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**Determinant of Role Stressors on Job  
Stress and Counterproductive Work  
Behavior among Employees in the  
Automotive Industry**

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**ABSTRACT**

This study investigates the influence of role stressors (workload, role ambiguity, and role conflict) on Counterproductive Work Behavior (CWB) and job stress as a mediator variable. A total of 310 questionnaires were distributed, and employees in Banten, Indonesia's automotive industry, provided the information. The Structural Equation Models (SEM) via the Lisrel software was used for path analysis along with the descriptive method in this study. The findings indicated a significant correlation among job stress and counterproductive work behavior and workload, role ambiguity, and role conflict. In CWB, the relationship among workload, role ambiguity, and role conflict was also mediated by job stress. The research's conclusions indicate that role stressors should be managed to reduce CWB. Therefore, lowering the role stressors leads to less job stress and CWB.

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**Keywords:**

Workload, Conflict, Role Ambiguity, Job Stress, Counterproductive Work Behavior

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## Introduction

Stress is the result of work factors such as expectations that do not match the abilities of employees, resources, needs, and job demands (Saranani et al., 2022). Many studies have proven that work stress can be an important predictor of employee behavior at work (Silva & Ranasinghe, 2017; Raza et al., 2017). This behavior can be positive because stress creates conditions for a dynamic work environment as a result of the parties adjusting to challenges in the internal and external environment of the organization (Muhdar, 2012). However, it is not uncommon for the impact to be negative. The behavior that has a negative impact is known as Counterproductive Work Behavior (CWB).

Robinson and Bennet (1995) state that this CWB may risk the organization's or its members' welfare, or even both. It also violates organizational norms. CWB is "harmful to the organization by directly affecting the function or role in the organization, or by hurting employees in a way that will reduce employee effectiveness" is referred to as CWB (Fox et.al., 2001, p. 292). Reactions to work-related stress and other variables that may elicit unfavorable emotions can result in CWB. Role ambiguity, workload, and conflict are the other variables under consideration. The relationship between work stress and counterproductive work behavior has been supported by a number of studies, including those by Ma and Li (2019), Mahdi et al. (2018), Hasanati et al. (2018), and even other studies that split the three components of job stressors—burden work, conflict, and role ambiguity—as independent variables (Ahmad et al., 2021; Sutarmin, et al., 2022; Zhang et al., 2019; Zin et al., 2017; ). Stated differently, the objective of this study is to fill two research gaps. The first gap is related to the lack of research on CWB itself, since the majority of studies on employee behavior at work focus primarily on "good" or "positive" behaviors, especially job satisfaction and organizational behavior citizenship. The fact that so few studies (Brender-Ilan & Sheaffer, 2019; Chen et al., 2020) have looked at "negative" attitudes and behavior like job stress and CWB at the same time suggests that more research is needed in this area. The second area of research that requires attention relates to CWB predictors. A clear understanding of how role stressors can promote job stress and how such stress can lead to CWB is lacking despite certain studies indicating a relationship between job stress and CWB, especially among employees in the automotive industry.

The objectives of the study were to determine the predictive effects of workload, role ambiguity, role conflict, and job stress on the degree of CWB based on phenomena and prior research. These kinds of studies may influence administrators to improve long-term performance in the automotive industry. The study pinpoints role stressors and how they affect automotive employees' CWB. The automotive industry was chosen for this study because employees in this field have a history of experiencing high levels of workplace stress.

## Literature review

### *Role stressor and job stress*

Role stressors, which are defined as role overload, role ambiguity, and role conflict, have been the subject of numerous studies. From the perspective of role theory (Kahn et al., 1964; Rizzo et al., 1970), which decides that employees are employed to carry out necessary roles (i.e., interdependent, recurring behaviors; Katz & Kahn, 1978), the organization's ability to

function is dependent on how effectively they can perform these roles. Role stressors are the result of repeated interactions between people in various functions and within them that can be stressful. Role stressors, which include three aspects: role ambiguity, role conflict, and role overload, are significant components of job stress (Eatough et al., 2011).

