

Job Design and Employee Engagement in Manufacturing Firms in Anambra State, Nigeria

Emmanuel Chijioke Dibua, PhD

Department of Business Administration, Nnamdi Azikiwe University, Awka,
Anambra State, Nigeria
Email: ec.dibua@unizik.edu.ng

Hope Ngozi Nzewi, PhD

Department of Business Administration, Nnamdi Azikiwe University, Awka,
Anambra State, Nigeria
Email: hn.nzewi@unizik.edu.ng

Chinenye Monica Onyegbuna

(MSc Student)

Department of Business Administration, Nnamdi Azikiwe University, Awka,
Anambra State, Nigeria
Email: cm.onyegbuna@unizik.edu.ng

Abstract

This study focused on job design and employee engagement in manufacturing Firms in Anambra state. Many manufacturing Firms in Anambra State lack a systematic approach for job design. Jobs are often repetitive, monotonous, and do not align with the skills and capabilities of the workforce, this results in decreased job satisfaction and engagement among employees. The broad objective of this study is to explore the relationship between job design and employee engagement in manufacturing Firms in Anambra state. The research design employed in this study is a quantitative approach, and data was collected through a structured questionnaire. The total Population used for this study is 1,200 and the study adopted Taro Yamane formula to determine the sample size of 300 respondents. The sample size consisted of senior management and senior staff employees of the selected Manufacturing Firms in Anambra state. Data was analyzed using descriptive statistics and hypotheses were tested using Pearson Product Moment Correlation. The findings revealed that there is significant positive relationship between Job design and employee engagement in Manufacturing Firms in Anambra state. Premised on this finding, the study recommends that regular job analyses should be carried out to understand the current job design and identify opportunities for improvement. Finally, this analysis should also integrate job enrichment, rotation, and simplification to design jobs that align with employees' skills, interests, and organizational goals.

Keywords: Job design, Employee, Engagement, Manufacturing Firms.

Introduction

The work environment has undergone considerable changes over the past years in terms of the nature and scope of work. Globally, job design is a concept that has persistently attracted a lot of attention amongst scholars and human resource practitioners Fried (Garg., 2007). Job design has evolved since work ever existed; it is as old as the human species. The changing nature of the work environment has necessitated different ways of management approaches. Yet an important and constant factor has been the ways in which managers motivate their workers to help achieve not only the organizational goals but also that of their own personal ones. Design of job and the concepts related to it has been traced back in 1900 which is when many scientific management pioneers had discovered new ways regarding the ideology of business such as Gilbreth (2000) Taylor (1990) consistently analyze the

jobs with many approaches and methods but all of them deem design of job as the most important in the scientific management. Ever since jobs have existed, debate has raged about the best way to design them. Fredrick Taylor (1900). Related issues include how jobs are embedded within their broader organizational contexts, how they interrelate with one another, and the design of the wider organization itself. As well as being important for engagement, job design has been shown to be important for the manufacturing companies because it helps them to have many outcomes such as the following outcomes which are high motivation, higher quality engagement, job satisfaction, low absenteeism and turnover (Hackman & Oldham 2000, Nzewi & Audu, 2023).

However, job design remains a topic that receives much less attention from employers and policymakers as a driver of engagement compared with other aspects of management such as leadership or management style (Truss, 2012). There is a dearth of information available for employers on the key principles of job design and the major factors that need to be taken into consideration when designing engaging jobs. This is a cause for concern. According to them job design consists of three activities: specifying individual work tasks; specifying the method of performing the work tasks and combining work tasks into jobs for assignment to individuals (job content). Job design has three aims: first, to satisfy the requirements of the organization for productivity, operation efficiency and quality of product or service, and to satisfy the needs of the individual for interest challenge and accomplishment. Clearly, these aims are interrelated and the overall objective of job design is to integrate the needs of the individual with those in the organization). In job design, workers derive pleasure and fulfillment in their position with a greater variety of skills, (Kamalet al, 2008); and tasks that requires self-systematic technique of "harnessing work processes and procedures for stimulating employee's engagement. Well-designed jobs provide challenging and interesting work, as well as access to resources and support to buffer employees from job demands. Job design and employee engagement amongst manufacturing companies is important in determining the experience of the kind of their productivity (Baird, 2014).

