International Journal of Economics and Management Sciences
Volume. 1 No. 4 November 2024
e-ISSN: 3046-9279, p-ISSN :3048-0965, Page 313-323
DOI: https://doi.org/10.61132/ijems.v1i4.329
Available online at: https://international.areai.or.id/index.php/IJEMS

Implementation Model of Job Rotation and Job Training in Enhancing Employee Performance Through Job Satisfaction as an Intervening Variable

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Abstract. *This research aims to analyze the influence of Job Rotation and Job Training on Employee Performance through Job Satisfaction. The unit of analysis for this study is PT BPR Arto Moro Semarang. This research is a causal-comparative type, with a sample size of 74 respondents collected through a questionnaire. The sampling method used is non-probability sampling with purposive sampling. The analysis tool employed in this study is Structural Equation Modeling (SEM) using the SmartPLS (Partial Least Square) version 4 application. The results of this study indicate a significant positive influence of Job Rotation on Job Satisfaction, Job Training on Job Satisfaction, and Job Rotation on Employee Performance. However, it does not show a significant impact of Job Satisfaction on Employee Performance and Job Training on Employee Performance at PT BPR Arto Moro.*

Keywords: *Job Rotation, Job Training, Job Satisfaction, Employee Performance*

1. INTRODUCTION

The Indonesian economy continues to develop over time, despite facing various challenges in the economic sector. This progress is closely linked to the contributions of financial institutions that play a vital role in driving the country's economy through the provision of capital. One key type of financial institution is the bank. Currently, the banking sector is expected to actively contribute to economic growth and improve living conditions for the community by mobilising public savings, collecting funds from the public, which are then redistributed by these financial institutions as loans for investment financing. Companies always have objectives for their business success, one of which is the banking sector entity, namely BPR (People's Economic Bank). BPR is a type of bank that operates either conventionally or under Islamic principles, without providing services in payment transactions, as the operational scope of BPR is more limited compared to commercial banks. The increasing number of BPRs in Central Java, particularly in Semarang, has resulted in intensified competition; therefore, there is a need for highly qualified human resources to enhance the quality of these BPR.

The success of a company can be achieved through satisfactory employee performance, which can be realised through effective and professional Human Resource Management. Several factors can influence employee performance, one of which is job rotation, an element

Received: September 17, 2024; Revised: September 28, 2024; Accepted: October 29, 2024; Published: November 02, 2024

that has the potential to affect employee performance. According to Mohan & Gomathi (2015), job rotation is the process of periodically changing an employee's tasks from one type of work to another. This process occurs when a particular task no longer presents a challenge to the employee, leading to a transfer to another job of similar difficulty that requires comparable skills. Therefore, to achieve higher employee performance, a company must ensure that the job rotation implemented is satisfying for employees and provides opportunities for growth and career development. Research by Suleman et al. (2022), Sholikhah et al. (2023), Marwanti et al. (2024), and Zaey et al. (2022) indicates that job rotation has a significantly positive effect on employee job satisfaction. Another study conducted by Widiastutik et al. (2022) shows that job rotation positively impacts employee performance, and job satisfaction can mediate the relationship between job rotation and employee performance. However, research by Ngatimun (2024) suggests that job rotation does not affect employee performance.

PT. BPR Arto Moro, one of the People's Economic Banks based in Semarang, Central Java, requires more capable employee performance in managing customers by enhancing the effectiveness of its staff. One way to provide opportunities for employee development and to prevent declines in performance due to boredom and stress is through job rotation. PT. BPR Arto Moro offers every employee the opportunity to advance their career if they demonstrate good performance, considering various factors such as the company's needs and the aspirations of the employees. In the context of career management, promotions and transfers are part of Human Resource Management that drive employees' careers in talent development. This policy is implemented to provide a comprehensive experience for each employee regarding the overall operations and business strategies developed by PT. BPR Arto Moro. In addition to job rotation, another factor influencing employee performance is training. Training refers to the company's efforts to support the learning process for employees regarding the skills required in their roles, which include knowledge, skills, and behaviours essential for achieving effective work performance (Subyantoro et al., 2022).

