



# The effect of work Stress on Mental and Its Implication for Police Behaviour in Indonesia

Horas Marasi Silaen

*Sekolah Tinggi Ilmu Kepolisian (STIK), Indonesia*

## Information Article

*History Article*

*Submission : 8-Jan-2025*

*Revision : 11-March-2025*

*Published : 12-March-2025*

## DOI Article:

<http://doi.org/10.24905/jip.10.1.2025.1-19>

## ABSTRACT

*This quantitative study investigates the impact of work stress on the mental health and subsequent behavior of Indonesian police officers. Utilizing a survey method with a sample of 400 officers, the research employs a structural equation modeling (SEM) approach to examine the relationships between work stress, mental health, and police behavior. The findings reveal a significant direct effect of work stress on both mental health and police behavior. Importantly, mental health mediates the relationship between work stress and behavioral outcomes. High work stress significantly predicts poorer mental health, which, in turn, is strongly associated with less effective police behavior. The study utilizes established scales to measure these constructs, including indicators related to emotional, intellectual, physical, and interpersonal responses to stress, alongside measures of mental health encompassing self-image, mood, relationships, and future outlook, and police behavior assessed through dimensions of legitimate force, adherence to procedures, and community interaction. While the initial SEM model exhibited fit issues, modifications improved the model fit, strengthening the key relationships. This research underscores the critical role of mental health in influencing police conduct and highlights the need for interventions aimed at mitigating work stress and improving the mental well-being of Indonesian law enforcement personnel. Such interventions should include coping skills training, emotional intelligence development, workload management, and improvements to organizational support systems.*

**Key word:** *Work stress; Police behavior; Mental health; Indonesia; Structural Equation Modeling (SEM).*

## Acknowledgment

© 2025 Published by Governmental Studies. Selection and/or peer-review under responsibility of JIP.

## 1. INTRODUCTION

Work stress among employees is a significant problem with various potential causes and consequences. Organizational factors such as lack of support, imbalance of rewards, and discrimination in the workplace can increase stress levels (Garbarino et al., 2013). Individual

characteristics, work mechanisms, and emotional intelligence also play an important role in managing stress (Matulesy et al., 2021). High work stress is associated with poor mental health outcomes, including depression and fatigue (Putri et al., 2024). It can also lead to behavioral problems such as aggression and partner abuse (Putra et al., 2019). To reduce these impacts, research shows the importance of social support, increasing the meaning of work, and developing effective coping strategies (Candrawati et al., 2023). Implementing interventions to reduce stress and increase resilience is essential to improve police welfare and performance (Wijayanti & Fauzi, 2020).

This is the case with jobs that have high demands and occupational risks, which can trigger significant work-related stress. According to Hardjana (1994), work stress can affect an individual's emotional, intellectual, physical, and interpersonal responses. In Indonesia, work stress among the police can be exacerbated by several factors such as limited resources, pressure from the community, and high expectations from the institution. So this paper aims to explore the effect of work stress on the mental health of government employees and how this can impact their behavior. Data from Kim et al. (2024) research shows that work stress has a significant correlation with the mental health of government employees who have greater challenges and risks, such as the police, prosecutors, and other law enforcement agencies. Work stress not only directly affects mental health but can also worsen pre-existing psychological symptoms. In Indonesia, cases such as excessive use of force by the police are often linked to poorly managed work stress.

Furthermore, research by Lee & Wu (2024) in "The Carolina Blue Project" found that work stress is closely related to psychological pressure among law enforcement officers. This finding is relevant to the Indonesian context, where law enforcement officers often face stressful and dangerous situations. Prolonged work stress can result in mental health disorders such as depression and anxiety, which in turn can affect their behavior on duty. In addition, Lin et al. (2024) highlight that health behavior can mediate the relationship between work stress and mental health outcomes. In the context of Indonesian law enforcement, poor health behaviors such as excessive alcohol consumption and lack of physical activity can exacerbate the impact of work stress on mental health. Therefore, it is important to understand how work stress affects police officers' mental health and behavior in order to develop effective interventions.

The previous paper focused on how work stress affects the mental health of police officers in Indonesia and its implications for their behavior. The study aims to give a better understanding of this complicated relationship by using the work stress theory of Hardjana (1994), the mental health theory of Enzing et al. (2022), and the police behavior theory of Bittner (1970). Overall, the existing literature shows that work stress has a significant impact on the mental health and behavior of law enforcement officers. However, understanding these dynamics in the Indonesian context requires further research.

Bittner (1970), in his theory of law enforcement behavior, highlights that the use of legitimate force, adherence to procedures, and interaction with the community are key dimensions of behavior. Poorly managed work stress can affect all three dimensions, leading to incidents that may involve the excessive use of force or failure to comply with established procedures. Research by Queirós et al. (2020) found that stress in policing can affect physical and mental health, which ultimately impacts their behavior in the field. This finding is consistent with research by Kinman et al. (2017), which shows that high job demands and lack of resources can worsen the mental health of law enforcement officers.

Meanwhile, research by Krajewski et al. (2023) discusses how the perceived threat to police officers influences the use of violence. This study emphasizes that threat assessment, both static and dynamic, significantly influences officers' decisions to use violence, regardless of the subject's level of resistance. Another study by Gershon et al. (2009) shows that police behavior in situations involving interaction with the community can be influenced by the police's perception of how the community views them. Furthermore, a study by Schaible & Gecas (2010) found that emotional burden and value dissonance can cause fatigue among police officers, which ultimately affects their performance and behavior.

Work stress in the context of policing has been the subject of extensive research, with many studies highlighting its impact on mental health and behavior. Hardjana (1994) argues that work stress can trigger emotional responses such as anxiety and depression, which are often seen in police officers working under high pressure. A study by Schaible & Gecas (2010) found that emotional burden and value dissonance can cause fatigue among police officers, which ultimately affects their performance and behavior. Meanwhile, Rabbing et al. (2022) emphasize that the behavior of police in critical situations, such as handling demonstrations or riots, is often influenced by the level of stress they are experiencing at that time. Highly stressed police officers tend to exhibit more aggressive and less cooperative behavior in stressful situations.

