

**THE EFFECT OF WORKLOAD AND ROLE CONFLICT ON EMPLOYEE
PERFORMANCE WITH WORK STRESS AS A VARIABLE
MODERATE IN BANK REPRESENTATIVE OFFICE
INDONESIA PEMATANGSIANTAR**

Nurmaya Hutasoit¹, Elfitra Desi², Kiki Farida Ferine³

Universitas Pembangunan Pancabudi, Medan, North Sumatera^{1, 2, 3}

Corresponding email : nurmaya.hutasoit@gmail.com¹

Author email : elfitradesi@dosen.pancabudi.ac.id² , kikifarida@dosen.pancabudi.ac.id³

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ABSTRACT

This study focuses on assessing how Workload and Role Conflict affect Employee Performance, with Job Stress acting as a moderating factor at the Bank Indonesia Representative Office in Pematangsiantar. Quantitative methods were applied, using Structural Equation Modeling (SEM) analysis using SmartPLS 3.0. The sample consisted of employees from the office selected through purposive sampling. The results indicate that Workload and Role Conflict have a significant negative influence on Employee Performance, and Job Stress also negatively impacts performance. However, Job Stress does not act as a moderator between Workload, Role Conflict, and Employee Performance. These results highlight the need for management at the Bank Indonesia Representative Office in Pematangsiantar to effectively manage workload, role conflict, and employee stress levels to improve employee performance, productivity, and overall well-being.

Introduction

In an era marked by global integration and rapid technological advancement, companies must adapt quickly and efficiently to stay ahead in the market. One of the key elements of an organization's success is the performance of its employees, as they are the primary drivers of strategy and policy implementation. If employees do not perform optimally, it will be difficult to achieve organizational goals and objectives. Therefore, organizations must recognize and address the various factors that influence employee performance, both internally and externally. One element commonly studied in human resources research is workload, which refers to the tasks that need to be completed within a specific timeframe. In reality, workload is not always evenly distributed; while some workers may have too much work, others may have too little. A heavy workload can cause physical and mental fatigue, reduce focus, and affect the quality and quantity of work produced. Conversely, a workload that is too light can lead to disinterest and low motivation. Therefore, managing workload effectively is crucial to support and enhance employee performance.

Additionally, role conflict is another important element that impacts performance. This situation arises when employees face conflicting, unclear, or inconsistent demands related to their roles, which may conflict with their personal values and expectations. In complex work environments, such as public financial institutions, employees often perform multiple roles and tasks that require effective multitasking and significant flexibility. Unclear role expectations can create stress, decrease job satisfaction, and negatively impact overall performance.

Workload and role conflict are closely related to job stress, which refers to the physical and emotional reactions that occur when job demands exceed a person's coping capacity. Job stress can act as a variable that increases or decreases the effects of workload and role conflict on performance. At manageable levels, stress can motivate individuals to be more attentive and efficient, but if it becomes too severe, it can negatively impact health, reduce productivity, and lead to workplace errors.

At the Bank Indonesia Representative Office in Pematangsiantar, staff are faced with demanding work objectives, strict regulations, and rapidly changing economic conditions. High work pressure, multitasking responsibilities, and public demands make the issues of workload, role conflict, and job stress crucial to study. If these aspects are not effectively addressed, employee performance can deteriorate, ultimately hindering the organization's ability to achieve its strategic goals.

This study aims to assist the leadership and human resource management at the Bank Indonesia Representative Office in Pematangsiantar in creating more humane, effective, and productive work policies. Recently, the office has faced challenges in managing its human resources, particularly related to increasing workloads and unclear roles. Employees often undertake tasks not listed in their job descriptions, work under tight deadlines, and face high expectations from management and the public. This situation has led to reports of work stress, burnout, and decreased performance, as evidenced by failure to achieve work targets and decreased internal job satisfaction.

