

The Effect Of Work Stress And Work Motivation On The Performance Of Civil Servants At The Cikarang Health Training Center, Ministry Of Health, Republic Of Indonesia

¹Sumarno, ²Rindu, ³Atiq Amanah Retna Palupi

^{1,2}Prodi Magister Kesehatan Masyarakat, Fakultas Ilmu Kesehatan, Universitas Indonesia Maju, ³Balai Pelatihan Kesehatan Cikarang, Kementerian Kesehatan RI

Article Info	ABSTRACT
Keywords:	Since the onset of the COVID-19 pandemic, the public service sector has
Work stress,	faced significantly increasing work demands. Government agencies,
Work motivation,	including the Cikarang Health Training Center under the Ministry of
Performance,	Health of the Republic of Indonesia, have been challenged to meet higher
Civil Servants.	performance targets without a proportional increase in staff or rapid
	technological adaptation. This situation has led to heightened levels of
	work stress among civil servants, potentially affecting their motivation
	and overall performance. In this complex era, managing work stress and
	motivating employees have become crucial to maintaining productivity
	and performance in government institutions. This study applied a
	quantitative approach by distributing questionnaires to 55 civil servants
	at the Cikarang Health Training Center who met the inclusion criteria.
	Data analysis was conducted using Structural Equation Modeling (SEM)
	with the Partial Least Square (PLS) approach. The findings show that
	work motivation has a positive and significant impact on performance
	(path coefficient = 0.712 , p-value < 0.05), and work stress also
	significantly affects performance (path coefficient = 0.243, p-value <
	0.05). Furthermore, work stress positively affects motivation (path
	coefficient = 0.677 , p-value < 0.05), with motivation mediating the
	relationship between work stress and performance. This suggests that
	work stress, when managed effectively, can improve performance
	through increased motivation. The study concludes that stress
	management and work motivation enhancement programs should be
	implemented at the Cikarang Health Training Center to optimize civil
This is an open access article	servant performance. Corresponding Author:
under the <u>CC BY-NC</u> license	Sumarno
	Prodi Magister Kesehatan Masyarakat, Fakultas Ilmu Kesehatan,
	Universitas Indonesia Maju
	sumarnobae15@gmail.com

INTRODUCTION

Cikarang Health Training Center, Ministry of Health of the Republic of Indonesia, has the task of managing health workforce training as stated in the Minister of Health Regulation Number 11 of 2023 (BPOM, 2023). Since the onset of the pandemic, performance demands have increased, marked by a growing number of output targets from 2020 to 2023. This increase

The Effect Of Work Stress And Work Motivation On The Performance Of Civil Servants At The Cikarang Health Training Center, Ministry Of Health, Republic Of Indonesia– Sumarno et.al $371 \mid P \mid g \mid g \mid c$



in targets has not been matched by an increase in the number of civil servants, along with the pressure to adapt to the rapidly evolving and instant learning technology. The current situation has led many civil servants to reach their lowest level of motivation after facing continuously changing work patterns. Some technologies are designed without considering user-friendliness. As a result, many civil servants find themselves struggling to understand technology that is completely unfamiliar to them (Faulia, 2022).

Workplace stress has emerged as a consequence of conditions arising since the pandemic, caused by excessive workloads, limited working hours, and other external factors beyond the work environment. This stress can impact employees, leading to fatigue, anxiety, and depression, and in more severe cases, may result in substance abuse. According to the 2018 Riskesdas data, 30% of workers face job-related stress, with a depression prevalence of 6.1% among individuals over the age of 15, and only about 9% of them receiving therapy (2018 Riskesdas, 2018). Additionally, based on the International Labour Organization (ILO) survey from 2020 to 2022 on violence and bullying at work in Indonesia, 63% of workers were indicated to suffer from mental health issues such as feelings of sadness and discomfort in the workplace (Maulidin, 2023).

This study is similar to previous research, with the novelty introduced in the specific context of the post-COVID-19 pandemic and focusing on a technical implementation unit in the field of health training within the Ministry of Health, which has not been previously explored. The study highlights the post-pandemic situation, where increased workloads without additional civil servants or adequate technological adaptation have become factors contributing to work stress.

In a survey conducted by the researcher involving 85 randomly selected civil servants from various agencies regarding work-related stress, the results showed that 36.47% reported experiencing low levels of work stress, 29.41% had experienced moderate levels of stress, and 34.12% stated that they did not experience work-related stress. The common causes can be summarized into three key factors: first, the work environment (including relationships with supervisors and colleagues), second, work overload including holding multiple positions, and third, the use of applications and internet networks.