According to Papazoglou & Andersen (2014), the stress experienced by police officers, both physically and mentally, can affect the way they act in the field. Work stress, which is often caused by pressure from superiors, high workloads, and public expectations, can make police officers tend to act aggressively or not in accordance with standard procedures. Organizational factors such as lack of support, reward imbalance, and workplace discrimination are often the main causes of stress (Garbarino et al., 2013). These organizational pressures create a work environment that makes officers feel unappreciated or unprotected, which ultimately exacerbates stress levels. In addition to organizational factors, individual characteristics, coping mechanisms, and emotional intelligence play an important role in determining how police officers experience and manage stress (Bin Baker & Ibrahim, 2014; Matulesy et al., 2021).

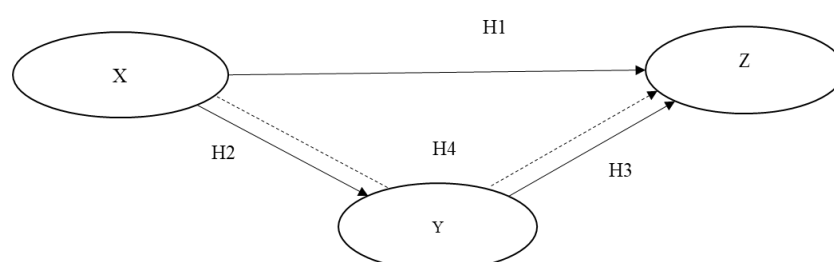
According to Manwell et al. (2015), mental health does not only include the absence of mental disorders but also the individual's ability to cope with stress and live a meaningful life in their social environment. On the other hand, Wren-Lewis & Alexandrova (2021) highlight that mental health is a fundamental element that allows individuals to live a positive life without having to be identified with overall well-being. The theory of mental health put forward by Enzing et al. (2022) emphasizes the importance of factors such as self-image, mood, and interpersonal relationships in determining a person's mental health. In the context of the police, disturbances in these elements can lead to deviant behavior, such as the disproportionate use of force. A study by Cox et al. (2022) shows that excessive stress can trigger deviant behavior among Malaysian police, which is relevant to the situation in Indonesia. Based on the various literature that has been reviewed, the purpose of writing this article is to reveal the relevance between work stress conditions and mental health, law enforcement thinking, and worker awareness.

## **2. METHOD**

This research use a quantitative approach with a survey method to collect data from the police in various regions in Indonesia. The survey will be designed to measure work stress levels, mental health, and police behaviour using pre-validated instruments. The work stress scale will be based on the dimensions proposed by Hardjana (1994), while mental health will be measured using indicators from Enzing et al. (2022). Police behaviour will be assessed based on the dimensions identified by Bittner (1970).

The research sample consisted of 400 police officers as respondents from 480.886 randomly selected personnel from the Headquarter and 34 Regional Police throughout Indonesia. The stratified random sampling technique according to the Slovin formula is used to ensure a balanced representation of various demographic characteristics such as age, gender, and function. The data collected will be analyzed using multivariate statistical analysis to identify the relationship between work stress, mental health, and police behaviour.

To ensure the validity and reliability of the research instrument, the initial trial was carried out on a small sample of 50 respondents before the implementation of the main survey. Reliability was tested using Cronbach's alpha coefficient, while validity was evaluated through confirmatory factor analysis. The data collected was analyzed using SPSS and Lisrell 8.8 software to test the research hypothesis.



### Figure 1. Conceptual Model

H1 : Work stress has a significant direct impact on mental health

H2 : Work stress has a significant direct impact on police behaviour

H3 : Mental health has a significant direct impact on police behaviour

H4 : Work stress has an indirect impact on police behaviour through mental health

## 3. FINDINGS AND DISCUSSION

### Model hypothesis testing

The research hypotheses are tested with data collected through surveys on police members throughout Indonesia, which are spread across the National Police Headquarters and 34 Regional Police. They fill out a questionnaire on the Google Form in the period of November 2024. The researchers received 400 respondents' answers that are worth analyzing. The following table displays the characteristics of the research respondents.

**Table 1. Demographic characteristics of samples**

Characteristic	Category	N	%
<b>Function</b>	Coaching	290	72,5
	Operational	110	27,5
<b>Gender</b>	Male	292	73,0
	Female	108	27,0
<b>Age</b>	< 21 Year	24	6,0
	21-30 Year	131	32,8
	31-40 Year	92	23,0
	41-50 Year	105	26,3
	50 < Year	48	12,0
<b>Length of Service</b>	<5 Year	88	22,0
	5-10 Year	71	17,8
	11-15 Year	40	10,0
	16-20 Year	63	15,8
	21-25 Year	62	15,5
	26-30 Year	33	8,3
<b>Job Level</b>	30 < Year	43	10,8
	Non-Commissioned Officer (Bintara)	226	56,5
	First Officer	87	21,8
	Middle Officer	87	21,8

Source: Research data collecting, 2024

The demographic distribution of the analyzed population, as depicted in the table 1, reveals that the majority (72.5%) are engaged in coaching functions, while 27.5% perform operational roles. In terms of gender composition, males dominate with 73.0%, whereas females constitute 27.0% of the sample. The age distribution indicates that the largest group (32.8%) falls within the 21-30-year category, followed by 41-50 years (26.3%), 31-40 years (23.0%), and a smaller proportion aged below 21 years (6.0%) or above 50 years (12.0%). Regarding the length of service, the majority have served less than five years (22.0%), followed by 5-10 years (17.8%),

and relatively fewer individuals have served beyond 30 years (10.8%). Lastly, in terms of job level, more than half (56.5%) are classified as Non-Commissioned Officers (Bintara), while the remaining are equally divided between First Officers (21.8%) and Middle Officers (21.8%). These findings suggest a workforce that is predominantly male, young to middle-aged, with a relatively short length of service, and largely engaged in coaching functions.

