

The Mediating Role of Employee Commitment: Relationship between Job Stress and Employee Performance of Selected Plastic Manufacturing Firms in South East, Nigeria

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Abstract

This study investigates the mediating role of employee commitment in the relationship between job stress and employee performance in plastic manufacturing firms in South East Nigeria. The research aims to understand how job stress factors—such as job burnout, work overload, and role ambiguity—impact employee performance, and how employee commitment can influence these dynamics. The study is motivated by high employee turnover rates in the targeted businesses, potentially linked to job stress. Using a correlation survey design, the research sampled 304 employees from seven selected plastic manufacturing companies. The findings revealed a significant negative relationship between job stress factors and employee performance, highlighting that increased job stress leads to decreased performance. The study concludes that strengthening employee commitment can mitigate the negative effects of job stress on performance. The research suggests that management should implement policies to reduce job stress, such as appropriate leave and regular reviews of job schedules, to foster a healthier and more productive workforce. These findings underscore the importance of employee commitment as a strategic tool for improving performance in high-stress work environments.

Keywords: *Employee commitment, Job stress, Employee performance, Plastic manufacturing firms*

1. Introduction

This paper explores the impact of job stress on employee performance in plastic manufacturing firms in Southeast Nigeria. Stress, defined as physical and emotional reactions to external pressures, is linked to various negative outcomes, including diminished job performance and increased workplace withdrawal behaviours such as burnout. The study examines how modern technological advancements and demanding work environments contribute to organizational stress, particularly in the Nigerian plastics industry, where employees face high workloads, role ambiguity, and work-family conflicts.

The research highlights that stress in the workplace, exacerbated by excessive job demands, negatively affects employees' mental and physical health, leading to decreased productivity and overall organizational performance. The study emphasizes that to improve performance; managers must address the well-being of employees, particularly those in production roles. By aligning organizational demands with employee capacities and interests, businesses can mitigate the adverse effects of stress and enhance their competitive edge. Ultimately, the study seeks to assess the extent to which job stress influences employee performance in the selected firms, providing insights for better management practices.

Stress alludes to physical and profound responses to the potential negativities that might come from the outer climate. It also refers to individuals' ambiguous psychological and physiological responses to threats that may have an impact on their current situation. The way an individual interacts with their external environment typically causes stress. According to Tomova et al., it is defined as social and physical tension brought on by differences in demands, abilities, behaviors, and judgments. (2014). Stress is an individual encounter and individual encounters various degrees of stress.

In the modern era, therapid development of information technologies has provided a variety of advantages that make human life easier (Batmaz et al., 2022; Tanhan and others, 2023; Yıldırım and Çiçek, 2022; Yıldırım et al., 2022), but they have also brought about numerous negative effects like technostress (Hung et al., 2015). According to Agboola&Olasanmi (2016), technostress is a kind of pressure welcomed on by the difficulties that people or associations face during the time spent adjusting to progressing changes in innovation. Technostress emerges from the singular's responses to mechanical turns of events (Kaymaz and Lorcu, 2018). These responses might have different ramifications for both individual and authoritative levels like low efficiency, work disappointment, absence of work

support, and unfortunate work execution (Jackson and Schuler, 1985).

In today's workplaces, information and communication technologies are increasingly prevalent.

Therefore, in the context of an organization, the utilization of technology may result in a variety of psychological outcomes for employees. Innovation-related undertakings, for example, downloading or introducing programming, arranging documents, changing arrangement structures, or adding new highlights can cause hierarchical pressure (Tarafdar et al., 2007). Organizational stress can also be caused by situations like having to complete multiple tasks at once, working as hard as possible under pressure, and always being available outside of work hours (Kestane& Uzbek, 2021; Kumar and others, 2017; Tarafdar and others, 2015).