Statement of the problem

In manufacturing companies in Anambra state, the problem of job design and employee engagement can significantly impact the overall performance and productivity of the organization if properly designed. Effective job design is essential to ensure that employees' roles are meaningful, challenging, and aligned with their skills and abilities. In recent years, Anambra State has witnessed a significant growth in its manufacturing sector, contributing to the state's economic development. However, this growth has also brought to light several challenges in terms of job design and employee engagement within these manufacturing Firms. (Parker & Wall, 1998). The following issues outline the problem statement There is repetitive and monotonous tasks, there is no job Rotation. When employees are assigned to perform the same task repeatedly, it can lead to boredom and a lack of engagement. As a result, employees may become disinterested in their work, leading to decreased motivation and lower productivity levels.

Another challenge in job design for manufacturing companies in Anambra state is the lack of skill variety and autonomy. When employees are limited to a narrow set of tasks and have little decision-making authority, they may feel unfulfilled and undervalued. This lack of autonomy can stifle creativity and innovation, as employees may not have the opportunity to use their skills and knowledge to contribute to process improvements or problem-solving.

Studies by Ogbonnaya, Käsälä, Saari and Isaksson (2017) have supported that the four main Technique of job design: job rotation, job simplification, job enrichment and job enlargement are

positively related with employee engagement. As result, engaged employees are more likely to portray organizational citizenship behaviour and are less likely to be deviant at work. There is also no training and development organized for the staff and this led to employee turnover which affect the overall performance of the organization because High turnover can be costly for the organization, as it incurs recruitment, training, and on boarding expenses, and may also disrupt team dynamics and productivity.

Objectives of the Study

The broad objective of the study is to explore the relationship existing between job design and employee engagement in manufacturing companies, Anambra state. However, the specific objectives are to;

- i. Determine the relationship between job enrichment on employee continuity of manufacturing companies, Anambra state.
- ii. Determine the relationship between job rotation and employee commitment of manufacturing companies, Anambra state.

Research Questions

The following research questions were raised to guide the study:

- i What is the relationship between job enrichment and employee continuity in manufacturing companies, Anambra state.
- ii. What is the relationship between job rotation and employee commitment in manufacturing companies, Anambra state.

Research hypotheses

The following null hypotheses were formulated to guide the objectives of the study and strengthen its analysis:

- i. Ho₁: There is no significant relationship between job enrichment and employee continuity in manufacturing companies, Anambra state.
- ii. Ho₂: There is no significant relationship between job rotation and employee commitment in manufacturing companies, Anambra state.

Significance of the study

The findings of this study will enable the management of some selected manufacturing companies to make necessary efforts to ensure that there is high level of employee engagements and satisfaction and it will also help them to know the recent impact job design has on their employee.

Scope of the study

The study elucidates on Job design and Employee engagement in manufacturing companies, Anambra state and the manufacturing companies are Innoson group of companies, Juhel pharmaceutical limited, Nigeria bottling companies and Sylfloral group of companies.

Conceptual Review

Job Design

Neil et al (2020) defined job design as the specification of the content, methods and relationships of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the job holder. Job design is the process of deciding on the contents of a job in terms of its duties and responsibilities, on the methods to be used in carrying out the job, in terms of techniques, systems and procedures and on the relationships that should exist between the jobholder and his superiors, sub-ordinates and colleagues Ibid (2001).

Before designing a job for workers for improving their quality of work life and increase in level of engagement, there is need to analyze the job itself. Carrel and Kazmits (2021) described job analysis as a systematic investigation of the tasks; duties and responsibilities of an organization's jobs. Flippo (2020). Effective job design considers factors such as employee skills, abilities, and preferences, aiming to enhance job satisfaction, motivation, and productivity. Different job design approaches, such as job enrichment, job rotation, and job simplification, are employed to optimize employee performance and meet organizational objectives while fostering a positive and fulfilling work experience. Job design also gives information about the qualification required for doing the job and the reward (financial and non-financial benefits) for doing the job. Job design is mostly done for managers, while designing the job, the needs of the organization and the needs of the individual employees must be balanced, need of the organization include high productivity, quality of work etc. needs of individual employees include job satisfaction that is they want the job to be interesting and challenging. Job designs that increase employee access, comfort and flexibility are likely to influence motivation and productivity positively (Uchenna & Audu, 2021; Uchenna & Audu, 2022).

