

# Factors Related to Work Stress in Elementary School Teachers in East Cengkareng Village During Work From Home

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## ABSTRACT

Work stress is a condition of the subjective understanding of the individual can be a form of interaction between the individual and the work environment that can threaten and put pressure on the psychological, physiological, and individual attitudes. Work stress can cause negative impact on health such as digestive disorders, circulatory disorders, and psychosocial disorder make decline in work productivity. Design of research used cross sectional with quantitative-based approach. This research was conducted at 17 SDN in Kelurahan Cengkareng Timur In August 2020. Primary data collected by questionnaires (Google Form). Respondents in this study are 86 teachers SDN in Kelurahan Cengkareng Timur using stratified random sampling method and random sampling using Microsoft Excel. Data analyzed using chi-square statistic test with  $\alpha = 0,05$ . The result showed 68 peoples (79,1%) had experience stress. Based on bivariate analysis obtained that the workload and working design have relationship between with work stress ( $p=0,000$ ), there is a relationship between work routine and work stress ( $p=0,000$ ), there is a relationship between career development and work stress ( $p=0,001$ ), there is a relationship between work environment conditions and work stress ( $p=0,000$ ). Independent variable showed no relationship with work stress is interpersonal relationship ( $p=0,793$ ). Therefore, it is suggested that institutions adjust workloads that received a employees as workload with physical or mental ability or capacity owned by the employees, it is expected that adjustments to the salary received by faculty workload. Employees stay keeping good communication, positive work environment, and a strong a family career development.

**Keywords:** *work stress, workload, routine, career development, work environment conditions*

## 1. INTRODUCTION

According to The current world situation of WHO has announced about the Covid-19 virus pandemic around the world. Indonesian President Joko Widodo in his speech instructed Indonesians to reduce in-house activities that are not important. This includes implementing the Work From Home work system and schools and online lectures. This is a strategic step taken by the government to prevent the widespread coronavirus outbreak in Indonesia today. This policy reaps many pros and cons especially for workers. According to Work From Home has advantages and disadvantages for teachers, Work From Home can be done effectively if both teachers and schools both live it responsibly. Both sides need to be more aware of the

conditions that occur while providing the best possible performance, even if they are working in different places. Don't forget to maximize communication to avoid unwanted things. Make good use of technology, make a list of things you want to do more planned, and include the expected output so that teachers won't miss a day of Work From Home with inproductiveness.

Emotional fatigue towards the source of stress felt by teachers is a manifestation of work stress. Researchers define stress as a physical, mental, or emotional response to events that cause pressure on the body or mentally. For teachers, stress is defined as a response to the negative effects of work as a teacher.

According to the National Safety Council There is a list of more stressful occupations namely postal workers, stockbrokers, journalists, aircraft pilots, mid-level managers, secretaries, police, nurses, customer service officers, waiters, teachers, miners, traffic regulators, firefighters, paramedics.

According to [1] In the Labour Force Survey in 2018 to 2019 found there have been 602,000 cases of work stress across the UK with a incidence rate of 1,800 cases per 100,000 workers experiencing work stress. Work-related stress and anxiety levels are generally flat but have shown signs of increasing in recent years. The number of new cases is 246,000, an event rate of 740 per 100,000 workers. The total number of working days lost due to this condition in 2018 to 2019 was 12.8 million days. This equated to an average of 21.2 days lost per case. Work days are lost per worker due to self-reported work related to depression.

According to data from Riskesdas[2] The prevalence of depression in the total population aged more than 15 years in Indonesia reached 6.1%. Research was also conducted on teachers in Indonesia who showed that, 30.27% of teachers experienced serious work stress, 48.11% of teachers experienced moderate work stress, and 21.62% of teachers experienced less serious stress. About 1.33 million people in DKI Jakarta are estimated to have mental health disorders or stress. The figure reached 14% of the total population with acute stress levels reaching 1-3%. DKI Jakarta's population and civilian records show the current population of DKI Jakarta is 9.5 million. The number of stressed population reached 1.33 million (14% of 9.5 million), while stress weight reached 95,000–285,000 people (1-3% of 9.5 million).

