The Job Stress as a Mediation Between Role Conflict and Employee Performance

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ABSTRACT
There has been continuous scrutiny of employee performance as it is a measure of both employee and organizational success. However, the determinants of employee performance are not yet convincing. Two inconclusive determinants of employee performance identified from the literature are role conflict and job stress. This study examines the mediating role of job stress between role conflict and employee performance. Primary data were collected from 102 employees of the Regional Financial and Asset Management Office in Yogyakarta, Indonesia. Structural Equation Model (SEM) was employed to analyze the data. The results indicated that role conflict positively and directly affected job stress. However, it negatively influenced employee performance. Based on the Sobel test, the results demonstrated that job stress mediated the relationship between role conflict and employee performance.

Keywords: Job Stress, Role Conflict, Employee Performance.

1. INTRODUCTION
There has been continuous scrutiny of employee performance as it is a measure of both employee and organizational success. Moreover, employee performance can quickly change due to many influencing factors. Two factors that are currently of concern as the causes of decreased employee performance are role conflicts and job stress [1], [2], [3], [4], [5], [6].

Role conflict occurs when an employee faces uncertainty about role or job, or if he/she is required to perform a position outside of his/her expertise [6]. In the same vein, Kusumawardani, Suprayitno, and Utami [7] argue that role conflicts are experienced by employees when their roles are unclear, or the employees have many roles since they have to do several jobs.

Literature reports that role conflict potentially reduces employee performance [2], [8], [9]. However, the influence of role conflict on employee performance remains unclear since there are different studies’ results. For example, research conducted by Ismarhadi [10] and Sari, Astuti, and Nurtjahjono [9] yielded a result that role conflict positively affected employee performance. The researchers argued that employees who experienced role conflict would foster an urge to solve the problem and keep their performance. In another study, role conflict had a non-significant influence on job performance [11].

Several researchers have predicted that an unclear relationship between role conflict and employee performance is due to the presence of another variable, namely job stress. Kurniawan and Cahyono [12] revealed that job stress mediated the relationship between role conflict and employee performance. Silvia and Yunia [13] supported the finding that job stress mediated the role conflict and employee performance. When the job stress emerges as a mediator, the influence of role conflict and job performance is significant.

The research problems identified are an unconvincing relationship between role conflict, job stress, and employee performance. This study aims to examine the relationships among role conflict, job stress, and employee performance, especially the mediating role of job stress between role conflict and employee performance.
2. LITERATURE REVIEW

Role Conflict

Rizzo, House, and Sidney [14] proposed a role theory that underlies the concept of role conflict. This conflict occurs when the role or behavior expected of an individual is inconsistent. Role conflicts arise when various demands from several roles cause employees to find it challenging to determine what demands must be met without ignoring other demands. Role conflict can also occur when a person is faced with role expectations that are inconsistent with the various social statuses or the status of life they live in [15]. It happens when there are two different work orders simultaneously, and in these two orders, there are orders that are contrary to the field of work being carried out, and the execution of one order alone will result in the neglect of another order. The emergence of this role conflict causes discomfort at work and tensions at work. Therefore, this role of conflict can decrease the quality of employee work.

Employee Performance

Performance is an employee’s work result both in quality and quantity in carrying out all his/her duties following the organizational responsibilities [16]. The work results, of course, follow the organizational standards. Correspondingly, performance is the work accomplished by a person or group of people in an organization, both quantitatively and qualitatively, by the authorities and responsibilities that have been given, does not violate the law, and follows the organizational values and ethics [17].

The literature reports ample evidence that employee performance is affected by role conflicts [1], [7], [8], [18], [19], [5]. The findings uncovered that role conflict negatively influenced employee performance. This negative and significant effect means that if the role conflict experienced by an employee is high, the employee performance will decrease. Vice versa, if an employee’s role conflict is low, the employee performance will be high. The emergence of role conflict causes a feeling of discomfort in completing the job. This condition can potentially reduce employee performance. Based on the research results discussed above, the first hypothesis is stated as follows:

H1: Role conflict negatively and significantly affects employee performance

Job Stress

Job stress theory refers to the stress theory, which is commonly classified into three approaches. The first theory is the Stress Stimulus Model, which gained prominence in 1940 and 1950 [20]. The stress stimulus model is a stress model that explains that stress is an independent variable or causes humans to experience stress [21]. In other words, stress is an environmental situation that makes a person feels very stressed [20], and the individual only receives stress stimuli directly without any assessment process [22]. The second is the Stress Response Model. Bartlett [20] affirmed that stress is a reaction or body response that affects a person. The stress response can be defined as the body's physical reaction to existing stress sources or stimuli detrimental to the body. The third is the transactional approach proposed by Lazarus and Folkman [23]. The transactional approach views stress as an interaction between a person and his/her environment. It refers to individuals’ feelings or perceptions that their environment has burdened or exceeded their resources and threatened their well-being.

Environmental factors involved in the stress process are called job stressors, and individual reactions to these stressors are referred to as stress reactions or strains. The strains can be grouped into three types of strains: (1) Psychological strains, for example, anxiety and burnout, (2) Physiological strains, such as high blood pressure and rapid heartbeat, (3) Behavioral strains, e.g., absenteeism and turnover [24].

Like role conflicts, job stress also affects one's performance. When employees feel pressured or burdened while completing their work, their performance will be impaired. The empirical research results revealed that increasing job stress would reduce one's job, and conversely, when job stress decreased, it would improve one's performance [2], [3], [4], [5], [6]. Based on these empirical instructions, the following hypothesis was proposed:

H2: Job stress negatively and significantly affects employee performance.

Job stress and role conflict both affect employee performance. Interestingly, job stress and role conflict also have a relationship. There is evidence that role conflict is a determinant of job stress [25], [26]. When an employee experiences role conflicts, pressures will arise in his/her work so that he/she experiences stress. High role conflict tends to cause employees to experience job stress easily. It can be inferred that concerning the relationship between the three variables (role conflict, job stress, and performance), job stress acts as both an antecedent and a consequence. Job stress occurs after a person experiences role conflict, and it results in reduced performance. Therefore, the following hypotheses were proposed:

H3: Role conflict positively and significantly affects job stress.

H4: Job stress mediates the influence of role conflict on employee performance.
The relationship between the three constructs can be modeled as follows.

![Diagram of research model]

Figure 1. Research model

3. RESEARCH METHOD

Research setting and data collection

The study was based on a quantitative approach to testing the hypotheses. The data were gathered from the Regional Financial and Asset Management Office employees in Yogyakarta, one of Indonesia's provinces. The study involved all members of the population as the respondents (113 employees). The data used in this study were primary data and collected through a structured questionnaire. Ten targeted respondents did not return the questionnaire. One of the 103 returned questionnaires was not included in the analysis since the answers were not complete. The response rate of the respondents was 90%.

Measures

Role conflict is defined as the compatibility-incompatibility dimension of role requirements, where conformity or compatibility is assessed relative to a set of standards or conditions that affect role performance [14]. Role conflict was measured on an eight-item (5-point) scale (e.g., I am doing work that I should not be doing), adopted from [14] that reflect the four dimensions of role conflict, which are:

1. Time-based conflict. It is a role conflict caused by the limited time to do work and time with family. This type of role conflict is usually related to schedules, the number of hours worked, employee overtime, shift absence, and lack of control over work schedules.
2. The conflict between the focal person's internal standards or values and the defined role behavior. It is a person-role conflict of the focal person as he/she fills a single position or role.
3. The conflict between several roles for the same person requiring different or incompatible behaviors or changes in behavior as a function of the situation
4. The conflict between expectations and organizational demands in the form of incompatible policies, conflicting requests from others, and incompatible standards of evaluation

The mediating variable, job stress, is an imbalance of physical and psychological conditions that affect an employee's emotions, thought, and condition due to the employee's high pressures [27]. The indicators of job stress include (1) excessive workload, (2) pressure and time pressure in completing a job, (3) feedback from superiors regarding the lack of good work, (4) insufficiency of authority in carrying out job responsibilities, and (5) various forms of change in organizations.

The independent variable, work performance, is defined as the results of employees' work in terms of quality and quantity following the responsibilities that have been given [28]. Four indicators utilized to measure the variable: (1) employee achievement, both in term of quantity and quality, (2) cooperation amongst employees, (3) skills used for completing tasks, (4) employee's responsibility or willingness to be responsible for policies, work results, and behavior.

