



THE RELATIONSHIP BETWEEN WORKLOAD AND WORK STRESS AMONG GOJEK DRIVERS IN MEDAN CITY IN 2024

Syahrevi Ulfa Marpaung¹, Gerry Silaban², Arfah Mardiana Lubis³

¹ Master Student, Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia

^{2,3} Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia
Email : ulfamarpaung154@gmail.com

Article details:

Published: 31th October 2024



Abstract

Gojek is an online transportation service that can be ordered through an application, and it is increasingly being used due to its perceived effectiveness. Gojek drivers play a crucial role in providing services under any circumstances, which can lead to work-related stress. This study aims to analyze the relationship between workload and work stress among Gojek drivers in Medan City. The study is analytical in nature, using a

cross-sectional design. It was conducted in Medan City and took place from March 2024 until completion. The population of this study consists of all active drivers registered at the Gojek office, totaling 642 individuals. The sample size was calculated using Slovin's formula, resulting in a sample of 247 Gojek drivers. Data collection was conducted using questionnaires, with the workload variable measured using the NASA TLX questionnaire and work stress measured using the NIOSH questionnaire on a Likert scale. Data analysis was carried out in two stages: univariate analysis using frequency, and bivariate analysis using the chi-square test with a significance level of 95% ($\alpha = 0.05$). The results of the study showed that the relationship between workload and work stress had a p-value of 0.001, indicating a significant relationship. It is recommended that Gojek drivers in Medan City manage their time effectively and wisely. When faced with a heavy workload, they should create a daily schedule to ensure all tasks are systematically organized.

Keywords: Gojek, workload, work stress

To cite this article : Marpaung, S. U., Silaban, G., Lubis, A. M., y, I. M. S., & Mahyuni, E. L. (2024). THE RELATIONSHIP BETWEEN WORKLOAD AND WORK STRESS AMONG GOJEK DRIVERS IN MEDAN CITY IN 2024. *International Journal of Health, Education & Social (IJHES)*, 7(10), 71-79.
<https://doi.org/10.1234/ijhes.v7i10.351>



Introduction

The development of technology in the field of transportation has brought significant changes to various aspects of society (Gohar & Nencioni, 2021; Zhao et al., 2020). Technology in transportation has emerged in the form of online motorcycle taxis (Bayuaji, 2021). In recent years, online transportation, referred to as “ojek online”, has seen increasing demand due to the need for fast transportation, especially in major cities where people increasingly rely on online services (Mahendra et al., 2022). Several online motorcycle taxi companies have expanded their businesses in Indonesia, with Gojek being one of the most well-known among the public (Wibowo & Handayani, 2020).

Gojek is a service provider application founded by PT. Aplikasi Anak Bangsa, primarily focusing on transportation services, with its core business being motorcycle taxis. Gojek's online motorcycle taxi service not only transports passengers but also offers package delivery (Go-Send), food delivery services (Go-Food), and even shopping services where customers can request the purchase of goods (Go-Shop), among other services (Markey, 2019; Adam et al., 2020).

As Gojek rapidly expands in Indonesia, the demand for drivers has increased to help meet the needs of the public. This presents a significant opportunity for many people to earn additional income, and quite a few have even made being a Gojek driver their primary occupation (Wibowo & Handayani, 2020).

Gojek implements a revenue-sharing and performance-based system. Under the revenue-sharing system, Gojek drivers benefit significantly, receiving 80% of the earnings while Gojek retains 20%. Gojek drivers can also work flexibly, managing their own working hours and income. To become a Gojek driver-partner, individuals are required to adhere to the company's policies (Wibowo & Handayani, 2020). However, since the work is based on a partnership system, there is no guaranteed minimum income or set working hours, which increases income uncertainty and vulnerability for drivers (Bayuaji, 2021). The company policies require drivers to work according to set rules, but some regulations push drivers to work longer hours, leading to work-related stress.

