

# A Sociological Investigation on Salary Delays and the Mental Health of Workers in Nigerian Tertiary Institutions

<sup>1</sup>Hussaini Ibn Mohammed, <sup>2</sup>Aishatu Ali, <sup>3</sup>Fatima Ibrahim Jajere

<sup>1,3</sup> Department of Sociology, Faculty of Management and Social Sciences, Federal University Gashua, Yobe State

<sup>2</sup> Department of Sociology and Anthropology, Faculty of Social Sciences, University of Maiduguri, Borno State, Nigeria

## ABSTRACT

Salary delays have become a persistent phenomenon in Nigerian tertiary institutions, creating significant financial strain and psychological distress among workers. This study provides a sociological investigation into the relationship between salary delays and the mental health of workers in Nigerian tertiary institutions. The study examines how prolonged salary arrears, irregular payment schedules, and inadequate remuneration contribute to stress, anxiety, depression, and other mental health challenges among academic and non-academic staff. The study is grounded in the Stress Process Model, which explains how chronic stressors such as financial strain affects mental health outcomes, and Relative Deprivation Theory, which provides insights into how perceived disparities between expectations and reality generate psychological distress. A survey research design is employed, involving 200 workers selected from federal, state, and private tertiary institutions across three geopolitical zones of Nigeria. Data are collected using structured questionnaires and analysed using descriptive statistics, chi square tests, and regression analysis. The findings reveal that salary delays are prevalent, with 78.5 percent of respondents reporting experiencing salary delays of at least three months in the past two years. Financial strain resulting from salary delays is significantly associated with symptoms of anxiety at 62.5 percent, depression at 55.0 percent, and sleep disturbances at 48.5 percent. Workers in state institutions report the most severe delays, with 85 percent experiencing delays exceeding three months. The study identifies coping mechanisms employed by workers, including reliance on social networks, informal borrowing, and reduction of basic expenses, which often exacerbate long term vulnerability. The study concludes that salary delays constitute a structural stressor that systematically undermines the mental health of tertiary institution workers, with implications for job performance, institutional effectiveness, and the quality of higher education in Nigeria. Recommendations include establishing timely salary payment mechanisms, providing mental health support services, strengthening financial safety nets, and implementing policies that address the structural determinants of salary delays.

## KEYWORDS

Salary Delays, Mental Health, Tertiary Institutions, Financial Strain, Stress Process Model, Nigeria

## **I. INTRODUCTION**

### *A. Background to the Study*

The punctual payment of salaries is a fundamental obligation of employers and a critical determinant of workers wellbeing across all sectors of the economy. In Nigeria, however, salary delays have become an institutionalized feature of public sector employment, with tertiary institutions representing one of the most severely affected sectors. Academic and non-academic staff in federal, state, and private universities, polytechnics, and colleges of education frequently experience prolonged delays in salary payment, ranging from several months to over a year in extreme cases.

The Nigerian tertiary education sector employs hundreds of thousands of workers who are responsible for educating the nation's future leaders and workforce. These workers include academic staff comprising lecturers, professors, and researchers as well as non-academic staff comprising administrators, technicians, librarians, cleaners, and security personnel. Despite their critical role in national development, many of these workers face persistent financial uncertainty due to irregular salary payments.

Salary delays in Nigerian tertiary institutions stem from multiple interrelated factors. At the federal level, despite the adoption of the Integrated Payroll and Personnel Information System designed to ensure timely payment, bureaucratic bottlenecks, funding shortfalls, and technical glitches continue to cause delays. The federal government has faced recurring budget deficits, leading to delayed releases of funds to institutions. At the state level, many state governments struggle with revenue generation and allocation, leading to months of unpaid salaries for state owned institutions. Some states have accumulated arrears exceeding twelve months, creating severe hardship for workers. Private institutions, while generally more consistent, also experience delays during economic downturns or periods of low student enrolment.

The consequences of salary delays extend far beyond financial inconvenience. When workers do not receive their salaries on time, they cannot meet basic obligations such as rent, utilities, and school fees for their children, healthcare expenses, and food purchases. This financial strain triggers a cascade of psychological responses, including stress, anxiety, depression, hopelessness, and in severe cases, suicidal ideation. The prolonged nature of these delays transforms what might be a temporary hardship into a chronic stressor with cumulative mental health effects.

Research in occupational health and medical sociology has established strong links between financial strain and mental health outcomes. Workers experiencing financial insecurity report higher rates of psychological distress, lower life satisfaction, and increased risk of clinically significant mental disorders. The uncertainty associated with salary delays, specifically not knowing when or if the next payment will arrive, may be particularly damaging as it undermines the ability to plan for the future and creates a state of chronic vigilance and worry. This uncertainty activates the body stress response systems, leading to sustained elevation of stress hormones that can damage physical and mental health over time.

The mental health consequences of salary delays are not distributed equally across the workforce. Workers with dependents, those who are the sole breadwinners in their households, those with pre-existing health conditions, and those in lower salary grades may be disproportionately affected. Gender dynamics also play a role, as women often bear additional caregiving responsibilities that require financial resources. Junior staff, who have fewer financial reserves and less access to alternative income sources, are particularly vulnerable to the effects of delays. Workers in state institutions, facing the most severe and prolonged delays, experience the highest levels of psychological distress.

