

Effect of Job Rotation on Employee Performance in the Nigerian Institute for Transport Technology (NITT), Zaria

Suleiman Dayyabu Mohammed

Department of Public Administration

Faculty of Administration

Ahmadu Bello University (ABU), Zaria

Email: sdmohammed@abu.edu.ng

Phone: 08100099911

Richard Ken Dodo

Department of Public Administration

Faculty of Administration

Ahmadu Bello University (ABU), Zaria

Phone: 08036603757

Abstract

Employee performance is essential for the effectiveness and success of public sector organisations, particularly in institutions such as the Nigerian Institute of Transport Technology (NITT) Zaria, where skilled and adaptable personnel are required to deliver training, research, and transport development mandates. However, ineffective human resource practices, especially politically influenced and unfair job rotation, have contributed to skill imbalance, low morale, and reduced employee performance. This study examined the effect of job rotation on employee performance in NITT Zaria. Adam's equity theory was used as the theoretical framework. The study adopted a quantitative research approach using a descriptive survey design. The population comprised 1,192 employees, from which a sample of 285 was determined using Krejcie and Morgan's sampling table, while 253 valid responses were retrieved and analysed. Data were collected using structured questionnaires, and SPSS was used to analyse the data with descriptive statistics and simple linear regression. The result of the statistical analysis revealed that job rotation has a significant positive effect on employee performance in NITT Zaria. Hence, the finding was in line with Equity Theory. The study recommended that management of the institution should implement job rotation with fairness and transparency. It was therefore concluded that job rotation is a major human resource practice that increases the performance of employees in NITT Zaria.

Keywords: Job rotation, employee performance, equity theory, public sector, NITT Zaria, human resource management.

Introduction

The significance of employee performance cannot be overemphasised. Employee performance has been indispensable to the success and effectiveness of organisations in the public sector. It is a primary factor that ensures efficient service delivery, execution of policies, and achievement of governmental mandates (Fernandez & Moldogaziev, 2011). Accountability and efficient use of resources are ensured as a result of employees' high level of performance (Partoip, 2025). According to Gallup (2023), an increased level of employee performance improves commitment

and excellence in operations, which makes it a strategic organisation in the public sector to fulfil its societal roles despite fiscal constraints (Silitonga, 2020).

From the global perspective, the performance of employees has remained an unending problem because there are significant losses in productivity as a result of low employee engagement. As reported by Gallup (2023), only 23% of the global employees are engaged actively in their work, which leads to an annual loss of \$8.8 trillion. These problems emerged from job expectations that are unclear, problems of recognition, and other factors that negatively affect the effectiveness of the organisations (Gallup, 2023). In Africa, the challenges of employee performance are worse. Reports have shown that the level of engagement among employees is low, as Gallup (2023) reported engagement rates as low as 13% across the continent, predominantly due to limited career advancement options, poor workplace well-being initiatives, and resource constraints in public sector institutions (Gallup, 2023; Okwu et al., 2025). These factors give rise to high levels of turnover as well as a decline in the productivity of the workforce, especially in bureaucratic environments where managerial capacity is limited (Ajayi & Oladipo, 2024).

Nigeria, in particular, faces a high level of employee underperformance crisis, especially in the public sector. One of the major reasons for this underperformance is a lack of proper job rotation. Past studies highlighted that issues relating to the problem of job rotation significantly reduced the commitment and job satisfaction of employees. This is realistic because Gallup (2023) reported that the level of employee engagement among employees in Nigeria is at 11%, which is below the African average (Gallup, 2023). Specifically, at the Nigerian Institute of Transport Technology (NITT), Zaria, employee performance challenges are also prevalent. In the institution, job rotation remains underdeveloped due to rigid structures despite the power of the Council under the Act to regulate versatile transport units (NITT Act, 1986).