From the explanation above, the company should conduct regular training for employees to enhance their performance to achieve the company's objectives. Research by Sari et al. (2024), Diah et al. (2024), Lubis et al. (2024), and Sinaga et al. (2024) indicates that job training has a positive effect on employee performance. Meanwhile, Setiawan et al. (2021) and Assyahidah et al. (2024) conclude that job satisfaction can mediate the relationship between job training and employee performance. Additionally, research conducted by Mampuru et al. (2024) and Aulia & Setyaningrum (2023) shows that job training has a significantly positive direct effect on job satisfaction.

PT. BPR Arto Moro develops the competencies and quality of its employees by implementing a job training programme. The training is organised with the hope of providing human resources with high competencies to achieve the company's targets. Throughout 2023, the company has enrolled its employees in 46 training and competency development programmes, conducted both in-house and by third parties, utilising in-class learning, virtual training, and e-learning methods. PT. BPR Arto Moro develops the competencies and quality of its employees by implementing a job training programme. The training is organised with the hope of providing human resources with high competencies to achieve the company's targets. Throughout 2023, the company has enrolled its employees in 46 training and competency development programmes, conducted both in-house and by third parties, utilising in-class learning, virtual training, and e-learning methods.

The implementation of job rotation, initially intended to provide opportunities for employees to develop, has, in practice, been carried out by the company without first considering the backgrounds of the employees. Additionally, decisions made by supervisors sometimes do not align with the needs of the employees. Based on the phenomena occurring at BPR Arto Moro and the existing research gap, along with the insignificant findings from previous studies related to job rotation and employee performance, the researcher believes there are important and intriguing aspects to explore. This study aims to introduce a new variable, examining the influence of job training on employee performance through job satisfaction among employees at BPR Arto Moro in Semarang.

2. RESEARCH METHOD

This research is of a causal-comparative nature with a quantitative approach. The population for this study comprises all employees of PT BPR Arto Moro, totalling 279 individuals. The sample size calculation employs Slovin's formula, resulting in a sample of 74 employees from PT BPR Arto Moro. The sampling technique used in this study is non-probability sampling, specifically purposive sampling. The statistical method applied is Partial Least Squares (PLS) using SmartPLS version 4 software.

The data analysis technique used in this research is quantitative analysis, which is expressed in numerical form and calculated using statistical methods assisted by Partial Least Squares (PLS) with SmartPLS version 4 software. PLS is one of the Structural Equation Modelling (SEM) methods that is considered superior to other SEM techniques. PLS analysis consists of three stages: the inner model, the outer model, and hypothesis testing (Rahadi, 2023).

Data Analysis

Outer Model Analysis

The initial stage before testing the measurement model involves creating a model estimation, as illustrated in Figure 1. The measurement model test is conducted to demonstrate the results of validity and reliability assessments. In the process of forming a measurement model, the first step is to link each group of indicators to the corresponding latent variables. Each latent variable must have at least one indicator that measures it. The evaluation of the measurement model includes convergent validity, discriminant validity, and composite reliability.

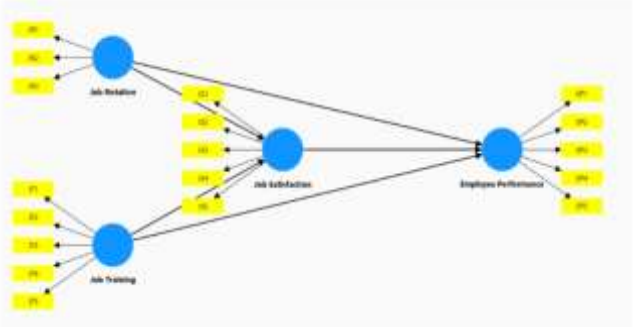

Figure 1. Model Estimation

Convergent Validity

Convergent validity is employed to assess item reliability (indicator validity), indicated by the loading factor value. The loading factor represents the correlation between the score of a specific questionnaire item and the score of the corresponding construct indicator. If an indicator has an outer loading value greater than 0.7, it is considered valid, allowing for further examination of the sample (Rahadi, 2023). The results of the convergent validity test are presented in Table 1.