Work stress creates tension within individuals, affecting their thinking patterns, emotions, and both physical and psychological balance. Work stress is often linked to various problems faced by drivers (Agustina & Sofian, 2019). These issues arise from job demands related to online motorcycle taxi services, such as excessive workload, long working hours, differences in perceptions and opinions, strained relationships between drivers and passengers, and other factors that can cause individuals to feel pressured, leading to work stress (Fahmi, 2017).

One of the triggers of work stress is workload. According to Ellyzar et al., (2017), workload refers to the amount of work that must be completed by an individual within a set timeframe, based on their position, using certain techniques to assess the efficiency and effectiveness of their performance. A heavy workload can lead to work stress. According to Sunyoto (2017), explains that this occurs when individuals are required to have greater skills, face tight deadlines, or deal with an overwhelming volume of tasks.

The results of a study by Rindorindo et al. (2019) indicate that workload has a positive and significant effect on work stress. Similarly, Wibowo & Handayani (2020) found that workload has a positive impact on employee stress levels, meaning that the higher the workload, the more intense the stress experienced by employees.

The results of a study by Rindorindo et al. (2019) indicate that workload has a positive and significant effect on work stress. Similarly Wibowo & Handayani (2020) found that workload has



a positive impact on employee stress levels, meaning that the higher the workload, the more intense the stress experienced by employees.

According to a survey conducted by the largest Gojek community in Medan, known as the Gojek Two-Wheelers Association of Medan and Surrounding Areas (GODAMS), there were 642 registered drivers as of 2023. In interviews with 30 Gojek drivers from the GODAMS community in Medan, 19 drivers reported experiencing work-related stress, which can negatively impact their performance. Work pressure, conflicts between workers, the physical work environment, and family demands also contribute to work stress for online motorcycle taxi drivers.

Gojek drivers face multiple work pressures that can lead to aggressive driving behavior. One of the stress triggers is family demands, the need to meet bonus targets, and dealing with passengers who are in a hurry, especially during traffic jams. As a result, some drivers engage in traffic violations, such as running red lights or driving against the flow of traffic, which increases the risk of accidents.

Work-related risks for drivers include occupational accidents while performing their duties. Online motorcycle taxi drivers often experience accidents while working, which can result in reduced focus and accidents on the road. Based on this background, the purpose of this study is to analyze the relationship between workload and work stress among Gojek drivers in Medan City.

Methods

This is a quantitative, analytical study using a cross-sectional design. The research was conducted in Medan City from February 2024 to April 2024. The population for this study consists of all Gojek drivers in Medan, totaling 642 drivers. The sample size was calculated using Slovin's formula, resulting in a sample of 247 drivers. The sampling technique used was simple random sampling, and the selection of population members was done randomly using a random number generator from a mobile phone. Data collection was carried out by distributing questionnaires through Kobotoolbox. The questionnaire instruments used for workload were based on NASA TLX, and for work stress, the NIOSH Job Stress Questionnaire was employed. The NIOSH questionnaire contains 20 items with two indicators of stress: psychological and physiological changes. The work stress questions were measured using a Likert scale with 5 points: Almost Never, Rarely Happens, Sometimes Happens, Often Happens, and Always Happens.

The research variables include the dependent variable, which is work stress measured on an ordinal scale (categorical data), and the independent variable, which is workload, also measured on an ordinal scale (categorical data). Data analysis was conducted using SPSS version 25. The analysis involved two steps: first, univariate analysis using frequency, and second, bivariate analysis using the chi-square test with a significance level of 95% ($\alpha = 0.05$).

The principal researcher received an ethics approval certificate from the Health Research Ethics Committee of Universitas Prima Indonesia (No: 032/KEPK/UNPRI/VII/2023). Additionally, permission was obtained from the academic administrator of the higher education institution and relevant authorities before data collection, with the aim of securing informed consent from respondents prior to the distribution of the questionnaires.