Specifically, the problem of job rotation at NITT Zaria is that there is high favouritism and politics, which goes against the NITT Act (1986) requirement for Council-regulated staff movement across transport units. A preliminary investigation by the researcher (2025) reveals that some employees get sent to juicy departments to make money and secure connections, while others remain static in one position for years, especially when they generate revenue from their current roles, which leads to unfairness and resentment. This political interference leads to widening skills gaps among the employees, leading to low morale and poor adaptability. Hence, their continued practice undermines NITT's ability to build a resilient workforce (NITT, 2025).

Despite the structured HR framework mandated by the NITT Act (1986), there is a persistent problem of politically driven job rotations, which has created a demotivated, skill-deficient workforce unable to fulfil NITT Zaria's critical transport sector mandate (NITT Act, 1986). Therefore, this study becomes essential to empirically examine how job rotation specifically impacts employee performance at NITT Zaria, filling the critical gap between policy intent and practice. Based on the statement of the problem, the objective of the study is to determine the effect of job rotation on employee performance in NITT Zaria. The hypothesis developed stated that:

H₀₁: Job rotation does not significantly affect employee performance in NITT Zaria.

Literature Review

Concept of Employee Performance

According to Donohoe (2019), employee performance refers to how employees perform in the place of work and how well they execute the job duties assigned to them. Organisations normally set performance targets for individual employees and the organisation as a whole in hopes of

increasing value to customers, minimising cost and operating efficiently. For an individual employee, performance may refer to work effectiveness, quality and efficiency at the task level. Also, according to Pradhan (2016), employees' performance signifies an individual's work achievement after exerting effort on the job, which is associated with getting meaningful work.

Performance is the result or level of success of a person as a whole during a certain period in carrying out tasks compared to various possibilities, such as work standards, targets or predetermined criteria that have been mutually agreed upon (Al Mehrzi & Singh, 2016). According to Shmailan (2016), employee performance is an action that employees take in carrying out the work done by the company. In organisational settings, employees' performance is the accumulated result of the skills, efforts and abilities of all the employees contributing to organisational improved performance leading towards its goal achievement (Dahkoul, 2018). Gitongu et al. (2016) stated that employee performance is among the critical factors that contribute significantly to organisational success. Learning organisations play an important role in enhancing employee performance through providing training and development for their employees. Employee performance plays an important role in organisational performance. Macky & Johnson (2002) pointed out that improved individual employee performance could improve organisational performance as well.

Performance is the level of attainment achieved by an individual, team, or organisation. It is the ability of the institution to achieve its goal. It is a way of thinking and communicating for building and problem-solving. The concept of performance itself involves both task performance and contextual performance. Ludovick (2015) stated that the performance has two aspects: task performance, which refers to the ability of an individual to perform an activity that contributes to the institution where the individual works, and contextual performance, which is not related to its technical contribution to the organisation, but usually must support the organisational environment, social and psychological.

Employee performance is a complex and multifaceted concept that incorporates various dimensions reflecting how individuals fulfil their roles within organisations. The two most widely acknowledged dimensions of employee performance are task performance and contextual performance, which together form a comprehensive view of an employee's overall contribution to organisational effectiveness. Task performance comprises job explicit behaviours, which include fundamental job responsibilities assigned as part of the job description. Task performance requires more cognitive ability and is primarily facilitated through task knowledge, such as requisite technical knowledge or principles to ensure job performance and having the ability to handle multiple assignments. On the other hand, contextual performance involves behaviours that may not be formally required by the job but support the social and psychological environment of the organisation. Contextual performance includes actions that are discretionary, like helping colleagues, engagement in volunteering activities, doing things the organisational way, initiating new ways of doing things, and ensuring a positive work climate. These behaviours contribute to the achievement of organisational objectives.

Conclusively, employee performance encompasses both task performance and contextual performance. The motivational dynamics behind these behaviours are crucial and highlight the need for organisations to design HR practices and motivational strategies that address both dimensions to achieve sustained individual and organisational performance (Ludovick, 2015).