Providing the required level of quality in both production and service delivery, staying on top of new developments, and keeping their operations to a minimum are all compelling factors that businesses face. This undoubtedly raises employee expectations and contributes to the development of organizational stress among workers (Daniel, 2019). Subsequently, hierarchical pressure arises as a circumstance that influences the expert responsibility of workers. The administration, representatives, and different partners of the associations have expressed great concern about organizational stress, which is now a widespread issue. The aforementioned circumstance undoubtedly has an impact on the individual's level of professional commitment, job performance, and activity outputs performed as a whole in terms of the organization. El- Kurdy et al. claim that (2022), affective commitment significantly reduces work-related stress.

Numerous studies have demonstrated that employees' organizational commitment is significantly impacted by occupational stress. While a moderate amount of stress can help people perform better at work, excessive stress can have the opposite effect (Stevenson & Harper, 2006; Carvalho and Angelo, 2021). This idea is backed up by a lot of evidence in the existing literature. For instance, a few investigations showed an adverse consequence of weight fair and square of word-related fulfillment and hierarchical responsibility (Ayyagari et al., 2011; Park and Jex, 2011; Tarafdar and others, 2007; Boyer-Davis, 2019), while others showed a positive effect of weight on work fulfillment and hierarchical responsibility (Ahmad et al., 2012; Hung and Co., 2015; 2019 Dorular). Consequently, fathoming the indicators of hierarchical weight on responsibility and occupation satisfaction is fundamental (Joshi, 2018).

The following hypothesis was developed in this regard.

Employee performance is a major factor in the survival of an organization, and a match between the organization's interest and demand will eventually result in improved performance. Orogbu, et al. (2015) support this assertion by stating that employee job performance is a significant factor in determining an organization's performance. Organizations can use employee performance as a real tool to get the most out of their employees. According to Orogbu et al. (2015), employee performance is one important factor that can influence organizational performance. It likewise assumes a significant part in deciding the association's seriousness. As a result, managers of these selected businesses need to prioritize the well-being of their employees, particularly those who work directly in the production department, if they want to remain in business and achieve a favourable position in the competitive market.

Work pressure is a condition in an association that is related to a ton of adverse results. It has been observed that having an excessive number of industrial and heavy tasks and responsibilities causes the employees of the plastic manufacturing companies chosen for this study to be stressed at the end of the day. They go to work early and return home depleted and tired for all intents and purposes consistently on the exemption of Sundays when they don't open for work. Due to their lack of dedication to their responsibilities, they are unable to perform at their highest level.

Individual contributions from employees will result in maximum organizational performance if they perform well. This study aims to determine the extent to which job stress affects employee performance at plastic manufacturing firms in the southeast of Nigeria

2. Literature Review

Job-related stress is defined as "a circumstance where a few qualities of the work circumstance are remembered to cause poor mental or actual wellbeing or to cause risk factors making chronic weakness more probable" (Muhammad and Kishwar, 2019). Currently, it is believed that even a small amount of stress will slow down employees' work performance. According to Oznur and Neslin (2019), work-related strains are reactions or outcomes brought on by stress, whereas work stress occurs when demands exceed capabilities. Conditions in the workplace that have a negative impact on an individual's performance or overall mental and physical health are the root cause of work stress, a chronic illness. Work-related stress can sometimes be crippling. Workplace stress has a negative impact on employee satisfaction, output quality, employee attrition, absenteeism,

overall performance, and authoritative performance. Unreasonable pressure is seen when efficiency and hierarchical viability drastically decline. The relationship between stress and job performance, as well as the impact of the weight of the work environment on performance, has long been of interest to academics and needs to be evaluated today.

2.1 Job Stress

Job stress, a persistent condition triggered by various workplace factors, has a significant negative impact on both individual performance and overall organizational health. Stress arises when there is a mismatch between job demands and an individual's capabilities, leading to physical and emotional strain. This strain can result in decreased work quality, reduced job satisfaction, increased absenteeism, and higher employee turnover.