Results



Characteristics of Gojek Drivers in Medan City. The characteristics of Gojek drivers in Medan City include age, gender, working hours, and length of service. The characteristics of Gojek drivers in Medan City are presented in Table 1 below:

Table 1. Frequency Distribution of Gojek Driver Characteristics in Medan City

Characteristics of Gojek Drivers	n	%
Age		
Less than 45 years	206	83.4
Greater than 45 years	41	16.6
Gender		
Male	214	86.6
Female	33	13.4
Working Hours		
Not at risk (less than 8 hours)	154	62.3
At risk (more than 8 hours)	93	37.7
Length of Service		
Long-term (more than 3 years)	172	69.6
Short-term (less than 3 years)	75	30.4

Based on Table 1, the distribution of Gojek driver characteristics in Medan City shows that the majority of Gojek drivers are under 45 years old, totaling 206 individuals (83.4%). Among them, 114 drivers (86.6%) are male, 154 drivers (62.3%) have non-risky working hours (less than 8 hours), and 172 drivers (69.6%) have more than 3 years of service.

Work Stress Among Gojek Drivers in Medan City. The distribution of work stress among Gojek drivers in Medan City is presented below:

Table 2. Frequency Distribution of Work Stress Among Gojek Drivers in Medan City

Work Stress Among Gojek Drivers	n	%
Moderate	160	64.8
High	87	35.2
Total	247	100.0

Based on Table 2, the frequency distribution of work stress among Gojek drivers in Medan City shows that the majority of drivers experience moderate work stress, with a total of 160 individuals (64.8%).

Workload Among Gojek Drivers in Medan City. Based on the workload calculations using NASA TLX, the distribution of workload among Gojek drivers in Medan City is presented below:

Table 3. Frequency Distribution of Workload Among Gojek Drivers in Medan City

Workload Among Gojek Drivers	n	%
------------------------------	---	---



Low	12	4.9
Moderate	95	38.5
High	66	26.7
Very High	74	30.0
Total	247	100.0

Based on Table 3, the frequency distribution of workload among Gojek drivers in Medan City indicates that the majority of drivers have a moderate workload, with a total of 92 individuals (37.2%).

Relationship Between Workload and Work Stress Among Gojek Drivers in Medan City. The bivariate analysis conducted aims to analyze the relationship between workload and work stress among Gojek drivers in Medan City. The relationship between workload and work stress among Gojek drivers in Medan City is presented in the following table:

Table 4. Relationship Between Workload and Work Stress Among Gojek Drivers in Medan City

Workload	Work Stress Among Gojek Drivers				Total		Pvalue
	Moderate		High		N	%	
	n	%	n	%			
Low	10	4.0	2	0.8	12	4.9	0.001
Moderate	84	34.0	11	12.1	95	38.5	
High	36	14.6	30	12.8	66	26.7	
Very High	30	12.1	44	17.8	74	30.0	

Based on Table 4 above, the relationship between workload and work stress among Gojek drivers in Medan City shows that the majority of drivers with a moderate workload experience moderate levels of work stress, at 34.0%. This is followed by drivers with a high workload, at 14.6%, and those with a very high workload, at 12.1%, while drivers with a low workload experience work stress at a rate of 4.0%. The statistical analysis yielded a p-value of 0.001 (p-value < 0.05), indicating a significant relationship between workload and work stress among Gojek drivers in Medan City.

Discussion

Workload can be defined as the amount of work or tasks that a worker must complete within a certain period (Rahman et al., 2020). Excessive workload can occur when the demands of the job exceed the worker's capacity or ability to complete them (Sekky et al., 2021). An excessive workload can lead to physical and mental fatigue, as well as decreased productivity (Anjanarko et al., 2022).

The workload experienced by online motorcycle taxi drivers is not only physical but also mental (Kusmasari & Mahirah, 2024). This workload is influenced by both external and internal factors (Ferusgel et al., 2020; Hartono & Kasno, 2023). External factors include the work



environment, working hours, spatial arrangement, tools and facilities, and other factors (Satriani et al., 2024). Internal factors encompass somatic factors (such as gender, nutrition, age, and health condition) and psychological factors (such as motivation, desire, and satisfaction), with each driver experiencing different levels of workload (Tuasikal et al., 2020; Wulani et al., 2022).

