



## The effect of workload and work ambiguity on burnout with work stress as a mediation variable

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### ABSTRACT

The purpose of this research is to analyze the factors which cause employees to burnout in working, which include workload and work ambiguity on burnout with work stress that employees feel as a mediation variable. Burnout is an important thing that must be considered by company management in managing company resources or employees. The populations in this study are Non Civil Servant Nurses dr. Reksodiwiryo Army Hospital, Padang CityWest Sumatera with a sample of 90 nurses. The analytical method used descriptive statistical analysis and factor description analysis using SmartPLS 4.0. The result of this study shows that workload has a positive and significant effect on work stress; work ambiguity has a negative and significant effect on work stress; workload, work ambiguity, and work stress have a significant impact on burnout; work stress as a mediating variable has an effect on the workload on burnout and work ambiguity on burnout.

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## 1. INTRODUCTION

Burnout is what is experienced psychologically which involves feeling, motive, and expectation means what he feels is very bad and related to stress or other things (Kelly, R, & Kundu, 2020). When someone experiences burnout, he shows or shows his absence (Sanchez & Bresó, 2020)

According to data from the World Health Organization (WHO) from a health model made in 2020 with a prediction of psychological disorders, namely feeling tired will lead to depression from what they do. The results of the Japanese Ministry of Manpower study on 12,000 companies involving around 16,000 workers showed that if 65% of workers complained of fatigue due to routine work, 28% complained of mental fatigue and 7% complained of stress and feeling isolated (Deyulman, 2018)

(Rasip, Kurniawan, & Syahrina, 2020) stated that burnout can occur from what is felt by the workers who are sick, often tantrums, and others. Employees or contract employees will feel bored, easily offended and others, if assignments are not carried out optimally, the impact is replaced and causes unwillingness or new employees need to work optimally and cause burnout. The impact of burnout for organizations or companies is the decrease in the frequency of coming to work or which affects efficiency. As a result

of this, there will be a decrease or poor employee performance, then with the emergence of conflicts within the scope of employees (Atmaja & Suana, 2018).

The difference between this research and previous research is, this research is intended to test the influence of workload and work ambiguity variables on the burnout of nurses at the dr. Reksodiwiry Army Hospital, Padang City, who are nurses with non-civil service status. Because there are still many nurses who feel a high workload and unclear responsibilities for the work. dr. Reksodiwiry Army Hospital is managed by the TNI-AD which not only serves TNI-AD members, but also serves the general public in health services.

However, of course, various problems occur in dr. Reksodiwiry Army Hospital such as the Burnout problem due to the workload of the nurses, who are tired of working. Researchers chose dr. Reksodiwiry Army Hospital as the object of research because researchers found workloads and work ambiguity that caused nurses to be stressed at work, causing many nurses to feel burnout, one of which was dr. Reksodiwiry Army Hospital providing guaranteed health services to in Padang City, RS. Army Dr. Reksodiwiry Padang City also provides guaranteed health services for the general public in Padang City. This high workload causes nurses to be tired at work and causes nurses to get sick in August 2022 which have 9 employees who were sick due to workload and cause sick employees, the increase in the number of employees who were sick due to tired work occurred in December 2022 which has 11 sick employees.

The results of (Buerden, 2019) study if the workload will have a positive influence on burnout. (Jonathan, 2019) states that workload has a positive and significant effect on burnout. (Buerden, 2019) if the workload will affect well and clear from what is given to employee fatigue.

Furthermore, the writers field survey did by questionnaire with of 30 nurses of dr. Reksodiwiry Army Hospital (Wati, Mahmud, & Pricilla, 2018), in terms of workload, there were still many nurses who gave the response "Yes" regarding work demands, short time to complete the work and demands for work results that were in line with the company's target, this proves that it is still high The workload felt by nurses, this can cause nurses to feel burnout at work (Rohmatin & Josephine, 2022), (Elizar, 2019).