In Jakarta, most schools, especially public schools, have a large number of students. The number of public elementary school students in DKI Jakarta is 1,557,611 people while the public elementary school teacher is 37,944 people. The number of public elementary school students in West Jakarta is 182,134 people while the state elementary school teacher is 8,372. The number of public elementary school students in Cengkareng sub-district is 41,817 people while the public elementary school teacher is 1771. Based on the above factors, there are research results of meaningful relationship between work stress and workload, namely research conducted by [3] and [4]. The results of research on work design show a significant relationship between work stress and work design, physical condition of the work environment, career development that is found in the results of research conducted by [5]. The results of research on interpersonal relationships of work show there is a relationship between work stress and interpersonal relationships that is found in the results of the study. West Jakarta is one of the cities with fairly stable economic growth, one of the districts that is well known by people who have a fairly dense population namely Cengkareng Sub-district. Cengkareng sub-district is divided into 6 villages namely West Cengkareng Village, Kapuk Village, Kedaung Kali Angke Village, Duri Kosambi Village, Rawa Buaya Village and East Cengkareng Village. East Cengkareng Village has 17 public elementary schools and has 5,230

students taught by 195 teachers. The number of teachers in Cengkareng is the largest of the sub-districts in West Jakarta, one of which is East Cengkareng Village which has the potential to experience a level of work stress. The teachers of the State Elementary School in East Cengkareng Village have different workloads, responsibilities, work environments, peer relationships while teaching. Based on interviews with teachers, state elementary school teachers feel symptoms. Based on preliminary observations made by the authors of 30 (thirty) elementary school teachers in East Cengkareng village who were working on WFH (Work From Home) due to the covid-19 pandemic with a survey using questionnaires through google form, there were 75% of teachers experiencing mild work stress where the teacher felt symptoms of neck muscle pain 17%, felt easily tired 26%, back muscle tension 9%, decreased concentration 9%, and experienced sleepless 39%. And 25% do not experience work stress and do not feel the symptoms mentioned above. Elementary School teachers in East Cengkareng Village have jobs that have the potential to experience a level of work stress. This is partly due to the demands of a task or a large burden of duty. The impact of this stress will decrease work productivity and increase work delays. Based on preliminary observations made by the authors on 30 (thirty) elementary school teachers in East Cengkareng village with a survey using questionnaires, there were 75% of teachers experiencing mild work stress and 25% did not experience work stress and did not feel the symptoms mentioned above. Diverse risk factors in the workplace have the potential to cause work stress in teachers. Therefore, the authors wanted to examine Factors Related to Work Stress In Elementary School Teachers In East Cengkareng Village During Work From Home Year 2020.

## 2. METHODS

The type of research used is quantitative research with Cross Sectional research design to study the relationship between risk or independent factors (workload, working environment conditions, work routines, career development, interpersonal relationships) and effect/dependent factors (work stress) where observation or measurement of variables once and at the same time as the association measure used is prevalens ratio (PR) due to the prevalence of large cases or cases more than 10%. This research was conducted in April - August 2020 where the time was calculated from the time of the research proposal until the final hearing of the study. This study has a target population of all elementary school teachers n while the study population is all elementary school teachers registered in the area kelurahan Cengkareng Timur which numbered 195 teachers so that a minimum of 86 teachers are required as respondents.

**3. RESULTS**

**3.1 Univariate Analysis**

**Table 1. Distribution of Frequency of Work Stress, Workload, Work Routines, Career Development, Working Environment Conditions, and Interpersonal Relationships In Elementary School Teachers in East Cengkareng Village During Work From Home**

| Variable                       |               | n  | %    |
|--------------------------------|---------------|----|------|
|                                |               | 86 | 100% |
| <b>Dependen</b>                |               |    |      |
| Work Stress                    | No stress     | 18 | 20,9 |
|                                | Stress        | 68 | 79,1 |
| <b>Independen</b>              |               |    |      |
| Workload                       | Light         | 28 | 32,6 |
|                                | Weight        | 58 | 67,4 |
| Work Routine                   | Not boring    | 27 | 31,4 |
|                                | Boring        | 59 | 68,6 |
| Career Development             | Good          | 42 | 48,8 |
|                                | Less          | 44 | 51,2 |
| Working Environment Conditions | Comfortable   | 21 | 24,4 |
|                                | Uncomfortable | 65 | 75,6 |
| Interpersonal Relationships    | Good          | 42 | 48,8 |
|                                | Less          | 44 | 51,2 |