Formulation of the problem

After describing the background, the problem formulation in this research is as follows:

1. Does workload have a negative effect on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar?
2. Does role conflict have a negative effect on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar?
3. Does work stress have a negative effect on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar?
4. Does workload have a negative effect on employee performance moderated by work stress at the Representative Office of Bank Indonesia in Pematangsiantar?
5. Does role conflict have a negative effect on employee performance moderated by work stress at the Representative Office of Bank Indonesia in Pematangsiantar?

Research purposes

The following are the research objectives which are compiled based on the previous problem formulation:

1. To test and analyze the effect of workload on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar.
2. To test and analyze the effect of role conflict on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar.
3. To test and analyze the effect of work stress on employee performance at the Representative Office of Bank Indonesia in Pematangsiantar.
4. To test and analyze the effect of workload on employee performance moderated by work stress at the Representative Office of Bank Indonesia in Pematangsiantar.
5. To test and analyze the effect of role conflict on employee performance moderated by work stress at the Representative Office of Bank Indonesia in Pematangsiantar.

Benefits of research

1. Theoretical Benefits

This study aims to advance the field of human resource management, particularly in understanding how workload and role conflict affect employee performance, along with the role of job stress as a moderating factor. Furthermore, the findings of this study may provide valuable insights for other scholars planning similar studies in the future.

2. Practical Benefits

This study is expected to provide recommendations to the management of the Bank Indonesia Representative Office in Pematangsiantar on how to better manage employee workload and role conflict. The results can also serve as a basis for developing work-related stress management policies aimed at improving overall employee performance.

Employee Performance

According to Fahmi (2020), performance is the level of success of an individual in carrying out tasks and responsibilities based on indicators set by the organization. Wibowo (2016) states that employee performance is the work results achieved by individuals according to their role or responsibility in the organization.

Indicators of Employee Performance

Based on Fahmi (2020), indicators of employee performance include:

1. Quality of work
2. Quantity of work
3. Timeliness
4. Discipline
5. Ability to cooperate

Workload

According to Haryanti and Kusumawati (2018), workload is the intensity of work that must be borne by a person both physically and mentally in carrying out their work tasks. Siahaan & Marpaung (2020) state that workload is a number of tasks or responsibilities that must be completed by employees within a certain period, which can affect an individual's physical and psychological abilities.

Indicators of Workload

Referring to Haryanti and Kusumawati (2018), workload indicators consist of:

1. Physical workload
2. Mental workload
3. Time workload
4. Emotional workload

Role Conflict

According to Wijaya and Nugroho (2017), role conflict occurs when there is a discrepancy between role expectations in work and the reality or ability of the individual to carry them out. Rachmawati and Lestari (2020) state that role conflict is a condition where an individual experiences pressure due to conflicting role demands or demands that are incompatible with personal or organizational expectations.

Indicators of Role Conflict

According to Rachmawati and Lestari (2020), role conflict indicators consist of:

1. Role ambiguity
2. Role incompatibility

3. Conflicting role demands
4. Role imbalance

Work Stress

Handayani and Ardiansyah (2019) state that work stress is an individual's reaction to work pressure that arises due to workload, conflict, or role ambiguity. According to Susanti and Prabowo (2021), work stress is defined as a condition of emotional and physical tension experienced by employees due to excessive work pressure or pressure that does not match their abilities.

Indicators of Work Stress

Referring to Susanti and Prabowo (2021), work stress indicators include:

1. Physical symptoms
2. Psychological symptoms
3. Behavioral symptoms
4. Decreased job satisfaction

Conceptual Framework

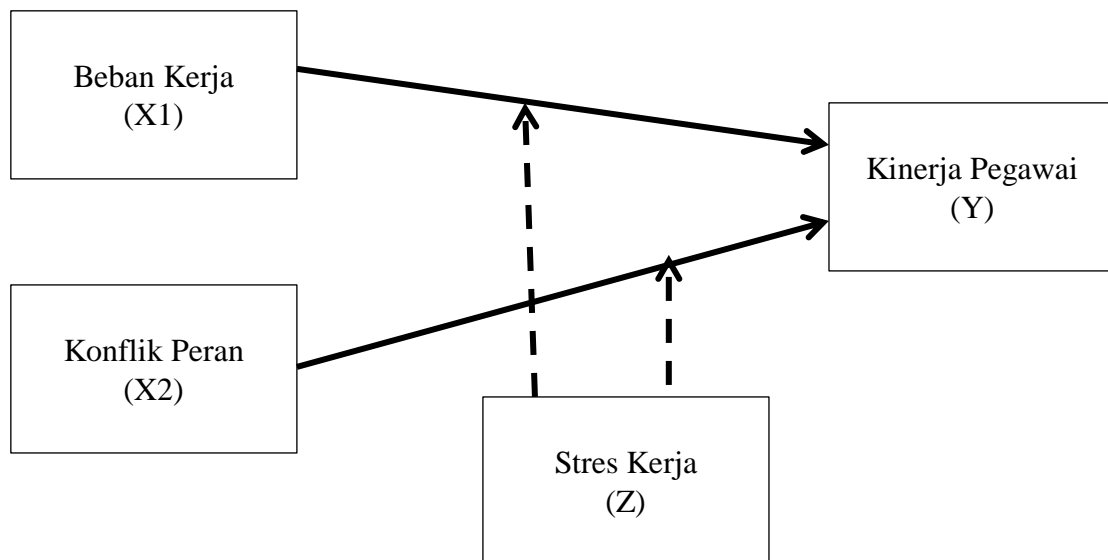


Figure 1 : Conceptual Framework

Hypothesis

Based on the problem formulation and theoretical study that have been explained previously, the research hypothesis can be formulated as follows:

- H1 Workload has a negative and significant effect on Employee Performance at the Representative Office of Bank Indonesia in Pematangsiantar.
- H2 Role conflict has a negative and significant effect on Employee Performance at the Representative Office of Bank Indonesia in Pematangsiantar.
- H3: Work stress has a negative and significant effect on Employee Performance at the Representative Office of Bank Indonesia in Pematangsiantar.

- H4 Workload has a negative and significant effect on employee performance moderated by Work Stress at the Representative Office of Bank Indonesia in Pematangsiantar.
- H5 Workload has a negative and significant effect on employee performance moderated by Work Stress at the Representative Office of Bank Indonesia in Pematangsiantar.

Method

Types of research

This research uses a quantitative method that prioritizes the application of numerical information to create organized data that can be examined systematically (Sinambela, 2021).

Time and Location of Research

This research was conducted in stages over three months, starting in July 2025. This research took place at the Bank Indonesia Representative Office in Pematangsiantar, located at Jl. H. Adam Malik No. 1, Pematangsiantar.

Data source

The main data used is primary data, which is collected directly by researchers to assist research analysis (Sanusi, 2017).

Data collection technique

Data is collected through surveys, which are forms given to respondents to complete independently. This technique typically does not require the researcher's physical presence because the questions are pre-structured (Sanusi, 2017).

Research Population

The research population included all 38 staff members of the Bank Indonesia Representative Office in Pematangsiantar. This population comprised all individuals with specific characteristics relevant to the research analysis (Sanusi, 2017).

Research Sample

The sample for this study consisted of the complete population, namely 38 employees. This sample was chosen because it accurately reflects the characteristics of the population as a whole, thus allowing for generalization of the analysis results (Sugiyono, 2017).

Data Analysis Techniques

Partial Least Squares (PLS)

Data analysis for this study was conducted using the Partial Least Squares (PLS) technique. The PLS method was chosen based on previous research and recognizes the existence of two latent variables with formative indicators. The applied model is causal,

aiming to investigate the relationship between variables. To evaluate the hypotheses, this study used Structural Equation Modeling (SEM) run through SMARTPLS software.

