Journal of Innovative and Creativity
Journal Homepage: https://joecy.org/index.php/joecy
e-mail: journaljoecy@gmail.com

Faculty of Education
University of Pahlawan Tuanku Tambusai
ISSN 2775-771X (Online)
ISSN 2962-570X (Printed)
6 (1) 2026, Page: 22339-22347

The Influence of Workload on Job Satisfaction with Work Stress as a Mediating Variable in Employes of the West Malangke Health Center

Maha Elsa Tosinaga Mappangaja[1], Tenri Sayu Puspitaningsih Dipoatmodjo[2], Zainal Ruma[3], Muhammad Ichwan Musa[4], Rezky Amalia Hamka[5]

[1,2,3,4,5] **Management Study Program, Makassar State University**

Corresponding Author: Maha Elsa Tosinaga Mappangaja, e-mail: mahesatz19@gmail.com

Published: April , 2026

ABSTRACT

The Study Purpose. This study aimed to analyze the effect of workload on job satisfaction, with work stress as a mediating variable, among employees of the West Malangke Public Health Center (Puskesmas). The research sought to determine whether work stress plays a significant role in linking workload to job satisfaction within the public health service context.

Materials and Methods. The study used a quantitative descriptive approach with a total population of 46 employees, all of whom were induded as the research sample (census method). Data were collected through observation and structured questionnaires. The data analysis employed the Partial Least Square (PLS) method using SmartPLS 4 software to test the direct and indirect relationships between variables.

Results. The analysis revealed that workload had a positive and significant effect on job satisfaction, indicating that employees with manageable workloads tend to report higher satisfaction. Workload also showed a positive and significant effect on work stress, suggesting that increasing workload contributes to higher stress levels. However, work stress itself did not have a significant effect on job satisfaction, meaning that stress did not directly influence how satisfied employees felt with their jobs. Furthermore, work stress did not mediate the relationship between workload and job satisfaction, showing that the influence of workload on satisfaction occurred directly rather than through stress.

Conclusions. The findings suggest that while workload influences both stress and satisfaction, work stress does not significantly reduce job satisfaction among employees. This may indicate that employees at the West Malangke Puskesmas are accustomed to high workloads and have developed coping mechanisms to maintain their job satisfaction despite work-related pressures.

Keywords: Workload, Work Stress, Job Satisfaction.

© The Author(s). 2021 Open Access This article is licensed under a Creative Commons Atibution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author (s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0

INTRODUCTION

Human resources are an essential element in an organization responsible for carrying out operational activities. In carrying out their duties, employes are required to be diligent, efficient, and possess adequate skills. However, in an effort to achieve work effectiveness and efficiency, companies or institutions often set high targets that can potentially increase employe workload. High workloads without sufficient time and resource support can lead to excessive stress (Hamali, 2018).

One of the factors influencing employe performance is job satisfaction, which is the extent to which employes' expectations align with the rewards they receive from the organization. Job satisfaction plays an important role in increasing productivity because satisfied employes tend to perform at their best (Pontoh, 2022). Additionally, job satisfaction is also related to employes' ability

to manage stress so that it does not cause emotional disturbances that hinder performance (Liawati, 2022).

Job satisfaction can be influenced by various factors, one of which is workload. Workload is the amount of tasks that must be completed within a specific timeframe. Excessive workload can lead to stress and job dissatisfaction (Rindo, 2019). This pressure can develop into work stress, which is an emotional condition such as anxiety, tension, or fear resulting from a mismatch between job demands and individual abilities (Sartika, 2023).

In public service sectors like community health centers (Puskesmas), high workloads and limited resources often lead to work-related stress, impacting employe well-being (Wijaya, 2018). This also happens at the Malangke Barat Community Health Center in North Luwu Regency, which serves 13 villages with a large population. The shortage of healthcare personnel, the increasing number of patients, and administrative complexities have led to a heavy workload for both medical and non-medical staff. Based on observation, this Community Health Center has 2 doctors, 8 midwives, 8 village midwives, 15 nurses, and other support staff. High demands for service quality and limited staffing have led to work stress becoming a real issue in that work environment.

