. Mustajab, A. Bauw, A. Rasyid, A. Irawan, M. A. Akbar, and M. A. Hamid, "Working from Home Phenomenon as an Effort to Prevent COVID-19 Attacks and Its Impacts on Work Productivity," *Int. J. Appl. Bus. Tijab*, vol. 4, no. 1, pp. 1–9, 2020.
- [10] S. A. Smith, A. Patmos, and M. J. Pitts, "Communication and Teleworking: A Study of Communication Channel Satisfaction , Personality , and Job Satisfaction for Teleworking Employees," *Int. J. Bus. Commun.*, vol. 55, no. 1, pp. 1–25, 2015, doi: 10.1177/2329488415589101.
- [11] O. Mungkasa, "Bekerja dari Rumah (Working From Home / WFH): Menuju Tatanan Baru Era Pandemi COVID 19," *Indones. J. Dev. Plan.*, vol. IV, no. 2, pp. 126–150, 2020, doi: 10.36574/jpp.v4i2.119.
- [12] A. A. Putra and N. Laily, "Pengaruh beban kerja, lingkungan kerja dan motivasi terhadap kinerja pegawai pada pt para bathara surya," *J. Ilmu dan Ris. Manaj.*, vol. 8, no. 9, pp. 1–15, 2020.
- [13] A. Moretti, F. Menna, M. Aulicino, M. Paoletta, and S. Liguori, "Characterization of Home Working Population during COVID-19 Emergency: A Cross-Sectional Analysis," *Int. J. Environ. Res. Public Health*, vol. 17, pp. 1–12, 2020, doi: 10.3390/ijerph17176284.
- [14] M. Shah and R. Desai, "Prevalence of neck pain and back pain in computer users working from home during COVID-19 pandemic: a web-based survey," *Int. J. Heal. Sci. Res.*, vol. 11, no. 2, pp. 26–31, 2021.
- [15] L. Vyas and N. Butakhieo, "The impact of working from home during COVID-19 on work and life domains : an exploratory study on Hong Kong," *Policy Des. Pract.*, vol. 4, no. 1, pp. 59–76, 2021, doi: 10.1080/25741292.2020.1863560.
- [16] F. Toscano and S. Zappala, "Social Isolation and Stress as Predictors of Productivity Perception and Remote Work Satisfaction during the COVID-19 Pandemic : The Role of Concern about the Virus in a Moderated Double Mediation," *Sustainabil*, vol. 12, pp. 1–144, 2020, doi: 10.3390/su12239804.