### Normality Test

To ensure the reliability of the results of statistical analysis by testing whether the assumptions of normality are met, a normality test is performed. The following is a table of normality test results from all research data.

**Table 2. Test of Multivariate Normality for Continuous Variables**

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
3814.196	265.974	0.000	10109.282	45.015	0.000	72768.329	0.000

*Source: Research data processing results, 2024*

The skewness value of 3814.196, with a highly significant Z-score of 265.974 and a p-value of 0.000, indicates extreme asymmetry in the data distribution. The kurtosis value of 10109.282, accompanied by a Z-score of 45.015 and a p-value of 0.000, suggests an exceptionally high level of peakedness compared to a normal distribution. The combined skewness and kurtosis test results in a chi-square value of 72768.329 with a p-value of 0.000, strongly rejecting the null hypothesis of normality. These findings indicate that the dataset deviates significantly from a normal distribution, exhibiting substantial skewness and heavy tails. According to Haryono (2016), in research practice, not every data produced is distributed normally. To reduce the impact of an abnormal data distribution, the use of a large sample size can be considered. In addition, the Limit Central Theorem states that the assumption of normality is not too crucial for a large sample, which is  $n \geq 100$  ( $n=400$ ). In this theory, it is also stated that if the number of samples is large, then the sample statistics will be close to the normal distribution (Megahayati et al., 2023).

### Validity and Reality Test with the CFA First-Order Method

The following are the results of the validity and reliability test of all question items and research variables in Table 3.

**Table 3. Construct validity and reliability**

Variable	Dimension	Indikator	Loading Factor	CR	AVE
<b>Work Stress (X)</b>	Respon Emosional (X1)	X11	0,95	0,915	0,643
		X12	0,78		
		X13	0,78		
		X14	0,78		
		X15	0,75		

Variable	Dimension	Indikator	Loading Factor	CR	AVE
		X16	0,75		
	Respon Intelektual (X2)	X21	0,77	0,897	0,637
		X22	0,77		
		X23	0,81		
		X24	0,81		
		X25	0,82		
	Respon Fisik (X2)	X31	0,85	0,889	0,618
		X32	0,83		
		X33	0,75		
		X34	0,75		
		X35	0,74		
	Respon Interpersonal (X3)	X41	0,76	0,884	0,561
		X42	0,71		
		X43	0,70		
		X44	0,78		
		X45	0,80		
	X46	0,73			
<b>Mental Health (Y)</b>	Self Image (Y1)	Y11	0,73	0,906	0,616
		Y12	0,72		
		Y13	0,86		
		Y14	0,80		
		Y15	0,78		
		Y16	0,81		
	Independence (Y2)	Y21	0,71	0,844	0,52
		Y22	0,70		
		Y23	0,78		
		Y24	0,75		
		Y25	0,66		
	Mood (Y3)	Y31	0,74	0,883	0,561
		Y32	0,61		
		Y33	0,81		
		Y34	0,91		
		Y35	0,70		
		Y36	0,69		
	Relationship (Y4)	Y41	0,86	0,916	0,609
		Y42	0,79		
		Y43	0,83		
		Y44	0,72		
		Y45	0,74		
		Y46	0,76		
		Y47	0,76		
	Daily Activities (Y5)	Y51	0,63	0,874	0,543
		Y52	0,63		
		Y53	0,89		
Y54		0,91			
Y55		0,70			
Y56		0,60			
Physical Health (Y6)	Y61	0,77	0,885	0,564	
	Y62	0,78			
	Y63	0,74			
	Y64	0,81			
	Y65	0,66			
	Y66	0,73			
Future (Y7)	Y71	0,77	0,926	0,676	

Variable	Dimension	Indikator	Loading Factor	CR	AVE
		Y72	0,84		
		Y73	0,88		
		Y74	0,83		
		Y75	0,77		
		Y76	0,83		
<b>Police Behaviour (Z)</b>	Lawful Use of Force (Z1)	Z11	0,76	0,840	0,517
		Z12	0,75		
		Z13	0,79		
		Z14	0,74		
		Z15	0,53		
	Kepatuhan terhadap Prosedur (Z2)	Z21	0,83	0,869	0,571
		Z22	0,75		
		Z23	0,70		
		Z24	0,68		
		Z25	0,80		
	Interaction with the Community (Z3)	Z31	0,85	0,917	0,65
		Z32	0,81		
		Z33	0,87		
		Z34	0,76		
		Z35	0,71		
Z36		0,82			

*Source: Research data processing results, 2024*

A check of the data set in the table for validity and reliability shows that the variables being measured have strong construct validity and internal consistency. The loading factor value is usually higher than 0.70, which means that the observed indicators are strongly related to their corresponding latent constructs. The Composite Reliability (CR) value for all dimensions ranges from 0.840 to 0.926, which exceeds the minimum threshold of 0.70, confirming the high internal consistency of the construct. In addition, the Average Variance Extracted (AVE) value, which measures the proportion of variance captured by the construct relative to total variance, ranges from 0.517 to 0.676. The values show good convergent validity because most of the dimensions meet or go above the 0.50 level. This means that the indicators accurately reflect their related concepts.