Previous studies on the relationship between work motivation and performance have demonstrated a positive and significant impact of work motivation on performance (Istri & Sintya, 2016) (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020) (Lotu et al., 2022) (Riyadi, 2015) (Sari et al., 2022). Other research has also stated that work stress negatively affects performance (Istri & Sintya, 2016) (Ayu Rikha Trianingrat, Ni Komang; Supartha, Ni Komang; Supartha, 2020). However, some studies suggest that the influence of both work motivation and stress has a positive value (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020) (Riyadi, 2015) (Sari et al., 2022).

Work-related stress significantly affects workplace motivation, as indicated by existing research (Semaksiani et al., 2019). Meanwhile, other studies suggest that it fundamentally influences work motivation (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020). Furthermore, previous research has highlighted that work motivation can mediate the



relationship between work stress triggers and performance outcomes (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020).

The researcher deems it necessary to conduct a study to examine the effects of work stress and work motivation on the performance of civil servants at the Cikarang Health Training Center, Ministry of Health of the Republic of Indonesia. It is also hoped that this research will provide several alternative inputs for the Cikarang Health Training Center, Ministry of Health of the Republic of Indonesia, in managing civil servants, particularly regarding the three research variables.

METHODS

This research is quantitative in nature, conducted systematically and organized with a series of well-defined steps, aiming to describe the social phenomena occurring (Fauzi & dkk, 2022). It includes both non-experimental research and survey-based methods using questionnaires.

Data collection was carried out from July 22 to August 16, 2024. The data was collected at the Cikarang Health Training Center, Ministry of Health of the Republic of Indonesia, located at Jalan Raya Lemahabang Number 01, Simpangan Village, North Cikarang District, Bekasi Regency. The population of this study includes all civil servants at the Cikarang Health Training Center, Ministry of Health of the Republic of Indonesia, totaling 58 individuals, based on the following criteria:

1. Inclusion Criteria

- a. Employees with civil servant (PNS) or government employee with work agreement (P3K) status;
- b. Employees who are in a condition that allows them to participate as research respondents.
- 2. Exclusion Criteria
 - a. Employees with outsourcing/non-permanent status;
 - b. Employees who are in a condition that does not allow them to participate as research respondents due to work obligations, health reasons, or unwillingness to participate in the study.

In its implementation, the research activity could only involve 55 respondents. Three civil servants were unable to participate in the study due to being assigned to budget discussions for the 2025 activities and were also not in a condition to participate based on health reasons, as they were in recovery after surgery. This study includes independent variables such as work stress, and dependent variables including work motivation and performance. The indicators being examined are as follows:

- 1. Work Stress Variable
 - a. Indicators of anxiety and time stress;
 - b. Indicators of role expectation conflicts;
 - c. Indicators of coworker support; and
 - d. Indicators of work-life balance.
- 2. Work Motivation Variable



- a. Indicators of fit (match);
- b. Indicators of rewards (return); and
- c. Indicators of expectations.
- 3. Performance Variable
 - a. Core tasks and functions;
 - b. Performance targets;
 - c. Competence;
 - d. Discipline;
 - e. Innovation and creativity;
 - f. Public service;
 - g. Team collaboration; and
 - h. Leadership.

Data collection was conducted using a questionnaire developed based on the variables and indicators previously described. The questionnaire employed a Likert scale ranging from 1 to 4 (never, rarely, often, always), which was prepared and distributed to respondents using Google Forms. The questionnaire used in this study was previously tested on civil servants outside of those at the Cikarang Health Training Center via Google Forms, with 20 respondents for the work stress questionnaire, 35 respondents for the work motivation questionnaire, and 30 respondents for the performance questionnaire. The data collected were then processed to assess validity and reliability. Overall, all three questionnaires demonstrated good reliability (Cronbach's Alpha > 0.70), making them suitable for data collection. Invalid items were removed from the questionnaires and were not included in the final data collection.

Structural Equation Modeling (SEM), a multivariate statistical technique derived from regression and path analysis, was used as the analytical method. SEM encompasses three main activities simultaneously: assessing the validity and reliability of the instruments (confirmatory factor analysis), testing the relationships among various factors (path analysis), and developing related predictive models (Muhson, 2022).

This research also applied Partial Least Squares (PLS) analysis, a multivariate statistical approach used to make predictions, investigate, or build structural models by estimating the effects among variables calculated simultaneously (Hair et al., 2019). In PLS, model evaluation includes assessing the measurement model, the structural model, and evaluating the goodness and fit of the model. To facilitate the data analysis process using SEM PLS, the researcher utilized statistical software. The data processing was carried out using SmartPLS version 4.1.0.6.