The trigger for burnout is not only the workload but also the work ambiguity. Work ambiguity is the perception that one lacks the information needed to perform a job or task, which leads to the perceiver feeling helpless. According to (sorongan & Lumanauw, 2017) meanwhile role ambiguity is the unknown expectations of other people.

The writers' field survey did by a questionnaire with 30 of nurses of the dr. Reksodiwiry Army Hospital, in terms of work ambiguity at dr. Reksodiwiry Army Hospital, there were still many nurses who gave the response "No" regarding the suitability of the responsibilities given to the work position and job descriptions that are not clear about what must be done, The work ambiguity felt by nurses, this can cause nurses to feel burnout at work (Talib & MARS, 2022).

Work stress can be interpreted as an individual's response to circumstances and events that become a threat or suppression in decreasing the ability he faces (Greenhaus & Beutell, 2017). The role of job stress with the definition of simultaneous events, the formation and role of its implementation, with the placement of burnout, from an employee determining expectations or other roles (Qureshi et al., 2018). (Jones, A., Norman, C. S., & Wier, 2018) state that "when work stress is higher from workers, the higher the impact on workers and company organizations. Dewi & Riana (2019) state that work stress will arise when there is a gap between individual abilities and demands. With such things, employees cannot manage stress levels, then what employees feel. This work stress causes someone to be bored, causing fatigue at work.

The writers' field survey did by a questionnaire with 30 of nurses of the dr. Reksodiwiry Army Hospital, in terms of work stress at dr. Reksodiwiry Army Hospital, there were still many nurses who gave the response "Yes" about nurses who felt unable to

complete the work that has been given and the work given to nurses is beyond the capacity of their self, The work stress felt by nurses, this can cause nurses to feel burnout at work.. Research conducted by(Zeinalpour, 2020) produced research findings that workstreescould not effect on burnout. This is different from research conducted by (Ramadhi, Rivai, & Lukito, 2021) means that work stress effect on burnout. It means the higher of work stress on nurses;it caused burnout effect on nurses felt (Desty & Alfikalia, 2023)

Based on the background of the problems above, the authors are interested in conducting further research on: "The Effect of Workload and Work Ambiguity on Burnout with Work Stress as A Mediation Variable on Non CivilSevant Nurses dr. Reksodiwiryo Army Hospital, Padang City."

## 2. RESEARCH METHOD

The object of research explains what and who is the object of research, where, when the research is carried out, the addition of other things needed(Umar, 2017). The object of this research is the Nurses of dr. Reksodiwiryo Army Hospital Padang City. The type of research used is causative, which is research with the aim of determining the causal relationship between the problem phenomena with those that affect the research variables. The research was conducted using quantitative methods, using statistical analysis by empirically testing the relationship between study variables (Sekaran, 2017).

The populations in this study were Nurse Civil Sevant or non on dr. Reksodiwiryo Army Hospital Padang City with a total population in this study of 98 nurses (source: dr. Reksodiwiryo Army Hospital Padang City, 2023). This study took a sample of 90 employees as proposed by (Sugiyono, 2018), saturated sampling is a sampling technique when all members of the population are used as samples. The identity of the respondents was analyzed based on 6 characteristics, namely gender, age, education, length of work, position, employment status, and salary.

This study uses burnout as the bound variable. Burnout means the fatigue felt by nurses in working at the dr. Reksodiwiryo Army Hospital Padang City. There are two independent variables as factors that affect burnout, namely workload and work ambiguity. In addition, this study uses work stress as a variable that mediates the relationship between workload and work ambiguity on burnout. The questionnaire applied a 5-point Likert scale and was guided by a questionnaire that had been developed by previous researchers and modified according to research needs described in Table 1. The questionnaire was given to respondents in the form of angket.