The perception that one's personal resources are unable to meet the demands of one's work role is known as role overload (Eatough et al., 2011). Some aspects of psychological strain, including elevated job stress and psychological distress, have been linked to role overload, according to empirical research (Shultz et al., 2010; Rafferty & Jimmieson, 2010). Workload and work stress are related, according to several earlier studies, such as Zin et al. (2017), supporting this claim. The same conclusion was reached by Susiarty et al. (2019) in a study of inpatient nurses at the Mataram City General Hospital, who stated that workload had a positive and significant effect on work stress. Similarly, Kokoroko and Sanda (2019), in their study on OPD nurses in Ghana using hierarchical regression and correlation analysis, found that a high workload is correlated with a significant amount of work stress for nurses.

In particular, roles with conflicting or ambiguous standards of behavior are referred to as having role ambiguity (Rizzo et al., 1970); on the other hand, roles with excessive demands that exceed an employee's capacity—that is, their time, energy, and capability—are referred to as having role overload (Eatough et al., 2011). The claim that role conflict and work stress are related is supported by some prior research investigations, such as Zin et al. (2017), who studied the Malaysian police. Similarly, Ahmad et al.'s research from 2021, which used regression analysis and correlation, states that role conflict makes people more stressed at work. Sutarmin et al. (2022) found that employees at the Office of Communication, Informatics and Sandi, East Lombok Regency, West Nusa Tenggara Province, felt more work stress than the level of conflict they experienced. The study used both descriptive and inferential statistical analysis with PLS. Similarly, several earlier studies such as Zin et al. (2017), who studied the Malaysian police, support the hypothesis that role ambiguity and work stress have a relationship. Similarly, Ahmad et al. (2021) found that role ambiguity increases work stress in a regression and correlation analysis study. Likewise, Obiageli et al. (2022), who conducted research at Deluxi Nigeria Limited using the SmartPLS path analysis, stated that Job Stress is influenced by role ambiguity. So, according to the literature and previous research, the following hypotheses were developed.

H1: workload has a significant effect on job stress

H2: ambiguity has a significant effect on job stress

H3: role conflict has a significant effect on job stress.

#### *Role stressors, job stress and CWB*

Several studies investigated the differential effects among the three role stressors or how they relate to CWB when combined. The three role stressors have varying effects on how CWB is carried out. According to Zhang et al. (2019), role ambiguity was most closely correlated with CWB, followed by role conflict and role overload. Several prior studies that found the workload to be a significant predictor of CWB in Nigerian organizations (Uzondu et al., 2017) support the hypothesis. High workloads have been confirmed by research by Ugwu (2017) as a precursor to CWB in Nigerian organizations. Chen et al. (2017) found that employees' CWB is positively correlated with workload, time pressure, and work-family

conflict. Additionally, Ugwu and Asogwa (2018) conducted research on nurses from five hospitals in southeast Nigeria and found a direct and positive correlation between CWB and perceptions of a high workload.

Moreover, the conflict has a significant effect on CWB. This hypothesis is supported by some previous research investigations on interpersonal conflict, for example, the study carried out by Hasanati et al. (2018), which reveal that interpersonal conflict significantly influences CWB. Similarly, Zhang et al. (2019) found that role conflict, a type of conflict, has an impact on CWB in their multiple regression analysis study of employees in Mainland China. Although role conflict among Account Representatives at the Primary Tax Service Office is the subject of Basalamah and Sugiharto's (2021) multiple analysis, it is known to be associated with CWB following role ambiguity.

Uncertainty about an employee's position within an organization leads to role ambiguity, which has a significant impact on the output of that employee's work. Put another way, workers who perceive their roles as unclear also exhibit high levels of CWB; that is, the more ambiguous an employee's role is, the higher their perceived CWB. The claim that role ambiguity is most strongly associated with CWB is supported by several earlier studies such as Zhang et al. (2019) that used multiple regression analysis to study employees in Mainland China. Likewise, Basalamah and Sugiharto (2021), in a multiple regression analysis research on Account Representatives at the Primary Tax Service Office, found that that role ambiguity have a significant effect on CWB.