RESULTS AND DISCUSSION

Evaluation of the Measurement Model

The estimation approach used is an advanced measurement model, specifically designed to assess the variables of job stress, work motivation, and performance. According to Hair et al. (2021), 'the evaluation of reflective measurement models includes a loading factor value of \geq



0.70, composite reliability \ge 0.70, and average variance extracted (AVE) \ge 0.50, as well as the assessment of discriminant validity using the Fornell and Lacker criteria and HTMT (Heterotrait-Monotrait Ratio) with a value of less than 0.90' (Sarstedt et al., 2021). **Table 1.** Recapitulation of Measurement Results for Variables and Indicators of the Research

Variable	Measureme nt Item	Indicator	Outhe r Weigh t	P- Value Outhe r Weigh t	Outer Loadin g	P- Value Outer Loadin g	Composit e Reliability	AVE
Work Stress	SKW	Anxiety Stress and Time	0,304	0,000	0,865	0,000		
	KEP	Expectation Conflict	0,377	0,000	0,899	0,000	0,829	0,62 8
	DRK	Coworker Support	0,228	0,000	0,582	0,000	_	0
	КНК	Work-Life Balance	0,338	0,000	0,785	0,000		
Work Motivation	ССК	Match	0,345	0,000	0,931	0,000	- กนาน	0,87
	IMB	Return	0,365	0,000	0,943	0,000		5
	HRP	Expectation	0,359	0,000	0,932	0,000		
Performan ce	TPF	Core Task and Functions	0,151	0,000	0,933	0,000	_	
	SSK	Performanc e Targets	0,135	0,000	0,853	0,000	_	
	КОМ	Competenc e	0,143	0,000	0,910	0,000		
	DIS	Dicipline	0,139	0,000	0,897	0,000	-	0.00
	INK	Innovation and Creativity	0,141	0,000	0,920	0,000	0,968	0,80 8
	PLP	Public Service	0,147	0,000	0,964	0,000	-	
	KST	Team Collaboratio n	0,134	0,000	0,892	0,000		
	PIM	Leadership	0,121	0,000	0,814	0,000		

All indicators are significant for job stress, namely time anxiety stress, role expectation conflict, coworker support, and work-life balance, as indicated by a p-value < 0.05. For the work motivation variable, all indicators are also significant, namely match, return, and



expectation, as indicated by a p-value < 0.05. In the final variable, data processing shows that all indicators are significant for performance, as indicated by a p-value < 0.05, namely job duties, performance targets, competence, discipline, innovation and creativity, public service, teamwork, and leadership.

Three valid items with outer loading values between 0.785 and 0.899 were used to measure the job stress variable. This indicates that the three items have a strong correlation in explaining the job stress variable. However, one item in the job stress variable had a value of 0.582 < 0.70. According to Chin (1998), 'items with an outer loading lower than 0.70 may be retained if the deletion of the indicator leads to a decrease in overall construct reliability or validity' (Chin, 2010). The reliability level for the job stress variable is considered adequate as the composite reliability value reaches 0.829, which exceeds 0.70, and the convergent validity shows an AVE value of 0.628, greater than 0.50. Among the four valid measurement items, job stress is most strongly reflected by role expectation conflict (LF = 0.899). Role expectation conflict arises from a mismatch between various obligations or expectations associated with the role a person plays within the organization. When these expectations are conflicting or unclear, individuals may experience role conflict, which can lead to job stress and affect their performance (Dr. Agus Wibowo, M.Kom., M.Si., 2023).

Three valid items with outer loading values between 0.931 and 0.943 were implemented to measure the work motivation variable. This indicates that the three items have a strong correlation in explaining the work motivation variable. The reliability level of the work motivation variable is deemed good, with composite reliability at 0.929 > 0.70, and convergent validity indicated by an AVE value of 0.875 > 0.50. Among the three valid items, work motivation is most strongly reflected by return (reward) (LF = 0.943). Maslow's theory of the Hierarchy of Needs classifies 'human needs into five levels, starting with basic physiological needs up to the highest need, self-actualization.' According to Maslow, 'a person must first fulfill more basic needs before they can be motivated to meet higher-level needs' (Muazaroh & Subaidi, 2019). Rewards such as salary and benefits fulfill physiological and safety needs (basic levels). Once these needs are met, employees may become more motivated by factors that fulfill social, esteem, and self-actualization needs.