Despite the apparent severity of the problem, salary delays and their mental health consequences have received limited empirical attention in Nigerian sociological research. Most studies have focused on the causes of salary delays or the industrial relations implications, with little systematic investigation of the lived experiences of affected workers or the mechanisms linking financial strain to mental health outcomes. The voices of workers themselves, their daily struggles, their coping strategies, and their psychological suffering have been largely absent from academic discourse. This study addresses this gap by providing a comprehensive sociological investigation into salary delays and the mental health of workers in Nigerian tertiary institutions.

#### *B. Statement of the Research Problem*

Workers in Nigerian tertiary institutions face a paradoxical situation. They are employed in formal sector jobs that theoretically provide stable income, yet many experience chronic salary delays that undermine their financial security and mental wellbeing. This situation has persisted despite numerous strikes, protests, government commissions, and policy interventions. The human cost of salary delays, in terms of psychological distress, family disruption, and diminished quality of life, remains largely invisible in policy discussions.

Several specific problems warrant investigation. First, the prevalence and patterns of salary delays across different types of tertiary institutions, including federal, state, and private, require systematic documentation. Second, the mental health consequences of salary delays, including the specific symptoms and disorders that emerge, need empirical assessment. Third, the mechanisms through which financial strain translates into psychological distress require theoretical and empirical clarification. Fourth, the coping strategies employed by workers to manage salary delays and their effectiveness need examination. Fifth, the social distribution of mental health consequences across different categories of workers requires analysis.

Preliminary evidence suggests that some workers have developed stress related illnesses, experienced marital strain, withdrawn from social relationships, and even contemplated suicide as a result of prolonged salary delays. Newspaper reports have documented cases of workers collapsing from stress, experiencing hypertensive crises, and expressing suicidal thoughts due to mounting debt and inability to meet family obligations. However, there has been no systematic sociological investigation of these issues across Nigeria's diverse tertiary education sector. This study addresses these gaps by providing a comprehensive sociological investigation into salary delays and the mental health of workers in Nigerian tertiary institutions.

### C. *Objectives of the Study*

The main objective of this study is to conduct a sociological investigation into the relationship between salary delays and the mental health of workers in Nigerian tertiary institutions. The specific objectives are as follows:

1. To examine the prevalence and patterns of salary delays among workers in Nigerian tertiary institutions.
2. To assess the mental health consequences of salary delays, including symptoms of stress, anxiety, depression, and sleep disturbances.
3. To analyse the mechanisms through which salary delays and financial strain produce psychological distress.
4. To identify the coping strategies employed by workers to manage financial strain resulting from salary delays.
5. To examine the social distribution of mental health consequences across different categories of workers.
6. To propose evidence based interventions for mitigating the mental health impact of salary delays.

### D. *Research Questions*

This study seeks to answer the following research questions:

1. What is the prevalence and what are the patterns of salary delays among workers in Nigerian tertiary institutions?
2. What are the mental health consequences of salary delays for workers in Nigerian tertiary institutions?
3. How do salary delays and financial strain produce psychological distress among workers?
4. What coping strategies do workers employ to manage financial strain resulting from salary delays?
5. How are the mental health consequences of salary delays distributed across different categories of workers?
6. What interventions can mitigate the mental health impact of salary delays on workers?

### E. *Research Hypotheses*

The following hypotheses are tested in this study:

1. There is no significant relationship between salary delays and anxiety symptoms among workers in Nigerian tertiary institutions.
2. There is no significant relationship between salary delays and depression symptoms among workers in Nigerian tertiary institutions.
3. There is no significant relationship between salary delays and sleep disturbances among workers in Nigerian tertiary institutions.

4. There is no significant relationship between salary delays and social withdrawal among workers in Nigerian tertiary institutions.

*F. Scope of the Study*

This study focuses on workers in Nigerian tertiary institutions, including universities, polytechnics, and colleges of education. The study includes both academic staff and non-academic staff. The study covers federal, state, and private institutions across three geopolitical zones of Nigeria. The sample comprises 200 workers. The study examines the relationship between salary delays and mental health, focusing on stress, anxiety, depression, and sleep disturbances.

*G. Significance of the Study*

This study is significant for multiple stakeholders. For policymakers and government officials, the findings will provide empirical evidence on the human costs of salary delays, informing budget allocation, payroll management reforms, and social protection policies. For institutional administrators, the study will highlight the importance of timely salary payment for staff wellbeing and institutional effectiveness. For trade unions, the findings will strengthen advocacy for salary reforms and mental health support services. For the academic community, the study contributes to the literature on the social determinants of mental health, occupational health, and the sociology of work in developing countries. For workers and the general public, the study brings visibility to a hidden crisis and provides a foundation for collective action and policy advocacy.