Based on Table 1, from the results of the study of 86 respondents. It is known that a total of 68 people (79.1%) and teachers who are not stressed as many as 18 people (20.9%). It is known that a total of 58 people (67.4%) and teachers with a light workload of 28 people (32.6%). It is known that a total of 59 people (68.6%) and teachers who have a tedious work routine of 27

people (31.4%). It is known that a total of 44 people (51.2%) and teachers who had a good career development of 42 people (48.8%). It is known that as many as 65 people (75.6%) and teachers who have comfortable working environment conditions as many as 21 people (24.4%). It is known that a total of 44 people (51.2%) and teachers who had good interpersonal relations as many as 42 people (48.8%).

**3.2 Bivariate analysis**

**Table 2 Statistical test of factors related to work stress at SDN Guru In East Cengkareng Village During Work From Home**

| Independent Variables          | Category Category | Work Stress |      |        |      | Total |     | P-value | POR (95% CI)          |
|--------------------------------|-------------------|-------------|------|--------|------|-------|-----|---------|-----------------------|
|                                |                   | No Stress   |      | Stress |      | n     | %   |         |                       |
|                                |                   | n           | %    | n      | %    |       |     |         |                       |
| Workload                       | Light             | 18          | 64.3 | 10     | 35.7 | 28    | 100 | 0.001   | 2.800 (1.703-4.602)   |
|                                | Weight            | 0           | 0    | 58     | 100  | 58    | 100 |         |                       |
| Work Routine                   | Not boring        | 16          | 59.3 | 11     | 40.7 | 27    | 100 | 0,001   | 2.371 (8.324-206.446) |
|                                | Boring            | 2           | 3.4  | 57     | 96.6 | 59    | 100 |         |                       |
| Career Development             | Good              | 15          | 35.7 | 27     | 64.3 | 42    | 100 | 0,001   | 1.449 (2.005-228.747) |
|                                | Less              | 3           | 6.8  | 41     | 93.2 | 44    | 100 |         |                       |
| Working Environment Conditions | Comfortable       | 14          | 66.7 | 7      | 33.3 | 21    | 100 | 0,001   | 2,815 (7.837-118,699) |
|                                | Uncomfortable     | 4           | 6.2  | 61     | 93.8 | 65    | 100 |         |                       |

|                             |      |    |      |    |      |    |     |       |                        |
|-----------------------------|------|----|------|----|------|----|-----|-------|------------------------|
| Interpersonal Relationships | Good | 8  | 19.0 | 34 | 81.0 | 42 | 100 | 0,793 | 0.955<br>(0.282-2.273) |
|                             | Less | 10 | 22.7 | 34 | 77.3 | 44 | 100 |       |                        |

Based on Table 2, the results of the bivariate analysis of the chi square test show that there is a significant relationship between workload and p-value work stress = 0.001(p< 0.05). The result of the calculation of risk estimate obtained PR value = 2,800 (95% CI = 1,703 - 4,602) means that respondents who have heavy workloads have a 2,800 chance of experiencing work stress compared to respondents who have a light workload.

There is a significant relationship between work routines and p-value work stress = 0.001(p<0.05). The result of the calculation of risk estimate obtained PR value = 2,371 (95% CI = 8,324-206,446) means that respondents who have a boring work routine have a 2,371 chance of experiencing work stress compared to respondents who have a less boring work routine.

There is a significant relationship between career development and p-value work stress = 0.001(p< 0.05). The result of the calculation of risk estimate obtained PR value = 1,449 (95% CI = 2,005-228,747) means that

respondents who have career development are less likely to have a 1,449 chance of work stress compared to respondents who have good career development.

There is a significant relationship between work routines and p-value work stress = 0.000(p<0.05). The result of the calculation of risk estimate obtained PR value = 2,815 (95% CI = 7,837-118,699) means that respondents who have uncomfortable working environment conditions have a 2,815 chance of experiencing work stress compared to respondents who have comfortable working environment conditions.