Eight items were implemented to measure the performance variable, all of which are deemed valid, with outer loading values between 0.814 and 0.964. This indicates that the eight items have a strong correlation in explaining the performance variable. The reliability level of the performance variable is considered adequate, with composite reliability at 0.968 > 0.70, and convergent validity indicated by an AVE value of 0.808 > 0.50. Among the eight valid items, performance is most strongly reflected by public service (LF = 0.964). Public service is described as the process of providing services to the public by the government, supported by digital infrastructure to improve efficiency and service quality and accelerate the adoption of technology to support more responsive and transparent governance. Public service in this context is not only about direct interaction between the government and the public but also involves the use of technology to ensure that services provided are more



accessible, more efficient, and more aligned with the needs of modern society (Katharina, 2020).

Table 2. Fornell and Lacker Calculation					
Performance Work Motivation Work Stress					
Performance 0,899					
Work Motivation	0,876	0,935			
Work Stress	0,725	0,677	0,792		

Discriminant validity evaluation was applied using the Fornell and Lacker criteria. Discriminant validity is a method to ensure that a set of variables is theoretically distinct and can be empirically proven through statistical tests. The Fornell and Lacker criteria can be assessed by comparing the AVE square root value of a variable, which must exceed the intervariable correlations. In this case, the job stress variable has an AVE square root value of 0.792, which is higher than its correlation with work motivation (0.677) and its correlation with the performance variable (0.725). This indicates that discriminant validity for the job stress variable has been met. Similarly, the work motivation and performance variables also meet the discriminant validity criteria, as the AVE square root values for all three variables are higher than the inter-variable correlation values in the study.

Table 3. HTMT Calculation

	Performance	Work Motivation	Work Stress			
Performance						
Work Motivation	0,923					
Work Stress	0,816	0,787				

The recommendation for the HTMT value is due to its higher sensitivity/accuracy in detecting discriminant validity (Hair et al., 2019). The recommended value is less than 0.90. The test results show that the HTMT value for job stress and performance is 0.816, and for job stress and work motivation is 0.787, both below 0.90. However, the HTMT value between work motivation and performance exceeds 0.90, specifically 0.923. The variable may separate the variation of items in its measurement less strongly compared to separating the variance from items of other variables.

Evaluation of the Structural Model

Evaluation of the structural model involves testing the hypotheses on the impact of the research variables. This evaluation occurs in three stages. The first stage involves examining the presence of multicollinearity among the variables by calculating the Variance Inflation Factor (VIF). According to Hair et al. (2021), 'a VIF value below 5 indicates no significant multicollinearity among the variables' (Sarstedt et al., 2021).

The second stage of structural model evaluation involves hypothesis testing using tstatistics or p-values. A t-statistic > 1.96 (critical value) or a p-value < 0.05 reflects a significant impact between variables. Additionally, it is important to report the estimated path coefficients with a 95% confidence interval. The third stage involves assessing the effect size



using the f-squared value, which measures the structural impact of the variables. An f-squared value of 0.02 is considered small, 0.15 is considered medium, and 0.35 is considered large (Sarstedt et al., 2021).

Table 4. Inner VIF							
Performance Work Motivation Work Stress							
Performance	Performance						
Work Motivation	1,848						
Work Stress	1,848	1,000					

Before conducting hypothesis testing on the structural model, the VIF factor must be used to detect multicollinearity between variables. A VIF value below 5 indicates a low level of multicollinearity between variables. This result supports the robustness and validity of parameter estimation in Structural Equation Modeling (SEM) using Partial Least Square (PLS), thereby enhancing the credibility of the findings.

I able 5. Hypothesis Testing					
	Path	P-	Lower	Upper	F-
Hypothesis	Coefficient	Value	Limit	Limit	Square
Work Motivation \rightarrow	0,712	0,000	0,560	0.903	1,372
Performance	0,712	0,000	0,560	0,903	1,372
Work Stress $ ightarrow$ Performance	0,243	0,018	0,023	0,424	0,159
Work Stress $ ightarrow$ Work	0,677	0,000	0,438	0,834	0,848
Motivation	0,077	0,000	0,430	0,034	0,040
Work Stress $ ightarrow$ Work	0,482	0,000	0,268	0,721	_
Motivation \rightarrow Performance	0,402	0,000	0,200	0,721	-

The first hypothesis (H1) is accepted, indicating a significant impact of work motivation on performance improvement, with a path coefficient of 0.712 and a p-value of 0.000 (less than 0.05). Any change in the work motivation variable can optimize the performance variable. At a 95% significance level, the impact of work motivation on performance improvement ranges between 0.560 and 0.903. The presence of the work motivation variable in performance improvement has a strong structural influence (f-square = 1.372). The importance of work motivation is strongly felt, as an increase in motivation can lead to a performance improvement of up to 0.903. Based on Maslow's theory of needs, motivation is described as a constant and ongoing process. Maslow's hierarchy of needs structure shows that fulfilling various needs influences motivation as a whole, which has a positive effect on performance improvement (Muazaroh & Subaidi, 2019).