External Model Test (Measurement Model)

External model evaluation aims to assess the relationship between the indicators and the measured latent variables. External model testing covers several aspects:

1. Standardized Load Factor: An indicator is considered valid if its load factor value is greater than 0.5 for the intended construct. The higher the load factor value, the higher the validity of the indicator.
2. T-Statistic: The critical value of the T-Statistic at a 5% significance level is 1.96. The higher the T-value, the stronger the validity of the indicator.
3. Average Variance Extracted (AVE): AVE indicates the proportion of variance explained by a latent variable from its indicators. The minimum accepted value is 0.5; the higher the AVE, the greater the information yielded by the latent variable.
4. Composite Reliability and Cronbach's Alpha: In addition to AVE, variable reliability is measured using Composite Reliability (CR). The minimum acceptable CR value is 0.7.
5. Cross-Loading The cross-loading criterion requires that each indicator has a higher correlation with its construct than with other constructs.

Internal Model Test (Structural Model)

1. T Statistics

The T-statistic test is used to assess the significance of the path between variables. At 5% alpha, the critical T-value is 1.96. If the T-value is between -1.96 and 1.96, the path is considered insignificant; if $T < -1.96$ or $T > 1.96$, the path is considered significant.

2. R-Square (R^2) R^2 is used to assess the Goodness of Fit (GOF) of a structural model, which describes the extent to which independent variables influence dependent variables. An R^2 value of 0.67 indicates good model fit.

SEM Analysis with Moderation Effect

Moderation effects indicate the interaction between exogenous variables (predictors) and moderator variables in influencing endogenous variables (Baron & Kenny; Henseler & Fassott, in Ghozali, 2021). One method for testing moderation is Moderated Regression Analysis (MRA), in which a third variable, the product of two independent variables, is included as a moderator. However, this approach can produce nonlinear relationships, resulting in inconsistent and biased coefficient estimates when used with latent variables. Structural Equation Modeling (SEM) is used as a solution because it can correct for measurement error by incorporating direct interaction effects into the model (Ghozali, 2021).

Results and Discussion

Outer Model Analysis

External model testing is conducted to determine how well the indicators represent the underlying variables being assessed. This procedure involves evaluating convergent validity, discriminant validity, and construct reliability.

Convergent Validity

Convergent validity is evaluated using factor loading values, which must be at least 0.70. Furthermore, the Average Variance Extracted (AVE) must exceed 0.50 for the construct to be considered valid. Valid indicators are those with loading values exceeding 0.70, effectively describing the construct being evaluated. The structural model used in this study is depicted in the figure below.

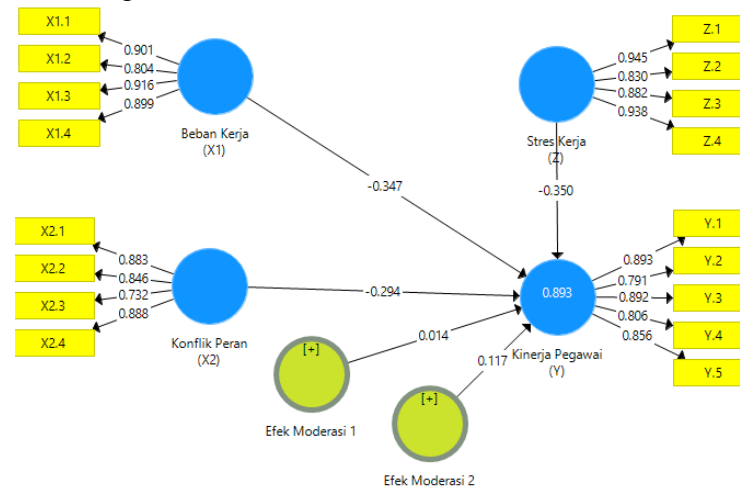


Figure 2. Outer Model

Source : Smart PLS3.3.3.

The Smart PLS output for loading factors provides results in the following table: Outer Loadings. In this study, there are eq

The Smart PLS output for loading factors gives the results in the following table: Outer Loadings In this study there are equations and the equation consists of two equations.

