The Relationship Between Work Fatigue and Work Stress Among Kawangkoan, Sonder, Tompaso (KST) Truck Driver Community

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ABSTRACT

Work-related fatigue and work-related stress are closely linked and can impact employee performance. Work-related fatigue can lead to poor performance, reduce worker quality, and have negative impacts. This research aims to determine the relationship between work fatigue and work stress among truck drivers in the Kawangkoan, Sonder, Tompaso truck driver community (KST). The research uses this study as an analytical study with a cross-sectional research design. The research was conducted from December 2024 to February 2025. In this study, a total of 34 drivers were sampled. The research results show a relationship between work fatigue and work stress. The significance value is 0.000, which is less than 0.05 ($p < 0.05$), and the correlation coefficient is 0.694, indicating a positive correlation. This indicates a significant correlation between work stress and truck driver fatigue. Where work stress scores positively correlate with levels of work fatigue.

Keywords: *Work Fatigue, Work Stress*

1. INTRODUCTION

Work fatigue and work stress are closely related and can have a negative impact on worker productivity. The presence of work fatigue in employees can lead to poor performance, a decline in work quality, and can have detrimental consequences (Linoe, Sumampouw, & Wowor, 2023). Stress on workers can disrupt work and lead to a decline in work performance (Singal, Manampiring, & Nelwan, 2020).

Work fatigue can be marked by a decrease in alertness and the onset of feelings of tiredness. Work fatigue can result in decreased employee performance. The feeling of fatigue is a psychosocial aspect that can affect work fatigue (Kawatu P. A., 2021). Workplace stress is an emotional state in individuals due to the demands of their job. Work stress can affect an individual's behavior, quality, and work productivity (Jacobs, Sumampouw, & Musa, 2024). Data from The Health & Safety Executive 2024 shows that 776,000 workers experience work- related stress, with 16.1 million workers losing workdays due to stress, depression, and anxiety at the workplace.

The research conducted by Suoth et al (2019) on drivers of the Karombasan — Malalayang Manado route showed that most drivers experience mild work fatigue and work stress. The research results also show a relationship between work stress among drivers. Where, the lighter the respondents experience work fatigue, the lighter the stress they feel. The drivers experience work fatigue due to repetitive tasks in a seated position with limited movement space. The work fatigue experienced by the driver can increase the risk of work-related accidents. The condition of fatigue, if not addressed, can lead to a decrease in concentration and driver response while driving, potentially resulting in traffic accidents. Truck drivers can generally drive for more than 12 hours and are prone to experiencing fatigue at work as well as increased work-related stress, where work fatigue can lead to a decrease in productivity among drivers while working. In addition, the increase in the number of vehicles on the road and the impact of work-related stress experienced by drivers can trigger unsafe driving behaviors, which can significantly contribute to traffic accidents (Syamsul et al 2022).

2. METHOD

Analytical study research with a cross-sectional study design. The research was conducted from December 2024 to February 2025. The population in this study is the Community of Truck Drivers from Kawangkoan, Sonder, Tompaso (KST). The sampling technique in this study uses total sampling with a total population of 34 drivers. Work fatigue is the independent variable in this study, and the dependent variable is work stress. To see the relationship between work fatigue and work stress, the Pearson correlation test is used.

3. RESEACRH FINDINGS AND DISCUSSION

Tabel 1. Distribusi Karakteristik Responden

Karakteristik	N (34)	%
Age		
16-25	5	14,7
26-35	2	5,6
36-45	4	11,8
45-70	23	67,6
Length of Service		
1-15	13	38,2
16-30	19	55,9
31-40	1	2,9
41-60	1	2,9
Duration of Work		
8 hours/day	7	20,6
More than 8 hours/day	27	79,4
Work Fatigue		
Low	1	2,9
Medium	18	52,9
Heavy	15	44,1
Work Stress		
Low	1	2,9
Medium	10	29,4
Heavy	23	67,6

Based on Table 1, it can be seen that the majority of respondents in the age range of 45-70 years were 23 respondents (67.6%), and the smallest number of respondents were in the age range of 26-35 years, with 2 respondents (5.6%). Most of the samples in this study have worked as truck drivers for 16-30 years, totaling 19 respondents (55.9%). Data has also shown that 27 respondents (79.4%) have a driving duration of more than 8 hours per day.