The relationship between workload and work stress among Gojek drivers in Medan City yielded a p-value of 0.001, indicating a significant relationship between workload and work stress. Excessive workload can lead to work stress among Gojek drivers in Medan City. This work stress can negatively impact their physical and mental health, as well as reduce the performance and productivity of Gojek drivers.

The results of this study align with the research conducted by Fadillah et al. (2020), which stated that there is a significant relationship between workload and work stress among online motorcycle taxi drivers in Banjarbaru City in 2020. The study found that excessive workload leads to fatigue both physical and mental and emotional reactions. A high workload can cause physical exhaustion, thereby affecting the mental state of motorcycle taxi drivers. Excessive or high workloads can result in work stress.

The results of this study are supported by research conducted by Rahmadina et al. (2022), which indicates a significant positive relationship between workload and work stress among online motorcycle taxi drivers (Gojek) in the Gojek X Community. The findings suggest that as workload increases, work stress also increases; conversely, lower workloads are associated with lower levels of work stress.

Workload is measured by six indicators, with performance being the most influential indicator of work stress. The performance of Gojek drivers refers to their efficiency and effectiveness in completing assigned tasks. As demand for fast and convenient transportation services increases, Gojek drivers are required to deliver optimal work performance. However, these high performance demands often compel Gojek drivers to work under challenging conditions, such as striving to meet order targets to earn bonuses or maintaining high ratings to retain customers. Such demands can elevate psychological pressure, ultimately leading to work stress (Purnomo & Waluyo, 2023).

This statement is supported by research conducted by (Kurniawan et al., 2022) Kurniawan (2022), which indicates that 70% of Gojek drivers with ratings below 4.5 experience high levels of stress. The study also found a positive correlation between the number of orders completed per day and the level of stress experienced.

Gojek drivers who perform well in their work can achieve good earnings, as their income largely depends on the number of orders completed and the ratings given by customers (Ma et al., 2024). The pressure to maintain a high rating from customers can create additional stress. Drivers must consistently deliver high-quality service, which often involves meeting passenger demands that go beyond the original request. For instance, this may include picking up passengers at incorrect locations or accommodating requests to stop at places that deviate from the planned route. Additionally, intrusive questions from passengers can further contribute to the stress experienced by Gojek drivers (Lahat & Marthanti, 2021; Kerti & Pradana, 2022).



Conclusion and Recommendation

Based on the results above, it can be concluded that the workload among Gojek drivers in Medan predominantly falls into the moderate category, with 38.5% of drivers experiencing this level of workload. Additionally, the majority of Gojek drivers in Medan experience moderate work stress, accounting for 37.2%. There is a significant relationship between workload and work stress among Gojek drivers in Medan, with a p-value of 0.001.

Recommendations for Gojek drivers in Medan include better time management during work hours to ensure compliance with legal regulations. Drivers should aim to complete tasks according to set targets without neglecting sufficient break time to avoid work-related stress. Effective time management is essential, especially when facing a heavy workload; creating a daily schedule can help organize activities systematically. If drivers feel distracted, they should remind passengers that they need to concentrate while driving.