In the case of certain constructs, Work Stress (X), Mental Health (Y), and Police Behavior (Z) are divided into several dimensions, all of which show an acceptable level of validity and reliability. For example, in the Work Stress variable, the Emotional Response (X1) dimension has a very high loading factor for X11 (0.95), which indicates a strong relationship, while the Physical Response (X3) component shows moderate values ranging from 0.74 to 0.85. Similarly, in Mental Health (Y), the Future dimension (Y7) stands out with an AVE of 0.676, indicating a strong representation of the construct. The most reliable part of Police Behavior (Z) is Interaction with Society (Z3), which has a CR value of 0.917 and an AVE value of 0.65. This means that it is a well-defined construct. Overall, the results show that this measurement model is strong and can be used with confidence in further analysis, although slight improvements can be made to



dimensions with slightly lower AVE values. Based on the table above, it can be seen that all statement items have a loading factor value of  $> 0.50$ , therefore all statement items are valid (Haryono, 2016). The CR value of all dimensions  $\geq 0.70$  and the AVE value  $\geq 0.50$ , which indicates that all, namely work stress, mental health and police behaviour, are reliable (Haryono, 2016).

**Measurement Model Analysis with CFA Second-Order Test**

The following are the results of the Conformatory Factor Analysis (CFA) exam with the second-order method in Table 4.

**Table 4. Measurement Model Analysis with CFA Second-Order Test**

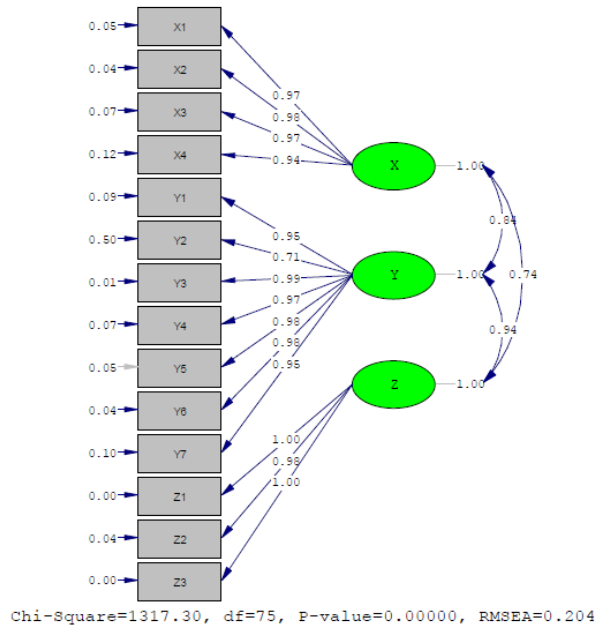
Variables	Dimensions	Loading Factor	CR	AVE
<b>Work Stress (X)</b>	Respon Emosional (X1)	0,97	0,982	0,930
	Respon Intelektual (X2)	0,98		
	Respon Fisik (X3)	0,97		
	Respon Interpersonal (X4)	0,94		
<b>Mental Health (Y)</b>	Self Image (Y1)	0,95	0,980	0,877
	Independence (Y2)	0,71		
	Mood (Y3)	0,99		
	Relationship (Y4)	0,97		
	Daily Activities (Y5)	0,98		
	Physical Health (Y6)	0,98		
	Future (Y7)	0,95		
<b>Work Behaviour (Z)</b>	Penggunaan Kekerasan yang Sah (Z1)	1,00	0,996	0,987
	Compliance with Procedures (Z2)	0,98		
	Interaction with the Community (Z3)	1,00		

*Source: Research data processing results, 2024*

The results of the CFA (Confirmatory Factor Analysis) Second-Order Test indicate a strong model fit, as demonstrated by the high loading factors across all dimensions. For Work Stress (X), the loading factors range from 0.94 to 0.98, suggesting that emotional, intellectual, physical, and interpersonal responses significantly contribute to the latent construct. The CR (Composite Reliability) of 0.982 and AVE (Average Variance Extracted) of 0.930 further confirm the robustness of this construct, indicating high internal consistency and convergent validity. Similarly, Mental Health (Y) exhibits strong factor loadings, ranging from 0.71 (Independence) to 0.99 (Mood), with a CR of 0.980 and an AVE of 0.877. The relatively lower loading for Independence (0.71) suggests that it may be a weaker indicator of mental health compared to other dimensions such as mood, relationship, and physical health, which all have values above 0.95.

With loading factors between 0.98 and 1.00 and a CR of 0.996, which means strong internal consistency, Work Behavior (Z) also shows high levels of reliability and validity. The AVE of 0.987 indicates that the construct, not error, captures the majority of variance. This means that the dimensions that were measured Legitimate Use of Force, Compliance with Procedures, and Interaction with the Community are very good at describing the whole concept of Work Behavior.

Overall, the CFA results back up the theoretical model by showing that each latent variable is well-defined by the indicators that were seen. But the slightly lower loading factor for Independence (Y2) in the Mental Health construct could mean that it needs to be improved in future studies to make sure it fits conceptually within the model.



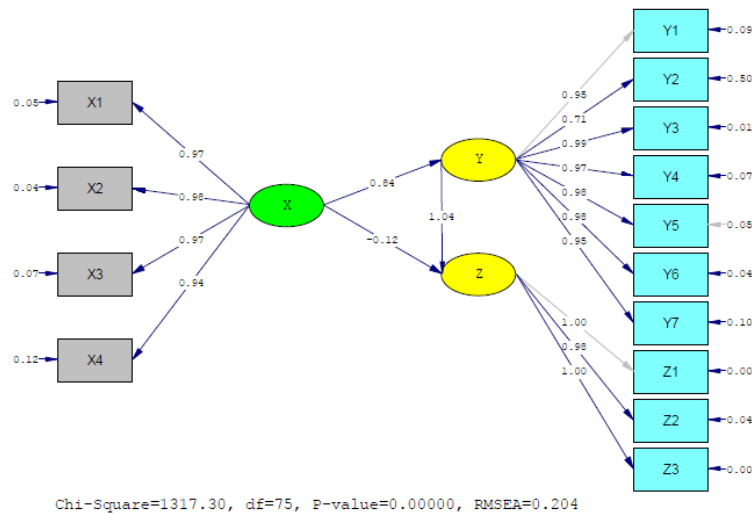
**Figure 2. CFA Second-Order Test**

The Confirmatory Factor Analysis (CFA) Second-Order Test in the given structural model (Figure 2) suggests that the latent variables X, Y, and Z are well-defined by their respective observed indicators, as indicated by the high factor loadings (mostly above 0.90). This implies strong relationships between the observed variables and their corresponding first-order latent constructs. The high correlation values between latent constructs (e.g., X and Y = 0.94, Y and Z = 0.74) indicate a significant interrelationship among the constructs, supporting the presence of a higher-order factor structure. However, the Chi-Square value (1317.30, df = 75, p-value = 0.000) suggests poor model fit, as the p-value is highly significant, indicating a substantial difference between the observed and expected covariance matrices.