The work fatigue variable shows that 18 respondents (52.9%) experience fatigue, 15 respondents (44.1%) experience severe fatigue, and there is 1 respondent (2.9%) who experiences mild fatigue. This happens because the drivers generally drive for more than 8 hours a day and have an unpredictable work schedule, where at certain times they have to undertake long journeys and transport goods at dawn, resulting in a lack of sleep and causing most respondents to often feel drowsy while driving and experience headaches during long driving periods. The results of a similar study conducted by Srinadi (2024) on truck drivers in Denpasar show that 64.5% of the drivers experience moderate fatigue. This is because most truck drivers have working hours of 9 to 16 hours a day.

The work stress variable shows that 23 respondents (67.6%) have a high stress score, 10 respondents (29.4%) have a moderate stress score, and 1 respondent (2.9%) has a low stress score. This happens because the transportation targets are quite high, causing respondents to often feel anxious when there is no transportation. The results of similar research conducted previously by Suoth et al (2019) on drivers of the Karombasan — Malalayang Manado route, who have been working for one year, tend to experience work-related stress due to a lack of experience and skills needed to adapt to the work environment.

Tabel 2. The relation between work fatigue and work stress among truck drivers

		Work Stress
Work Fatigue	Correlation Coefficient	,694
	Sig. (2-tailed)	,000
	N	34

The results of the Pearson correlation test between work fatigue and work stress obtained a p-value of 0.000 and a calculated r of 0.694, indicating a strong relationship with a positive correlation, which means there is a significant relationship between work fatigue and work stress experienced by truck drivers. Based on the results of interviews with respondents, this is caused by truck drivers having a limited and quite long working time, which leaves them with insufficient rest time, leading to feelings of fatigue and easy stress when facing situations such as heavy traffic and short delivery deadlines. In addition, the high transportation targets require truck drivers to make deliveries every day, causing the drivers to feel stressed if these targets are not met. The results of similar research conducted by Dajoh, Palilingan & Rambitan (2021) on gas station employees in Minahasa Regency show that daily workload can cause a relationship between work fatigue and work stress.

4. CONCLUTION

a. Work fatigue is being experienced by most drivers.
b. Heavy work stress is experienced by most drivers
c. There is a significant relationship between work fatigue and work stress among truck drivers

5. SUGGESTION

a. For Workers, it is recommended that workers pay attention to their nutritional intake according to their workload and engage in physical activities such as stretching exercises during driving breaks.
b. For Future Researchers, it is recommended to conduct further research on other causal factors related to work stress among truck drivers.

REFERENCES

Executive, T. H. (2024). Work-related stress, anxiety or depression statistic.

Jacobs, R. S., Sumampouw, O. J., & Musa, E. C. (2024). The Correlation Between Age and Work Stress in Ship Crew at Tumumpa Beach Fisheries Port, Manado City. *Journal of Midwifery History and Philosophy*, 1-6.

Kawatu, P. A. (2021). *Dasar Kesehatan Dan Keselamatan Kerja*. Minahasa Utara: Penerbit Major. Linoe, R. G., Sumampouw, O. J., & Wowor, R. E. (2023). Hubungan Postur Kerja Dengan Kelelahan

Kerja pada Pekerja di PT. Nusantara Sejahtera Beton Indonesia di Desa Rateli Kabupaten Minahasa . *Jurnal Lentera Sehat Indonesia* , 44-49.

Singal, E. M., Manampiring, A. E., & Nelwan, J. E. (2020). Analisis Faktor-Faktor Yang Berhubungan Dengan Stres Kerja Pada Pegawai Rumah Sakit Mata Provinsi Sulawesi Utara. *Sam Ratulangi Journal of Public Health*, 040-051.

Srinadi, N. L. (2024). HUBUNGAN ANTARA USIA DAN LAMA KERJA DENGAN KELELAHAN KERJA SUBJEKTIF PADA SOPIR TRUK DI TERMINAL ANGKUTAN BARANG KOTA DENPASAR TAHUN 2024. *Poltekes Kemenkes Denpasar*.

Suoth, S. G., Lery, F., & Malonda, N. S. (2019). Hubungan Antara Kelelahan Kerja Dengan Stres Kerja Pada Sopir Angkutan Umum Trayek Karombasan-Malalayang Kota Manado. *Jurnal Kesmas*, 336-343.

Dajoh, V., Palilingan, R. A., & Rambitan, M. (2021). HUbungan Antara Kelelaha Kerja dan Stres Kerja Pada Karyawan di SPBU Kabupaten Minahasa. *PIDEMINA*, 21-16.