Table 1. Convergent Validity Values Using Outer Loading (>0.7)

Indicator	*Job rotation*	*Job training*	*Job Satisfaction*	*Employee Performance*
JR1	0.872			
JR2	0.931			
JR3	0.815			
JT1		0.769		
JT2		0.911		
JT3		0.894		
JT4		0.859		
JT5		0.849		
JS1			0.834	
JS2			0.911	
JS3			0.894	
JS4			0.859	
JS5			0.849	
EP1				0.736
EP2				0.876
EP3				0.891
EP4				0.723
EP5				0.770

From Table 1, the outer model values, or the correlation between constructs and variables, have been satisfied, as the loading factor values are greater than 0.7. Therefore, in this study, convergent validity has been met.

Discriminant Validity

Discriminant validity can be assessed through the Average Variance Extracted (AVE) values. A good measurement model is indicated when the latent construct values have an AVE greater than 0.5.

Table 2. Average Variance Extracted (AVE) Values

Variable	AVE
Job rotation	0.763
Job training	0.736
Job Satisfaction	0.687
Employee Performance	0.646

Table 2 shows that all constructs meet the validity criteria, as indicated by AVE values above 0.50, in accordance with the recommended standards.

Composite Reliability

Reliability testing assesses the extent to which a measurement instrument can be trusted. A questionnaire is considered reliable if an individual's responses to the questions are consistent or stable. Starstedt, as cited in Rahadi (2023), states that if the composite reliability value is greater than 0.7 and the Cronbach's alpha value is also greater than 0.7, this indicates good reliability.

Table 3. Cronbach's Alpha and Composite Reliability Values

Variable	Cronbach's alpha	Composite Reliability
Job rotation	0.847	0.900
Job training	0.909	0.891
Job Satisfaction	0.887	0.894
Employee Performance	0.863	0.918

Table 4. R-square Value

Variable	R-square
Job Satisfaction	0.512
Employee Performance	0.420

From the table presented, it can be concluded that R-squared is the coefficient of determination that measures the extent to which the variables Job Satisfaction and Employee Performance are influenced by other variables in this study. The R-squared value for Job Satisfaction is 0.512, which means that 51.2% of the variation in Job Satisfaction can be

explained by the variables used in this research, while the remaining 48.8% is influenced by factors outside this study.

For the variable Employee Performance, the R-squared value is 0.420, indicating that 42% of the variation in Employee Performance can be explained by the variables used in this research, while the remaining 58% is influenced by factors outside this study.

F-Square Test

F-square is a metric used to assess the relative influence of independent variables on the dependent variable. The criteria for F-square values are as follows: 0.02 = weak, 0.15 = moderate, and 0.35 = strong.

Table 5. F-square Value

Variable	Job rotation	Job training	Job Satisfaction	Employee Performance
Job rotation			0.096	0.142
Job training			0.438	0.034
Job Satisfaction				0.036
Employee Performance				

Based on the table above, the influence of the job rotation variable is 0.096, which indicates a weak effect on Job Satisfaction. The job rotation variable has an influence of 0.142, which also signifies a weak effect on Employee Performance. The job training variable shows an influence of 0.438, indicating a strong effect on Job Satisfaction. The job training variable has an influence of 0.034, which is considered weak regarding Employee Performance. Lastly, the Job Satisfaction variable has an influence of 0.036, which also indicates a weak effect on Employee Performance.