Techniques of Job Design

There are five job design techniques as noted by (Stoner et al., 1989), job rotation, which comprises the movement of the worker from one functional department to another to reduce monotony by increasing variety of tasks. Job enlargement refers combining previously, fragmented tasks into one job, by increasing variety and meaning of repetitive work. Job enrichment, which goes beyond job enlargement to add greater autonomy and responsibility to a job and is based on the job characteristics approach. Theoretically, job enrichment enhances the job and makes it more rewarding, intrinsically satisfying which in turn motivate the worker to be more productive. Job enrichment provides direct feedback through the work itself on how well the worker is doing his job. It makes the worker as much variety, decision making responsibility and control as possible in carrying out the work. Autonomous work groups, which means creating self-regulating groups who work largely without direct supervision. It emphasizes the social aspect of the work, that is, the interpersonal relationship and the technological aspect comprising of the task, tools and work activities

Job enrichment

Job enrichment in manufacturing companies refers to the practice of enhancing employees' roles and responsibilities to create more meaningful and rewarding work experiences. It aims to increase job satisfaction, motivation, and overall productivity. In the context of manufacturing, job enrichment strategies typically focus on expanding employees' tasks, autonomy, and decision-making authority. Key elements of job enrichment may include offering employees' opportunities to handle a broader range of tasks, encouraging skill development and training, empowering them to make decisions that

affect their work, and providing feedback on their performance. These approaches can lead to a more engaged and committed workforce, ultimately boosting product quality, efficiency, and innovation. Baird (2014) Manufacturing companies may implement job enrichment through cross-training employees in various production processes, involving them in problem-solving and continuous improvement initiatives, and fostering a collaborative and supportive work environment. By enriching jobs, manufacturing companies can improve employee morale, reduce turnover, and cultivate a skilled and adaptable workforce, contributing to long-term success in a competitive industry (Bratton, 2007).

Job Rotation

Job rotation is a human resource management strategy that involves moving employees through different positions or departments within an organization. (Fernando & Dissanayake, 2019) The primary goal of job rotation is to enhance employee skills, knowledge, and overall performance, while also reducing monotony and employee burnout (Karatepe, 2022). There are three main types of job rotation: horizontal rotation, vertical rotation, and diagonal rotation. Horizontal rotation involves moving an employee to different roles within the same level of hierarchy, vertical rotation moves employees to higher or lower positions, and diagonal rotation combines aspects of both horizontal and vertical rotations

Advantages of job rotation include skill diversification, increased employee engagement, improved job satisfaction, and a broader understanding of the organization. It can also foster teamwork and facilitate better communication among departments. Suleman and Bingab, (2021) However, job rotation may also have some disadvantages. It can lead to temporary inefficiencies as employees adjust to new roles, potential disruption in workflow, and increased training costs (Galluf, 2004). Additionally, if not implemented effectively, it may fail to meet its intended objectives and result in employee dissatisfaction. Therefore, proper planning, communication, and evaluation are crucial for successful job rotation implementation.

Employee Continuity

Employee continuity refers to the consistent presence and engagement of skilled and experienced workers within a manufacturing company (Nzewi & Audu. 2023). It emphasizes the importance of retaining employees over the long term and fostering a positive work environment that encourages loyalty, commitment, and productivity. In the manufacturing industry, employee continuity plays a vital role in driving success and achieving sustainable growth. Here's how it contributes (Malik & Audu, 2023).

Knowledge and Expertise: Experienced employees possess valuable knowledge and expertise that they have accumulated over the years. This institutional knowledge is difficult to replace and is essential for maintaining high-quality standards, operational efficiency, and problem-solving capabilities within the manufacturing process.

Reduced Training Costs: High employee turnover can lead to frequent training needs for new hires, which can be costly and time-consuming. Continuity in the workforce helps reduce these expenses and allows the company to focus on enhancing existing skills and knowledge rather than continuously onboarding new employees.