Table 1. Questionnaire References

Research Variable	Author	Number of question
Work load	Valdehita (2017)	12
Work ambiguity	Rizzo (2019)	12
Work stress	Jalagat (2017)	12
Burnout	Maslach (2008)	12

## 3. RESULT AND DISCUSSION

This study will use SmartPLS 4.0 for the data analysis method starting from the measurement model (outer model), model structure (inner model), and hypothesis testing(Ghozali, 2018). PLS according to(Ghozali, 2018), is an approach from covariance-based Structural Equation Modeling (SEM) to variant-based. Covariance-based SEM generally tests causality/theory, while PLS is more of a predictive model. PLS is the method and used as confirmation of the study theory. The measurement model test was conducted to measure the validity and reliability tests. While structural model testing is carried out to test causality or to test hypotheses. Data analysis includes outer model, convergent validity, discriminant validity, reliability. and structural model testing (inner

model) to test the hypothesis, coefficient of determination ( $R^2$ ), the relevance of prediction ( $Q^2$ ), Path Coefficient to describe the results that affect the construct and test the mediation effect.

To analyze the data in this study, the LRA technique was used, namely, the data for each variable in this study was calculated to know the distribution of respondents' answers to each variable and indicator. Table 2 shows that the LRA of this research variable is in the range of a quite good category to a good category. The highest LRA score is the burnout variables with a percentage of 81,24% while the lowest LRA percentage is the workload variable with a percentage of 68,5%.

Table 2. Results of Descriptive Variables

Research Variable	N	Mean	TCR	Category
1. Work Load	90	3,42	68,5%	Fairly High
2. Work ambiguity	90	4,01	80,2%	Fairly High
3. Work stress	90	4,03	80,75%	Fairly High
4. Burnout	90	4,06	81,24%	High

Convergent Validity is a construct validity that measures how far a construct is positively correlated with other constructs (Hair, Sarstedt, Hopkins, L., & Uppelwieser, 2018) Convergent validity relates to the principle that measures of a construct should be highly correlated. Indicators with a high loading factor have a strong contribution to explaining the latent variable and vice versa the indicators with a low loading factor have a weak contribution to explaining the latent variable. The rule of thumb used for convergent validity is outer loading  $> 0.7$ , if the value of outer loading  $> 0.7$  then it is said that the indicator is valid and otherwise an indicator must be removed from the measurement model when the value of outer loading is  $< 0.7$  and then the model is calculated again. The outer loading value of each research variable can be seen in the figure and table below.

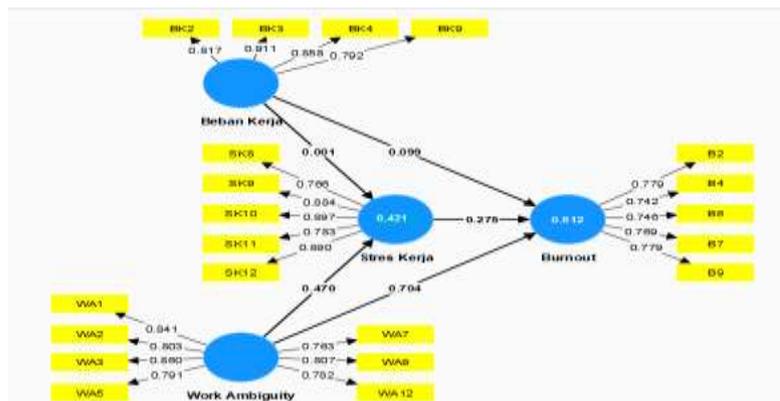


Figure 2 Outer Model

The AVE value describes the big variance or diversity of the manifest variables that can be owned by the latent variable. Thus, the greater the variance or diversity of the manifest variables that can be contained by the latent variable, the greater the representation of the manifest variable on the latent variable. The AVE value is acceptable if the value is above 0.5, meaning that more than half the diversity of the indicators can explain the latent variable. The results show that all variables have an AVE value above 0.5.

Discriminant validity refers to the extent to which certain constructs in the same model differ from each other (Barclay, Higgins, & Thompson, 1995). To test discriminant validity there are three types of analysis used: Fornell and Larcker criteria, cross-loading, and heterotrait-monotrait ratio (HTMT). Based on the Fornell and Larcker test, cross-loading and HTMT ratios fulfilled the requirements of discriminant validity and are considered valid.