Additionally, the RMSEA value of 0.204 is far above the acceptable threshold of 0.08, indicating poor model fit. This suggests that the proposed second-order factor model may not adequately represent the underlying data structure. The poor fit could be attributed to model misspecification, sample size issues, or strong correlations between first-order factors, which might indicate redundancy. Future model adjustments, such as incorporating additional paths, allowing for correlated errors, or revising item assignments, could improve the overall fit. Despite the poor model fit, the strong factor loadings suggest that the observed indicators reliably measure their respective constructs, supporting the theoretical framework of the study.

### Structural Model Analysis

The structural equation model (SEM) presented in the figure 3 illustrates the relationships between latent variables X, Y, and Z and their corresponding observed indicators. The model shows that X is a latent construct measured by four observed variables (X1, X2, X3, X4), while Y and Z are also latent constructs measured by multiple indicators (Y1-Y7 for Y and Z1-Z3 for Z). The standardized factor loadings between the latent variables and their observed indicators are generally high, indicating that the observed variables strongly represent their respective latent constructs. Additionally, the structural paths suggest that X positively influences Y (0.84), whereas its influence on Z is weak and negative (-0.12). Moreover, there is a strong positive effect of Y on Z (1.04), suggesting that Y plays a mediating role between X and Z.



**Figure 3. Structural Model**

The model fit statistics indicate a poor overall fit. The Chi-square value ( $\chi^2 = 1317.30$ ,  $df = 75$ ,  $p\text{-value} = 0.000000$ ) is significant, which typically suggests that the model does not fit the data well. However, chi-square is known to be sensitive to large sample sizes, and alternative fit indices should be considered. The Root Mean Square Error of Approximation (RMSEA) is 0.204, which is significantly higher than the acceptable threshold of 0.08, further suggesting a poor model fit. High RMSEA values indicate that the model may have misspecified relationships or that additional paths and modifications are necessary. The standardized factor loadings for the observed variables are mostly high, but some indicators, such as Y1, Y3, and Y5, have weaker loadings, which may indicate measurement issues or model misfit.

To improve the model, several adjustments could be considered. First, re-evaluating the theoretical framework to ensure that all relevant relationships are accounted for may help refine the structural paths. The weak and negative effect of X on Z (-0.12) suggests that additional mediating variables might be missing, or that the direct relationship may not be necessary. Second, allowing modification indices to suggest additional covariances between measurement errors could improve model fit if theoretically justified. Lastly, poorly performing indicators, such as those with low standardized loadings, should be examined for potential removal or re-

specification. By addressing these issues, the model could achieve a better fit while maintaining theoretical validity.

The following are the results of the *Goodness-of-fit Indices* test from the research model as shown in table 5.

**Table 5. Results of Goodness-of-fit Indices**

<i>Goodness of Fit Indices</i>	Result	Cut-Off Value	Information
Chi-Square	1359,01		
Probability	0,00000	≥ 0,05	Tidak Fit
CFI	0,89	≥ 0,90	Marginal Fit
NNFI	0,87	≥ 0,90	Marginal Fit
NFI	0,89	≥ 0,90	Marginal Fit
IFI	0,89	≥ 0,90	Marginal Fit
RMSR	0,026	≤ 0,05	Good Fit
RFI	0,86	≥ 0,90	Marginal Fit
RMSEA	0,225	≤ 0,08	Tidak Fit

Source: (Haryono, 2016)

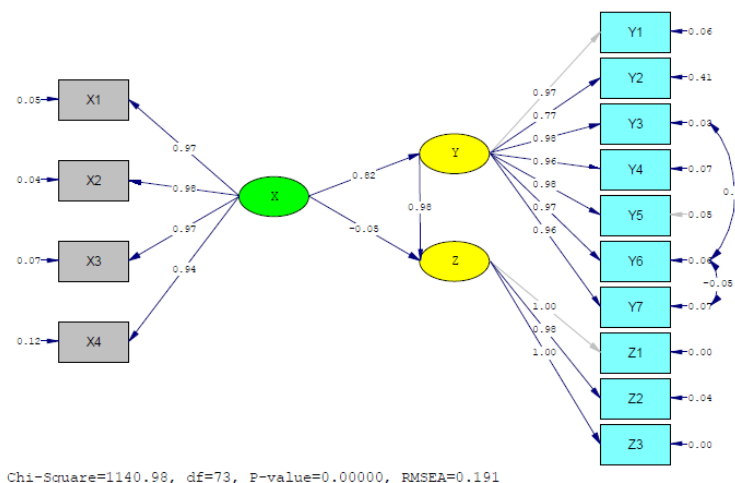
Based on the table above, it can be concluded that the model in the study is a fit, the model is said to be feasible if at least one of the model feasibility test methods is met (Haryono, 2016). There is one feasibility test for a good fit model, namely RMSR so that the model meets *the good of fit*. Nevertheless, researchers continue to make modifications to get a better model by being guided by the modification index by choosing the largest modification index (MI) (Haryono, 2016).