$$Y = b_1X_1 + b_2Z + b_3X_1Z + e_1$$

$$Y = -0.347 - 0.350 - 0.014 + e_1$$

$$Y = b_2X_2 + b_3Z + b_4X_2Z + e_2$$

$$Y = 0.294 + 0.350 - 0.189 + e_2$$

Table 1. Outer Loadings

	Workload_(X1)	Moderation Effect 1	Moderation Effect 2	Employee Performance_(Y)	Role Conflict_(X2)	Job Stress_(Z)
Workload_(X1) * Work Stress_(Z)		0.777				
Role Conflict_(X2) * Job Stress_(Z)			0.814			
X1.1	0.901					
X1.2	0.804					
X1.3	0.916					
X1.4	0.899					
X2.1					0.883	
X2.2					0.846	
X2.3					0.732	
X2.4					0.888	
Y.1				0.893		
Y.2				0.791		
Y.3				0.892		
Y.4				0.806		
Y.5				0.856		
Z.1						0.945
Z.2						0.830
Z.3						0.882
Z.4						0.938

Source : Smart PLS3.3.3.

The Smart PLS output for loading factors provides results in the following table: Outer Loadings. In this study, there are eq

Table 1 shows that each indicator in the Workload, Role Conflict, Employee Performance, and Job Stress variables has an outer loading value exceeding 0.70, thus meeting the convergent validity criteria. The moderation indicators Workload \times Job Stress and Role Conflict \times Job Stress show values of 0.777 and 0.814, respectively, confirming their suitability for inclusion in the research model. Therefore, all indicators are confirmed to be valid for measuring the designated constructs.

Discriminant Validity

The next step is to evaluate discriminant validity, which aims to identify whether the cross-loading value for an indicator is greater with the construct being measured than with other constructs. This step is necessary to verify that the indicator maintains a stronger relationship with its own construct. The table below displays the cross-loading results from the discriminant validity analysis.

Table 2. Discriminant Validity

	Workload_(X1)	Moderation Effect 1	Moderation Effect 2	Employee Performance_(Y)	Role Conflict_(X2)	Job Stress_(Z)
Workload_(X1) * Work Stress_(Z)	0.219	1,000	0.796	-0.106	0.138	0.219
Role Conflict_(X2) * Job Stress_(Z)	0.132	0.796	1,000	0.004	0.007	0.149
X1.1	0.901	0.230	0.089	-0.835	0.847	0.914
X1.2	0.804	-0.085	-0.160	-0.809	0.670	0.734
X1.3	0.916	0.297	0.266	-0.763	0.729	0.757
X1.4	0.899	0.349	0.298	-0.726	0.697	0.741
X2.1	0.761	0.155	0.074	-0.809	0.883	0.787
X2.2	0.639	0.093	-0.094	-0.682	0.846	0.616
X2.3	0.601	-0.077	-0.135	-0.637	0.732	0.631
X2.4	0.792	0.244	0.124	-0.860	0.888	0.943
Y.1	-0.806	0.046	0.045	0.893	-0.733	-0.758
Y.2	-0.750	-0.316	-0.330	0.791	-0.629	-0.738
Y.3	-0.796	-0.199	-0.061	0.892	-0.859	-0.945
Y.4	-0.650	0.186	0.272	0.806	-0.721	-0.598
Y.5	-0.780	-0.135	0.104	0.856	-0.848	-0.786
Z.1	0.792	0.221	0.122	-0.863	0.901	0.945
Z.2	0.847	0.396	0.352	-0.761	0.751	0.830
Z.3	0.779	-0.111	-0.151	-0.807	0.794	0.882
Z.4	0.821	0.289	0.222	-0.842	0.790	0.938

Source : Smart PLS3.3.3.

Table 2 illustrates that the relationship between indicators is stronger for each construct than for the others. This indicates that each indicator can clearly differentiate its variable from other variables in the research framework. Consequently, all research variables—Workload, Role Conflict, Employee Performance, Job Stress, and the moderating effect—meet the standards of discriminant validity.

Composite Reliability

In this study, the reliability of each variable was evaluated through a composite reliability value. A variable is considered reliable if its value exceeds 0.60; conversely, a value between 0.60 and 0.70 indicates inadequate reliability. The following table displays the Cronbach's Alpha, composite reliability, and AVE values, which were used to evaluate the validity and reliability of the study findings.

