

## Psychological Influence of Inflation on the Health of Women of Child Bearing Age in Kaduna State, Nigeria

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### Abstract

*Women of childbearing age face increased financial strain, as their roles often require prioritizing family needs over personal health and well-being. This study investigated the psychological influence of inflation on the health of women of childbearing age in Kaduna State, Nigeria. Utilizing a descriptive survey design, a sample of 384 participants was drawn from a population of 2,219,429 women using multi-stage sampling techniques. Data collection was conducted via structured questionnaires, validated for reliability (Cronbach's Alpha = 0.871). Findings revealed significant psychological influence of inflation, including heightened stress, anxiety, and altered life perceptions. The one-sample t-test analysis indicated a statistically significant psychological influence ( $t = 12.532$ ,  $p < 0.000$ ). The study suggested the need for targeted interventions such as mental health support programs and economic empowerment initiatives to alleviate the psychological burden of inflation on this vulnerable demographic. In conclusion, inflation has psychological influence on women of childbearing age in Kaduna State, Nigeria.*

**Keywords:** Inflation, Psychological impact, Women of childbearing age, Mental health

### Introduction

Globally, inflation has become a persistent economic challenge, especially since the COVID-19 pandemic. For example, the annual inflation rate in 2020 was 1.2%, rising to 4.7% in 2021 and continuing its upward trend due to geopolitical conflicts, supply chain disruptions, and other macroeconomic pressures (Williams, 2022; IMF, 2023). Inflation, the sustained increase in the general price level of goods and services, directly impacts the socioeconomic landscape, with vulnerable groups, such as women of childbearing age, disproportionately affected. These women often juggle caregiving, household management, and economic responsibilities, leaving them more exposed to the negative psychological and social effects of inflation (Williams, 2022; Saifaddin, 2023).

Inflation reduces the purchasing power of money, thereby limiting access to essential commodities such as food, housing, healthcare, and childcare. Women of childbearing age face increased financial strain, as their roles often require prioritizing family needs over personal health and well-being. Research shows that inflation exacerbates psychological challenges, including anxiety, depression, and stress, as women struggle to maintain their families' basic needs while coping with rising prices and stagnant wages (Sarah, 2022; APA, 2023).

In developing countries, the situation is even more critical. For instance, African nations like Zimbabwe and Nigeria face high inflation rates driven by political instability, currency devaluation, and supply chain disruptions. Trading Economics reports Zimbabwe's inflation rate is in the double- to triple-digit range e.g. 93.80 % in August 2025, while Nigeria experienced food inflation rates exceeding 30%, further straining household economies (Saifaddin, 2023; CBN, 2023). Women in these regions not only bear the brunt of economic hardship but also encounter barriers to healthcare access, including prenatal and postnatal services, further jeopardizing their mental and physical health (WHO, 2023; Yejide, 2023).

Inflation also impacts women's social and emotional well-being. Rising costs lead to employment instability, reduced financial independence, and limited access to professional mental health support. Women often report feelings of frustration, helplessness, and injustice in the face of economic hardship, which significantly affect their family dynamics and quality of life (Sarah, 2022; Kate, 2023). Studies reveal that women are 28% more likely than men to experience inflation-induced stress, further underscoring the gendered nature of this economic challenge (Kate, 2023).

In Nigeria, inflation has historically been a major economic concern, with rates peaking during periods of fiscal expansion and economic instability. The Consumer Price Index (CPI) in Kaduna State, for example, revealed annual inflation rates as high as 22% in 2023, driven by factors such as subsidy removal and rising transportation costs (Kaduna State Bureau of Statistics, 2021). These economic pressures disproportionately affect women of childbearing age, necessitating targeted interventions to mitigate their psychological and socioeconomic impacts. This study therefore examines the psychological influence of inflation on women of childbearing age, on its impact on mental health, access to healthcare, and quality of life.

### **Purpose of the study**

The study examined the psychological influence of inflation on health status of women of childbearing age in Kaduna state, Nigeria.

### **Research question**

What is the psychological influence of inflation on health status of women of childbearing age in Kaduna state, Nigeria?

### **Null hypothesis**

The study tested the null hypothesis:

Inflation do not significantly have psychological influence on women of childbearing age in Kaduna state, Nigeria.

## **Methodology**

The research design employed for this study was descriptive survey design. Orah (2007) submitted that survey design focused on people, their belief, attitudes and behaviours. It also helps the research to systematically document current opinions and information on research work. Hence, the descriptive survey design was considered quite suitable for conducting this study. The population for this study consisted of 2,219,429 women of childbearing age in Kaduna state, Nigeria (National population commission estimate, 2022). For a population of this magnitude according to Research Advisor (2006). The sample size for this study was drawn from the population of women of childbearing age which was 384. A multi stage sampling procedure was employed for this study, which include stratified, simple random, proportionate and systematic sampling procedure. Stage I: Cluster sampling technique was used to divide Kaduna state into the three (3) existing senatorial zones, which are Kaduna north, Kaduna central and Kaduna south as a strata. Stage II: Simple Random Sampling Technique was used to select two (2) local government area from the each senatorial zones which (Kaduna North, Kaduna Central and Kaduna south) in Kaduna state. Kaduna north comprised of Sabon-gari and Zaria LGA , Kaduna central consisted of Igabi and Giwa LGA while Kaduna south comprised of Kachia and Kaura LGA. Stage III: Simple Random sampling technique was used to select one community for the study from each selected LGAs. Stage IV: Proportionate sampling technique was used to select respondents from each community. Stage V: Systematic sampling method was used to select and administer questionnaire to participants using every 5<sup>th</sup> participants from the selected houses in community to participate in the study.