Q-Square Test

The Q-square test is conducted to assess predictive capability using the blindfolding procedure. Values obtained of 0.02 (weak), 0.15 (moderate), and 0.35 (strong) are considered. The calculation of Q-square is performed using the following formula:

$Q^2 = 1- (1-R1^2) (1-R2^2)$

$Q^2 = 1- (1- 0,512) (1-0,420)$

$Q^2 = 1- (0,28304)$

$Q^2 = 0.717$

From the Q-square result of 0.717, it can be interpreted that the model formed is strong, allowing for hypothesis testing to be conducted.

Hypothesis Testing (Bootstrapping)

This study tests five hypotheses within the inner model. To determine whether a hypothesis is accepted or rejected, one can look at the significance values between constructs, t-values, and p-values, so that the estimates and standard errors are not calculated based on statistical assumptions but rather on empirical observations.

Hypothesis testing in SmartPLS is conducted using the bootstrapping method with standard sample criteria. A hypothesis will be rejected if t-values < 1.96 or p-values > 0.05, while a hypothesis will be accepted if t-values > 1.96 or p-values < 0.05, leading to the acceptance of (Hα) and the rejection of (H0). The results of the hypothesis testing can be seen in Table 6 and Figure 2.

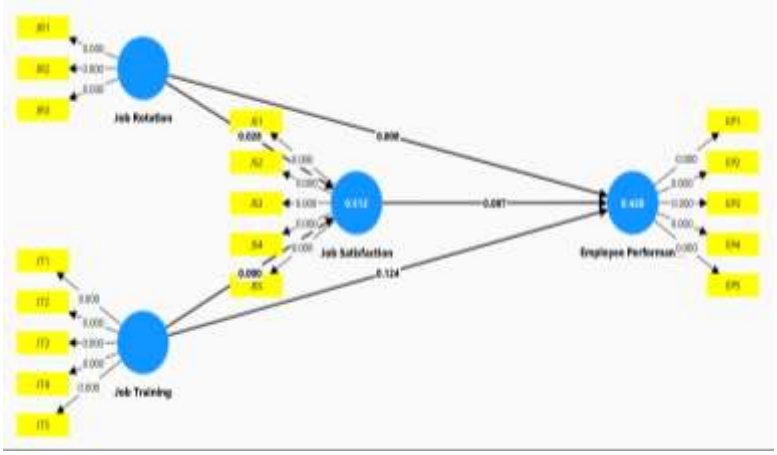

Figure 2. Relationship Analysis Using Bootstrapping

Table 6. Relationship Analysis Using Bootstrapping

Variable	Original Sample (O)	Sample Mean (M)	Standar Deviation	T-Statistic	*P-values*
JR→JS	0.256	0.253	0.116	2.199	0.028
JT→JS	0.546	0.555	0.091	5.978	0.000
JS→EP	0.207	0.202	0.124	1.662	0.097
JR→EP	0.355	0.366	0.092	3.866	0.000
JT→EP	0.200	0.213	0.130	1.539	0.124

The results of the bootstrapping test in this study, derived from the PLS analysis, are as follows:

3. RESEARCH RESULTS

Hypothesis Testing H1 (Relationship between Job Rotation and Job Satisfaction)

The effect of job rotation on Job Satisfaction among employees of PT BPR Arto Moro Semarang is 0.256, with a p-value of 0.028, as indicated by a t-value of 2.199. The positive original sample value indicates that job rotation has a positive effect, and the t-value shows significance regarding Job Satisfaction, thus Hypothesis 1 is accepted.

This finding aligns with the first hypothesis and corresponds with the research conducted by Marwanti et al. (2024), Suleman et al. (2022), and Zaey et al. (2022), which indicates that job rotation is a strategy that significantly positively affects employee job satisfaction.

Hypothesis Testing H2 (Relationship between Job Training and Job Satisfaction)

The effect of Job Training on Job Satisfaction among employees of PT BPR Arto Moro Semarang is 0.546, with a p-value of 0.000, as indicated by a t-value of 5.978. The positive original sample value indicates that Job Training has a positive effect, and the t-value shows significance regarding Job Satisfaction, thus Hypothesis 2 is accepted.