Concept of Job Rotation

Job rotation is described as working in different areas or under different situations at different times that are categorised based on a range of individual erudition, skill, and capacity of employees

(Gómez et al., 2004). It is an organised practice of rotating chosen internal candidates into specific roles in order to broaden their understanding of a company and how it works, as well as to enhance their leadership abilities (Iluk & Iluk, 2017).

Job rotation is frequently utilised, although it has attracted particular attention in human resource literature (Iluk & Iluk, 2017). Yet a consensus as to how job rotation can be defined does not exist. Job rotation is one of the tactics and methods used in career development and organisational transformation. It is one of the current management strategies used to allow as many employees as possible to do several tasks in the fields of supervision, management, or leadership (Al Hanty & Khan, 2019). Additionally, job rotation is a lateral transfer of an employee among jobs within the same organisation without changing the hierarchical rank or the salary grade. It is frequently regarded as an important tool for organisational development, as horizontal assignments typically fully comply with a change in job content and required expertise (Campion et al., 1994). However, horizontal transfers can happen when inefficient individuals are redistributed to different jobs in order to enhance the quality of the person-job match or to inspire employees by assigning them new responsibilities within the organisation. Many organisations' talent management strategies include job transfers for inefficient employees (Kampkötter et al., 2018).

Furthermore, job rotation is viewed as a technique of shifting employees among technical and managerial positions within an organisation, for a set period and at regular intervals, allowing them to gain expertise, proficiencies and work know-how to use in their careers and improve organisational effectiveness (Jassim, 2018). Job rotation is the practice of allocating employees from their present task to another task in the organisation (Prasetyanto et al., 2020). Similarly, job rotation is an opportunity for employees to obtain an overall awareness of organisational goals, create a deeper mastery of diverse functional areas, develop a network of organisational connections, and improve employees' abilities (Zin et al., 2013). It is an alternate method that a firm may use to handle excessive or monotonous employee work routines. This must be done if the employee's job is no longer considered difficult. In this case, the person is shifted to a different position in the same division and with the same job requirements (Natalia et al., 2020). As part of a career development programme, job rotation is a technique for work orientation and professional skill development, with the goal of assisting the new employee in acquiring a sufficient level of competence for the position (Järvi & Uusitalo, 2004).

Empirical Review

Shamsi (2021) conducted a study on the effects of job rotation on performance, motivation and commitment of employees. The sample size of this study consisted of 50 respondents. The target population was the employees who were working in different banks, and questionnaires were distributed to them. Primary data was collected and analysed through the IBM SPSS software. Different tests, such as reliability test, coefficient test, regression, significance, and the test of hypothesis, were done using this software. The study found that employees perceived a great and positive effect of job rotation on their performance, motivation & commitment. When employees are shifted from one department/unit to another, their motivation increases, and their commitment towards the organisation is also enhanced. Employee performance improves through job rotation programs. The result indicated that there is a significant relationship between job rotation and employee performance, motivation and commitment. Recommendations were made that the banks should follow techniques of job rotation to improve the performance of employees, and to increase their motivation and commitment level and understand different jobs and tasks during their jobs.

Majd et al. (2024) examined the effect of job rotation on employee performance with the mediating role of HR strategy and training in the petrochemical industry. Data were collected

through a questionnaire, which was distributed among the experts working in an Iranian petrochemical organisation. Previously validated scales were utilised to measure job rotation, employee performance, HR strategy, and training effectiveness, and partial least squares structural equation modelling was utilised for hypothesis testing. The research findings indicated that job rotation had a negative effect on employee performance, whilst training effectiveness and HR strategy positively mediated the relationship between job rotation and employee performance. The study recommended that managers within hazardous industries, such as petrochemical workers who are interested in job rotation, should note the negative implications it has on employee performance. Hence, job rotation should be considered side by side with human resources strategy and training.