Employee Commitment: Employee commitment is a critical aspect of organizational success in manufacturing companies (Uchenna, & Audu, 2021). It refers to the level of dedication, loyalty, and

emotional attachment that employees have towards their work, the company's goals, and its values. Committed employees are more likely to stay with the organization for an extended period, perform at their best, and contribute to a positive work environment (Uchenna, & Audu, 2021). In the context of manufacturing companies, where efficiency, quality, and productivity are paramount, employee commitment plays a pivotal role in driving success and competitiveness (Ngwenya, & Pelser, 2020).

Several factors contribute to employee commitment in manufacturing companies

Job Satisfaction: Bakker and Demorouti (2008): Employees who find their work meaningful and satisfying are more likely to be committed. Manufacturing companies should focus on providing challenging and rewarding tasks, opportunities for growth, and a supportive work environment.

Leadership and Communication: Effective leadership and transparent communication are essential for fostering commitment. Leaders must communicate the company's vision, values, and goals, involving employees in decision-making processes and recognizing their contributions. (Neill, Men, & Yue, 2020).

Theoretical Framework

The theoretical framework for this study comes from Vroom's Expectancy Theory which posits that employee engagement in manufacturing companies is influenced by three factors: expectancy, instrumentality, and valence. Expectancy refers to an individual's belief that effort will lead to performance. Instrumentality is the belief that performance will be rewarded. In manufacturing companies, employees are more committed when they believe their efforts will result in successful performance, which will be recognized and rewarded with meaningful incentives. To enhance engagement, companies must ensure clear performance expectations, link rewards to performance outcomes, and provide rewards that align with employees' preferences and needs.

Research Methodology

Research design

The design of this research was descriptive research design as it collected data from sampled respondents through structured questionnaire.

Population

The population of the study covers the whole senior staff Management and senior staff Employees of four selected manufacturing companies in Anambra state. The manufacturing Firms are Innoson group of companies, Nnewi (600), Juhel pharmaceutical limited, Awka (200), Nigerian bottling companies, Onitsha (300) and Syfloral Nigeria limited, Onitsha (2000). Hence the Population size of the study 1200.

Sample size and Sampling Techniques

The population size of the study (1200) was too large; thus, researchers made use of sample instead of making use of the whole population. The statistical tool of Taro Yamani (1964) was used to determine the sample size. Yamani's Statistical formula for sample size determination is;

$$n = \frac{N}{1+N(e)^2}$$

Where n = sample size, N = population size, and e = error limit. With an error limit of 0.05, population size of 1200 the sample size will be calculated as follows;

$$n = \frac{1200}{1 + 120 (0.05)^2} = 300.$$

The sample size of the study is 300. And simple random sampling will be used to make sure that all the population are selected at random.

Instruments for data collection

The researcher used questionnaire as the best instrument for data collection. The response options of the two instruments were coded based on five-point Likert scale; (5) strongly agree, (4) agree, (3) moderately agree, (2) disagree, (1) strongly disagree. The instrument was used mainly to get vital information's from the respondents.

Method of Data Analysis

The data generated were analysed using descriptive statistics and the hypotheses were tested using Pearson Product Moment Correlation Coefficient on Statistical Packages for Social Science (Version 27) at 5% level of significance.

Data Presentation and Analysis

However, out of the three hundred (300) respondents given questionnaire to fill, two hundred and ninety 290 of the questionnaires were returned giving a retrieval rate of 97%. This study used self-administered questionnaires distributed to elicit information from the respondents.

Analysis of Data Related to Research Question

Decision Rule

The decision in the analysis section is determined by the average of the responses of respondents. Strongly Agreed (5 points), Agreed (4 points), Disagreed (3 points), Strongly Disagreed (2 points) and Undecided (1 point). The average of the responses:

$$\frac{(5 + 4 + 3 + 2 + 1)}{5} = 3.0$$

Therefore, a mean score below 3.0 would be considered as rejected and a mean score of 3.0 and above would be considered as accepted.

Table 1: Research Question 1: What is the relationship between job enrichment and employee continuity of manufacturing companies in Anambra state?