Stress caused by a high workload not only affects the individual well-being of employes but can also reduce the quality of service provided to patients. Stressed employes tend to experience decreased motivation, fatigue, and job dissatisfaction. As a mediating variable in this study, work stress can be the link between high workload and employe job satisfaction. High workload can increase work stress levels, which in turn affects employe job satisfaction levels. Therefore, it is important to take appropriate steps in human resource management to reduce stress levels and increase employe job satisfaction.

Research conducted by Pontoh (2022) explains that workload has a positive and insignificant effect on job satisfaction of employes at PT. Bank SulutGo. This means that the workload perceived by employes has an insignificant impact on their job satisfaction. Workload has an insignificant effect on job satisfaction, which means that the perceived workload does not significantly increase job satisfaction. As for the research conducted by Suartana and Dewi (2020), they found that workload has an insignificant effect on job satisfaction, where a sufficiently high workload felt by employes will make them feel dissatisfied with their work.

Based on the background above, the researcher aims to obtain information on the extent to which workload affects job satisfaction, and how workload causing work stress influences job satisfaction. Therefore, the researcher is interested in conducting a study titled "The Influence of Workload on Job Satisfaction with Work Stress as a Mediating Variable in Employes of the West Malangke Public Health Center."

METHOD

In this study, the data analysis method used is path analysis. Path analysis, according to Somantri (2006), is an analytical tool used to address issues related to cause and effect. The purpose is to explain the direct or indirect influence of existing variables, such as causal variables, on other variables. This method is used because the researcher wants to know and to ensure whether there is a direct or indirect influence between workload and job satisfaction, with job stress as an intervening variable.

FINDING AND DISCUSSION

Evaluation of the Outer Model Measurement Model

a. Convergent validity

Convergent validity explains that measures or variables that appear to be from the same construct should have a high correlation. Convergent validity testing is assessed based on the factor loading values for each indicator of the construct. Convergent validity with a factor loading value >0.7 (Abdillah, 2015). Results of convergent validity test using outer loading from 46 respondents using SmartPLS is as follows:

Table 1. Outer Loading Values

	Workload (X)	Job Satisfaction (Y)	Work Stress (Z)
X1	0.761		
X10	0.766		
X2	0.769		
X3	0.71		
X4	0.719		
X5	0.749		
X6	0.715		
X7	0.779		
X8	0.756		
X9	0.761		
Y1		0.714	
Y2		0.758	
Y3		0.763	
Y4		0.718	
Y5		0.743	
Y6		0.803	
Y7		0.735	
Y8		0.786	
Y9		0.843	
Y10		0.778	
Z1			0.779
Z2			0.741
Z3			0.724
Z4			0.796
Z5			0.801
Z6			0.795
Z7			0.747
Z8			0.757
Z9			0.758
Z10			0.79

Source: Primary data processed by the researcher

Based on the outer loading values above, it can be seen that each statement from each indicator has a loading factor value > 0.7. Therefore, it can be concluded that all statement items can be declared convergently valid. So, it is concluded that each statement is capable of explaining the latent variables in the study.

Convergent validity testing can be seen from the results of the Average Variance Extracted (AVE). The conditions for validity testing thru AVE assessment are that measurement indicators are declared valid if the AVE value is > 0.5 or can be concluded to be 50% and the measurement indicators can be explained (Abdillah, 2015). Here's the presentation:

Table 2. Average Variance Extracted (AVE) Values

	Average variance extracted (AVE)
Workload (X)	0.532

Job Satisfaction (Y)	0.571
Work Stress (Z)	0.548

Source: Primary data processed by the researcher

Based on the table above, it can be seen that each Average Variance Extracted (AVE) value for each variable is >0.5, which means the measurement indicators for each variable are considered convergent valid.

b. Discriminant Validity

Testing discriminant validity using the Fornell-Larcker Criterion. A research model can be considered good if the square root of the AVE value for each variable construct is greater than the magnitude of the correlation between other constructs (Abdillah, 2015).

Table 3. Discriminant Validity Values

	Workload (X)	Job Satisfaction (Y)	Work Stress (Z)
Workload (X)	0.725		
Job Satisfaction (Y)	0.566	0.733	
Work Stress (Z)	0.468	0.440	0.698

Source: Primary data processed by the researcher

Based on the table above, it shows that all variables have a square root AVE value above the correlation value with other variables. Therefore, it can be concluded that the results of the discriminant validity test using the Fornell-Larcker criteria for latent constructs have acceptable or valid discriminant validity values.

c. Reliability Test

A reliability test is a tool for assessing a questionnaire as an indicator of a variable or construct. A questionnaire is considered reliable or dependable if a person's responses to the questions or statements are consistent or stable over time (Abdillah, 2015). Reliability testing can be done using two methods: Cronbach's alpha and Composite Reliability. As a rule of thumb, the alpha value or composite reliability should be greater than 0.7.