Similarly, Majd (2024) conducted a study on the effect of job rotation on employee performance in an Iranian petrochemical organisation. A questionnaire was used to collect data, and PLS-SEM was used to analyse the data collected. Results revealed that job rotation has a negative effect on employee performance, and the indirect effects of HR strategy and training were found to be positive. The study revealed that job rotation in specialised industries leads to disruptions in workflow, increases stress, and reduces employee effectiveness. The weakness of the study was that it focused on a specialised sector, which limited the generalisability of the findings to it.

Taiwo et al. (2019) examined the effect of job rotation on employees' performance in Skye Bank Nigeria Plc. The specific objectives were targeted towards assessing the effect of job rotation on employees' performance. The population for the study was 3,011 employees of Skye Bank Nigeria Plc., in Southwest, Nigeria, as indicated in the annual report of the bank as at 2015. A multi-stage sampling technique was used. Logistic regression analysis was adopted to analyse the objective. The results showed that job rotation has a significant effect on performance through employee improvement and versatility ($\beta = 0.801$, $t = 2.25$, $p < 0.05$) and on the job. The study concluded that rotating employees on the job will make them improve their ability on the job, making them versatile with attendant effect on performance.

Nour (2024) examined the impact of job rotation on employee performance in telecommunication companies in Hargeisa, Somaliland. The study used a descriptive research design, and non-probability sampling was used to draw a sample of 95 participants. The study revealed that job rotation significantly improved job satisfaction and productivity. Similarly, a positive correlation between job rotation and employee performance was identified, which indicated that increasing job rotation enhances performance. The results highlighted the importance of job rotation in boosting organisational effectiveness and employee outcomes in this sector.

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Theoretical Framework

Equity theory is adopted as the theoretical framework for this study. The theory was developed by Adams (1963) in his seminal paper entitled "Towards an Understanding of Inequity." The theory postulated that individuals are motivated when they perceive fairness in a social exchange relationship. According to him, employees continuously evaluate equity through a comparison between their inputs and outputs, against the input-output ratios of other colleagues. When the comparison produced approximate balance, a state of equity exists, which then leads to motivation. However, where an imbalance is perceived during the comparison, employees engage in behaviours with a view to restoring equilibrium. More importantly, the theory posits that equity is a perceptual and subjective phenomenon. In the context of this study, which examined the effect of job rotation on the performance of staff in NITT Zaria, employees assess equity by trying to

balance their contributions against rewards relative to peers. Hence, the perception of equity leads to motivation, while the perception of inequity leads to a reduced level of motivation by employees.

Research Methodology

In this study, a quantitative approach was used to determine the effect of job rotation on the performance of employees in NITT Zaria. The quantitative method was used because the aim of the study is hypothesis testing of the relationship between the independent variables and the dependent variable. Additionally, the study used a descriptive survey method to gather data using a self-administered questionnaire and interviews. The study also used a cross-sectional study to collect data from the respondents.

The population of this study comprises employees of NITT Zaria, Kaduna State. The total number of employees in NITT Zaria is 1192 staff (NITT Registry, 2025). Krejcie & Morgan's (1988) table of sample size determination was used to arrive at a sample of 285. Hence, the sample size of the study is 285 employees of the institution. A stratified sampling design was used in relation to the study. The stratified sampling design was used because the staff of NITT Zaria are divided into senior staff and junior staff.

Data Analysis

A total of 285 copies of the questionnaire were administered to the respondents. However, only 253 were retrieved and duly responded to, representing 88.8%, which is considered appropriate for the study.

Table 1: Mean and Standard Deviation for Job Rotation

Questionnaire Items	Mean	Std. Deviation
1 Job rotation occurs frequently enough to prevent stagnation in my role	4.06	.976
2 The criteria for selecting employees for job rotation are fair and clear	3.26	.770
3 Job rotation has improved my expertise in different transport modalities.	4.30	.747
4 Job rotation has increased my adaptability to varied job tasks	4.23	.790
5 Job rotation opportunities are equally accessible to all eligible employees	3.11	.978

Source: SPSS (2026).