Numerous studies have demonstrated that work stress can be a significant predictor of employee behavior at work, particularly the negative behavior known as CWB. Ma and Li (2019), for example, found that work stress positively predicts employees' CWB using multiple regression analysis and SPSS. Similarly, Mahdi et al. (2018) found that work stress had a significant impact on teacher CWB in three schools in the city of Banda Aceh based on their multiple regression analysis research on high school teachers using SPSS. According to a 2019 study by Farrastama et al. (2019) using path analysis and SMartPLS on workers in Mataram, job stress significantly and favorably influences CWB. Then, employing multiple regression analysis, Mahadiputra and Piartrini (2021) concluded that Job Stress had a favorable and significant impact on CWB. Similarly, Hapsari et al. (2022) found that work stress has a positive and significant impact on CWB behavior in a study of civil servants in Lombok, using path analysis with SMartPLS. So, according to the literature and previous research, the following hypotheses were developed.

H4: workload has a significant effect on CWB

H5: ambiguity has a significant effect on CWB

H6: role conflict has a significant effect on CWB.

H7: Job Stress has a significant effect on CWB.

H8: Job Stress has a role as a mediator variable in the relationship among role stressors (workload, role ambiguity & role conflict) and CWB.

## **Methodology**

Because there are variables to be examined, this research method is descriptive method that assessed using verification approach . The objective is to provide an accurate, structured, factual picture of the relationships among the variables according to the review. As

mentioned by Churchill and Iacobucci (2005), this research was conducted using a survey technique, which is a method used to provide facts about phenomena so that it may be considered based on theoretical reviews or previous studies. Then, conclusions about employees' job stress and CWB can be drawn. .

The sampling method chosen is simple random sampling; because the population in the study was known, the sample was determined using the Slovin formula so that a sample size of 310 was obtained. For the measurement of CWB, indicators and items that developed by Bennett and Robinson (2000) and Spector et al. (2006) was used. The Role Stressor Scale (RSS) created by Rizzo, et.al. (1970) was used to assess role stressors. There are eight items on this scale. Based on Robbins (2016), a simplified the Job Stress Scale (JSS) that consist of nine items was used in this research The method of analysis using Structural Equation Model (SEM) was used for verification. This study requires an analysis of data and its interpretation that will be used to answer research questions and identify specifics social phenomena. As a result, data analysis is the process of simplifying data into a form that is easier to read and analyze. To evaluate the proposed hypothesis, a causality or path analysis model will be used in this research. . The statistical expert Lisrel's analytical approach is SEM (Structural Equation Modeling). Meanwhile, the Sobel test is used in the mediation test. .

## Results

Before evaluating the correlation among variables, the results of the Goodness of fit from the data were investigated.. The following table shows the criteria of goodness of fit for the SEM analysis using Lisrel.

**Table 1.**

*Result of Goodness of fit testing*

No.	Goodness of Fit Index	Cut-off Value	Result	Statement
1	Chi-Square	Under Table value	332,37 < 200,33	Good Fit
2	Significant Probability	$\geq 0.05$	0.065	Good Fit
3	RMSEA	$\leq 0.08$	0.019	Good Fit
4	GFI	$\geq 0.90$	0.976	Good Fit
5	AGFI	$\geq 0.90$	0.961	Marginal Fit
6	RFI	$\geq 0.90$	0.917	Good Fit
6	NFI	$\geq 0.95$	0.954	Good Fit
7	CFI	$\geq 0.94$	0.961	Good Fit