All variables' parameters were measured on a 5-point Likert scale ranging from "strongly disagree to the strongly agree."

4. RESULTS AND DISCUSSIONS

Demographic Analysis

| Table 1. Respondent characteristics |
|-------------------------------------|
| Category   | Frequency | Percentage |
| Gender     |           |            |
| Male       | 49        | 48%        |
| Female     | 53        | 52%        |
| Age        |           |            |
| <26        | 1         | 0,98%      |
| 26-36      | 18        | 17,65%     |
| 36-46      | 32        | 31,37%     |
| 46-56      | 50        | 49,02%     |
| >56        | 1         | 0,98%      |
| Education  |           |            |
| HS         | 30        | 29,41%     |
| D          | 19        | 18,63%     |
| UG         | 41        | 40,20%     |
| G          | 12        | 11,76%     |

H.S.: High School
D: Diploma
U.G.: Undergraduate/Bachelor
G: Graduate/Master
Table 1 depicts that 52% of the respondents are female, and 48% are male. It could be inferred that less than 1% of respondents was in the age group of below 26 years; 17.65% were in the age group of 26-36 years; 32.37% were in the age group of 37-46 years; 49.02% were in the age group of 47-56 years; one respondent or 0.98% was in the age group of above 56 years. It was interpreted that 29.41% of the respondents had studied in H.S., 18.63% were diploma holders, 40.20% were bachelor holders, and 11.76% were graduates.

Data Analysis

The data were analyzed using the Structural Equation Model (SEM), an analytical technique for testing the hypothesized theoretical model by examining the model fit [29]. SEM enables the researchers to examine the relationship between exogenous and endogenous variables simultaneously and allows testing of the mediating variables [30], [31]. The analysis was carried out with the help of AMOS (version 22).

The first stage of data analysis measured the variables employing the Confirmatory Factor Analysis (CFA) technique. It examined the fitness of exogenous and endogenous constructs. The CFA test results showed that the indicators of the exogenous and endogenous constructs in the tested model were all significant (because the P-value was ≤ 0.05). There were no negative variants in the model. All indicators in the exogenous and endogenous construct CFA models were valid because they met the standard loading factor value of ≥ 0.5 [30]. The reliability test was performed by looking at the construct reliability (C.R.) values. The results disclosed that the C.R. values for three variables were higher than 0.7 (0.9027 for role conflict; 0.8846 for job stress; and 0.9310 for performance), meaning that all variables were reliable [30].

Model Test

The next analysis was to identify the goodness of fit (GoF). It measured the suitability of the observed or actual inputs (covariance or correlation matrices) with the proposed model's predictions [32]. Figure 2 presents the model testing results.

The next analysis compared the model based on multiple fit and chose the best model as tabulated in Table 2. In this stage, the data and model were checked for their suitability. The model is feasible if it meets at least one criterion [30].

Table 2. The goodness of fit index

| The goodness of fit index | Cut-off value | Model | Evaluation |
|---------------------------|---------------|-------|------------|
| Chi-square                | 263.147 (df=227) | 252.556 | Fit |
| Significant probability   | ≥ 0.05        | 0.117 | Fit |
| RMSEA                     | ≤ 0.08        | 0.033 | Fit |
| GFI                       | ≥ 0.90        | 0.830 | Marginal |
| AGFI                      | ≥ 0.90        | 0.793 | Marginal |
| CMIN/DF                   | ≤ 2.0         | 1.113 | Fit |
| TLI                       | ≥ 0.90        | 0.980 | Fit |
| CFI                       | ≥ 0.90        | 0.982 | Fit |

The analysis results revealed four indices met the requirements: RMSEA, MNIN, TLI, and CFI. The values of RMSEA, the root mean square error of approximation, was 0.033 or less than 0.08, meaning that the research model was fit [30], [31]. Besides, CMIN/DF is a parsimonious suitability index that measures the model’s goodness of fit with the number of estimated coefficients expected to achieve conformity. The results of CMIN/DF in this study were 1.113, indicating that the research model was fit. Meanwhile, TLI (Tucker Lewis Index) is an alternative incremental fit index with values ranging from 0 to 1, and a value of ≥ 0.90 is recommended as a good fit. The analysis results produced a TLI value of 0.98, which signified that the model was fit.