The second hypothesis (H2) is accepted, indicating a significant impact of the job stress variable on performance improvement, with a path coefficient of 0.243 and a p-value of 0.018 (less than 0.05). Changes in the job stress variable can affect performance improvement. Within a 95% confidence interval, the impact of the job stress variable on performance improvement ranges between 0.023 and 0.424. The influence of the job stress variable on



performance improvement is considered moderate at the structural level (f-square = 0.159). Job stress is seen as important, and if well-managed, it can increase performance by up to 0.424. The Yerkes-Dodson theory states that the relationship between stress and performance follows an inverted U-curve, where at low levels of stress, performance may not be optimal due to a lack of drive. Conversely, at moderate levels of stress, arousal can enhance motivation and focus, contributing to improved performance. However, if stress is too high, performance may decline due to excessive pressure and fatigue. Overall, from the perspective of the Yerkes-Dodson theory, moderate job stress can contribute a beneficial and substantial impact on performance, as long as the stress does not exceed an individual's capacity to manage it (Psychology, 2024).

The third hypothesis (H3) is accepted, indicating a significant impact of job stress on the increase in work motivation, with a path coefficient of 0.677 and a p-value of 0.000 (less than 0.05). Any change in the job stress variable can enhance work motivation. Within a 95% confidence interval, the impact of job stress on the increase in motivation ranges between 0.438 and 0.834. The job stress variable has a strong impact on enhancing motivation at the structural level, with an f-square value of 0.848. The necessity of this job stress variable is considered important, as when job stress is well-managed, work motivation can increase by up to 0.834. According to the Yerkes-Dodson theory, the relationship between job stress and motivation follows an inverted U-shaped curve. Moderate levels of stress can enhance arousal and motivation, encouraging individuals to focus more and work harder. However, excessive stress can lead to a decline in motivation and performance due to the effects of fatigue or excessive pressure (Psychology, 2024).

The fourth hypothesis (H4) is accepted, indicating a significant effect of job stress on performance improvement when mediated by work motivation, with a path coefficient of 0.482 and a p-value of 0.000 (less than 0.05). The work motivation variable successfully examines the relationship between job stress and performance. Work motivation plays a crucial role in influencing how job stress contributes to performance. Understanding and managing work motivation can help maximize the benefits of stress and enhance overall performance.

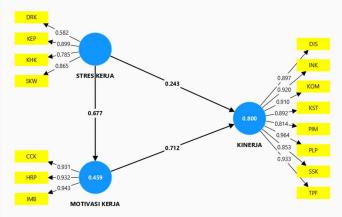


Figure 1. Graphic Output SEM PLS



Stress emphasizes the impact of motivation on performance through various performance elements, with the most significant effect being the direct influence of work motivation on performance. Based on this observation, any increase in work motivation tends to have a more substantial effect on overall performance. Job stress needs to be taken into account, as it can affect performance both directly and indirectly through the mediation of work motivation, provided it is managed appropriately.

Evaluation of Model Fit and Goodness

Partial Least Squares (PLS) is a variant of Structural Equation Modeling (SEM) that focuses on testing theoretical models and predictive analysis. To assess the validity of the model, several metrics are used, including the R-squared value, Q-squared value, Standardized Root Mean Square Residual (SRMR), PLS prediction, and the Goodness of Fit (GoF) index. Additionally, the robustness of the model is evaluated through tests for variable relationship linearity, endogeneity, and the examination of heterogeneity using FIMIX-PLS (Hair et al., 2019)(Sarstedt et al., 2021).

	R Square	Q Square
Performance	0,800	0,501
Work Motivation	0,459	0,430

The R-squared statistic describes the proportion of variance in the endogenous variable explained by the exogenous or endogenous variables in the model. Subjectively, the R-squared value can be interpreted as follows: 0.19 reflects a low effect, 0.33 reflects a moderate effect, and 0.66 reflects a high effect (Chin, 2010). Based on data processing results, the effect of work stress on performance is 80%, indicating a high impact. Similarly, the effect of work stress on work motivation is 45.9%, which also reflects a high impact.