**Table 6. Model Modification Results**

Between	and	Decrease in Chi-Square	New Estimate
Y7	Y6	245,8	-0,06
Y6	Y3	213,6	0,03
Y5	Y1	146,4	0,02
Y3	Y1	141,3	-0,03
Y7	Y5	71,3	0,02
Y6	Y2	54,7	0,07
X3	X2	50,7	-0,03

Source: Research data processing results, 2024

The results of the model modification are shown in the following figure 3.



**Figure 4. Modified Model**

The structural equation model (SEM) depicted in the figure 4 assesses relationships between latent variables and their observed indicators, demonstrating strong factor loadings across most constructs. The latent variable X, measured by four observed variables (X1 to X4), exhibits high standardized loadings ranging from 0.94 to 0.98, indicating that these indicators strongly represent the underlying construct. Similarly, the latent variables Y and Z display strong associations with their respective observed variables, with loadings mostly above 0.90. The structural paths indicate that X positively influences Y (0.82) but has a weak negative effect on Z (-0.05), suggesting that while X significantly contributes to Y, its impact on Z is negligible or potentially non-significant. Additionally, residual correlations among some observed variables, such as Y5 and Y6, show minor negative associations, which could indicate some level of measurement error or unexplained variance.

Despite the strength of the factor loadings, the model's overall fit indices indicate that it does not adequately explain the data. The Chi-Square statistic ( $\chi^2 = 1140.98$ ,  $df = 73$ ,  $p < 0.001$ ) suggests a significant discrepancy between the observed and model-implied covariance matrices, which is typically undesirable. Additionally, the Root Mean Square Error of Approximation (RMSEA = 0.191) is well above the recommended threshold of 0.08, indicating a poor model fit. High RMSEA values suggest that the model might be missing key pathways, has incorrect factor structures, or suffers from specification errors. A significant chi-square result combined with a high RMSEA often signals that the model needs modifications to improve its explanatory power and fit with the data.

To enhance model fit, potential modifications could include adding theoretically justified pathways, allowing correlated errors where necessary, or reconsidering the construct relationships. One possible improvement could be exploring additional predictors for Z, as the weak path from X to Z (-0.05) suggests that other latent factors might better explain Z's variance. Additionally, modifying the factor structure by testing alternative models, such as bifactor or second-order factor models, may provide better conceptual alignment with the data. Allowing covariances among certain observed variables, particularly those with high residual correlations (e.g., Y5 and Y6), could also help improve fit.

The results of the calculation of the new *Goodness-of-fit Indices* model are presented in Table 7 below.

**Table 7. Results of Goodness-of-fit Indices**

<i>Goodness of Fit Indices</i>	<i>Hasil</i>	<i>Cut-Off Value</i>	<i>Information</i>
<b>Chi-Square</b>	918,10		
<b>Probability</b>	0,00000	≥ 0,05	Tidak Fit
<b>CFI</b>	0,94	≥ 0,90	Good Fit
<b>NNFI</b>	0,92	≥ 0,90	Good Fit
<b>NFI</b>	0,93	≥ 0,90	Good Fit
<b>IFI</b>	0,94	≥ 0,90	Good Fit
<b>RMSR</b>	0,026	≤ 0,05	Good Fit
<b>RFI</b>	0,92	≥ 0,90	Good Fit

<b>RMSEA</b>	0,189	≤ 0,08	Tidak Fit
--------------	-------	--------	-----------

*Source: (Haryono, 2016)*

Based on the table above, it can be concluded that the model in the study is a fit, the model is said to be feasible if at least one of the model feasibility test methods is met (Haryono, 2016). There are six feasibility tests for models that are good fit, namely CFI, NNFI, NFI, IFI, RMSR and RFI so that the model has met *the good of fit*.

Based on the results of data processing using Lisrel 8.8, the following structural equations are obtained:

$$Y = 0.81 * X, \text{ Errorvar.} = 0.34, R^2 = 0.66$$

$$(0.043) \quad (0.027)$$

$$18.88 \quad 12.77$$

$$Z = 0.99 * Y - 0.069 * X, \text{ Errorvar.} = 0.12, R^2 = 0.88$$

$$(0.034) \quad (0.030) \quad (0.0087)$$

$$29.52 \quad -2.27 \quad 13.77$$

Based on the structural equation above, the value of the determination coefficient (R<sup>2</sup>) of the Mental Health variable (Y) is 0.66, meaning that the Work Stress variable (X) can explain the Mental Health variable (Y) by 66%. Meanwhile, the value of the determination coefficient (R<sup>2</sup>) of the Work Behaviour (Z) variable is 0.88, meaning that the Work Stress (X) and Mental Health (Y) variables can explain the Work Behaviour (Z) variable by 73%.

### **Hypothesis Test Results**

If the T value ≥ 1.967, then the research hypothesis is accepted (Haryono, 2016: 256).

Berikut disajikan dalam tabel 8.

**Table 8. Hypothesis Test Results**

<b>Path</b>	<b>T-Values</b>	<b>T-Table</b>	<b>Conclusion</b>
<b>X --&gt; Y</b>	18,88	1,967	H1 Accepted
<b>X --&gt; Z</b>	-2,22	1,967	H1 Accepted
<b>Y --&gt; Z</b>	29,52	1,967	H1 Accepted

*Source: Research data processing results, 2024*

The explanation is as follows:

1. The X -> Y path obtained a T value of 18.88 > 1.967, then H1 was accepted, meaning that there was a significant direct influence of work stress on mental health.
2. The X -> Z path obtained a T value of 2.22 > 1.967, then H1 was accepted, meaning that there was a significant direct influence of work stress on work behaviour.
3. The Y -> Z path obtained a T value of 29.52 > 1.967, then H1 was accepted, meaning that there was a significant direct influence of mental health on work behaviour.

According to Haryono (2016), if the value of the standardized indirect effects of the independent variable on the dependent variable through the intervening variable is greater than the value of the standardized direct effects of the independent variable on the dependent variable, then there is an indirect influence.