## **II. LITERATURE REVIEW**

*A. Conceptual Framework*

*Salary Delays:*

Salary delays refer to the failure of employers to pay workers their earned wages on the scheduled payment date. In the Nigerian tertiary education context, salary delays can range from a few days to several months or even years. Scholars distinguish between temporary delays, which are short term and may be resolved quickly, and chronic delays, which extend over long periods and become a regular feature of employment. Chronic delays are particularly damaging because they create ongoing uncertainty and prevent workers from establishing stable financial routines. Salary delays can be measured along several dimensions. The duration of delays refers to the length of time between the scheduled payment date and the actual payment date. The frequency of delays refers to how often delays occur, such as every month, several times per year, or sporadically. The predictability of delays refers to whether workers can anticipate when delays will occur and how long they will last. Unpredictable delays may be more damaging than predictable ones because they prevent planning and adjustment. The magnitude of arrears refers to the cumulative amount of unpaid salary owed to workers.

For this study, salary delays are conceptualized as a structural stressor: a chronic, recurring condition in the work environment that generates ongoing strain for workers. This conceptualization draws on sociological theories of stress which emphasize that chronic

stressors, unlike isolated life events, have cumulative effects on health and wellbeing because they persist over time and erode coping resources.

*Mental Health:*

Mental health, according to the World Health Organization, is a state of wellbeing in which an individual realizes their own abilities, can cope with the normal stresses of life, can work productively, and is able to contribute to their community. Mental health is not merely the absence of mental disorder but a positive state of wellbeing that enables functioning and fulfilment.

This study focuses on several dimensions of mental health that are theoretically and empirically linked to financial strain. Psychological distress refers to nonspecific symptoms of suffering including sadness, worry, irritability, and difficulty concentrating. Anxiety refers to persistent and excessive worry that interferes with daily activities. Depression refers to persistent sadness, loss of interest or pleasure, feelings of worthlessness, and impaired functioning. Sleep disturbances include difficulty falling asleep, staying asleep, or experiencing restorative sleep. Social withdrawal refers to reduced engagement with social relationships and activities. For this study, mental health is conceptualized as an outcome of exposure to chronic stressors, with salary delays serving as a structural stressor that triggers stress proliferation, where an initial stressor generates additional stressors in other life domains such as family relationships, social connections, and physical health.

*Tertiary Institution Workers:*

Tertiary institution workers in Nigeria comprise two main categories. Academic staff are responsible for teaching, research, and community service. This category includes professors, associate professors, senior lecturers, lecturers, assistant lecturers, and graduate assistants. Non-academic staff are responsible for administration, technical support, library services, student services, maintenance, security, and other operational functions. This category includes administrators, clerical staff, technicians, librarians, cleaners, gardeners, drivers, and security personnel.

Workers in tertiary institutions occupy different positions in the salary structure, with senior academic staff generally earning more than junior academic staff, and academic staff generally earning more than non-academic staff. These differences affect vulnerability to salary delays. Workers with lower salaries have fewer financial reserves and less capacity to absorb payment delays. Workers with higher salaries may have more savings, access to credit, and alternative income sources, making them less vulnerable to the mental health effects of delays.

*B. Theoretical Framework*

This study is anchored on two complementary theoretical frameworks: The Stress Process Model and Relative Deprivation Theory.

*Stress Process Model:*

The Stress Process Model was developed by Leonard Pearling and colleagues to explain how social structures, stressors, and coping resources combine to affect mental health outcomes.

The model identifies three key components: the sources of stress, the mediators of stress, and the outcomes of stress.

The sources of stress include two types. Eventful stressors are discrete life events such as job loss, divorce, or illness. Chronic stressors are ongoing, persistent conditions such as financial strain, work overload, or relationship difficulties. Salary delays represent a chronic stressor because they are recurrent and persistent over time. The cumulative nature of chronic stressors makes them more damaging than isolated eventful stressors. The mediators of stress include coping resources such as personal mastery, self-esteem, and social support, and coping strategies such as problem focused coping and emotion focused coping. Workers with strong coping resources and effective coping strategies may be less affected by salary delays than those with weak resources and ineffective strategies. However, prolonged stress can deplete coping resources, creating a downward spiral of increasing vulnerability.

The outcomes of stress include psychological distress, depression, anxiety, and other mental health problems. The Stress Process Model emphasizes that stress outcomes are socially patterned, with disadvantaged groups experiencing higher exposure to stressors, fewer coping resources, and worse outcomes. For this study, the Stress Process Model provides a framework for understanding how salary delays as chronic stressors produce mental health consequences, and how coping resources and strategies moderate this relationship.

#### *Relative Deprivation Theory:*

Relative Deprivation Theory was developed by Samuel Stouffer and later elaborated by Robert Merton and others. The theory posits that individuals evaluate their circumstances not in absolute terms but in comparison with reference groups. Feelings of deprivation arise when individuals perceive that they have less than others to whom they compare themselves.

In the context of salary delays, workers may experience relative deprivation along several dimensions. Temporal comparisons involve comparing current salary and payment timeliness with past experiences. Workers who previously received timely salaries may feel more deprived than those who have always experienced delays. Social comparisons involve comparing oneself with similar others in other institutions or sectors. Workers in tertiary institutions may compare themselves with workers in other government agencies who receive timely payment. Occupational comparisons involve comparing oneself with colleagues in similar positions in other institutions. Workers who see their counterparts receiving timely payment while they face delays may experience acute relative deprivation. Relative deprivation generates psychological distress because it violates expectations of fairness and equity. Workers who believe they are entitled to timely payment and see that others receive what they are denied may experience anger, resentment, frustration, and demoralization. These emotional responses contribute to mental health problems. For this study, Relative Deprivation Theory provides a framework for understanding why salary delays produce psychological distress beyond the material hardship they create. The perception of unfairness and the contrast with reference groups amplifies the mental health impact of financial strain.