There is no significant relationship between interpersonal relationships with work stress p-value = 0.793 (p>0.05). The result of the calculation of risk estimate obtained pr value = 0.955 (95% CI = 0.282-2,273) means that respondents who have interpersonal relationships are less likely 0.955 to experience work stress compared to respondents who have a good interpersonal relationship.

## 4. DISCUSSION

### 4.1 Univariate Analysis

There were 68 more respondents to elementary school teachers (79.1%) who are experiencing work stress. This result is similar to the results of a study conducted by [6] in which larger respondents experienced work stress as much as 54.5% in slb teachers. The result of frequency distribution obtained more results there were 58 respondents to sdn teachers (67.4%) that feel a heavy workload. This result is similar to the results of a study conducted by [4] in which larger respondents felt a heavy workload of 51.9% than those who felt a light workload. The results of frequency distribution based on the routine work of elementary school teacher respondents found that 59 respondents (68.6%) more respondents experienced a tedious work routine. This is not similar to research conducted by [6] where there was a tedious work routine of 24 respondents (43.6%) from 55 teacher respondents. The result of frequency distribution obtained more results there were 44 respondents of sdn teachers (93.2%) elementary school teacher respondents who felt their career development was lacking, because salaries dropped and regional allowances were cut by 50% during the working period from home. This result is in line with [7] in which respondents to teachers who felt their career development was lacking as many as 17 teachers (48.6%) from 35 teacher respondents. The result of frequency distribution obtained more results there were 65 respondents to sdn teachers (75.6%) who feel the working environment is uncomfortable. This result is not similar to the results of research conducted by [6] where respondents were more than 58.2% of the 55 teachers in Depok Extraordinary School. The results of frequency distribution based on interpersonal relationships in elementary school teachers in East Cengkareng Village found that the number of respondents as many as 44 respondents (51.2%) more feel his interpersonal connection less. This is similar to the results of a study conducted by [4] in which respondents who felt their

interpersonal relationship was lacking as many as 57 teachers (51.8%) out of 110 respondents.

### 4.2 Bivariate analysis

#### 1. Workload Relationship with Work Stress in SDN Teachers in East Cengkareng Village During Work From Home

Based on statistical analysis of the relationship between workload and work stress as many as 58 sdn teachers (100 %) feeling like you have a heavy workload experiencing work stress. While elementary school teachers who have a light workload there are 10 sdn teachers (35.7%) who are experiencing work stress. Statistical test results are obtained p-value = 0.000(p< 0.05). That is, there is a significant relationship between workload and work stress. The results of this study are similar to the research conducted by [7] there is a significant relationship between workload and work stress obtained results p value = 0.008. There is a significant relationship between workload and work stress due to, based on the results of brief interviews to some respondents directly. According to research [8] shows that workload reduces high psychological levels. High levels of stress and fatigue over time are physically and emotionally demanding and can increase health risks such as heart disease and respiratory disease[9] as well as emotional outcomes including depression and anxiety[10][11]. Basically the teacher's job description has both categories of workload. Where in the qualitative workload category a teacher is required to provide teaching materials to his students with the skills and teaching skills that are learned. While in the category of quantitative workload, such as the number of teaching hours that the teacher must meet, checking the students' duties, and moreover if there is daily administrative reporting to be made, absent photos by using the morning

and afternoon timestape application using a full uniform according to the work day. So the situation of work from home makes the teacher's workload more difficult. To reduce the workload on teachers, the school should improve work planning in the form of time management regulations for students or guardians in collecting tasks on time so that teachers can correct the results of tasks in accordance with working hours. As for absenteeism teachers should use absenteeism in the form of daily reports only so that there is no need to send photos using full uniform according to the work day.