**Table 9. Indirect Influence**

Path	Standardized Direct Effects	Standardized Indirect Effects	Conclusion
X --> Z	-0,069	-	-
X --> Y --> Z	-	0,81	H1 Accepted

*Source: Research data processing results, 2024*

Based on the table above, the value of the standardized indirect effects of the Work Stress variable (X) on the Work Behaviour variable (Z) through the Mental Health variable (Y) is 0.81 > the value of the standardized direct effects of the Work Stress variable (X) on Work Behaviour (Z) is -0.069, then H1 is accepted, meaning that there is a significant indirect influence of work stress on work behaviour through mental health.

## DISCUSSION

The results of this study confirm that work stress has a significant influence on the mental health of police officers, which ultimately has an impact on their work behaviour. These findings are consistent with previous research showing that high levels of work stress, both caused by job demands and organizational factors, can worsen mental conditions and trigger deviant behaviour (Kim et al., 2024; Lee & Wu, 2024). In the Indonesian context, community pressure, resource constraints, and excessive workloads contribute to the high levels of stress felt by police officers, as identified in this study.

Mental health was a significant mediating variable in the relationship between work stress and work behaviour. This is in line with a study by Lin et al. (2024), which stated that health behaviours can mediate the relationship between work stress and mental health. In this study, low levels of mental health led to an increased risk of ineffective work behaviours, such as disproportionate use of violence or non-adherence to standard operating procedures. These findings support the importance of paying attention to mental health as part of human resource management strategies in police institutions.

Other findings from the study highlight the need for interventions designed to reduce work stress and improve police mental health. A study by Gershon et al. (2009) shows that coping skills development and emotional intelligence training can help officers better manage stress. In addition, this study also shows that organizational policies, such as improving workload balance and providing emotional support from leaders, can help reduce work stress levels (Davis, 2024; Schaible & Gecas, 2010).

Based on the results of this study, organization-based interventions such as coping training, social support development, and employee welfare programs can be an effective solution to reduce the impact of work stress on police mental health. Research by White & Weisburd (2018) suggests a collaborative model involving mental health providers to support police in dealing with their psychological challenges. This model can be adapted in the Indonesian context, focusing on improving the mental well-being of police officers and improving their relationship with the community.

Overall, the study highlights the importance of a deeper understanding of the relationship between work stress, mental health, and police work behaviour. By taking strategic steps to manage work stress, improve mental health, and facilitate positive work behaviours, police institutions in Indonesia can create a healthier and more productive work environment. These findings provide valuable insights for policymakers, academics, and practitioners to design more effective strategies for supporting police officers.

#### **4. CONCLUSION**

This study reveals that work stress significantly impacts the mental health and behaviour of police officers in Indonesia. Findings indicate that high levels of stress, triggered by heavy workloads, high-risk situations, and complex expectations, negatively affect police mental health, increasing the risk of disorders such as depression, anxiety, and burnout. These effects are reflected in work behaviour, including disproportionate use of force, reduced compliance with procedures, and diminished quality of community interactions. Mental health plays a crucial mediating role in the relationship between work stress and police behaviour. Therefore, improving mental well-being not only mitigates the adverse effects of work stress but also enhances police performance and professionalism in fulfilling their duties. Factors such as social support, work-life balance, and emotional intelligence are proven to be critical in managing the impact of work stress on mental health and behaviour.

The findings of this study have important implications for police organizations in Indonesia. Efforts should focus on developing stress mitigation strategies, such as training in coping mechanisms, providing psychological support, and restructuring workloads. Additionally, programs promoting mental health and work-life balance for police personnel should be implemented. Finally, this study highlights the need to strengthen data-driven approaches in human resource management within police institutions. Further analysis is required to understand other factors influencing the relationship between work stress, mental health, and police behaviour, as well as to evaluate the effectiveness of interventions designed to address these challenges. By fostering a supportive work environment, police organizations can not only enhance the well-being of their personnel but also strengthen public trust in law enforcement institutions in Indonesia.



## REFERENCES

- bin Baker, R., & Ibrahim, H. I. (2014). *Tekanan Kerja Dalam Organisasi Kepolisian: Tinjauan Dalam Perspektif Kecerdasan Emosi*.
- Bittner, E. (1970). The Functions of the Police in Modern Society. a review of background factors, current practices, and possible role models. *National Institute of Mental Health, Center for Studies of Crime and Delinquency, 1*, 243.
- Candrawati, N. K. A., Setyabudi, C. M., & S, B. (2023). Adaptive Management Strategy and Mental Wellbeing of the South Jakarta Metropolitan Police. *International Journal For Multidisciplinary Research, 5*(5), 1–10. <https://doi.org/10.36948/ijfmr.2023.v05i05.6830>
- Cox, J. A., Zawawi, D., & Yasin, I. M. (2022). The Impact of Excessive Stress on Deviant Behaviour and the Mediation Role of Emotional Intelligence among the Royal Malaysian Police. *Global Business and Management Research, Suppl. Special Issue, 14*(3s), 1378–1392.
- Davis, M. A. (2024). *Behavioral Attributes of Police Supervisors That Reduce the Occupational of Stress of Officers They Lead* (Issue July).
- Enzing, J. J., van Krugten, F. C. W., Sabat, I., Neumann-Böhme, S., Boer, B., Knies, S., Brouwer, W. B. F., Barros, P. P., van Exel, J., Schreyögg, J., Stargardt, T., & Torbica, A. (2022). Psychometric evaluation of the Mental Health Quality of Life (MHQoL) instrument in seven European countries. *Health and Quality of Life Outcomes, 20*(1), 1–11. <https://doi.org/10.1186/s12955-022-02041-6>
- Garbarino, S., Cuomo, G., Chiorri, C., & Magnavita, N. (2013). Association of work-related stress with mental health problems in a special police force unit. *BMJ Open, 3*(7), 1–12. <https://doi.org/10.1136/bmjopen-2013-002791>
- Gershon, R. R. M., Barocas, B., Canton, A. N., Xianbin Li, & Vlahov, D. (2009). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior, 36*(3), 275–289. <https://doi.org/10.1177/0093854808330015>
- Hardjana, A. M. (1994). *Stres tanpa Distres (Seni Mengolah Stres)*. Kanisius.
- Haryono, S. (2016). *Metode SEM Untuk Penelitian Manajemen dengan AMOS LISREL PLS*. PT. Intermedia Personalia Utama.
- Kim, J., Jang, J., Park, B., & Kim, I. (2024). Mental COP: Mental Health Cohort of Police officers in Korea. *BMJ Open, 14*(6), 1–9. <https://doi.org/10.1136/bmjopen-2023-082010>
- Kinman, G., Clements, A. J., & Hart, J. (2017). Job demands, resources and mental health in UK prison officers. *Occupational Medicine, 67*(6), 456–460. <https://doi.org/10.1093/occmed/kqx091>
- Krajewski, A. T., Worrall, J. L., & Scales, R. M. (2023). Threat Dynamics and Police Use of Force. *Journal of Research in Crime and Delinquency*. <https://doi.org/10.1177/00224278231194711>
- Lee, N., & Wu, Y. K. (2024). Work-Related Stress and Psychological Distress among Law Enforcement Officers: The Carolina Blue Project. *Healthcare (Switzerland), 12*(6), 1–