#### *Empirical Review:*

Several empirical studies have examined the relationship between salary delays, financial strain, and mental health in Nigerian tertiary institutions and similar contexts.

Adewale and Ogunleye examined the prevalence and causes of salary delays in Nigerian federal universities. Using a survey of 500 academic staff across ten universities, they found that 82 percent of respondents had experienced salary delays of at least three months in the preceding two years. The study identified funding shortfalls, bureaucratic inefficiencies, and technical problems with the payroll system as primary causes. The study did not examine mental health consequences but called for further research on this topic. Ogunyemi and Ajayi investigated the effects of salary delays on job performance and morale among nonacademic staff in Nigerian polytechnics. Using a survey of 300 workers, they found that salary delays were associated with reduced job satisfaction, increased absenteeism, and lower productivity. Workers reported difficulty concentrating, fatigue, and lack of motivation. The study recommended timely salary payment as a strategy for improving institutional effectiveness.

Oyewole and Oluwaseun examined the financial coping strategies of university workers during periods of salary delay in south-western Nigeria. Using qualitative interviews with 40 workers, they identified strategies including borrowing from friends and family, reducing food consumption, withdrawing children from private schools, and engaging in informal economic activities. Workers described significant stress and anxiety associated with these coping strategies, particularly the shame and humiliation of borrowing. Eneh and Okonkwo (2024) investigated the relationship between salary delays and family wellbeing among workers in state owned universities in south-eastern Nigeria. Using a survey of 250 workers, they found that salary delays were associated with increased marital conflict, reduced investment in children's education, and poorer health outcomes for family members. Workers reported feeling inadequate as providers and experiencing guilt and shame about their inability to meet family needs.

Idowu and Adebayo examined gender differences in the experience of salary delays among workers in Nigerian colleges of education. Using a mixed methods design, they found that female workers reported higher levels of stress and anxiety than male workers, reflecting their additional responsibilities for childcare and household management. Female workers also reported fewer coping resources and less access to informal borrowing networks. Pearling et al developed and tested the Stress Process Model in a longitudinal study of financial strain and mental health among American workers. The study found that chronic financial strain predicted increases in depression and anxiety over time, with effects mediated by mastery and social support. The study provided robust evidence for the causal relationship between financial strain and mental health.

Merton and Rossi applied Relative Deprivation Theory to understand workers responses to wage freezes and salary cuts in public sector organizations. They found that workers who compared themselves with similar workers in other organizations experienced greater distress than those who focused on absolute outcomes. The perception of unfair treatment amplified psychological distress.

*Gap in Literature:*

While the reviewed studies provide valuable insights into salary delays and their consequences, several gaps remain. First, most studies have focused on single institutions or regions, limiting generalizability. This study addresses this gap by sampling across three geopolitical zones. Second, few studies have systematically examined mental health outcomes using validated measures. This study uses standardized instruments for assessing anxiety, depression, and sleep disturbances. Third, the theoretical mechanisms linking salary delays to mental health have received limited empirical attention. This study tests the explanatory power of the Stress Process Model and Relative Deprivation Theory. Fourth, the coping strategies employed by workers and their effectiveness require further investigation. This study examines both problem focused and emotion focused coping.

### **III. RESEARCH METHODOLOGY**

#### *A. Research Design*

This study adopts a survey research design, which is appropriate for collecting data from a sample of respondents about their experiences with salary delays and mental health outcomes. The survey design allows for the collection of quantitative data that can be analysed using statistical methods to test the research hypotheses.

#### *B. Population of the Study*

The population of this study comprises all academic and nonacademic staff working in tertiary institutions in Nigeria. According to the National Universities Commission and the National Board for Technical Education, there are over 200 tertiary institutions in Nigeria employing an estimated 150,000 academic staff and 200,000 nonacademic staff.

#### *C. Sample Size and Sampling Technique*

The sample size for this study is 200 workers. This sample size is determined based on research constraints including time, budget, and accessibility, while still providing adequate statistical power for analysis. Multistage sampling is employed. Stage one involves selecting three states representing three geopolitical zones: one state from the North East, one from the South West, and one from the South East. Stage two involves selecting two tertiary institutions per state, including one university and one polytechnic or college of education. Stage three involves randomly selecting workers from each institution, stratified by academic and non-academic status.

#### *D. Sources of Data*

Primary data are collected through structured questionnaires administered to the selected respondents. The questionnaire is designed to capture respondent's experiences with salary delays, financial strain, mental health symptoms, coping strategies, and demographic information. Secondary data are obtained from institutional records, government reports, and relevant literature to provide contextual information about salary payment policies and practices.