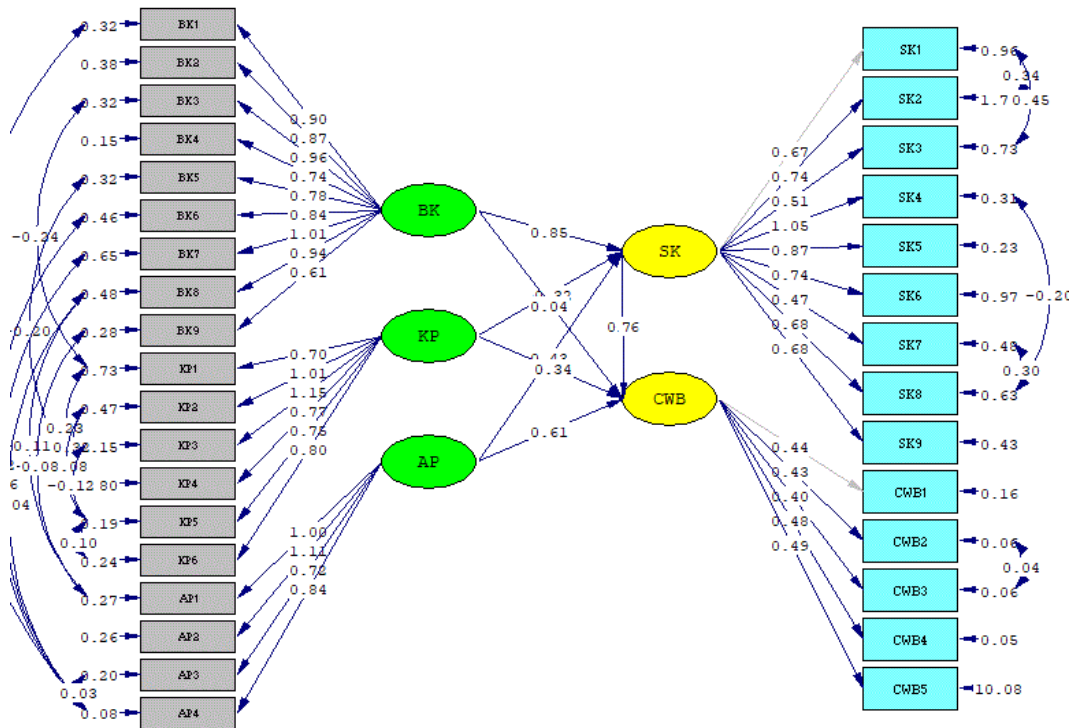
Source: The result of data processing (2023)

As presented in Table 1, SEM was used to examine the relationship among variables for proof that this model was acceptable. The test on the suitability of the model shows that this model is fit because almost all the cut-off values of the test indicators can be fulfilled. Even though there is one test variable that is below the cut-off value, the difference is not too significant; namely, GFI shows a marginal or unfit level of acceptance, because the value range close to 0.9 is still acceptable.

The structural model's interpretation of job stress and CWB is shown in Figure 1. The relationship among the dependent variable, the mediator, and the explanatory factors is shown by this model. This model, comparable to regression models, enables the relative importance of the model's variables to be assessed. The results displayed in Figure 1,

demonstrated that each support's direct influence was examined and found to be substantial and that the impression of job stress functions as a complete mediator in the relationship among role stressors (workload, role ambiguity and role conflict) and CWB.

**Figure 1.**  
*Standardize model structural*



Based on the results of structural modeling as shown in Figure 1, the parameter of the hypothesis test uses a comparison of the t value, namely if the t count > t table (1.96), then H0 is rejected and H1 is accepted. The results of hypothesis testing are then summarized in Table 2:

**Table 2.**  
*Structural equations*

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SK = 0.850*BK + 0.316*KP + 0.427*AP, Errorvar.= 0.0931 , R <sup>2</sup> = 0.907				
(0.103)	(0.0691)	(0.0608)	(0.0236)	
8.252	4.566	7.017	3.944	
CWB = 0.758*SK + 0.035*BK + 0.345*KP + 0.607*AP, Errorvar.= 0.644 , R <sup>2</sup> = 0.356				
(0.271)	(0.280)	(0.153)	(0.149)	(0.0900)
2.794	3.702	2.249	4.086	7.154
<hr/>				

The finding of statistical analysis indicate a correlation among the independent variable and the dependent variable. The significance test is after evaluating the hypothesis using correlation analysis using SEM analysis to find out if an independent variable's influence on the dependent variable occurs significantly. . The significance test, in this context, , an analysis of the variance test is between value of the t-table and the t-count. The resultant value is significant since the t-count is higher than the t-table. . The summary of the result of

data processing can be seen in Table 3:

**Table 3.**

*Finding summary*

Hypothesis	Coefficient	T-value	P-Values	Decisions
<i>Direct relations</i>				
workload -> job stress	0.850	8.252	0.003	Accepted
Role ambiguity -> job stress	0.316	4.566	0.014	Accepted
Role conflict -> job stress	0.427	7.017	0.025	Accepted
workload -> CWB	0.035	3.702	0.004	Accepted
Role ambiguity -> CWB	0.345	4.086	0.032	Accepted
Role conflict -> CWB	0.607	2.249	0.015	Accepted
Job stress -> CWB	0.758	2.794	0.002	Accepted
<i>Mediating</i>				
	<i>ta</i>	<i>tb</i>	<i>Sobel</i>	
workload -> Job stress -> CWB	8.252	2.794	2.586	Accepted
Role ambiguity -> Job stress -> CWB	4.566	2.794	2.185	Accepted
Role conflict -> Job stress -> CWB	7.017	2.794	1.989	Accepted

Source: Proposed by authors (2023)

The hypothesis testing structural model approves all the hypotheses (See Table 3). Workload has a significant impact on job stress ( $\beta = 0.85$ ,  $t = 8.25 > 1.96$ , and  $p = 0.003 < 0.05$ ), so the first research hypothesis (H1) that workload influences job stress is accepted. Role ambiguity significantly affect job stress ( $\beta = 0.32$ ,  $t = 4.57 > 1.96$ , and  $p = 0.01 < 0.05$ ); thus, the second research hypothesis (H2) is accepted. Role conflict significantly affect job stress ( $\beta = 0.43$ ,  $t = 7.02 > 1.96$ , and  $p = 0.03 < 0.05$ ), thus the third research hypothesis (H3) is accepted.

Workload significantly affect CWB ( $\beta = 0.04$ ,  $t = 3.70 > 1.96$ , and  $p = 0.00 < 0.05$ ), supporting the fourth research hypothesis (H4). Role ambiguity significantly affect CWB ( $\beta = 0.35$ ,  $t = 4.09 > 1.96$ , and  $p = 0.02 < 0.05$ ); thus, the fifth research hypothesis (H5) is accepted. Role conflict significantly affect CWB ( $\beta = 0.61$ ,  $t = 2.25 > 1.96$ , and  $p = 0.00 < 0.05$ ), supporting the sixth research hypothesis (H6). Job stress significantly affect CWB ( $\beta = 0.76$ ,  $t = 2.79 > 1.96$ , and  $p = 0.00 < 0.05$ ); thus, the seventh research hypothesis (H7) is accepted.

Finally, for the evaluation of the eighth hypothesis (H8), it is confirmed that job stress has a mediating effect between workload, Role ambiguity, and role conflict on CWB (Sobel's statistic = 2.59, 2.19, and 1.99 sequentially).

## Discussions

One of the objectives of this study was to analyze the influence of job stress (perceived antecedents and impact) on CWB from an organizational perspective, given the current lack of a theoretical foundation for job stress. We determined role stressors (workload, role ambiguity, and role conflict) as significant antecedents of job stress and CWB based on the results of the statistical analysis.

The major influence of workload on job stress is aligned with that reported in previous research, indicating a strong correlation on job stress. This research seems to be consistent with studies by Zin et al. (2017), Kokoroko and Sanda (2019), and Susiarty et al. (2019), which indicated that workload has a significant effect on job stress as well as the role

ambiguity has a significant effect on job stress. The result of this research seems to be consistent with studies by Zin et al. (2017), Ahmad et al. (2021), Sutarmin et al. (2022), and Obiageli et al. (2022), which indicated that role ambiguity has an insignificant effect on job stress.

Further, role stressors (workload, role ambiguity and role conflict) also have a significant effect on CWB. The result of this research seems to be consistent with studies by Zhang et al. (2019), Uzundu et al. (2017), Ugwu (2017), Chen et al. (2017), Ugwu and Asogwa (2018), which stated that perceptions of high workload were directly and positively related to CWB. The result also shows that there is a relationship between role ambiguity and CWB, or the higher the level of role ambiguity of an employee, the higher the perceived CWB. This result is reinforced by several previous studies conducted by Zhang et al. (2019); Basalamah and Sugiharto (2021) that role ambiguity has a significant effect on CWB. The conflict has a significant effect on CWB. This result is reinforced by several previous studies conducted by Hasanati et al. (2018), Zhang et al. (2019), and Basalamah and Sugiharto (2021) that role conflict is related to CWB.