## **2. Relationship of Work Routine with Work Stress in SDN Teachers in East Cengkareng Village during Work From Home**

Based on the results of statistical analysis obtained that the results of the analysis of the relationship between work routine and work stress as much as 57 elementary school teachers (96.6%) who find their work routine tedious, while sdn teachers who feel they have a work routine are not boring there are 11 teachers at SDN (40.7%) who are experiencing work stress. Based on statistical test results obtained  $p$ -value = 0.000 ( $p < 0.05$ ). That is, there is a significant relationship between work routines and work stress. The results of this study are similar to the research conducted by [6] there is a significant relationship between work routine and work stress obtained results  $p$  value = 0.032. There is a significant relationship between work routines and work stress because, based on the results of live interviews with elementary school teacher respondents feel the work is done monotonously (over and over again). In addition respondents felt the work they were doing was very saturated. It is known that respondents felt the work they did was the same every day, the lack of face-to-face social interaction with the students at the school so that the work they did often felt saturated. To reduce boring work routines, teachers should do other activities such as exercise at home that can maintain endurance and reduce work stress.

## **3. Career Development Relationship with Work Stress in SDN Teachers in East Cengkareng Village During Work From Home**

Based on statistical analysis of the relationship between career development and work stress there are 41 sdn teachers (93.2%) who feel lacking with career development experience work stress. While the respondents of elementary school teachers who felt good with career development there were 27 reponden (64.3%) who are experiencing work stress. Statistical test results are obtained  $p$ -value = 0.001 ( $p < 0.05$ ). That is, there is a significant relationship between career development and work stress. The results of this study are in line with research conducted by [6] where there is a relationship between career development and work stress in teachers where  $p$  value = 0.007. There is a significant relationship between career development and work stress due to this covid-19 pandemic which results in work from home so that the trainings held from the education office are conducted virtually (zoom meeting) using a

personal laptop followed by representatives from the school chosen by the principal. So with zoom meeting training is less effective and teachers feel their salaries are less full of daily murmurs because for civil servant teachers kindergarten is cut by 50% and honorary teachers are paid once every 3 months. As well as for promotion in school or certification is also constrained because teachers take care of themselves and submit themselves to the education office. To solve the problem related to the promotion of positions in the school should the school take care for the purposes of certification for teachers so that the process is faster and organized.

## **4. Relationship of Working Environment Conditions with Work Stress in SDN Teachers in East Cengkareng Village During Work From**

Based on statistical analysis of the relationship between working environment conditions and work stress, there were 61 teachers at elementary school (93.8%) occurs in teachers who feel the condition of an uncomfortable work environment that has work stress. Meanwhile, 7 sdn teachers (33.3%) who feel comfortable working environment conditions experiencing work stress. Statistical test results are obtained  $p$ -value = 0.000 ( $p < 0.05$ ). That is, there is a significant relationship between work environment conditions and work stress. The results of this study are in line with the results of [6] which states there is a significant relationship between work environment conditions and work stress with  $p$  value = 0.000. The relationship between the condition of the work environment and the stress of work due to, the work from home that results in teachers doing work outside of school or from home. This condition makes a difference in the working environment by teachers. If you do work outside of school, the condition of the environment that is not clean can occur because teachers feel accustomed to the school environment that must always be clean. Sometimes teachers also do their job at school to do tasks more focused and comfortable. This situation makes teachers feel the condition of their work environment outside the school is uncomfortable. We recommend that the teachers of elementary school find a place that feels clean and comfortable enough to work. So when working increases morale and productivity increases.

## **5. Interpersonal Relationship with Work Stress in SDN Teachers in East Cengkareng Village during Work From Home In 2020**

Based on the results of the analysis between interpersonal relationship with work stress, of the 68 respondents of SDN teachers who experienced work stress in part occurred in respondents who had less interpersonal relationship, namely as many as 34 elementary school teachers (77.3%). Meanwhile, of the 68 respondents who felt experiencing work stress there were 34 teachers at elementary school (81.0%) who feel they have a good interpersonal relationship. Statistical test results are obtained  $p$ -value = 0.793 ( $p > 0.05$ ). That is, there is no significant link between interpersonal relationships and work stress. This is in line with research conducted by [6] where there is no interpersonal relationship with work stress in teachers with a value of  $p$  value = 0.80. Previous research has shown a relationship between teaching

behavior and teacher stress and student perceptions[12] and between stress and perceived personal achievement[13][14]. The absence of interpersonal relationship with work stress due to good relationships between fellow teacher colleagues, bosses and parents of students. Teachers establish effective communication by creating whatsapp groups with parents so that they can ask about tasks and obstacles when doing tasks, There is a good interpersonal relationship between fellow teacher co-workers and with the student's guardians must be improved. Effective communication can reduce the stress of work on teachers.