Numerous studies across various industries, including banking, healthcare, IT, and education, have demonstrated that excessive job stress correlates with lower productivity. Stressed employees are often less motivated, less productive, and more prone to health issues, ultimately leading to a decline in organizational effectiveness. Particularly in high-demand sectors like IT, where technical skills and cognitive abilities are crucial, stress can severely hinder performance.

Overall, managing job stress is critical to maintaining employee well-being and ensuring optimal performance within organizations. Failure to address stress can result in long-term negative consequences for both individuals and the organization as a whole.

2.2 Employee performance

Employee performance is a critical determinant of both individual success and organizational growth. It is influenced by various factors, including commitment and job stress. Performance is the outcome of an employee's capacity, combined with effort and support. A decline in any of these elements can lead to decreased performance. Continuous and improved employee performance is essential for an organization's development and progress, as it directly contributes to productivity and efficiency.

Employee commitment reflects the degree of dedication and loyalty an individual has towards an organization. Highly committed employees are more likely to remain with the organization, exert more effort, and work towards the organization's success, thereby enhancing overall performance. Commitment is influenced by various factors such as advancement opportunities, compensation, and the work environment. When employees feel aligned with the organization's goals and values, they tend to be more committed, which in turn positively impacts their performance.

Job stress, however, poses a significant challenge to employee performance. It is a chronic condition caused by various workplace factors that negatively affect an individual's physical, mental, and emotional well-being. High levels of job stress can lead to decreased job satisfaction, burnout, absenteeism, and ultimately, lower performance. Stress occurs when job demands exceed an employee's capabilities, resources, or needs, leading to negative outcomes for both the employee and the organization.

The relationship between job stress and employee performance is complex. While some studies suggest a weak positive correlation between job stress and commitment, the majority of research indicates that job stress negatively impacts both commitment and performance. Employees under high stress are less likely to be committed to their jobs and more likely to experience burnout, leading to reduced productivity and higher turnover rates.

Organizations must recognize the importance of managing job stress to maintain high levels of employee commitment and performance. A conducive and motivating work environment can help mitigate the negative effects of stress, leading to better organizational outcomes. By understanding and addressing the interplay between job stress, commitment, and performance, organizations can enhance their overall effectiveness and ensure long-term success.

3. Hypothesis and Framework

A hypothesis is a suggested clarification, answer, or explanation for an exploratory question or explanation that forecasts the outcome of a link between the variables outlined in the inquiry. A good theory should be concise, reasonable, and often derived from the testing process. Anyhow, a professional has two theories at their disposal: invalid and alternative. Consequently, elective conjecture will be acknowledged if the unfounded speculation is rejected

Workload and employee performance

Work overload occurs when the demands of a job exceed an employee's capacity to manage them effectively. This condition creates internal pressure, which can undermine the worker's motivation and ability to complete tasks. The economic challenges brought on by the COVID-19 pandemic have exacerbated this issue, as organizations increase job demands in an effort to recover and survive in a competitive business environment. Employees, particularly those in manufacturing sectors such as Nigeria's plastic manufacturing industry, are facing heightened work pressures. This surge in workload, if not managed properly, can negatively impact

employee performance, leading to broader organizational challenges.

Research supports the negative correlation between work overload and employee performance. A study by Forgiving and Adedara (2020) on selected manufacturing ventures in Ogun State, Nigeria, found that work overload significantly diminishes employee performance ($F[1, 473] = 22.752, P < 0.05, R^2 = 0.0457$), and extended work hours further exacerbate this issue ($F[1, 472] = 51.238, P < 0.05, R^2 = 0.0473$). Similar findings were reported by Azhar (2018) in a study of representatives at Lembaga Zakat Negeri in Malaysia, where time constraints and work overload were shown to adversely affect job performance.

In conclusion, work overload has a significant and negative impact on employee performance. As organizations strive to meet their recovery and growth goals post-pandemic, it is crucial to address the challenges posed by work overload to maintain a productive and healthy workforce.

H1: Work Overload has a negative and significant influence on Employee Performance.