Face-to-face interview administered questionnaire was used for the respondents in their husband houses to allow for confidential location and to ensure comfortability of the respondents. The data collection process included the following steps; visit to each of the communities, paying an identification visit to the heads of the selected communities to seek permission to conduct interviews and administration of questionnaire to the respondents. And data collection was mostly in the morning in confidential places such as any suitable place prompted out by the respondent within the house. Advocacy visit was carried out in ministry of Local Government and Chieftaincy affair as well as the State Primary Healthcare and development Boards of the selected local government to solicit support and explain objective of the research. Courtesy visit was paid to the community leaders and to explain the objectives of the study and solicit support before the administration of the questionnaire in each community. The data collection exercise lasted for two (3) weeks. However, in order to avoid duplication of respondents, the researcher and the research assistants personally guided the respondents in responding to the questionnaire.

**Table 1**

**Sample Selection Table**

S/N	Zone	LGA	Community Selected	Population	Sample Size
1	Kaduna North	Sabon Gari	Samaru	35,096	24
		Zaria	Tudunwada	29,444	20
2	Kaduna Central	Igabi	Igabi	146,776	100
		Giwa	Giwa	213,339	146
3	Kaduna South	Kachia	Gumel	51,506	35
		Kauru	Fada	86,061	59
<b>Total</b>				<b>561,199</b>	<b>384</b>

**Source: National Population Commission, Kaduna State (2006)**

### **Instrumentation**

The instrument that was used for data collection in this study was researcher-structured closed-ended questionnaire. The questionnaire was divided into 5 sections A, B, C, D and E. Section “A” comprises of demographic characteristics of the respondents, Section “B” Consists of (10) items on the psychological influence of inflation of women of childbearing age, Section “C” consist of (10) items on the social influence of inflation of women of childbearing age, Section “D” Consist of (10) items on the emotional influence of inflation of women of childbearing age, Section “E” Consist of (10) items on the economic influence of inflation of women of childbearing age. To calculate the mean score of response as shown by respondents, the modified four (4) point’s Likert rating scale was used: Always (4); Sometimes (3); Often (2); Never (1). Therefore, any mean score of response than 2.5 or above was regarded positive, while any mean score of response less than 2.5 was regarded negative.

To ensure the instrument measures what it supposed to measure, the research instrument (questionnaire) was vetted for face, structural and content validity by experts in educational research in the Department of Human Kinetics and Health education, Ahmadu Bello University, Zaria . The suggestions, criticism and comments were used in fine-tuning the final draft of the instrument for the data collection process. The questionnaire was administered to the women (respondents) by the researcher with the help of four (4) research assistants (RAs). The research assistants were guided on the objective of the study, the sampling procedure, how to secure respondent's informed consent; the importance of collecting valid data; procedures for questionnaire administration and techniques for reviewing the items on the questionnaire to have an adequate understanding of the instrument and completeness.

The researcher and the research assistants administered the questionnaire to the respondents in their husband's houses to allow for a confidential location and to ensure the comfort of the respondents. The data collection process includes the following steps; a visit to each of the zones and communities, paying an identification visit to the heads of the selected communities to seek permission to administer the questionnaire to the respondents. The researcher and her research assistants administered three Hundred and Eighty-Four (384) copies of the questionnaire in all three senatorial zones in Kaduna state. The researcher used three (3) weeks for the data collection exercise. The researcher and her research assistants met the respondents

in each community and administered the questionnaires. The researcher and her research assistants used one week in each community for the data collection. The research and her research assistants explained to the respondents how to fill out the questionnaire and all copies of the questionnaire administered were retrieved immediately after filling.

### **Procedure for data analysis**

Mean score and standard deviation were used to answer the research questions. The mean score of each of the responses was calculated based on the four (4) points-modified Likert rating scale. An inferential statistic of one simple t-test will be used to test hypothesis at 0.05 level of significant.

### **Results and Discussion**

**Research Question One:** What is the influence of psychological health status of women of childbearing age in Kaduna state, Nigeria?