References

- Adam, V., Wulandari, J., & Aprillia, H.D. (2020). Analisis beban kerja dan insentif terhadap kinerja driver gojek di Bandar Lampung. *Jurnal Perspektif Bisnis*, 3(2), 106-116. <https://doi.org/10.23960/jpb.v3i2.14>
- Agustina, A., & Sofian, E. (2019). Pengaruh konflik dan stres kerja terhadap semangat kerja karyawan di PT. Deka medica cabang medan. *Jurnal Bisnis Corporate*, 4(1), 65-76.
- Anjanarko, T. S., Jahroni, J., Retnowati, E., Putra, A. R., & Arifin, S. (2022). The Effect of Workload and Compensation on Employee Productivity. *International Journal of Service Science, Management, Engineering, and Technology*, 1(2), 17-21. <https://ejournalisse.com/index.php/isse/article/view/84>
- Bayuaji, B. (2021). Stres kerja terhadap kepuasan kerja pada pengemudi Gojek Salatiga selama pandemi COVID-19. *Psyche 165 Journal*, 14(4), 323-328. <https://doi.org/10.35134/jpsy165.v14i4.129>
- Ellyzar, N., Yunus, M., & Amri. (2017). Pengaruh mutasi kerja, beban kerja, dan konflik interpersonal terhadap stress kerja serta dampaknya pada kinerja pegawai BPKP perwakilan Provinsi Aceh. *Jurnal Magister Manajemen*, 1(1), 35– 45.
- Fadillah, A.I., Fauzan, A., & Ariyanto, E. (2020). Hubungan beban kerja, masa kerja dan usia dengan stress kerja pada pengemudi ojek online di Kota Banjarbaru Tahun 2020. *Jurnal Online Universitas Islam Kalimantan*, 1(1), 1-8.
- Fahmi, S. (2017). Pengaruh stres kerja dan konflik kerja terhadap semangat kerja karyawan pada Pt. Omega Mas Pasuruan. *Jurnal Ekonomi Modernisasi*, 12(3), 107-116. <https://doi.org/10.21067/jem.v12i3.1462>
- Ferusgel, A., Butar-Butar, M.H., Widya, A., Napitupulu, L.H., & Chaniago, A.D. (2020). Risk factors of an online motorcycle taxi (ojek online) fatigue in Medan. In *5th Universitas Ahmad Dahlan Public Health Conference (UPHEC 2019)*, 76-80. <https://doi.org/10.2991/ahsr.k.200311.014>



- Gohar, A., & Nencioni, G. (2021). The role of 5G technologies in a smart city: The case for intelligent transportation system. *Sustainability*, 13(9), 1-24. <https://doi.org/10.3390/su13095188>
- Hartono, H., & Kasno, K. (2023). The effect of workload and commitment on online motorcycle taxi drivers' performance. *Jurnal Ilmu Manajemen Advantage*, 7(1), 70-78. <https://doi.org/10.30741/adv.v7i1.1034>
- Kerti, Y.D.N., & Pradana, G.Y.K. (2022). The relationship between customer expectations and driver stress in Indonesia's ride-hailing industry. *Asian Journal of Social Science and Management Technology*, 4(2), 131-142.
- Kurniawan, K., Alumidin, A., & Akbar, M. (2022). Komunikasi pemasaran gojek cabang makassar terkait gopay di Instagram: Indonesia. *Studia Komunika: Jurnal Ilmu Komunikasi*, 5(2), 156-172. <https://doi.org/10.47995/jik.v5i2.86>
- Kusmasari, W., Mahirah, A., & Nalhadi, A. (2024). Measurement of Physical and Mental Workload in Onlline Ojek Drivers: A Case Study in Serang City. *International Journal of Disabilities Sports and Health Sciences*, 7(3), 655-662. <https://doi.org/10.33438/ijdshts.1409225>
- Lahat, M.A., & Marthanti, A.S. (2021). The effect of work engagement and work stress on job satisfaction and their impact on turnover intention of Gojek Partners In Jakarta. *International Journal of Social and Management Studies*, 2(6), 40-50. <https://doi.org/10.5555/ijosmas.v2i6.79>
- Ma, S., Zimmerman, J., Fox, S. E., Nisi, V., & Nunes, N. J. (2024). My sense of morality leads to my suffering, battling, and arguing: the role of platform designers in (un) deciding gig worker issues. In *Proceedings of the 2024 ACM Designing Interactive Systems Conference*, 3501-3514. <https://doi.org/10.1145/3643834.3660713>
- Mahendra, Y.I., Setiawan, D., Fawwazir, A.H., Ratna, D., Ulyna, M., & Zahra. (2022). Analisis pengaruh stress kerja terhadap ojek online di Kota Medan. *Nautical : Jurnal Ilmiah Multidisiplin*, 1(4), 246-252. <https://jurnal.arkainstitute.co.id/index.php/nautical/index>
- Markey. (2019). *Sejarah Gojek Indonesia, Profil, Fitur & Layanannya*. Diakses dari <https://markey.id/plan/gojek-indonesia>.
- Purnomo, A. M., & Waluyo, D. E. (2023). The Influence of Workload and Job Stress on the Performance of Online Motorcycle Taxi Drivers (Grab, Maxim, and Gojek) in the Semarang City Area. *ProBisnis: Jurnal Manajemen*, 14(6), 498-506. <https://doi.org/10.62398/probis.v14i6.348>
- Rahmadina, S., Alkaff, R. N., Shofwati, I., Sari, M., & Aristi, D. (2022). Determinan stres kerja pada pengendara ojek online di Jabodetabek. *Jurnal Masyarakat Sehat Indonesia*, 1(02), 72-82. <https://doi.org/10.70304/jmsi.v1i02.11>
- Rahman, N.I.A., Dawal, S. Z. M., & Yusoff, N. (2021). Ageing drivers' mental workload in real-time driving task based on subjective and objective measures. *Journal of Engineering Research*, 9(3B). <https://doi.org/10.1016/j.trf.2020.01.019>