Job Burnout and Employee Performance

Worker loss of motivation may result from job burnout, which is based on continued work pressure. It is frequently observed in organizations where workers expend a lot of energy and are in constant, close touch with clients. Workplace burnout is what occurs as a result of repeated exposure to examples of business-related strain displayed by well-known physical, deep, and mental fatigue. It continues to have an impact on many workers in several associations (Wafaa, 2019). Burnout at work has been linked to worse representative fulfillment and performance. The current situation affects how associations market themselves while also having a negative impact on certain employees. Lack of motivation, absence of hierarchical support, incompetence and lack of justifications, irrational assumptions, and increased liabilities are risk factors that have been linked to the disease. Its warning signs include withdrawal symptoms, interpersonal conflict, poor performance, personal problems, and health disorders (Wafaa, 2019). In order to prevent employees from experiencing challenges linked to burnout, all leaders must implement the necessary smart strategies that will assist them in creating a positive work environment (Khdour, et al., 2015).

H2 Work Job Burnout has a negative and significant influence on Employee Performance.

Role Ambiguity and Employee Performance

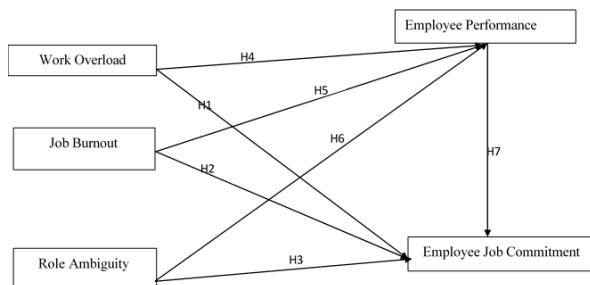
Employee can experience role ambiguity where there is role conflict. Employee trying to carry out too many responsibilities at time may encounter job pressure and role ambiguity and that tends to affect

performance of that employee negatively. In the manufacturing industry like plastic manufacturing firms, it was observed that employees spent most of their life time in the organization in order to satisfy and meet the organizational expectation. These, the workers do at the expense of their satisfaction. The organizations seem to have failed in putting the of the workers in their priority list. The employees at the end feel less valued and start exhibiting some negative behaviors towards their job in terms of low commitment, lateness to work, lack of loyalty, absenteeism, and even total withdrawal if they see better opportunities. These negative behaviors of employee are no doubt having negative and significant influence on the general performance of the organization. In collaboration to this, a study carried by Azhar (2018) investigated the impact job stress factors on employee's job performance at Lembaga Zakat Negeri, Malaysia. Result of the showed that there was a negative correlation for role ambiguity on employee's job performance.

H3 Role Ambiguity has a negative and significant influence on Employee Performance

Figure 2.1
 Variable of Job Stress

Source: Guangdong, Zhibin, and Junwei, (2019)



4. Findings

In this chapter, data collected from the field survey were analyzed and summarized in tables to highlight the findings. The presentation was done sequentially starting by answering the research questions, then the testing of hypotheses formulated in chapter one of this study.

Table 4.1
 Population Table

Plastic Manufacturing Firms	Location	Population Employees
DozzyPlastics	Onisha, Anambra State	115

JoyTexIndustriesLtd	Awka, Anambra State	109
ObikeBasicPlasticIndustries Ltd	Onitsha, Anambra State	87
CeeplastIndustry Limited	Aba, Abia State	200
MikkoPlastic Ltd	Aba, Abia State	250
DoubleDiamondPlasticIndustryLtd	Aba, Abia State	103
Innoson Technical and Industrial Company Ltd	Industrial layout Emene, Enugu State	600
Total		1464

Source: Personnel Department of the focused Firms, 2021.