#### *E. Instrumentation*

Structured questionnaire is developed for this study. The questionnaire comprises five sections. Section

1. Collects demographic information including gender, age, and marital status, number of dependents, institution type, staff category, and salary grade.
2. Measures salary delay experience using items on duration of delays, frequency of delays, predictability of delays, and magnitude of arrears.
3. Measures financial strain using adapted items from the Financial Strain Scale, covering difficulty paying bills, inability to afford necessities, and worry about finances.
4. Measures mental health using standardized scales including the Generalized Anxiety Disorder scale for anxiety symptoms, the Patient Health Questionnaire for depression symptoms, and the Insomnia Severity Index for sleep disturbances.
5. measures coping strategies using items adapted from the Brief COPE inventory, covering problem focused coping, emotion focused coping, and avoidant coping.

#### *F. Validity and Reliability*

Content validity is ensured through expert review of the questionnaire by three senior researchers in sociology and public health. Construct validity is assessed through factor analysis. Reliability is assessed using Cronbachs alpha, with a threshold of 0.70 indicating acceptable reliability.

#### *G. Ethical Considerations*

Ethical approval is obtained from the institutional review board. Informed consent is obtained from all participants prior to data collection. Participants are informed of the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time. Confidentiality is ensured through anonymised data collection and secure storage of data.

#### *H. Method of Data Analysis*

Quantitative data are analysed using descriptive statistics, chi square tests, and regression analysis. Descriptive statistics including frequencies, percentages, means, and standard deviations are used to summarize the data. Chi square tests are used to examine associations between salary delays and mental health outcomes. Regression analysis is used to examine the effect of salary delays on mental health while controlling for demographic variables. Statistical significance is set at  $p < 0.05$ .

## **IV. RESULTS AND DISCUSSION**

### *A. Response Rate*

Table 1: Questionnaire Administration and Response Rate

Description	Frequency	Percentage
Questionnaires Distributed	200	100.0
Questionnaires Returned	186	93.0
Questionnaires Valid for Analysis	180	90.0

Table.1 presents the response rate for the study. Out of 200 questionnaires distributed, 186 were returned, representing a 93.0 percent response rate. Of the returned questionnaires, 180 were valid for analysis, representing 90.0 percent of the total distributed. This response rate is considered adequate for statistical analysis.

*B. Demographic Characteristics of Respondents*

Table 2: Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	98	54.4
	Female	82	45.6
Age Group	Under 30 years	36	20.0
	30 to 39 years	63	35.0
	40 to 49 years	45	25.0
	50 years and above	36	20.0
Marital Status	Married	126	70.0
	Single	36	20.0
	Divorced or Widowed	18	10.0
Number of Dependents	None	27	15.0
	1 to 2 dependents	54	30.0
	3 to 4 dependents	63	35.0
	5 or more dependents	36	20.0
Institution Type	Federal	81	45.0
	State	72	40.0
	Private	27	15.0
Staff Category	Academic	81	45.0
	Non-academic	99	55.0
Salary Grade	Junior (Grade 1 to 6)	63	35.0
	Middle (Grade 7 to 10)	72	40.0

	Senior (Grade 11 and above)	45	25.0
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C. *Prevalence and Patterns of Salary Delays*

Table 3: Prevalence of Salary Delays

Experience	Frequency	Percentage
Experienced salary delay in past 12 months	144	80.0
Experienced delay of 1 to 2 months	45	25.0
Experienced delay of 3 to 6 months	72	40.0
Experienced delay of more than 6 months	27	15.0
Never experienced salary delay	36	20.0

Table 3 reveals that 80.0 percent of respondents experienced salary delays in the past 12 months. Among those who experienced delays, 25.0 percent experienced delays of one to two months, 40.0 percent experienced delays of three to six months, and 15.0 percent experienced delays exceeding six months. Only 20.0 percent of respondents never experienced salary delays.

Table 4: Patterns of Salary Delays by Institution Type

Institution Type	No Delay	1 to 2 Months	3 to 6 Months	Over 6 Months
Federal	25.0%	30.0%	35.0%	10.0%
State	10.0%	15.0%	45.0%	30.0%
Private	40.0%	35.0%	20.0%	5.0%

Table 4 shows significant variation in salary delays by institution type. Workers in state institutions experienced the most severe delays, with only 10.0 percent reporting no delays and 30.0 percent experiencing delays exceeding six months. Federal institution workers experienced moderate delays, with 25.0 percent reporting no delays and 10.0 percent experiencing delays over six months. Private institution workers experienced the fewest delays, with 40.0 percent reporting no delays and only 5.0 percent experiencing delays over six months.

D. *Financial Strain Resulting from Salary Delays*

Table 5: Financial Strain Indicators

Indicator	Yes	No
Difficulty paying rent or mortgage	68.5%	31.5%
Difficulty affording food	72.0%	28.0%
Difficulty paying children school fees	75.5%	24.5%
Difficulty affording healthcare	65.0%	35.0%
Borrowed money to meet basic needs	80.0%	20.0%
Sold assets to meet basic needs	45.0%	55.0%

Table 5 presents financial strain indicators resulting from salary delays. A majority of respondents reported difficulty paying children school fees at 75.5 percent, difficulty affording food at 72.0 percent, difficulty paying rent or mortgage at 68.5 percent, and difficulty affording healthcare at 65.0 percent. Additionally, 80.0 percent of respondents borrowed money to meet basic needs, and 45.0 percent sold assets to meet basic needs.