- Rindorindo, R.P., Murni, S., & Trang, I. (2019). Pengaruh beban kerja, stres kerja dan kepuasan kerja terhadap kinerja karyawan Hotel Gran Puri. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 7(4), 5953–5962. <https://doi.org/10.35794/emba.v7i4.26576>
- Satriani, Wahyu, A., Saleh, L. M., Naiem, F., Thamrin, Y., & Riskiyani, S. (2024). Analysis of risk factors for traffic accidents among online motorcycle taxi drivers in Makassar City in 2024. *Journal of Chemical Health Risks* 14 (4), 867-874.
- Sekkay, F., Imbeau, D., Dubé, P. A., Chinniah, Y., de Marcellis-Warin, N., Beauregard, N., & Trépanier, M. (2021). Assessment of physical work demands of long-distance industrial gas delivery truck drivers. *Applied Ergonomics*, 90, 103224. <https://doi.org/10.1016/j.apergo.2020.103224>
- Sunyoto, D. (2017). *Manajemen sumber daya manusia*. Yogyakarta: Center For Academic Publisher Service.
- Tuasikal, H., Thamrin, Y., Syam, A., Naiem, F., Muis, M., & Amqam, H. (2020). Factors affecting traffic accidents on online transportation riders in Ambon City. *Journal of Asian Multicultural Research for Social Sciences Study*, 1(2), 48-55.
- Veldhoven, Z.V., & Vanthienen, J. (2022). Digital transformation as an interaction-driven perspective between business, society, and technology. *Electronic markets*, 32(2), 629-644. <https://doi.org/10.1007/s12525-021-00464-5>
- Wibowo, S.A., & Handayani, A. (2020). Hubungan antara dukungan sosial dan beban kerja dengan stress kerja pada mitra pengemudi ojek online di Komunitas Gojek X. *PSISULA: Prosiding Berkala Psikologi*, 2(11), 185–196.
- Wulani, F., Lindawati, T., & Iswanto, Y. (2022). Work stress of online motorcycle taxi drivers: the role of coworker support, autonomy and affective occupational commitment. *Jurnal Organisasi dan Manajemen*, 18(2), 26–42. <https://doi.org/10.33830/jom.v18i2.3409.2022>
- Zhao, X., Ke, Y., Zuo, J., Xiong, W., & Wu, P. (2020). Evaluation of sustainable transport research in 2000-2019. *Journal of Cleaner Production*, 120404. doi:10.1016/j.jclepro.2020.120404