17. <https://doi.org/10.3390/healthcare12060688>
- Lin, P. Y., Tseng, P., Liang, W. M., Lin, W. Y., Cheng, Y. P., & Kuo, H. W. (2024). The mediating effect of health behaviors on the association between job strain and mental health outcome: a national survey of police officers. *Scientific Reports*, 14(1), 1–9. <https://doi.org/10.1038/s41598-024-60746-8>
- Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ Open*, 5(6), 1–11. <https://doi.org/10.1136/bmjopen-2014-007079>
- Matulesky, A., Rakhim, A. F., & Pascarini, A. (2021). *Understanding Social Support and Work Meaning To Reduce Work Stress for Police Officers during the Covid-19 Pandemic*.
- Megahayati, F., Pulansari, F., & Waluyo, M. (2023). Analysis of Low-Income Community Level Models as Determinants of Waste Management, Clean Living Behavior, and Environmental Health in Surabaya City. *Quantitative Economics and Management Studies*, 4(4).
- Papazoglou, K., & Andersen, J. P. (2014). A guide to utilizing police training as a tool to promote resilience and improve health outcomes among police officers. *Traumatology: An International Journal*, 20(2), 103–111. <https://doi.org/10.1037/h0099394>
- Putra, A. P., Rini, R. A. P., & Saragih, S. (2019). Hubungan antara Self Control dan Stres Kerja dengan Agresivitas Polisi. *Psikologia: Jurnal Psikologi*, 2(2), 93. <https://doi.org/10.21070/psikologia.v2i2.1512>
- Putri, E. M., Patricia, H., Wewa, L., Tazkia, S. N., & Supriyadi, T. (2024). Dampak Stress Kerja Terhadap Kesejahteraan Mental Anggota Kepolisian. *Observasi: Jurnal Publikasi Ilmu Psikologi*.
- Queirós, C., Passos, F., Bártolo, A., Faria, S., Fonseca, Sílvia]job stress, burnout and coping in police officers: R. and psychometric properties of the organizational police stress questionnaire, Marques, A., Silva, C., & Pereira, A. (2020). Estrés laboral, agotamiento y afrontamiento en policías: relaciones y propiedades psicométricas del cuestionario organizacional de estrés policial. *International Journal of Environmental Research and Public Health*, 17(18), 1–19.
- Rabbing, L., Bjørkelo, B., Fostervold, K. I., Strømme, H., & Lau, B. (2022). A Scoping Review of Stress Measurements and Psychometry in Police Research. *Journal of Police and Criminal Psychology*, 37(2), 457–482. <https://doi.org/10.1007/s11896-022-09498-7>
- Schaible, L. M., & Gecas, V. (2010). The Impact of Emotional Labor and Value Dissonance on Burnout Among Police Officers. *Police Quarterly*, 13(3), 316–341. <https://doi.org/10.1177/1098611110373997>
- van Krugten, F. C. W., Jonker, M. F., Himmler, S. F. W., Hakkaart-van Roijen, L., & Brouwer, W. B. F. (2024). Estimating a Preference-Based Value Set for the Mental Health Quality of Life Questionnaire (MHQoL). *Medical Decision Making*, 44(1), 64–75. <https://doi.org/10.1177/0272989X231208645>
- Wang, J., Wang, R., Zhao, P., Han, T., Li, M., He, Y., & Liu, Y. (2023). Cross-cultural adaptation and validation of the Mental Health Quality of Life (MHQoL) questionnaire in a

Chinese-speaking population with chronic musculoskeletal pain. *BMC Psychology*, 11(1), 1-8. <https://doi.org/10.1186/s40359-023-01482-y>

White, C., & Weisburd, D. (2018). A Co-Responder Model for Policing Mental Health Problems at Crime Hot Spots: Findings from a Pilot Project. *Policing: A Journal of Policy and Practice*, 12(2), 194-209. <https://doi.org/10.1093/police/pax010>

Wijayanti, R. Y., & Fauzi, H. B. (2020). *Factors Affecting The Work Stress Of Police Officers: A Systematic Review*.

Wren-Lewis, S., & Alexandrova, A. (2021). Mental Health without Well-being. *Journal of Medicine and Philosophy (United Kingdom)*, 46(6), 684-703. <https://doi.org/10.1093/jmp/jhab032>

### **Author Profile**

**Horas Marasi Silaen**, Is a police psychologist whose job is to deal with the mentality of police officers who need assistance and are traumatized. In addition, he is active as a researcher in the field of human resource governance, especially regarding the task arrangement of organizational members and performance load analysis.