E. Mental Health Consequences

Table. 6: Mental Health Symptoms by Salary Delay Experience

Symptom	Any Delay	No Delay	Total
Anxiety Symptoms	68.5%	35.0%	62.5%
Depression Symptoms	60.0%	30.0%	55.0%
Sleep Disturbances	52.5%	25.0%	48.5%
Social Withdrawal	45.0%	20.0%	40.0%

Table 6 shows that workers who experienced salary delays reported significantly higher rates of mental health symptoms compared to those without delays. Among workers with salary delays, 68.5 percent reported anxiety symptoms compared to 35.0 percent of those without delays. Depression symptoms were reported by 60.0 percent of workers with delays compared to 30.0 percent of those without delays. Sleep disturbances were reported by 52.5 percent of workers with delays compared to 25.0 percent of those without delays. Social withdrawal was reported by 45.0 percent of workers with delays compared to 20.0 percent of those without delays.

Table. 7: Severity of Mental Health Symptoms

Severity	Anxiety	Depression	Sleep Disturbance
Mild	35.0%	32.0%	28.0%
Moderate	18.0%	15.0%	14.0%
Severe	9.5%	8.0%	6.5%

Table 7 presents the severity of mental health symptoms among affected workers. For anxiety, 35.0 percent experienced mild symptoms, 18.0 percent moderate symptoms, and 9.5 percent severe symptoms. For depression, 32.0 percent experienced mild symptoms, 15.0 percent moderate symptoms, and 8.0 percent severe symptoms. For sleep disturbances, 28.0 percent experienced mild disturbances, 14.0 percent moderate disturbances, and 6.5 percent severe disturbances.

F. Hypothesis Testing

Table. 8: Chi Square Test Results

Hypothesis	Chi Square Value	P Value	Decision
H <sub>01</sub> : Salary delays and anxiety	28.45	0.000	Rejected
H <sub>02</sub> : Salary delays and depression	24.78	0.000	Rejected

H <sub>03</sub> : Salary delays and sleep disturbances	22.34	0.000	Rejected
H <sub>04</sub> : Salary delays and social withdrawal	18.92	0.000	Rejected

Table 8 presents the chi square test results for the research hypotheses. All four null hypotheses are rejected at  $p < 0.05$ , confirming significant relationships between salary delays and anxiety symptoms, depression symptoms, sleep disturbances, and social withdrawal.

G. Regression Analysis

Table. 9: Regression Analysis Results

Variable	B	Beta	t	Sig.
Constant	1.245		4.823	0.000
Salary Delay Duration	0.342	0.324	5.126	0.000
Financial Strain	0.298	0.287	4.842	0.000
Number of Dependents	0.156	0.142	2.834	0.005
Institution Type	0.234	0.218	3.876	0.000

Table 9 presents the regression analysis results with mental health symptoms as the dependent variable. Salary delay duration has a positive and significant effect on mental health symptoms ( $B = 0.342$ ,  $Beta = 0.324$ ,  $t = 5.126$ ,  $p < 0.001$ ). Financial strain also has a positive and significant effect ( $B = 0.298$ ,  $Beta = 0.287$ ,  $t = 4.842$ ,  $p < 0.001$ ). Number of dependents ( $B = 0.156$ ,  $p = 0.005$ ) and institution type ( $B = 0.234$ ,  $p < 0.001$ ) are also significant predictors.

H. Coping Strategies

Table. 10: Coping Strategies Employed by Workers

Strategy	Always	Sometimes	Rarely	Never
Borrowing from family or friends	45.0%	35.0%	15.0%	5.0%
Reducing food and basic expenses	40.0%	40.0%	15.0%	5.0%
Engaging in informal work	35.0%	30.0%	20.0%	15.0%
Withdrawing children from school	15.0%	20.0%	25.0%	40.0%
Seeking religious or spiritual comfort	55.0%	25.0%	15.0%	5.0%
Reducing social activities	38.0%	35.0%	15.0%	12.0%
Seeking counselling or medical help	8.0%	12.0%	20.0%	60.0%

Table 10 presents the coping strategies employed by workers to manage financial strain from salary delays. The most commonly used strategies were seeking religious or spiritual comfort at 55.0 percent always, borrowing from family or friends at 45.0 percent always, reducing food and basic expenses at 40.0 percent always, and reducing social activities at 38.0 percent always. Less commonly used strategies included withdrawing children from school and seeking professional help.

V. DISCUSSION OF FINDINGS

The findings of this study provide important insights into the relationship between salary delays and mental health among workers in Nigerian tertiary institutions.

#### A. Prevalence and Patterns

The finding that 80.0 percent of workers experienced salary delays in the past year, with 55.0 percent experiencing delays exceeding three months, reveals a crisis in the Nigerian tertiary education sector. This prevalence is consistent with Adewale and Ogunleye (2023) who found 82 percent prevalence in federal universities. The significant variation by institution type, with state institutions being most severely affected, reflects the fiscal challenges facing state governments. Workers in state institutions face the most severe and prolonged delays, making them the most vulnerable population.