Moreover, the CFI (Comparative Fit Index) is an incremental suitability index. Values range from 0 to 1, and when the values are ≥ 0.90, the model is recommended as a good fit, while the value of 0.8 ≤ GFI <0.90 is often referred to as marginal fit. This study's CFI value was 0.982 or more than 0.90, implying that the research model was fit.
Hypothesis Testing

Since the proposed model has met the requirements of Goodness of Fit, the hypothesis test was carried out. The test was conducted using a t-value at a significance level of 0.05. The t-value in the AMOS program is the Critical Ratio (C.R) value in the Regression Weight of the fit model. If the value of Critical Ratio (C.R) $\geq 1.967$ or the probability value ($P$) $\leq 0.05$, then $H_0$ is rejected (the research hypothesis is accepted). The Regression Weight value resulting from processing by AMOS on the model is shown in the following table:

Table 3. Hypothesis Testing

| Performance | Role Conflict | Job Stress | Employee Performance |
|-------------|---------------|------------|----------------------|
| Estimate    | -0.200        | -0.748     | -0.700               |
| S. E.       | 0.100         | 0.140      | 0.112                |
| C. R        | $-2.010$      | $5.336$    | $6.257$              |
| P           | 0.044         | 0.000      | 0.000                |
| Result      | Significant, negative | Significant, positive | Significant, negative |

The results of testing the relationship between role conflict and performance showed that the estimated parameter value of the coefficient of standardized regression weight was -0.200, and the value of C.R was -2.010. It exhibited that the relationship between role conflict and employee performance was negative. The data analysis also revealed that a probability value was 0.044 ($p < 0.05$), denoting that $H_1$ was supported: "Role conflict negatively and significantly affects employee performance."

The test results on the relationship between job stress and performance showed that the estimated parameter value of the coefficient of standardized regression weight was -0.700, and the value of C.R was -6.257. It exposed that the relationship between job stress and employee performance was negative. The probability value was 0.000 ($p < 0.05$), representing that $H_2$ was supported: "Role conflict positively and significantly affects job stress."

The examination of role conflict’s influence on job stress yielded a value of the estimated parameter of the standardized regression weight coefficient of 0.748, and the value of C.R was 5.336. The values showed that the relationship between role conflict and job stress was positive. It signified that the higher the role conflict experienced by employees, the job stress would also be high or increase. The probability value obtained was 0.000 ($p < 0.05$). Therefore, $H_3$ was supported, stating that "Role conflict positively and significantly affects job stress."

Table 4. Standardized Direct Effects

| Role Conflict | Job Stress | Employee Performance |
|---------------|------------|----------------------|
| Job Stress    | 0.620      | 0.000                |
| Employee Performance | -0.181  | 0.761 | 0.000 |

To analyze the mediation effect, a standardized direct effect value was compared with the standardized indirect effect value. The value of standardized direct effect (0.181) was smaller than the value of standardized indirect effect (0.472). It indicated that the job stress variable had an indirect effect (or mediated) on the influence of role conflict on employee performance. $H_4$ was supported.

Table 5. Standardized Indirect Effects

| Role Conflict | Job Stress | Employee Performance |
|---------------|------------|----------------------|
| Job Stress    | 0.000      | 0.000                |
| Employee Performance | -0.472  | 0.000 | 0.000 |

5. CONCLUSION

This study aimed to determine the effect of role conflict on employee performance mediated by job stress on Yogyakarta City Regional Financial and Asset Management Office employees. Based on data analysis and the discussion above, the research conclusions are as follow:

1. Role conflict negatively affected employees’ performance at the Yogyakarta City Regional Financial and Asset Management Office.
2. Role conflict positively influenced employees’ job stress at the Yogyakarta City Regional Financial and Asset Management Office.
3. Job stress negatively impacted employees’ performance at the Yogyakarta City Regional Financial and Asset Management Office.
4. Role conflict had a negative effect on employee performance through the mediation of job stress.

AUTHORS’ CONTRIBUTIONS

The first author contributed to the literature review and hypothesis development. The first and second
authors participated in designing the research and data analysis. All authors read and proved the final manuscript.

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