Table 4. Reliability Test Values

	Cronbach's alpha	*Composite reliability*
Workload (X)	0.902	0.919
Job Satisfaction (Y)	0.904	0.930
Work Stress (Z)	0.884	0.923

Source: Primary data processed by the researcher

Based on the table above, it can be seen that the Cronbach's alpha and Composite reliability values for each variable are above 0.7, which means all variables in the questionnaire are considered reliable.

Structural Model Evaluation (Inner Model)

Testing the inner model or evaluating the structural model is done after the outer model test or measurement model evaluation has been completed. The structural model in PLS can be evaluated using R2 for its dependent constructs, the values of path coefficients or t-values for each path to test the significance between constructs in the structural model.

a. R-Square and Q-Square Test

The R2 value is used to measure the degree of variation in the independent variable changes relative to the dependent variable. R-squared values such as 0.70 are considered a strong model, 0.50 a moderate model, and 0.25 a weak model (Hamid, 2019). Here is a table showing the results of calculating the R-squared value using the SmartPLS application:

Table 5. R-Square Value

	R-square	R-square adjusted
Z (Work Stress)	0.260	0.301
Y (Job Satisfaction)	0.349	0.318

Source: Primary data processed by the researcher.

Based on the table above, it shows the value of the coefficient of determination, which explains the contribution of each exogenous variable to the endogenous variable. The coefficient of determination value for work stress variable is 0.260, which means that 26% of the variation in work stress variable changes can be explained by the work load variable. The remaining 74% is influenced by variables outside of this study. The coefficient of determination value for job satisfaction variable is 0.349, which means that 34.9% of the variation in job satisfaction variable changes can be explained by work load and work stress variables. The remaining 65.1% is explained by other variables not included in this study.

Next, the model can be measured using Q-square to assess whether a model is capable. If the value found in Q-Square is greater than zero, then the independent variable is suitable for clarifying the dependent variable (Abdillah 2015). The results of the Q-square calculation can be calculated directly using the following formula:

$Q2 = 1 – (1 – R12) \times (1 – R22)$

$Q2 = 1 – (1 – 0.260) \times (1 – 0.301)$

$Q2 = 1 – (0.74 \times 0.699)$

$Q2 = 1 – 0.517$

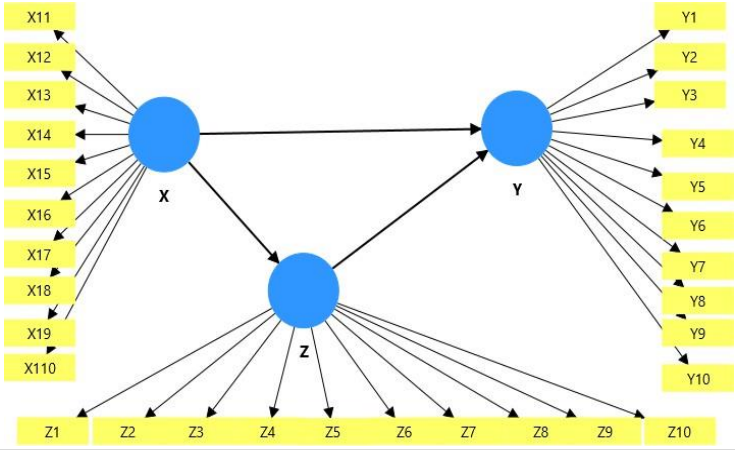
$Q2 = 0.483$

According to the Q-square test above, it can be shown that the predictive relevance value is 0.483 or 48.3%. The remaining value of 51.7% is influenced by variables outside this study.