Job Enrichment

S/N	Items	SA	A	D	SD	U	Mean	Remark
1	Job enrichment programs encourage worker participation and enhance motivation.	97	82	51	49	11	3.70	Accepted
2	Job enrichment can cause one workplace hazards thereby reducing employee engagement so must be implemented with caution.	5	13	224	6	42	2.76	Rejected
3	Job enrichment include the job development practices which propel as well as provoke employee to carry out their duty very well	103	95	62	23	7	3.91	Accepted

Source: Field survey, 2023

Employee Continuity

S/N	Items	SA	A	D	SD	U	Mean	Remark
4	Employee safety helps employee to continue in an organization	95	80	44	37	34	3.57	Accepted
5	Training and development help in the continuity of employee	143	66	61	15	5	4.13	Accepted
6	A positive work environment increases Employee continuity in an organization	36	8	182	62	2	3.05	Accepted

Source: Field survey, 2023

In table 1, all the items, 1, 2, 3, 4, 5, and 6 were questions addressing the first research question which is "What is the relationship between job enrichment and employee continuity of manufacturing companies in Anambra state?" From the data analysis, items 1, 3, 4, 5, and 6 obtained a mean rating above the criterion mean of 3.0 indicating that majority of the respondents agreed that Job enrichment programs encourage worker participation and enhance Engagement.

Table2: Research Question 2: What is the relationship between job rotation and employee commitment of manufacturing companies in Anambra state?

Job Rotation

S/N	Items	SA	A	D	SD	U	Mean	Remark
7	Job rotation broadens employee skillset which helps in employee engagement	155	87	28	17	3	4.29	Accepted
8	It helps in reduction of monotony in an organization	132	109	33	5	7	4.18	Accepted
9	When a smart goal is been set for employee, it increases their knowledge and engagement	6	14	221	23	26	2.83	Rejected

Source: Field survey, 2023

Employee Commitment

S/N	Items	SA	A	D	SD	U	Mean	Remark
10	Organizations grow when employees are committed to work	149	82	26	12	21	4.12	Accepted
11	My dedication to work brings commendations from my boss	49	2	191	8	40	3.04	Accepted
12	Employees can only be committed to work if given a hard task	103	95	62	23	7	3.91	Accepted

Source: Field survey, 2023

In table 2, all the items, 7, 8, 9, 10, 11, and 12 were questions addressing the second research question which is "what is the relationship between job rotation and employee commitment of manufacturing companies in Anambra state?" From the data analysis, items 7, 8, 10, 11, and 12 obtained a mean rating above the criterion mean of 3.0 indicating that majority of the respondents agreed that Job rotation broadens employee skillset which helps in employee engagement.

Hypotheses Testing

Decision Rule: Reject the null and accept the alternate if P-value < 0.05; if otherwise accept the null Hypothesis.

Test of Hypothesis One

Ho₁: There is no significant relationship between job enrichment and employee continuity of manufacturing companies in Anambra state.

Hi₁: There is significant relationship between job enrichment and employee continuity of manufacturing companies in Anambra state.

Table 3 Correlation between job enrichment and employee continuity of manufacturing companies in Anambra state.
Correlations

		Job Enrichment	Employee Continuity
	Pearson correlation	1	.876**
Job Enrichment	Sig. (2-tailed)		.041
	N	290	290
	Pearson correlation	.876**	1
Employee Continuity	Sig. (2-tailed)	.041	
	N	290	290

Source: SPSS ver. 27 Outputs.

Result Summary

Table 3 shows that there is significant relationship between job enrichment and employee continuity of manufacturing companies in Anambra state with $r = 0.876$, $n = 290$ and p value of 0.041 ($p < 0.05$). Therefore, the researchers reject the null hypotheses and accept the alternate hypothesis and conclude

that there is significant positive relationship between job enrichment and employee continuity of manufacturing companies in Anambra state.

Test of Hypothesis Two

H₀₂: There is no significant relationship between job rotation and employee commitment of manufacturing companies in Anambra state.

H₁₂: There is significant relationship between job rotation and employee commitment of manufacturing companies in Anambra state

Table 4 Correlation between job rotation and employee commitment of manufacturing companies in Anambra state.
Correlations

		Job Rotation	Employee Commitment
	Pearson correlation	1	.647**
Job Rotation	Sig. (2-tailed)		.015
	N	290	290
	Pearson correlation	.647**	1
Employee Commitment	Sig. (2-tailed)	.015	
	N	290	290

Source: SPSS ver.27 Outputs.