Table 1 depicts the means and standard deviations on questionnaire items relating to job rotation. The table shows a mean ranging from 3.11 to 4.30. This reveals that generally, there are positive perceptions of job rotation among NITT staff.

First, on whether job rotation occurs frequently enough to prevent stagnation in employees' roles, the mean and standard deviation are 4.06 and 0.976, respectively, which is above average. This means that job rotation regularly occurs in the institution, and it helps to prevent monotony in their roles. This means that NITT uses job rotation as a strategy to maintain employee engagement and productivity. However, the high standard deviation means that there is variation in the employees' responses.

Second, the mean and standard deviation of whether the criteria for selecting employees for job rotation are fair and clear are presented. The mean and standard deviation reveal 3.26 and 0.770, respectively. This means that this aspect is rated average, meaning that staff in NITT see the selection process as fair and transparent, while others have contrary views.

Third, the result revealed an above-average response on whether job rotation has improved employees' expertise in different transport modalities. The result shows a mean of 4.30 and a standard deviation of 0.747. This means that respondents have a strong agreement that job rotation enhances their skills and knowledge across different operational areas. This response has the highest mean in the study, and the low standard deviation shows that there is uniformity in their opinions.

Fourth, the mean and standard deviation on whether job rotation has increased employees' adaptability to varied job tasks show 4.23 and 0.790, respectively. Hence, respondents' views on this item are above average. The mean response shows the importance of job rotation in preparing employees to handle multiple responsibilities within NITT, while the low standard deviation means there is a high level of consensus among the respondents on this matter.

Lastly, the result on whether job rotation opportunities are equally accessible to all eligible employees shows a mean of 3.11 and a standard deviation of 0.978. The mean response is therefore average. This is the lowest mean in the table, and it means that some employees have concerns about the fairness and equal access to rotation opportunities. The high standard deviation shows variability in responses, which means that access to job rotation may differ across departments.

Table 2: Mean and Standard Deviation on Employee Performance

Questionnaire Statement	Mean	Std. Deviation
1 I am able to perform my job duties effectively.	4.03	.809
2 I consistently maintain high quality in my work outputs	4.00	1.014
3 I complete my tasks within the prescribed deadlines	4.02	.771
4 I often exceed the performance standards set by NITT Zaria	3.95	.860
5 My work performance contributes positively to the achievement of NITT Zaria's goals	3.76	1.076

Table 2 shows the mean and standard deviations of questionnaire items relating to employee performance at NITT Zaria. To begin with, the result of whether respondents can perform their job duties effectively shows a mean of 4.03 and a standard deviation of 0.809. This means that employees in NITT viewed this above average, which shows that the employees are capable of doing their assigned responsibilities effectively. However, the low standard deviation shows consensus in their views. Second, on whether respondents consistently maintain high quality in their work outputs, the mean reveals 4.00 and a standard deviation of 1.014, respectively. This means that employees in NITT responses on this aspect are above average. This shows that employees maintain high standards in their work and commitment to quality performance. However, the high standard deviation shows that there is variability in responses.

Third, the responses on whether respondents complete their tasks within the prescribed deadlines reveal a mean of 4.02 and a standard deviation of 0.771. This means that respondents rated this aspect above average. The mean responses revealed the presence of time management and efficiency among employees, while the low standard deviation revealed uniformity among respondents.

Fourth, on whether respondents often exceed the performance standards set by NITT Zaria, the mean is 3.95, and the standard deviation is 0.860. The mean is therefore above average, which shows that the employees sometimes go beyond the minimum performance expectations. Hence, the moderate standard deviation indicates some variation in responses regarding this aspect.