Hypothesis Testing

Hypothesis testing is indicated by the path coefficient values to show the level of significance. The path coefficient values are shown by the t-statistic and p-values. The hypothesis testing used in this study is the resampling or bootstrapping technique. Bootstrapping is used to minimize the problem of non-normal research data. Here are the results:

Figure 1. SmartPLS output processed by the researcher



In the bootstrapping method used in this study, the significance level used is 5% with a t-table value of 1.96. Research variables can be considered to have a positive effect if the significance level of the probability value is < 0.05 (Sarstedt, 2017). The results of the hypothesis test can also indicate the direction of the relationship between variables, which is determined by the path coefficient value (original sample). If the path coefficient value in the relationship is positive, then the influence of the independent variable on the dependent variable indicates a direct relationship, whereas if the path coefficient value is negative, Therefore, the relationship between the independent variables and the dependent variable shows an opposite direction. The bootstrapping test results in this study show that the final evaluation results in a total of 30 indicators that passed the model evaluation testing. The results of testing the direct and indirect effects will show the magnitude of the influence between the exogenous variables (Workload and Job Satisfaction) on the endogenous variable (Work Stress). Here are the results:

Table 6. Hypothesis Testing

	Original sample (O)	***T statistics (|O/STDEV|)***	***P values***	**Description**
Workload (X) -> Job Satisfaction (Y)	0.557	5,037	0.000	Significant
Workload (X) ->Work Stress (Z)	0.356	3,254	0.049	Significant
Work Stress (Z) -> Job Satisfaction (Y)	0.127	0.735	0.462	Not significant
(X) -> (Z) -> (Y)	0.02	0.356	0.722	Not significant

Source: Primary data processed by the researcher.

Based on the table above, the path coefficient values indicated by the t-statistics and p-values show the direct relationship between the exogenous and endogenous variables. The first, second, and third hypotheses represent direct effects, while the fourth hypothesis represents an indirect effect.

For the first hypothesis, the effect of workload on job satisfaction shows a path coefficient value of 0.557, with a t-statistic value of 5.037 and a p-value of 0, which is less than 0.05. Therefore, it can be concluded that workload has a positive and significant effect on job satisfaction, and thus the first hypothesis is accepted.

The second hypothesis test shows that the effect of workload on work stress has a path coefficient value of 0.356, with a t-statistic value of 3.254 and a p-value of 0.049, which is less than 0.05. This indicates that workload has a positive and significant effect on work stress, and therefore the second hypothesis is accepted.

For the third hypothesis, the effect of work stress on job satisfaction shows a path coefficient value of 0.127, with a t-statistic of 0.735 and a p-value of 0.462, which is greater than 0.05. Hence, it can be concluded that work stress does not have a positive and significant effect on job satisfaction, and the third hypothesis is rejected.

The fourth hypothesis test indicates that the effect of workload on job satisfaction mediated by work stress has a path coefficient value of 0.02, with a t-statistic value of 0.356 and a p-value of 0.722, which is greater than 0.05. Therefore, it can be concluded that workload mediated by work

stress does not have a positive and significant effect on job satisfaction, and thus the fourth hypothesis is rejected.

Discussion

This study was conducted to determine the effect of workload on job satisfaction and how work stress mediates the relationship between workload and job satisfaction among employees of the West Malangke Health Center (Puskesmas). Data for this study were obtained from questionnaire responses from all 46 employees of the health center. Based on respondent characteristics, the majority were female (31 people or 67.34%), most were aged 31–40 years (17 people or 37%), most held a Bachelor's degree (S-1) (19 people or 41.30%), and most had worked for more than five years (21 people or 45.65%). The descriptions of each variable are as follows:

1. The Effect of Workload on Job Satisfaction

The workload variable in this study was measured using five indicators: work volume, task complexity, time available to complete tasks, task difficulty, and responsibility (Robbins, 2016), which were represented by 10 questionnaire items. The analysis results showed that workload (X) had a positive and significant direct effect on job satisfaction (Y). This finding aligns with Sholihah (2024), who stated that when workload matches employees' capacity, skills, and endurance, it leads to higher job satisfaction. Similarly, Widiantoro (2024) found that employees who work optimally and have a positive attitude tend to exhibit higher job satisfaction levels.