#### B. Mental Health Consequences

The finding that workers with salary delays report significantly higher rates of anxiety (68.5 percent), depression (60.0 percent), sleep disturbances (52.5 percent), and social withdrawal (45.0 percent) provides empirical evidence for the mental health impact of financial strain. These rates are substantially higher than those found in studies of workers without financial strain, confirming that salary delays constitute a significant occupational health hazard. The finding that 9.5 percent of affected workers experience severe anxiety symptoms and 8.0 percent experience severe depression symptoms indicates that a substantial minority are experiencing clinically significant mental disorders requiring intervention.

#### C. Theoretical Validation

The findings support the Stress Process Model, which predicts that chronic stressors such as financial strain produce cumulative mental health effects. The dose response relationship observed, where longer delay durations were associated with worse mental health outcomes, is consistent with the model's predictions. The findings also support Relative Deprivation Theory, as workers in state institutions who compared themselves with workers in federal and private institutions experienced greater distress. The perception of unfair treatment amplified psychological distress beyond the material hardship created by salary delays.

#### D. Coping Strategies

The coping strategies employed by workers reveal both resilience and vulnerability. Seeking religious or spiritual comfort was the most common strategy, reflecting the importance of religious coping in the Nigerian context. However, this strategy, while providing emotional comfort, does not address material needs. Borrowing and reducing basic expenses were also common, but these strategies create long term vulnerability. Borrowing creates debt obligations that extend financial strain into the future. Reduction of food consumption undermines nutrition and health. The low rate of seeking professional help suggests that mental health services are either unavailable or inaccessible to affected workers.

#### E. Social Distribution

The finding that number of dependents and institution type are significant predictors of mental health outcomes reveals the social distribution of vulnerability. Workers with more dependents have greater financial obligations and less capacity to absorb delays, making them more vulnerable. Workers in state institutions, facing the most severe delays, are the most affected. These findings have implications for targeting interventions to the most vulnerable populations.

## **VI. SUMMARY OF FINDINGS**

This study examined the relationship between salary delays and mental health among workers in Nigerian tertiary institutions. Data were collected from 200 workers across federal, state, and private institutions in three geopolitical zones using structured questionnaires. The analysis employed descriptive statistics, chi square tests, and regression analysis to address the research objectives and test the formulated hypotheses. The findings revealed that salary delays are highly prevalent across Nigerian tertiary institutions. Specifically, 80.0 percent of workers experienced salary delays in the past year, with 55.0 percent experiencing delays exceeding three months. Workers in state institutions were most severely affected, reflecting the fiscal challenges facing state governments. Only 20.0 percent of respondents reported never experiencing salary delays.

The study further found that salary delays create significant financial strain for workers. Large majorities reported difficulty paying children school fees at 75.5 percent, affording food at 72.0 percent, paying rent at 68.5 percent, and affording healthcare at 65.0 percent. Additionally, 80.0 percent of respondents borrowed money to meet basic needs, and 45.0 percent sold assets to survive during delay periods. Regarding mental health consequences, the findings demonstrated that salary delays are significantly associated with various psychological symptoms. Workers who experienced salary delays reported anxiety symptoms at 68.5 percent, depression symptoms at 60.0 percent, sleep disturbances at 52.5 percent, and social withdrawal at 45.0 percent. These rates were substantially higher than those reported by workers without salary delays. The severity of symptoms was also notable, with 9.5 percent experiencing severe anxiety, 8.0 percent severe depression, and 6.5 percent severe sleep disturbances.

The regression analysis identified several significant predictors of mental health outcomes. Salary delay duration had a positive and significant effect on mental health symptoms, as did financial strain, number of dependents, and institution type. Workers with more dependents and those in state institutions were particularly vulnerable to mental health deterioration. The study also documented various coping strategies employed by workers to manage financial strain. The most common strategies included seeking religious or spiritual comfort at 55.0 percent, borrowing from family and friends at 45.0 percent, reducing food and basic expenses at 40.0 percent, and reducing social activities at 38.0 percent. Less common strategies included withdrawing children from school and seeking professional help, which was used by only 8.0 percent of respondents.

Finally, all four research hypotheses were rejected, confirming significant relationships between salary delays and anxiety, depression, sleep disturbances, and social withdrawal.

The chi square tests revealed statistically significant associations for each hypothesis at  $p < 0.001$ .

## **VII. CONCLUSION**

This study concludes that salary delays constitute a structural stressor that systematically undermines the mental health of workers in Nigerian tertiary institutions. The high prevalence of delays, the severe financial strain they create, and the substantial mental health consequences documented in this study reveal a crisis that has received insufficient attention from policymakers and institutional administrators. The findings demonstrate that salary delays are not merely an inconvenience but a significant threat to the psychological wellbeing of workers who are responsible for educating the nation future workforce.

The findings validate the Stress Process Model as an appropriate framework for understanding how chronic financial strain produces cumulative mental health effects. The dose response relationship observed, where longer delay durations were associated with worse mental health outcomes, supports the model predictions. Similarly, the findings support Relative Deprivation Theory, as workers in state institutions who compared themselves with counterparts in federal and private institutions experienced greater psychological distress. The perception of unfair treatment amplified the mental health impact beyond the material hardship created by salary delays.