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Workload_(X1)	0.903	0.933	0.776
Moderation Effect 1	1,000	1,000	1,000
Moderation Effect 2	1,000	1,000	1,000
Employee Performance_(Y)	0.902	0.928	0.720
Role Conflict_(X2)	0.859	0.905	0.705
Job Stress_(Z)	0.921	0.944	0.810

Source : Smart PLS3.3.3.

Table 3 shows that each variable has a Cronbach's Alpha value and composite reliability exceeding 0.70, and an AVE greater than 0.50. This indicates that the elements of Workload, Role Conflict, Employee Performance, Job Stress, and the two moderating effect indicators have strong reliability and convergent validity.

Internal Model Analysis

An internal model assessment was conducted to confirm the accuracy and validity of the established structural model. This evaluation used various indicators, including the Coefficient of Determination (R^2). According to data analysis conducted with SmartPLS 3.0, the R^2 values are as follows:

Table 4. R Square Results

	R Square	Adjusted R Square
Employee Performance_(Y)	0.893	0.876

Source : Smart PLS3.3.3.

Table 4 shows that the R-squared value for Employee Performance is 0.893, accompanied by an adjusted R-squared of 0.876. This implies that approximately 87.6% of the change in Employee Performance can be attributed to the factors Workload, Role Conflict, Job Stress, and the moderating impact in the model, while the remainder is influenced by additional elements not included in the model.

Hypothesis Testing

After evaluating the internal model, the next phase involves investigating the relationships between variables according to the research hypotheses. This examination uses the T statistic and P value, with $T > 1.96$ and $P < 0.05$ set as significance thresholds. The test results reveal the direct effect of each path coefficient, which is described as follows:

Table 5. Hypothesis and Moderation Effect

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Workload_(X1) -> Employee Performance_(Y)	-0.347	2,144	0.016	Accepted
Moderation Effect 1 -> Employee Performance_(Y)	0.014	0.101	0.460	Rejected
Moderation Effect 2 -> Employee Performance_(Y)	0.117	0.770	0.221	Rejected
Role Conflict_(X2) -> Employee Performance_(Y)	-0.294	1,797	0.036	Accepted
Job Stress_(Z) -> Employee Performance_(Y)	-0.350	2,087	0.019	Accepted

Source : Smart PLS3.3.3.

The explanation in the table above is as follows:

1. Workload (X1) has a significant negative effect on Employee Performance (Y) ($t = 2.144$; $p = 0.016$). This means that the higher the workload perceived by employees, the lower their performance tends to be. This hypothesis is accepted.
2. The moderating effect of Workload*Job Stress on Employee Performance (Y) was not significant ($t = 0.101$; $p = 0.460$). This indicates that job stress does not strengthen or weaken the influence of workload on employee performance. This hypothesis is rejected.
3. The moderating effect of Role Conflict*Job Stress on Employee Performance (Y) was also insignificant ($t = 0.770$; $p = 0.221$), which means that job stress does not moderate the relationship between role conflict and employee performance. This hypothesis is rejected.
4. Role Conflict (X2) has a significant negative effect on Employee Performance (Y) ($t = 1.797$; $p = 0.036$), meaning that the higher the role conflict experienced, the lower employee performance tends to be. This hypothesis is accepted.
5. Job Stress (Z) has a significant negative effect on Employee Performance (Y) ($t = 2.087$; $p = 0.019$), indicating that high levels of stress have an impact on decreasing employee performance. This hypothesis is accepted.

Conclusion

The conclusions of this study are as follows:

1. Workload has a significant negative effect on Employee Performance at the Bank Indonesia Representative Office in Pematangsiantar, accepted .
2. The moderating effect of Workload*Job Stress on Employee Performance at the Bank Indonesia Representative Office in Pematangsiantar , rejected .
3. The moderating effect of Role Conflict*Work Stress on Employee Performance at the Bank Indonesia Representative Office in Pematangsiantar , rejected .
4. Role Conflict has a significant negative effect on Employee Performance at the Bank Indonesia Representative Office in Pematangsiantar , accepted .
5. Job stress has a significant negative effect on employee performance at the Bank Indonesia Representative Office in Pematangsiantar , accepted .

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