This finding aligns with the second hypothesis and corresponds with the research conducted by Mampuru et al. (2024), Aulia & Setyaningrum (2023), and Assyahidah et al. (2024), which indicates that job training is a strategy that significantly positively affects job satisfaction.

Hypothesis Testing H3 (Relationship between Job Satisfaction and Employee Performance)

The effect of Job Satisfaction on Employee Performance among employees of PT BPR Arto Moro Semarang is 0.207, with a p-value of 0.097, as indicated by a t-value of 1.662. The positive original sample value indicates that Job Satisfaction has a positive effect, but the t-value shows that it is not significant regarding Employee Performance, thus Hypothesis 3 is rejected.

This finding does not align with the third hypothesis, as higher job satisfaction should lead to improved employee performance.

Hypothesis Testing H4 (Relationship between Job Rotation and Employee Performance)

The effect of job rotation on Employee Performance among employees of PT BPR Arto Moro Semarang is 0.355, with a p-value of 0.000, as indicated by a t-value of 3.866. The positive original sample value indicates that job rotation has a positive effect, and the t-value shows significance regarding Employee Performance, thus Hypothesis 4 is accepted.

This finding aligns with the fourth hypothesis and corresponds with the research conducted by Sholikhah et al. (2023) and Widiastutik et al. (2022), which indicates that job rotation has a significant positive effect on employee performance.

Hypothesis Testing H5 (Relationship between Job Training and Employee Performance)

The effect of Job Training on Employee Performance among employees of PT BPR Arto Moro Semarang is 0.200, with a p-value of 0.124, as indicated by a t-value of 1.539. The positive original sample value indicates that Job Training has a positive effect, but the t-value shows that it is not significant regarding Employee Performance, thus Hypothesis 5 is rejected.

This finding does not align with the fifth hypothesis, as job training should enhance employee performance.

Indirect Effect Hypothesis Testing

The results of testing the indirect effect hypotheses through job satisfaction as an intervening variable, using path analysis with bootstrapping clarified through specific indirect effects, are as follows:

Table 7. Path Analysis Using Path Coefficients

Variable	Original Sample (O)	Sample Mean (M)	Standar Deviation	T-Statistic	*P-values*
JT→JS→EP	0,113	0,113	0,073	1,545	0,122
JR→JS→EP	0,053	0,049	0,042	1,264	0,206

Testing Job Satisfaction as a Mediator in the Effect of Job Rotation on Employee Performance

From Table 7, it shows that Job Satisfaction as a mediator in the effect of job rotation on Employee Performance is 0.113, with a p-value of 0.122, and the t-value is 1.545, which is less than the t-table value of 1.96. The positive original sample value indicates that Job Satisfaction as a mediator in the effect of job rotation has a positive influence, but the t-value shows that it is not significant regarding Employee Performance, thus the hypothesis test is rejected.

Testing Job Satisfaction as a Mediator in the Effect of Job Training on Employee Performance

From Table 7, it shows that Job Satisfaction as a mediator in the effect of Job Training on Employee Performance is 0.053, with a p-value of 0.206, and the t-value is 1.264, which is less than the t-table value of 1.96. The positive original sample value indicates that Job Satisfaction as a mediator in the effect of Job Training has a positive influence, but the t-value shows that it is not significant regarding Employee Performance, thus the hypothesis test is rejected.

4. CONCLUSION

Based on the discussion in the previous chapter, the following conclusions can be drawn:

1. Job rotation has a positive and significant effect on Job Satisfaction, indicating that job rotation can enhance Job Satisfaction.
2. Job Satisfaction has a positive and significant effect on Employee Performance, indicating that Job Satisfaction can improve Employee Performance.
3. Job Satisfaction does not have a significant effect on Employee Performance, indicating that Job Satisfaction cannot enhance Employee Performance.
4. Job Training does not have a significant effect on Employee Performance, indicating that Job Training cannot improve Employee Performance.
5. Job Training has a positive and significant effect on Job Satisfaction, indicating that Job Training can enhance Job Satisfaction.

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