## 5. CONCLUSION

Based on research conducted at SDN Kelurahan Cengkareng Timur year 2020 obtained as many as 68 respondents of elementary school teachers (79.1%) and 18 teacher respondents (20.9%) who do not experience work stress. Based on the workload obtained the largest result as many as 58 respondents to elementary school teachers (67.4%) who felt a heavy workload. Based on the routine of the work obtained the largest results as many as 59 respondents to sdn teachers (68.6 %) who feel his work routine is boring. Based on the career development obtained the largest results as many as 44 sdn teachers (51.2 %) who felt his career development was lacking. Based on working environment conditions obtained the largest result of 65 sdn teachers (75.6%) that feel the working environment is comfortable. Based on interpersonal relationships, the largest result was 44 sdn teachers (51.2%) who feel his interpersonal connection is lacking. Based on the statistical tests that have been conducted, it is obtained that there is a relationship.

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## REFERENCES

- [1] HSE, "Work-related stress , anxiety or depression statistics in Great Britain," *Annu. Stat.*, pp. 1–9, 2019.
- [2] Ministry of Health, "Provinsi Mana yang Memiliki Angka Depresi Tertinggi ? 2018," 2018.
- [3] I. Samosir, Z., & Syahfitri, "Faktor Penyebab Stres Kerja Pustakawan pada Perpustakaan Universitas Sumatera Utara," 2008.
- [4] Noviyanti R, "Analisis faktor-faktor yang berhubungan dengan stres kerja pada Guru Honorar SMA di Jakarta Timur tahun 2012," 2012.
- [5] Safitri L, "Factors of work stress of Employee in Administration Center Universitas Indonesia in," 2013.
- [6] Aldo Virdya Septian, "Analisa Faktor – Faktor Yang Berhubungan Dengan Stress Kerja Pada Guru Sekolah Luar Biasa – BC Di Kota Depok," 2016.
- [7] Atika A. D, "Analysis of factors due to work stress level of primary school in special education and general primary school teachers," 2014.
- [8] R. Harmsen, M. Helms-Lorenz, R. Maulana, and K. Veen, "The longitudinal effects of induction on beginning teachers' stress," *Br. J. Educ. Psychol.*, vol. 89, no. 2, pp. 259–287, Jun. 2019, doi: 10.1111/bjep.12238.
- [9] D. A. J. Salvagioni, F. N. Melanda, A. E. Mesas, A. D. González, F. L. Gabani, and S. M. de Andrade, "Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies," *PLoS One*, vol. 12, no. 10, p. e0185781, Oct. 2017, doi: 10.1371/journal.pone.0185781.
- [10] H. Shin, H. Noh, Y. Jang, Y. M. Park, and S. M. Lee, "A longitudinal examination of the relationship between teacher burnout and depression," *J. Employ. Couns.*, vol. 50, no. 3, pp. 124–137, Sep. 2013, doi: 10.1002/j.2161- 1920.2013.00031.x.
- [11] M. A. Steinhardt, S. E. Smith Jaggars, K. E. Faulk, and C. T. Gloria, "Chronic Work Stress and Depressive Symptoms: Assessing the Mediating Role of Teacher Burnout," *Stress Heal.*, vol. 27, no. 5, pp. 420–429, Dec. 2011, doi:10.1002/smi.1394.
- [12] R. Hanif, S. Tariq, and M. Nadeem, "Personal and Job Related Predictors of Teacher Stress and Job Performance among School Teachers," Lahore: Johar Education Society, Pakistan (JESPK), 2011.
- [13] F. D. Betoret, "Self-efficacy, school resources, job stressors and burnout among Spanish primary and secondary school teachers: A structural equation approach," *Educ. Psychol.*, vol. 29, no. 1, pp. 45–68, Jan. 2009, doi: 10.1080/01443410802459234.
- [14] C. M. Kokkinos, "Job stressors, personality and burnout in primary school teachers," *Br. J. Educ. Psychol.*, vol. 77, no. 1, pp. 229–243, Mar. 2007, doi: 10.1348/000709905X90344.