Result Summary

Table 4 shows that there is a significant relationship between job rotation and employee commitment of manufacturing companies in Anambra state with $r= 0.647$, $n=290$, and a p-value of 0.015 ($p<0.05$). Therefore, we reject the null hypotheses and accept the alternate hypothesis and conclude that there is a significant relationship between job rotation and employee commitment of manufacturing companies in Anambra state.

Discussion of Findings

1. Hypothesis one revealed that there is a significant positive relationship between job enrichment and employee continuity of manufacturing companies in Anambra state with $r= 0.876$, $n=290$, and p-value of 0.041 ($p<0.05$). Therefore, we reject the null hypotheses and accepted the alternate hypothesis and concluded that there is a significant positive relationship between job enrichment and employee continuity of manufacturing companies in Anambra state. This finding agrees with Park, Han, and Kim, (2022) result that job enrichment positively correlates with employee continuity in an organization in their study on structural relationships among transformational leadership, affective

organizational commitment, and job performance: the mediating role of employee engagement in South Korea.

2. Hypothesis two indicated that there is a significant positive relationship between job rotation and employee commitment of manufacturing companies in Anambra state with $r= 0.647$, $n=290$, and p-value of 0.015 ($p<0.05$). Therefore, we rejected the null hypotheses and accepted the alternate hypothesis and concluded that there is a significant positive relationship between job rotation and employee commitment of manufacturing companies in Anambra state. This finding is in congruent with the result of Eyfrel, and Ariyanto (2020) that job rotation and job autonomy have a positive relationship with employee commitment and satisfaction in their study on the effect of job design on work commitment in Star Capital Group company in South Africa.

Conclusion

In conclusion, this study has explored the relationship between job design and employee engagement in manufacturing companies in Anambra State. The findings of this research shed light on the importance of effective job design in promoting employee continuity, commitment, and creativity. The research revealed that job enrichment, which involves providing employees with challenging and fulfilling tasks, is positively related to employee continuity. When employees find their jobs engaging and meaningful, they are more likely to remain with the organization, leading to increased continuity and reduced turnover. Furthermore, job rotation was found to be positively related to employee commitment. By allowing employees to perform different tasks and gain diverse experiences, job rotation enhances their sense of involvement and dedication to the organization. Employees who have the opportunity to explore different roles within the company are more likely to develop a strong commitment to their work and the organization.

Overall, this research contributes to the existing body of knowledge on job design and employee engagement. It provides valuable insights for employers, employees, and researchers, emphasizing the significance of creating engaging and fulfilling work environments to drive organizational success. The research contributes to the existing literature on job design and employee engagement, providing researchers with valuable information and insights for further studies in this field. It serves as a resource for future researchers interested in exploring similar topics and expands the current understanding of job design in organizational settings.

Recommendations

Based on the analysis of these variables, several recommendations emerge for organizations looking to optimize job design and employee engagement:

1. Implement Job Enrichment: Manufacturing companies in Anambra state should adopt job enrichment techniques, such as increasing the level of responsibility, autonomy, and skill variety within job roles. This will help to enhance employee engagement, motivation, and satisfaction. Providing employees with challenging and meaningful tasks can lead to a sense of accomplishment and personal growth.

2. Introduce Job Rotation: To combat monotony and promote employee engagement, manufacturing companies should consider implementing job rotation programs. This involves periodically rotating employees across different tasks and roles. Job rotation can provide employees with a broader understanding of the organization, develop their skills, and prevent boredom and burnout.