The reliability test is intended to regulate how much measurement can measure with a stable or consistent instrument (Hair et al., 2018). A construct is declared reliable if the value of Cronbach's Alpha and Composite Reliability > 0.7. The results of Cronbach's Alpha and Composite Reliability tests have fulfilled the criteria greater than 0.7. Therefore, it can be concluded that all variables are considered reliable or have good reliability to measure the construct.

The next step in testing the structural model is to test the R-square which aims to find out how the relationship between variables, according to (Chin, 1998) the R-square value of 0.67 is categorized as strong, then if the value is 0.33 it is categorized as moderate and 0.19 is said weakly. The results of the R-square test show that the contribution of the influence given by workload, work ambiguity, and work stress to burnout is 0.668, so it can be said that the contribution of the influence given by workload, organizational culture, and work stress to burnout is moderate so that it shows the accuracy of the prediction of the moderate model. Then the contribution of the influence given by workload and work ambiguity to work stress is 0.442, and then the contribution of the influence given by workload and work ambiguity to work stress is moderate, thus indicating moderate model prediction accuracy.

According (Chin, 1998) explains that a model shows a good predictive relevance when its  $Q^2$  value is greater than zero which indicates a good exogenous latent variable (appropriate) as an explanatory variable that can predict its endogenous latent variable. The result of the test is that the structural model obtained has a good prediction of relevance. This means that workload and work ambiguity are appropriate as explanatory variables that can predict work stress then workload, work ambiguity, and work stress are appropriate as explanatory variables that can predict burnout.

Path Coefficient will describe the contribution or influence between variables, carried out through a bootstrapping procedure. Path coefficient evaluation is used to show how strong the effect or influence of the independent variable is on the dependent variable. In short, the path coefficient is used to determine whether the research hypothesis is accepted or rejected. The hypothesis accepted or rejected can be seen on the value of the t-statistical test. If the value of the t statistic is above 1.96 (t-table) and the significance (p-value) is less than 0.05, the hypothesis is accepted. The test results can be seen in Table 3.

Table 3. Hypotheses Testing

Hypotheses	Original Sample (O)	T	P Values	Explanation
		Statistics ( O/STDEV )		
H1 : BK -> SK	0.301	2.013	0.009	Significant
H2 : WA -> SK	0.470	4.628	0.000	Significant
H3 : BK -> B	0.399	2.909	0.006	Significant
H4 : WA -> B	0.704	3.075	0.000	Signifikan
H5 : SK -> B	0.375	3.537	0.000	Significant

To interpret the results or hypothesis testing on the data of the inner model stage, it can be seen from the value of the direct influence of each independent variable on the dependent variable which is shown in Table 3. The results of hypothesis testing are as follows: H1: Workload has a positive and significant effect on work stress. H2: Work Ambiguity has a positive and significant effect on work stress. H3: Workload has a positive and significant effect on burnout. H4: Work Ambiguity has a positive and

significant influence on burnout. H5: Work stress has a positive and significant effect on burnout.

This study also uses mediating variables. According to (Hair et al., 2018) argues that the mediating effect explains the influence between the independent variable and the dependent variable through the mediating variable. The test to find out whether the work stress variable mediates the workload variable on the burnout variable and the work stress variable mediates the work ambiguity variable on the burnout variable. The results of the study can be seen in Table 4.

Table 4. Mediation Testing

Hypotheses	Original Sample (O)	T Statistics ( O /STDEV  )	P Values	Explanation
H1 : BK -> SK -> B	0.246	2.350	0.000	Partial mediating
H2 : WA -> SK -> B	0.336	4.326	0.000	Partial mediating

To interpret the results or mediation test on the data of the inner model stage can be seen in Table 4. The results of the mediation test are as follows: H6: Work stress can give a full mediating influence of the workload on burnout because the direct effect and the indirect effect are significant. H7: Work stress has a partial effect of mediating work ambiguity on burnout because the direct and indirect effects are significant.