The Q-squared value measures the predictive accuracy of the model by evaluating how changes in exogenous and endogenous factors can estimate variations in the endogenous variable. It serves as a validation measure in PLS to assess the predictive significance of the model. A Q-squared value greater than 0 indicates that the model produces predictive relevance. The qualitative interpretation of the Q-square value is: zero indicates low effect, 0.25 indicates moderate effect, and 0.50 indicates high effect (Hair et al., 2019). The data analysis results show that the Q-square value for the performance variable is 0.501, which is greater than 0.50, indicating high predictive accuracy. Meanwhile, the Q-square value for work motivation is 0.430 > 0.25, indicating moderate predictive accuracy.

Table 7. SRMR Values		
Model Estimation		
SRMR	0,060	

The Standardized Root Mean Square Residual (SRMR) is a metric used to assess model fit, which describes the difference between the observed data correlation matrix and the estimated model correlation matrix. An SRMR value below 0.08 indicates good model fit

The Effect Of Work Stress And Work Motivation On The Performance Of Civil Servants At The Cikarang Health Training Center, Ministry Of Health, Republic Of Indonesia– Sumarno et.al $380 \mid P \mid a \mid g \mid e$



(Sarstedt et al., 2021). An SRMR value of 0.060 indicates that the model demonstrates adequate fit, suggesting that the empirical data sufficiently explains the relationships among the model variables.

Table 8. Godness of Fit Index (GoF Index)				
Average Communality Average R Square GoF Index				
0,773 0,630 0,698				

The Goodness-of-Fit (GoF) index is a comprehensive measure of model fit that combines the estimates and structural components of the model. The GoF index is calculated from the estimated model by taking the geometric mean of the squared multiple correlations and the average R-squared values. According to Wetzels et al. (2009) as cited in Yamin (2023), "GoF values are interpreted as follows: 0.1 reflects low GoF, 0.25 reflects moderate GoF, and 0.36 reflects high GoF" (Sofyan Yamin, S.Si, 2023). A GoF value of 0.698 for the model is considered high, indicating that the empirical data provides a strong explanation for the estimates and structural model, reflecting a high level of fit.

Table 9. PLS Predict						
Measurement Item	PLS RMSE	PLS MAE	LM RMSE	LM MAE		
Discipline	1,903	1,392	1,914	1,408		
Innovation and Creativity	2,752	1,988	2,723	2,015		
Competence	2,901	2,228	3,050	2,386		
Team Collaboration	2,918	2,247	3,116	2,351		
Leadership	3,021	2,356	3,151	2,502		
Public Service	2,812	2,096	2,956	2,204		
Performance Targets	3,493	2,569	3,727	2,740		
Core Tasks and Functions	4,137	3,006	4,305	3,143		
Indicators of Fit (Match)	11,393	8,360	11,017	8,313		
Indicators of Expectations	3,985	3,019	4,194	3,173		
Indicators of Rewards (Return)	2,237	1,645	2,294	1,707		

PLS is a SEM analysis method aimed at prediction (Hair et al., 2019). To ensure the robustness of the predictive performance of the proposed model, it is crucial to implement a rigorous validation process. The PLS method evaluates predictive accuracy to determine how well the model forecasts outcomes. For the PLS model to exhibit high predictive power, its performance must be compared to a benchmark model, particularly the Linear Regression (LM) model. Specifically, if the PLS model shows lower values of Root Mean Squared Error (RMSE) or Mean Absolute Error (MAE) compared to the LM model, it is considered to have superior predictive capability.

If all PLS model metrics show lower RMSE and MAE values than the linear regression model, the PLS model is considered to have strong predictive power. If only a small number of metrics show lower values, the predictive strength of the PLS model is considered moderate.



Analysis of 22 observations revealed that 19 out of 22 PLS model metrics had lower RMSE and MAE values compared to the linear regression model, related to the data analysis. This indicates that the PLS model demonstrates substantial (moderate) predictive power.

Linearity Test	Path Coefficient	P-Values
Work Stress x Work Stress \rightarrow Performance	-0,015	0,821
Work Motivation x Work Motivation \rightarrow Performance	-0,042	0,512
Work Stress x Work Stress \rightarrow Work Motivation	-0,111	0,228

It is important to check for linearity in the relationships between variables (Hair et al., 2019). The main assumption is that there is a linear relationship between the variables. This examination includes testing the quadratic forms of the variables as part of the Partial Least Squares (PLS) version and the robustness test of Structural Equation Modeling (SEM). Regarding data handling, the quadratic forms of work stress and job perception do not demonstrate significance concerning the outcome variables. Similarly, the quadratic form of work stress is also not significant concerning job perception. This indicates that the linearity effect of the model has been met (robust).