2. The Effect of Workload on Work Stress

Work stress was measured through five indicators: task pressure, role conflict, role ambiguity, emotional burden, and physical or mental fatigue (Robbins, 2016), represented by 10 questionnaire items. The analysis showed that workload (X) had a positive and significant direct effect on work stress (Z). This means that higher workload levels lead to higher stress levels, and vice versa. The finding is consistent with Fikri (2024), Maharani & Budianto (2019), and Paramitha (2019), who found that excessive workload significantly increases employee stress levels. When workload exceeds an employee's capacity, it creates pressure, fatigue, and difficulty in completing tasks.

3. The Direct Effect of Work Stress on Job Satisfaction

Job satisfaction was measured using five indicators: satisfaction with salary or compensation, work environment, relationships with supervisors and colleagues, career development, and work–life balance (Robbins, 2016). The analysis results showed that work stress (Z) had no significant direct effect on job satisfaction (Y). This means that changes in job satisfaction are not related to stress levels. This is consistent with Yasa (2019) and Rahmayuliani (2018), who found that work stress negatively affects job satisfaction—higher stress levels among public employees lead to lower job satisfaction. Therefore, many other factors beyond stress influence job satisfaction.

4. The Indirect Effect of Workload on Job Satisfaction Mediated by Work Stress

This study also examined whether work stress mediates the relationship between workload and job satisfaction. The results showed that work stress did not mediate the effect of workload on job satisfaction, as indicated by a significance value of 0.722 (> 0.05). This means that although workload directly affects both job satisfaction and work stress, it does not have a significant indirect effect on job satisfaction through work stress. This finding supports Lutfhi Azhar (2023), who stated that stress is not the main link explaining how workload influences job satisfaction—other factors may play a stronger mediating role.

CONCLUSIONS

Based on the research conducted, the following conclusions can be drawn:

1. The influence of workload on job satisfaction shows a path coefficient value of 0.557 with a T-statistic value of 5.037 and a p-value significance of 0, which is <0.05. Therefore, it can be stated that workload has a positive and significant influence on job satisfaction of Malangke Barat Public Health Center employes.
2. The influence of workload on job stress shows a path coefficient value of 0.356 with a T-statistic value of 3.254 and a p-value significance of 0.049, which is <0.05. Therefore, it can

be stated that workload has a positive and significant influence on job stress of Malangke Barat Public Health Center employes.

3. The influence of job stress on job satisfaction shows a path coefficient value of 0.127 with a T-statistic value of 0.735 and a p-value significance of 0.462, which is >0.05. Therefore, it can be stated that job stress does not have a positive and significant influence on job satisfaction of Malangke Barat Public Health Center employes.
4. The influence of workload on job satisfaction mediated by job stress shows a path coefficient value of 0.02 with a T-statistic value of 0 Workload mediated by work stress does not have a positive and significant effect on the job satisfaction of Puskesmas Malangke Barat employes.

REFERENCES

Arikunto. (2006). Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta : PT. Rineka Cipta

Astuti, D. (2022). Pengaruh faktor-faktor motivasi terhadap kepuasan kerja pada karyawan perusahaan XYZ. Jurnal Manajemen dan Bisnis, 15(3), 120-135

Azhar, Luthfi (2023). Pengaruh karakteristik individu, beban kerja dan stres kerja terhadap kinerja pegawai yang dimediasi kepuasan kerja. Jurnal Riset Ekonomi dan Bisnis ISSN 1979-4800 E-ISSN 2580-8451

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. In C. L. Cooper & P. L. Perrewé (Eds.), Handbook of organizational behavior: A multivolume set (Vol. 3, pp. 65-78). CRC Press/Taylor & Francis.

Fikri, Muhammad Aqib. (2024) Pengaruh Beban Kerja, Work Life Balance dan Konflik Kerja Terhadap Stres Kerja (Studi Pada Karyawan di PT Jamkrindo Cabang Kabupaten Tangerang) Jurnal Manuhara: Pusat Penelitian Ilmu Manajemen dan Bisnis Vol.2, No.4 e-ISSN: 2988-5035

Ghozali, Imam. (2011). Aplikasi Analisis Multivariate Dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro

Hamali, A. Y. (2018). Pemahaman Sumber Daya Manusia. Yogyakarta: PT Buku Seru. Marwansyah.

Hasibuan, M. (2010). Manajemen Sumber Daya Manusia. Bandung: Alfabeta. Herzberg, F. (2003). The Motivation to Work (2nd ed.). Wiley.