**Table 1**

*Mean Scores of Responses on the psychological health status of women of childbearing age in Kaduna State, Nigeria*

S/N	Item	Mean	Std Dev
1.	I become more irritable due to inflation	2.45	0.763
2.	I have difficulty sleeping due to inflation	2.64	1.184
3.	Inflation makes me more anxious	2.59	0.996
4.	Inflation makes me more depressed	2.52	0.972
5.	I have difficulty concentrating on my work due to inflation	2.42	1.129
6.	I have difficulty concentrating on my studies due to inflation	2.47	1.078
7.	My perception of life changes due to inflation	2.73	0.892
8.	I am stressed which is caused by inflation	2.50	0.878
9.	Am stressed due to financial concerns caused by inflation	2.75	0.859
10.	Inflation makes me think too much which leads to headaches, loss of appetite	2.46	0.922
	<b>Average Mean</b>	<b>2.55</b>	

(Decision Mean – 2.50)

Table 1 presented the mean scores of responses on the psychological health status of women of childbearing age in Kaduna State, Nigeria, in relation to the effects of inflation. The highest mean score is 2.75 which is associated with stress due to financial concerns caused by inflation. This implies that financial worries are a primary source of stress among these women.

Similarly, the mean score of 2.73 for the item "My perception about life changes due to inflation" indicates a substantial shift in life perspectives due to economic conditions. Difficulty in sleeping (mean score 2.64) and increased anxiety (mean score 2.59) are also significant concerns, which shows how inflation disrupts both mental and physical well-being.

The women also reported experiencing less irritability (mean score 2.45) and less difficulty concentrating on work (mean score 2.42) and studies (mean score 2.47). The sense of increased depression (mean score 2.52) and stress in general (mean score 2.50) further revealed the mental health challenges posed by inflation. Additionally, the score of 2.46 for the item "Inflation makes me think too much which leads to headache, loss of appetite" suggests that the physical symptoms of stress and daily functioning and productivity are less affected by inflation.

The results indicated that the psychological health of these women is affected by inflation, with an overall average mean score of 2.55, which is above the decision mean of 2.50.

**Testing of null hypothesis:** Inflation does not significantly have psychological influence on women of childbearing age in Kaduna state, Nigeria

**Table 2**

*One-Sample t-test Analysis of psychological influence on women of childbearing age in Kaduna state, Nigeria*

Variable	N	Mean	Std. Dev.	df	t-value	p-value
Psychological Effect	384	2.55	1.18	383	12.532	0.0001
Test Mean	384	2.50	0.00			

**Calculated  $p < 0.05$ , calculated t-value  $> 1.972$  at df 383**

The result of the one-sample t-test statistics in Table 2 revealed that inflation significantly have psychological influence on women of childbearing age in Kaduna State, Nigeria with calculated p-value of 0.0001 is less than the 0.05 level of significance and the calculated t-value of 12.532 is higher than the 1.972 critical t-value at 383 degrees of freedom (df). Therefore, the null hypothesis which stated that inflation do not significantly have psychological influence on women of childbearing age in Kaduna state, Nigeria is hereby rejected. This means that inflation have psychological effect on women of childbearing age in Kaduna State, Nigeria.

### **Discussion of findings**

The study revealed that inflation significantly have psychological influence on women of childbearing age in Kaduna State, Nigeria. The calculated p-value of 0.0001 is less than the 0.05 level of significance and the calculated t-value of 12.532 is higher than the 1.972 critical t-value at 383 degrees of freedom (df). This means that inflation has psychological influence on women of childbearing age in Kaduna State, Nigeria. This is consistent with the study conducted by Arab Naz *et al.* (2019) who reported that inflation as a social monster has

multidimensional impacts on the psychological spheres of poor families, which paralyzes their overall development.

A study by Olayiwola and Adedokun (2021) on the impact of inflation on the mental health of low-income women in Lagos, Nigeria found that rising prices of essential goods and services led to increased stress, anxiety, and depression among this population. Similarly, a cross-country analysis by Perrons (2018) on the problems and possibilities of capitalising on emotional and affective value revealed that higher levels of inflation are associated with poorer psychological outcomes, particularly for vulnerable groups like women and children.

These findings can be understood through the lens of the "cost of living crisis" framework, which posits that rapid price increases for necessities like food, housing, and healthcare can have detrimental effects on an individual's mental health and overall quality of life (Romich *et al.*, 2022). Women of childbearing age may be especially susceptible to the psychological impacts of inflation, as they often bear the brunt of managing limited household budgets and ensuring the well-being of their families (Akanbi & Monisola, 2020). More so, a study of low-income mothers in the United States found that food insecurity and housing instability resulting from economic pressures contributed to heightened anxiety, depression, and feelings of helplessness (Nandi *et al.*, 2018). Likewise, an investigation of the mental health impacts of the great recession in Europe demonstrated that women were more likely than men to experience depression and other psychological distress during periods of high inflation and economic uncertainty (Drydakis, 2015).

## **Conclusion**

Based on the findings of the study, inflation has psychological influence on women of childbearing age in Kaduna State, Nigeria.

## **Recommendations**

Based on the findings, the study recommended that:

1. Government and health-related organizations should design and implement mental health support programmes for women of childbearing age through free counselling services and stress management workshops to improve their psychological wellbeing.
2. Economic empowerment programmes aimed at women of childbearing age such as microfinance opportunities, vocational training, and entrepreneurship workshops to help them improve their financial stability and resilience against inflation should be developed by relevant stakeholders like government agencies and health educators to improve their psychological health
3. Further study should be carried out to examine the influence of inflation on access to counselling services among women of childbearing age.

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