So work stress can be an important predictor of employee behavior at work, especially negative behavior known as CWB, for example, job stress has significant effects on CWB. This statement is reinforced by several previous studies conducted by Ma and Li (2019), Mahdi et al. (2018), Farrastama et al. (2019), Mahadiputra and Piartrini (2021), Hapsari et al. (2022), stated that work stress has a positive and significant effect on CWB. Even though Lestari and Rino (2021) stated that work stress had a negative and significant effect on CWB.

Our empirical analysis's results offer strong evidence regarding the significance of role stressors, which were found to have a significant impact on CWB and job stress. The results show that the greatest effect on job stress and CWB has been correlated to the variety of role stressors, which include workload, role ambiguity, and role conflict. Overall, the results of this study provide evidence that job stress has a mediating effect on the relationship between CWB and role stressors like workload, role ambiguity, and role conflict.

## **Conclusion**

This study implements path analysis and modern mediation techniques using the Sobel test to explain the relationship among role stressors (Independent), CWB (Dependent), and job stress (Mediator). Data analysis validates and supports each of the research hypotheses. This study shows that role stressors (workload, role ambiguity, and role conflict) and high job stress are the causes of increased CWB. This study's design highlights the need for human resource administrators to monitor and identify variables that could raise or lower CWB. Employees in the automotive industry found that reduced role stressors would result in lower CWB levels. Employees would be more dedicated to the automotive industry when given a reasonable amount of opportunity and equality to handle. Consequently, even in situations where other role stressors are high, the useful findings implication is to minimize job stress. The findings show that a significant portion of the impact of role stressors on CWB may be mitigated if management can find ways to lessen conflict. In this scenario, management will be able to retain CWB workers despite the high level of role stressors.

Results from this research indicate that manager or owners of organizations need to take steps to reduce job stress and CWB in different dimensions of their jobs. However, changes

that would increase one dimension on a variable may not associated with a reduction of CWB in a different measurement. .

### Limitations

Every research has limitations, as does this research, which are related to geographic location. Data was collected from the automotive industry and was specific to the city of Bekasi. Since the results of this study may not apply to other organizations generally in other industries, it is not possible to generalize the validity of our conclusions to other employees in other industry sectors. Apart from that, there are different perceptions that each employee has in interpreting the item statements in the questionnaire, which makes the results biased.

There are two key recommendations for the company. First, improvements should be made to the operational process in retail automotive. The second is that in order to reduce workload, role ambiguity, and role conflict, employees should receive training whenever they are assigned a new task or work. They should also receive guidance relevant to the job or duty that clearly defines the responsibilities and role expectations. .

### References

- Ahmad, A., Zahid, S., Wahid, F. F., & Ali, S. (2021). Impact of Role Conflict and Role Ambiguity on Job Satisfaction the Mediating Effect of Job Stress and Moderating Effect of Islamic Work Ethics. *European Journal of Business and Management Research*, 6(4), 41-50. <https://doi.org/10.24018/ejbmr.2021.6.4.895>
- Basalamah, A. S., & Sugiharto, D. H. (2021). Pengaruh Stres Kerja terhadap Perilaku Kontraproduktif di Tempat Kerja – Studi pada Account Representative di Kantor Pelayanan Pajak Pratama. *Jurnal AgriWidya*, 2(1), 27-46.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360. <https://doi.org/10.1037/0021-9010.85.3.349>
- Brender-Ilan, Y., & Sheaffer, Z. (2019). How do self-efficacy, narcissism and autonomy mediate the link between destructive leadership and counterproductive work behaviour. *Asia Pacific Management Review*, 24(3), 212-222
- Chen, Y., Li, S., Xia, Q., & He, C. (2017). The Relationship between Job Demands and Employees' Counterproductive Work Behaviors: The Mediating Effect of Psychological Detachment and Job Anxiety. *Front. Psychol*, 8, 1890. <https://doi.org/10.3389/fpsyg.2017.01890>
- Churchill, G. A., & Iacobucci, D. (2005). *Marketing Research: Methodological Foundations* (9th Ed.). Thomson/South-Western, Cincinnati.
- Eatough, E. M., Chang, C. H., Miloslavic, S. A., & Johnson, R. E. (2011). Relationships of role stressors with organizational citizenship behavior: a meta-analysis. *J. Appl. Psychol.* 96, 619-632. <https://doi.org/10.1037/a0021887>
- Farrastama, D. N., Asmony, T., & Hermanto, (2019). Effect of Emotional Intelligence on Counterproductive Work Behavior with Job Stress as An Intervening Variable: Study on Civil Servants in Mataram City. *International Journal of Social Sciences and Humanities*, 3(1), 14-25. <http://dx.doi.org/10.29332/ijssh.v3n1.248>
- Fox, S., Spector, P.E. & Miles, D. (2001), "Counterproductive work behavior (CWB) in response to job stressors and organizational justice: some mediator and moderator tests for autonomy and emotions", *Journal of Vocational Behavior*, 59(3), 291-309.
- Hapsari, N. A., Agusdin, & Suryatni, M. (2022). The Effect of Big Five Personality and Organizational Justice on Counterproductive Work Behavior and Work Stress As Intervening