Discussion

This research certainly has strengths and weaknesses. Here are some aspects that constitute the strengths and weaknesses of this study:

- 1. Strengths of the Research
 - a. Relevant topic, relevant factors influencing the performance of civil servants are important issues for government agencies and are discussed in this research.
 - b. Specific research context, this study focuses on civil servants at Cikarang Health Training Center, Ministry of Health, Republic of Indonesia, providing specific data so that the results can be more applicable to Cikarang Health Training Center, Ministry of Health, Republic of Indonesia.
 - c. Comprehensive analysis, by examining two main variables, namely work stress and work motivation, a thorough analysis of civil servants' performance at Cikarang Health Training Center, Ministry of Health, Republic of Indonesia can be provided.
 - d. Use of quantitative data, this research method can provide solid and measurable evidence regarding the impact of the two variables, namely work stress and work motivation, on performance.
 - e. Contribution to managerial practice, this research provides practical recommendations for the management of Cikarang Health Training Center, Ministry of Health, Republic of Indonesia to enhance civil servants' performance through the management of work stress and motivation.
- 2. Weaknesses of the Research
 - a. Limited generalizability of research results, this study focuses on a single agency, so the results may not be generalizable to all civil servants in Indonesia or civil servants in other agencies.



- b. Other potentially influential variables not considered, this research does not include the possibility of other factors that could impact civil servants' performance, such as the work ecosystem, leadership, or organizational culture.
- c. Potential bias from respondents, respondents may feel concerned about the consequences of their answers, especially since the variables in this research are sensitive for civil servants, even though the researcher has explained that there are no consequences from this research regarding performance evaluation and other matters.

The findings of this research explain the presence of a positive and significant influence between work stress and work motivation on the performance of civil servants at the Cikarang Health Training Center. Additionally, the work motivation variable also successfully mediates the influence of work stress on the performance of civil servants at the Cikarang Health Training Center.

The results suggest that although work stress is often viewed as a negative factor, in certain contexts, it can function as a driver or motivator that enhances performance. This can occur if civil servants feel challenged by stress and are able to manage it well. Furthermore, work motivation is an important factor that needs to be managed by management to improve civil servant performance. Strategies to enhance motivation, such as recognition of hard work or incentives, can be effective in increasing productivity or performance.

The mediation performed by work motivation regarding the influence of work stress on civil servant performance indicates that work stress may contribute to civil servants' performance impacts not explicitly, but rather through an increase in work motivation. Work stress can trigger an increase in motivation, which in turn contributes to improved performance. This can be tested through path analysis, where work motivation acts as a mediating variable. Additionally, it suggests that the management of work stress can be focused on enhancing motivation, which ultimately can improve performance. An approach that not only reduces stress but also increases motivation could be more effective in enhancing civil servant performance.

The research on the first hypothesis illustrates a significant influence of work motivation on performance. This finding aligns with previous studies that identified a significant impact of work motivation on employee performance (Istri & Sintya, 2016) (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020) (Lotu et al., 2022).

The research results related to the subsequent hypothesis illustrate a positive and significant influence of work stress on performance. This aligns with previous studies that also observed that work stress affects employee performance (Lotu et al., 2022). However, these findings contradict other research that states work stress contributes a negative and significant impact on employee performance (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020) (Istri & Sintya, 2016).

The results related to the third hypothesis illustrate a positive and significant relationship between work stress and work motivation. This finding contradicts previous



research that indicated work stress negatively and significantly affects work motivation (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020).

The results related to the fourth hypothesis illustrate a positive and significant influence of work stress on performance improvement when mediated by work motivation. This supports previous research that concluded work motivation mediates the relationship between work stress and employee performance (Ayu Rikha Trianingrat, Ni Komang; Supartha, 2020).

CONCLUSION

This study examines the impact of work stress and work motivation on the performance of civil servants at the Cikarang Health Training Center, Ministry of Health, Republic of Indonesia. The findings indicate that work stress significantly influences performance, with higher stress levels leading to increased productivity and effectiveness. Work motivation is also critical, as motivated civil servants tend to perform better. Notably, work stress affects motivation, implying a direct and indirect influence on performance, with motivation serving as a mediator. Based on these insights, it is recommended that the Cikarang Health Training Center implement an effective stress management program that includes training, psychological support, and activities promoting work-life balance, tailored to the organization's context. Additionally, enhancing work motivation through recognition and incentive strategies, such as performance awards and career development opportunities, is essential. Future research should encompass a broader population and additional variables affecting performance, such as the work ecosystem and leadership styles, to ensure a comprehensive understanding of these dynamics.