Irawati, & Carollina, R. (2017). Manajemen Sumber Daya Manusia: Teori dan Praktik. Jakarta: Kencana.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. Administrative Science Quarterly.

Koesomowidjojo, S. (2017). Perilaku Organisasi: Teori, Aplikasi, dan Penelitian

(Edisi ke-3). Jakarta: Erlangga.

Kreitner, R., & Kinicki, A. (2001). Organizational behavior (6th ed.). McGraw- Hill.

Liawati. (2022). Pengaruh Semangat Kerja Dan Kepuasan Kerja Terhadap Produktivitas Kerja Pada Pt Herona Express Tangerang Selatan. Jurnal ARASTIRMA Universitas Pamulang Vol. 2, No. 2.

Mangkunegara, A.P. (2017). Evaluasi kinerja sdm. Bandung: Refika Aditama. Moekijat. (2004). Manajemen Sumber Daya Manusia. Bandung: Mandar Maju. Nirmawati, U. (2008). Manajemen Sumber Daya Manusia (Edisi ke-1).

Yogyakarta: Penerbit Andi.

Pontoh, Siti Hajar. (2022). Pengaruh Stres Kerja Dan Beban Kerja Terhadap Prestasi Kerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening Pada Pt. Bank Sulutgo Cabang Boroko. Jurnal EMBA Vol.10 No.1

Quick, J. C., & Quick, J. D. (dalam Waluyo, 2009). Stress and health: A managerial perspective. In Waluyo (Ed.), Psikologi industri dan organisasi. Yogyakarta: Penerbit Andi.

Rivai, V. (2010). Manajemen Sumber Daya Manusia untuk Perusahaan: Dari Teori ke Praktik (Edisi ke-4). Jakarta: Rajawali Pers.

Robson, C., & Griffiths, P. (2005). Business research: A practical guide for undergraduate and postgraduate students (2nd ed.). London: SAGE Publications.

Robbins, S. P. (2016). Organizational behavior (17th ed.). Pearson Education.

Sartika, Dewi. (2023). Stres Kerja. Bandung: t Widina Bhakti Persada.

Safitri, L. (2019). Pengaruh beban kerja terhadap stres kerja pada karyawan perusahaan X. Jurnal Manajemen Sumber Daya Manusia, 10(2), 45-58.

Sekaran, U. (2011). Research methods for business: A skill-building approach (5th ed.). Wiley.

Siagian, S. P. (2010). Manajemen Sumber Daya Manusia (Edisi ke-4). Jakarta: Bumi Aksara.

Sholihah, Luluk. (2024) Analisis Beban Kerja Pada Bagian Keuangan Dan Sumber Daya Manusia Di Rumah Sakit Xyz. Jurnal Ilmiah Bisnis dan Kewirausahaan. e ISSN: 2622-0806. Vol. 13 No.3.

Somantri, S. (2006). Manajemen Sumber Daya Manusia (Edisi ke-1). Jakarta: Ghalia Indonesia.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial Least Squares Structural Equation Modeling. In Handbook of Market Research (pp. 1–40). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-1

Suartana, Putu . Dewi, M. (2020). Pengaruh Stres Kerja, Beban Kerja, Dan Konflik Pekerjaan Keluarga Terhadap Kepuasan Kerja Karyawan Swiss Belinn Hotel. Jurnal Manajemen Vol 9. No. 3.

Sugiyono. (2016). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Suwatno, & Priansa, D. (2018). Manajemen Sumber Daya Manusia: Pendekatan Teoritis dan Praktis (Edisi ke-2). Bandung: Alfabeta.

Tarwaka. (2014). Manajemen Sumber Daya Manusia (Edisi ke-1). Yogyakarta: Graha Ilmu.

Widiantoro, Roni (2024). Pengaruh Beban Kerja Terhadap Kepuasan Kerja Pegawai di Lingkungan Sekretariat Direktorat Jenderal Perhubungan Darat. Jurnal Ekonomi. Vol. 2 No. 5

Wijaya, Agus. (2018). Pengaruh Kualitas Produk, Kualitas Layanan, Persepsi Harga, Dan Asosiasi Merek Terhadap Kepuasan Dan Loyalitas Pelanggan. Jurnal Bisnis Terapan, Volume 02 Nomor 01 (Juni, 2018) 1-16.