- Variables (Study Of Civil Servants In Central Lombok District). *IJISSET - International Journal of Innovative Science, Engineering & Technology*, 09(07), 2348-7968. <http://eprints.unram.ac.id/id/eprint/33090>
- Hasanati, N., Winarsunu, T., & Karina, V. D. (2018). The Influence of Interpersonal Conflict on Counterproductive Work Behaviour Mediated by Job Stress, *Advances in Social Science. Education and Humanities Research*, 133. <http://dx.doi.org/10.2991/acpch-17.2018.17>
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York, America: John Wiley & Sons.
- Katz, D., & Kahn, R. (1978). *The social psychology of organizations* (2nd Ed.). New York: John Wiley.
- Klotz, A. C., & Buckley, M. R. (2013). A historical perspective of counterproductive work behavior targeting the organization. *Journal of Management History*, 19(1), 114-132. <http://dx.doi.org/10.1108/17511341311286222>
- Kokoroko, E., & Sanda, M. A. (2019). Effect of Workload on Job Stress of Ghanaian OPD Nurses: The Role of Coworker Support. *Safety and Health at Work*, 10(3), 341-346. <https://doi.org/10.1016/j.shaw.2019.04.002>
- Lestari, W., & Rino, (2021). *The Effect of Organizational Justice and Job stress on Counterproductive Work Behavior with Job Satisfaction as a Mediation Variable in the Food and Agriculture Office of Padang Panjang City*. Proceedings of the Eighth Padang International Conference on Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA-8 2021), *Advances in Economics, Business and Management Research*, Vol. 659. <https://doi.org/10.2991/aebmr.k.220702.046>
- Ma, L., & Li, W. L. (2019). The Relationship between Stress and Counterproductive Work Behavior: Attachment Orientation as a Moderate. *Open Journal of Social Sciences*, 7(4), 413-423. <https://doi.org/10.4236/jss.2019.74033>
- Mahadiputra, I. G. E. S., & Piartrini, P. S. (2021). The Moderating Role of Emotional Intelligent on the Relationship among Job Stress, Organizational Justice and Counterproductive Behavior. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 672-683.
- Mahdi, S., Ibrahim, M., & Armia, S. (2018). The Role of Negative Emotions on the Relationship of Job Stress and Counterproductive Work Behavior (Research on Public Senior High School Teachers). *International Journal of Asian Social Science*, 8(2), 77-84. <https://doi.org/10.18488/journal.1.2018.82.77.84>
- Muhdar, H. M. (2012). Stres Kerja dan Kinerja dalam Perspektif Teori dan Bukti Empirik. *Jurnal Ekonomika Bisnis*, 3(2). <https://doi.org/10.22219/jibe.v3i2.2234>
- Obiageli, A. J., Yusuf, A. A., & Shuaibu, H. (2022). Effect of Job Stress on Employee Conterproductive Work Behaviour: A Case Study of Deluxi Nigeria Limited. *International Journal of Management, Social Sciences, Peace and Conflict Studies (IJMSSPCS)*, 5(2), 317-330.
- Rafferty, A. E., & Jimmieson, N. L. (2010). Team changes climate: a group-level analysis of the relationships among change information and change participation, role stressors, and well-being. *Eur. J. Work Organ. Psychology*, 19, 551-586. <http://dx.doi.org/10.1080/13594320903007869>
- Raza, A., Azeem, M., Humayon, A., & Ansari, N. U. A. (2017). The Impact of Pay Satisfaction, Job Stress, and Abusive Supervision on Turnover Intention among Banking Employees. *Sarhad Journal of Management Sciences*, 3, 272-284. <http://dx.doi.org/10.31529/sjms.2017.3.2.7>
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in co mplex organizations. *Administrative Science Quarterly*, 15(2), 150-163. <http://dx.doi.org/10.2307/2391486>
- Robbins, S. P. (2016). *Perilaku Organisasi*. Alih Bahasa: Benyamin Molan. Penerbit PT. Indeks, Kelompok Gramedia. Jakarta.

- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555-572. <https://doi.org/10.2307/256693>
- Saranani, F., Setiawan, M., & Asraf. (2022). *Stres Kerja*. CV Media Sains Indonesia
- Shultz, K. S., Wang, M., & Olson, D. A. (2010). Role overload and underload in relation to occupational stress and health. *Stress Health*, 26, 99-111. <http://dx.doi.org/10.1002/smi.1268>
- Silva, H., & Ranasinghe, R. (2017). The Impact of Job Stress on Deviant Workplace Behaviour: A Study of Operational Level Employees of Comfort Apparel Solutions Company in Sri Lanka. *International Journal of Human Resource Studies*, 7. <http://dx.doi.org/10.5296/ijhrs.v7i1.10901>
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68(3), 446-460. <https://doi.org/10.1016/j.jvb.2005.10.005>
- Susiarty, A. Suparman, L., & Suryatni, M. (2019). The Effect of Workload and Work Environment on Job Stress and Its Impact on The Performance of Nurse Inpatient Rooms At Mataram City General Hospital, *Scientific Research Journal (SCIRJ)*, VII(VI), 32-40. <https://doi.org/10.31364/SCIRJ/v7.i6.2019.P0619661>
- Sutarmin, D., Nurmayanti, S., & Hermanto, (2022). The Influence of Role Ambiguity and Role Conflict on Job Stress and Cyber loafing of Employees at the Department of Communication, Information and Encryption, East Lombok Regency, West Nusa Tenggara Province, Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 9(12), 421-429. <http://dx.doi.org/10.18415/ijmmu.v9i12.4280>
- Ugwu, F. (2017). Contribution of perceived high workload to counterproductive work behaviours: Leisure crafting as a reduction strategy. *Practicum Psychologia*, 7(2), 1-20
- Ugwu, F. O., & Asogawa, F. O. (2018). Walking the Tightrope: Perceived High Workload, Positive Affectivity and Counter Productive Work Behaviors in the Nigerian Context. *Psychology and Behavioral Science International Journal*, 8(3), 1-9. <http://dx.doi.org/10.19080/PBSIJ.2018.08.555739>
- Uzundu, C. N., Nwonyi, S. K., & Ugwumbor, E. T. (2017). Abusive supervision, work tension and overload as predictors of counterproductive work behaviour. *International Journal of Health and Psychology Research*, 5(3), 37-48
- Zhang, Y., Crant, J. M., & Weng, Q. D. (2019). Role stressors and counterproductive work behavior: The role of negative affect and proactive personality. *International Journal of Selection and Assessment*, 27(1), 1-13. <http://dx.doi.org/10.1111/ijasa.12255>
- Zin, M. L. M., Ibrahim, H., & Noor, M. H. M. (2017). Determinants of Job Stress among Royal Malaysian Police (RMP): A Conceptual Framework. *Journal of Advanced Research in Business, Marketing, and Supply Chain Management*, 1(1), 49-53. <http://dx.doi.org/10.1018/j.jarims.2017.10.017>