Research conducted by (Zeinalpour, 2020) produced research findings that work stress could not effect on burnout. This is different from research conducted by (Ramadhi et al., 2021) means that work stress effect on burnout. It means the higher of work stress on nurses it caused burnout effect on nurses felt.

In this research the results show that all variables have an AVE value above 0.5. Based on the Fornel and Larcker test, cross-loading and HTMT ratios fulfilled the requirements of discriminant validity and are considered valid. The results of Cronbach's Alpha and Composite Reliability tests have fulfilled the criteria greater than 0.7. Therefore, it can be concluded that all variables are considered reliable or have good reliability to measure the construct.

The results of the R-square test show that the contribution of the influence given by workload, work ambiguity, and work stress to burnout is 0.668, so it can be said that the contribution of the influence given by workload, organizational culture, and work stress to burnout is moderate so that it shows the accuracy of the prediction of the moderate model. Then the contribution of the influence given by workload and work ambiguity to work stress is 0.442, and then the contribution of the influence given by workload and work ambiguity to work stress is moderate, thus indicating moderate model prediction accuracy. The result of the test is that the structural model obtained has a good prediction of relevance. This means that workload and organizational culture are appropriate as explanatory variables that can predict work stress then workload, work ambiguity, and work stress are appropriate as explanatory variables that can predict burnout.

#### 4. CONCLUSION

Based on the direct relationship analysis of the variables in this study, it is stated that workload has a positive and significant effect on work stress; work ambiguity has a positive and significant influence on work stress; workload has a positive and significant effect on burnout; work ambiguity has a positive and significant influence on burnout; work stress has a positive and significant effect on burnout. The test of indirect analysis of variables in this study found that work stress can give partial mediating on the workload on burnout because the direct effect and the indirect effect is significant; work stress has a partial effect of mediating organizational culture on burnout because the

direct and indirect effects are significant. The research result found in this study can be an input for the management of dr. Reksodwiryo Army Hospital Padang City increase the burnout that nurses felt. The management of the dr. Reksodwiryo Army Hospital Padang City must to pay attention to the workload given to nurses, such as not giving excessive work to nurses so that there is no excess workload on employees which results in employees feeling tired at work. Apart from that, agencies can minimize burnout experienced by nurses through other nurses whose emotional conditions are more stable. The management of the dr. Reksodwiryo Army Hospital Padang City must to pay attention to work ambiguity where it is hoped that management can provide clear responsibilities to employees when working, provide work and role clarity at work, so that it can reduce the feeling of fatigue felt by nurses while working. The management of the dr. Reksodwiryo Army Hospital Padang City can more attention to the division of tasks or work because this will increase nurses' stress at work which will result in fatigue felt by nurses while working. It is hoped that the limitations of this research can be a lesson for further research in the future. Several limitations in the research that could affect the research results are as follows factors that influence burnout in this study are limited to workload, work ambiguity and work stress. Meanwhile, there are many other variables that influence burnout, the sample for this study was limited to nurses with non-PNS work status, meanwhile there were still many nurses with civil servant status but were not taken as samples, the object of this research is limited to a single industry, namely the Reksodwiryo Army Hospital Padang City; while testing is still needed there are industries other than hospitals, the suggestions that can be given by the author regarding the results of this research are as follows future research is use qualitative methods or interview techniques so that the results and will understand how fatigue is felt by nurses. Future research can use a larger and more extensive sample to obtain better research results, more generalizable, and able to provide a more real pof nurse burnout. Future research is expected to test other factors that can influence burnout such as organizational culture, gender, locus of control, work family conflict, and etc, as well as using other mediating factors such as cyberloafingbehavior and etc. The management of Reksodwiryo army hospitals Padang City can also carry out joint activities such as family gatherings, or other activities aimed at reduce the work stress that nurses feel at work.

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