REFERENCE

- 2018 Riskesdas. (2018). Laporan Riskesdas 2018 Nasional.pdf. In *Lembaga Penerbit Balitbangkes* (p. 674).
- Ayu Rikha Trianingrat, Ni Komang; Supartha, I. W. G. (2020). *Pengaruh Stres Kerja Terhadap Kinerja Karyawan Dengan Motivasi Kerja Sebagai Variabel Mediasi. 9*(5), 1838–1857.
- BPOM. (2023). Berita Negara. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2023*, *151*(2), 10–17.
- Chin, W. W. (2010). The partial least squares approach to structural equation modeling. Modern methods for business research. *Modern Methods for Business Research, April*, 295-336.

http://books.google.com.sg/books?hl=en&lr=&id=EDZ5AgAAQBAJ&oi=fnd&pg=PA29 5&dq=chin+1998+PLS&ots=47qB7ro0np&sig=rihQBibvT6S-

Lsj1H9txe9dX6Zk#v=onepage&q&f=false

- Dr. Agus Wibowo, M.Kom., M.Si., M. (2023). Kumpulan Teori Organisasi & Manajemen. In M. K. Dr. Joseph Teguh Santoso, S.Kom. (Ed.), *Universitas STEKOM*. Universitas STEKOM.
- Faulia, F. (2022). Technostress pegawai negeri sipil dinas sosial Kabupaten Nagan Raya. *Regress: Journal of Economics & Management, 2*(2), 279–284.



Fauzi, A., & dkk. (2022). Metodologi Penelitian. In Suparyanto dan Rosad (2015.

- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203
- Istri, C., & Sintya, A. (2016). *PENGARUH STRES KERJA DAN MOTIVASI KERJA TERHADAP KINERJA KARYAWAN PADA PT. BANK BPD BALI CABANG UBUD Fakultas Ekonomi dan Bisnis Universitas Udayana , Bali , Indonesia. 5*(12), 7583–7606.
- Katharina, R. (2020). *Pelayanan Publik & Pemerintahan Digital Indonesia*. Yayasan Pustaka Obor Indonesia.
- Lotu, N. A., Widodo, Z. D., & Sumarto, L. (2022). Pengaruh Stres Kerja, Motivasi Kerja Dan Disiplin Kerja Terhadap Kinerja Pegawai Di Kantor Kelurahan Sudiroprajan. *Publik: Jurnal Manajemen Sumber Daya Manusia, Administrasi Dan Pelayanan Publik, 9*(4), 703–712. https://doi.org/10.37606/publik.v9i4.456
- Maulidin, M. A. (2023). *63 Persen Pekerja di Indonesia Alami Gangguan Kesehatan Mental.* https://isafetymagazine.com/63-persen-pekerja-di-indonesia-alami-gangguankesehatan-mental/#google_vignette
- Muazaroh, S., & Subaidi. (2019). Kebutuhan Manusia Dalam Pemikiran Abraham Maslow. *Al-Mahazib*, *7*(1), 17–33.
- Muhson, A. (2022). Analisis Statistik Dengan SmartPLS. *Universitas Negeri Yogyakarta*, 1–34.
- Psychology, S. (2024). *Hukum Gairah dan Performa Yerkes-Dodson*. 1–13.
- Riyadi, S. (2015). Effect of Work Motivation, Work Stress and Job Satisfaction on Teacher Performance at Senior High School (SMA) Throughout The State Central Tapanuli, Sumatera. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS*, 20(2), 52–57. https://doi.org/10.9790/0837-20215257
- Sari, H. F., Ekawarna, E., & Sulistiyo, U. (2022). Pengaruh Stres Kerja, Motivasi Kerja dan Kepuasan Kerja Terhadap Kinerja Guru. *Edukatif: Jurnal Ilmu Pendidikan*, *4*(1), 1204– 1211. https://doi.org/10.31004/edukatif.v4i1.2113
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research* (Issue October 2023). https://doi.org/10.1007/978-3-319-57413-4_15
- Semaksiani, A., Handaru, A. W., & Rizan, M. (2019). The Effect of Work Loads and Work Stress on Motivation of Work Productivity (Empirical Case Study of Ink-Producing Companies). Scholars Bulletin, 05(10), 560–571. https://doi.org/10.36348/sb.2019.v05i10.003
- Sofyan Yamin, S.Si, M. . (2023). *Olah Data Statistik:SMARTPLS3 SMARTPLS4 AMOS & STATA (Mudah & Praktis)*. Dewangga Energi Internasional Publishing.