Table 4.1.1
 Population Table in accordance to the respondents

Name of Organization	Population			To
	Administration Unit	Commercial Unit	Production /Technical Unit	
DozzyPlastics	30	40	45	115
JoyTexIndustriesLtd	36	30	43	109
ObikeBasicPlasticIndustries Ltd	20	29	38	87
Ceeplast Industry Limited	50	66	84	200
Mikko Plastic Ltd	67	83	100	250
Double Diamond Plastic IndustryLtd	17	39	47	103
Innoson Technical and Industrial CompanyLtd	100	200	300	600
Total	320	487	657	1464

Source: Field Survey, 2021

Equation 4.2

For the research, a sample size of 304 representatives was taken into consideration. The research tool was divided into two sections; the first would often collect the respondents' biographical information and the second would provide information about the developments of the topic matter.

Given the population, the instances are shown below although not completely settled.

The example size $X2NP(1 - P)$ was determined using the Krejcie and Morgan (1970) formula.

$$s = d^2(N - 1) + X2P(1 - P)$$

S is the test size.

Chi-square value for 1 level of opportunity at 0.05% confidence level is $X2(3.84)$. N = number of people (1464)

P is assumed to be 0.5 since it would produce the largest example size. d = Precision level expressed as a percentage (0.05)

$$S = S = 1405.44$$

$$S = S \cong 304$$

Hence 304 copies of the questionnaire were distributed to the selected organizations of study.

The Bowley's (1926) portion recipe was utilized to decide the duplicates of the poll to be disseminated to every plastic firm. The recipe is meant in this manner:

$$N_h = n \frac{n_h}{N}$$

Where N_h = Number of units disseminated to each gathering. n_h = Number of respondents in each gathering.

n = Total Sample Size.

N = Total Population Size.

$$\text{Dozzy Plastics} = 115 \frac{304}{1464} = 24$$

$$\text{JoyTex Industries Ltd} = 109 \frac{304}{1464} = 23$$

$$\text{Obike Basic Plastic Industries Ltd} = 87 \frac{304}{1464} = 18$$

$$\text{Ceeplast Industry Limited Ltd} = 200 \frac{304}{1464} = 42$$

$$\text{Mikko Plastic Ltd} = 250 \frac{304}{1464} = 52$$

$$\text{Double Diamond Plastic Industry Ltd} = 103 \frac{304}{1464} = 21$$

1
4
6
4

$$\text{Innoson Technical and Industrial Company Ltd} = 600 \frac{304}{1464} = 124$$

1
4
6
4

Hence the copies of questionnaire distributed to the chosen employees of the selected organizations in accordance to the proportion of each organization and among their units.

Name of Organization	Sample size			Total
	Administration Unit	Commercial Unit	Production/Technical Unit	
Dozzy Plastics	4	8	12	24
JoyTex Industries Ltd	4	8	11	23
Obike Basic Plastic Industries Ltd	3	6	9	18
Ceeplast Industry Limited Ltd	7	15	20	42
Mikko Plastic Ltd	11	17	24	52
Double Diamond Plastic Industry Ltd	4	7	10	21
Innoson Technical and Industrial Company Ltd	15	34	75	124
Total	48	95	161	304

Source: Field Survey, 2021

5. Conclusion

The empirical findings of this study highlight a strong correlation between employee performance and job stress within selected plastic manufacturing firms in Southeast Nigeria. The results clearly demonstrate that job stress, particularly in the form of employee burnout—where employees experience physical, emotional, and psychological exhaustion—leads to a significant decrease in employee commitment. This reduction in commitment negatively impacts overall performance levels, especially when employees face work overload and role ambiguity without sufficient flexibility.

Additionally, the study explored the relationship between transformational leadership style and employee performance in construction companies in Jordan. The findings confirm a positive association between transformational leadership and employee performance, with employee commitment serving as a significant mediating factor. The study suggests that transformational leadership can foster increased employee commitment, which in turn enhances employee performance. The research contributes to the literature by highlighting the critical mediating role of employee commitment and underscores the importance of adopting a transformational leadership style to improve both employee commitment and performance in organizational settings, particularly within the construction industry.

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