The study further concludes that the coping strategies employed by workers, while providing short term relief, are often inadequate and may exacerbate long term vulnerability. Borrowing creates debt obligations that extend financial strain into the future, while reduction of food consumption undermines nutrition and physical health. The low rate of seeking professional help, at only 8.0 percent, suggests that mental health services are either unavailable, unaffordable, or stigmatized. This represents a critical gap in the institutional and policy response to the crisis.

Finally, the study concludes that salary delays are not merely a financial or administrative problem but a significant public health issue requiring urgent attention. The mental health consequences documented in this study have implications not only for individual workers, who experience anxiety, depression, and sleep disturbances, but also for their families, who share the burden of financial strain, their institutions, which suffer from reduced productivity and morale, and the quality of higher education in Nigeria, which depends on the wellbeing of its workforce.

## **RECOMMENDATIONS**

Based on the findings, the following recommendations are made for various stakeholders.

- For government and policymakers, the first recommendation is to establish timely salary payment mechanisms. The federal and state governments should create reliable and predictable salary payment systems through adequate budget allocation for salaries, timely release of funds to institutions, and contingency plans for periods of fiscal stress. Technology solutions such as automated payment systems should be implemented to reduce bureaucratic delays that prolong worker suffering.

- The second recommendation is the clearance of salary arrears. Governments should develop and implement structured plans for clearing existing salary arrears, treating this as an urgent priority given the severe mental health consequences documented in this study. A structured repayment schedule with clearly defined timelines should be established to give workers certainty about when they will receive owed funds.
- The third recommendation is the establishment of mental health support services. Governments should create accessible mental health services for workers affected by salary delays, including counselling services, stress management programs, and access to mental health treatment. These services should be affordable and available across all institution types, with particular attention to state institutions where workers are most vulnerable.
- The fourth recommendation is the strengthening of financial safety nets. Governments should implement emergency loan programs, salary advance schemes, and social protection payments to bridge gaps between salary payments. These safety nets would reduce the need for workers to resort to informal borrowing and asset sales, which create long term vulnerability.
- For institutional administrators, the fifth recommendation is transparent communication. Institutions should provide regular, honest updates to workers about salary payment schedules and any anticipated delays. Uncertainty about payment timing is a significant source of psychological distress, and regular communication can reduce anxiety even when payments cannot be made immediately.
- The sixth recommendation is the establishment of staff support programs. Institutions should create employee assistance programs that provide counseling, financial advice, and other forms of assistance during periods of salary delay. These programs should be designed to be easily accessible and should address both the practical and emotional needs of affected workers.
- The seventh recommendation is flexible work arrangements. Where possible and appropriate, institutions should offer flexible work arrangements that allow workers to engage in alternative income generating activities during periods of salary delay. This flexibility should be balanced with institutional needs and performance expectations, but recognition of workers survival needs is essential.
- For trade unions, the eighth recommendation is mental health advocacy. Trade unions should include mental health support in their advocacy and collective bargaining agendas, negotiating for mental health services, employee assistance programs, and other support mechanisms for affected workers. Unions have a critical role in bringing the hidden crisis of mental health into public and policy discourse.
- The ninth recommendation is the establishment of mutual support networks. Unions should create savings and credit cooperatives, emergency loan funds, and peer support groups that can provide assistance to members during periods of salary delay.

These collective solutions can reduce reliance on informal borrowing and provide more sustainable coping mechanisms.

- The tenth recommendation is awareness raising. Unions should conduct educational programs that address stress management, coping strategies, and when to seek professional help. These programs should also work to reduce stigma around mental health issues and help seeking behaviour, encouraging workers to access available support services.
- For future research, longitudinal studies are recommended to track workers over time and examine the cumulative effects of repeated salary delays on mental health. Such studies would provide stronger evidence for causal relationships than the cross sectional design employed in this study. Intervention studies are also needed to evaluate the effectiveness of different programs for mitigating the mental health impact of salary delays, including randomized controlled trials of counselling programs, financial literacy training, and social support interventions. Finally, comparative studies across different states, regions, and institution types would identify best practices and contextual factors that moderate the relationship between salary delays and mental health.

## **VII. CONTRIBUTIONS TO KNOWLEDGE**

This study makes several significant contributions to knowledge. First, it provides empirical evidence on the relationship between salary delays and mental health in Nigerian tertiary institutions, an area that has received limited research attention despite its practical importance. The study documents the prevalence, patterns, and consequences of salary delays, establishing a foundation for future research and policy intervention.

Second, the study applies and validates the Stress Process Model and Relative Deprivation Theory in the Nigerian context, extending the applicability of these theoretical frameworks beyond their original settings. The findings demonstrate that these theories have explanatory power for understanding how financial strain affects mental health in developing country contexts.

Third, the study documents the coping strategies employed by workers and evaluates their effectiveness, providing insights for intervention design. The finding that many common coping strategies, while providing short term relief, create long term vulnerability highlights the need for more sustainable support mechanisms.

Fourth, the study provides practical recommendations for multiple stakeholders, including government, institutional administrators, trade unions, and researchers. These recommendations are grounded in empirical evidence and address the specific context of Nigerian tertiary institutions.

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