References

- Al Balushi, Thumiki, Nawaz, Jurcic, and Gajenderan, V. (2022). Role of organizational commitment in career growth and turnover intention in public sector of Oman. *Plos one*, 17(5), e0265535.
- Armstrong. (2003), 'Job Analysis and Job Design', Human Resource and Personal Management, 4th Edition, 93-125, India: Tata McGraw-Hill Publishing Company Limited.
- Baird, and Bratton, (2014). Career Dynamics: Managing the Superior/Subordinate Relationship. *Organizational Dynamics*, 11(3), 46–64
- Baird. (2014) Developing Your Human Resources: An Operational Approach
- Bakker, (na); Demerouti, (na), (2008). The Job Demands- Resources Model: State of the Art,' *Journal of Managerial Psychology*, 22: 309-328. 23341
- Bratton, (2007). "Work and Organizational Behaviour'. New York: Paul Grave Mac Milan.
- Carrel, Kazmits, and Oldham, (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159–170.
- Flippo D. and Raymond, A. N., Nancy, L. M., and Michael, P. F. (2020). A Meta- Analysis of the Relation of Job Characteristics to Job Satisfaction. *European Journal of Work and Organizational Psychology*, 9(1), 79–110.
- Fredrickson, B. L. 2001. The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions,' *American Psychologist*, 56: 218-226.
- Fried, Y., and Ferris, G. R. (1987). The validity of the job characteristics model: a review and Meta-analysis. *Organizational Behavior and Human Performance*, 16, 250– 79.
- Gallup, S., Schaufeli U, and Bakker, G. (2004). Effects of process feedback on motivation, satisfaction and performance in virtual teams. *Small Group Research*, 37(5), 459– 489.
- Garg, P. and Rastogi, R. (2007). New Model of Job Design: Motivating Employees' Performance, *Journal of Management Development*, 25 (6): 572-587. Gratton, L. 2000. Living
- Hackman, J. R., and Oldham, G. R. (2000). Work Redesign, Reading: Addison-Wesley
- Henry Ford, A. S. (2012). Training and Development Strategy and Its Role in Organizational Performance. *Journal of Public Administration and Governance*, 2(1), 2161– 7104.
- Kamal et al . (2008). Design Jobs that Motivate and Develop People. Retrieved January 14, 2016 from <http://www.media-associates.co.nz/fjobdesign.html>. 7
- Karatepe, Ozturen, Karatepe, Uner, and Kim, (2022). Management commitment to the ecological environment, green work engagement and their effects on hotel employees' green work outcomes. *International Journal of Contemporary Hospitality Management*, 34(8), 3084-3112.
- Malik,A.A., Audu, S. (2023). Globalization as Catalyst for International Entrepreneurship. *Journal of Internationals Relations Security and Economic Studies*, 2(3),65-72. Retrieved from <http://journals.rcmss.com/index.php/jirses/article/view/822>.
- Morgeson, F., Dierdorff, E. and Hmurovic, J. (2012). Work Design in situ: Understanding the Role of Occupational and Organizational Context, *Journal of Organizational Behaviour*, 31: 351-360.
- Neill, M. S., Men, L. R., and Yue, C. A. (2020). How communication climate and organizational identification impact change. *Corporate Communications: An International* .
- Nzewi, H.N., Audu, S. (2023). Job Embeddedness and Employees Retention in Deposit Money Banks , Kogi State, Nigeria. *Journal of Public Administration , Policy and Governance Research*, 1(1), 13-32. Retrieved from <http://jpapgr.com/index.php/research/article/view/4>.
- Stoner, J, Gilbert, S.. (2000). Management 8th (ed) Prentice Hall of India 23342 How jobs are embedded within their organizational contexts

- Taylor, F.W. (1947). Principles of scientific management. In Ngwa, W.T., Adeleke, B.S., Agbaeze, E.K., Ghasi, N.C. and Imhanrenialena, B.O. (eds.). Effect of Job design on employee Engagement among selected manufacturing firms in Anambra
- Torrington, D., Hall, L., Taylor, S., and Atkinson, C. (2011). Human Resource Management. 8th Edition. Harlow: Pearson.
- Truss, C. (2012). Spinning Plates and Juggling Hats: Employee Engagement in an Era of Austerity. Wimbledon: CIPD.
- Uchenna, A.C., Audu, S.J. (2021). Business Process Reengineering and Performance of Manufacturing Firms in North-Central Nigeria. *Journal of Good Governance and Sustainable Development in Africa*, 6(3),75-87. Retrieved from <http://journals.rcmss.com/index.php/jddsda/article/view/282>.
- Uchenna, A.C., Audu, S.J. (2022). Dynamic Capability and the Performance of West African Ceramics Limited Ajaokuta, Kogi State. *International Journal of Democratic and Development Studies*, 5(2),15-30. Retrieved from <http://journals.rcmss.com/index.php/ijdds/article/view/605>.
- Vroom (1964). Expectancy Theory of Motivation: Motivating by Altering Expectations. *International Journal of management, Business and Administration*, 2(2), 45-54.