Lastly, the mean and standard deviation on whether respondents' work performance contributes positively to the achievement of NITT Zaria's goals show a mean of 3.76 and a standard deviation of 1.076. Hence, the mean response is above average. This therefore indicates that there is general agreement that the employees' performance supports the goals at NITT Zaria. However, the mean is very low, which means that some employees do not see a direct link between their individual performance and organisational success, while the high standard deviation reveals variability in responses.

Hypothesis Testing

The hypothesis developed for the study was analysed using simple linear regression. The hypothesis is explained based on the Model Summary, ANOVA, and the coefficient table.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852 ^a	.725	.721	.26941

a. Predictors: (Constant), Job Rotation

The Model summary shows that the R-squared is 0.852. This represents the proportion of variance in employee performance explained by job rotation. The R-Squared value of 0.725 explains 72.5% variance in employee performance by job rotation. Hence, the remaining 27.5% can be explained by other variables not captured in this model. The Standard Error of the Estimate (0.26941) measures the accuracy of the model's predictions. It represents the standard deviation of the residuals (the differences between observed and predicted values of job creation).

Table 4: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	176.471	1	176.471	2431.283	.000 ^b
	Residual	18.218	251	.073		
	Total	194.690	252			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Job Rotation

The ANOVA table assesses the overall significance of the regression model from a statistical perspective. As provided by the table, the F-statistic (2431.283) shows that the model explains a significant portion of the variance. Additionally, the ANOVA results confirm that the regression model is statistically significant (P=0.000). Thus, the high F-value and low p-value indicate that job rotation explains a substantial and statistically significant portion of the variance in employee performance.

Table 5: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.306	.088		-3.471	.001
	Job Rotation	.831	.021	.852	39.571	.000

a. Dependent Variable: Employee Performance

The coefficient table shows that job rotation has a significantly positive effect on employee performance in NITT Zaria (β 0.831, $T=39.571$, $P=0.000$). The P-value is 0.000, which is less than the level of significance (0.05); thus, there is adequate justification to reject the null hypotheses and conclude that job rotation has a significant effect on employee performance in NITT Zaria. Furthermore, the Beta value of 0.831 indicates that a unit increase in job rotation increases employee performance by 83.1%.

Discussion of Finding

The objective of the study was to examine the effect of job rotation on employee performance in NITT Zaria. The finding shows that job rotation has a positive and statistically significant effect on employee performance ($\beta = 0.831$, $t = 39.571$, $p < 0.05$), with job rotation explaining 72.5% of the variation in employee performance ($R^2 = 0.725$). This means that job rotation is a strong predictor of employee performance in NITT Zaria. Therefore, the rotation leads to employees acquiring new skills, improvement in their competence, and leads to enhancement in the employees' ability to perform effectively towards the achievement of the organisational objectives.

This finding is in line with Adam's equity theory (1963). According to this theory, employees become motivated when they perceive fairness between their inputs and outcomes. Hence, job rotation is a human resource practice that provides employees with the opportunity to develop their skills and experience. Hence, when employees perceive that there is fairness in job rotation, a sense of equity is developed, which then motivates them to reciprocate by improving their level of performance.

The finding that job rotation significantly affects employee performance is in line with previous studies such as Md Yusof et al. (2023), Ukoette & Ukoette (2024), Syofian et al. (2023), Suleman et al. (2022), Agustian & Rachmawati (2021), among others. Consistent with the findings of this study, these studies collectively confirm that job rotation is an effective human resource practice that enhances employee performance.

Conclusion and Recommendation

The importance of job rotation as a human resources practice cannot be overemphasised. This study revealed that job rotation has a significantly positive effect on employee performance in NITT Zaria. Job rotation explains 72.5% variance in performance, which means that the coefficient of determination is substantial. The result is consistent with the Adams equity theory, which postulates that employees are motivated to perform at a higher level when they perceive fairness in job rotation. Based on the findings and conclusion, the study recommends that the management of NITT Zaria should ensure fair and transparent implementation of job rotation by providing equal access to all eligible employees so that they will perceive fairness, which will ultimately lead to improvement in employee performance.

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