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An Analysis on the effects of Household Demographics on Household Consumption Patterns in Zambia: A Case Study of Chawama Constituency, Lusaka Province

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Abstract

This This study examines the influence of household demographics on consumption patterns in Chawama constituency, Lusaka, Zambia, between 2018 and 2023. The research explores the role of factors such as household size, dependency ratios, education levels, income distribution, and labor force participation in shaping household expenditure behaviors. By analyzing these relationships, the study provides valuable insights into addressing socio-economic disparities and optimizing policy interventions to enhance household welfare and economic development in Zambia's urban areas. The study employs a descriptive quantitative survey design, utilizing structured questionnaires distributed to a representative sample of households. Statistical analysis of the data revealed significant correlations between demographic factors and expenditure categories, including essentials such as food, housing, and healthcare, as well as discretionary spending on education, transportation, and entertainment. Key findings indicate that higher dependency ratios are associated with greater allocation of income to essential needs like food and healthcare, often limiting discretionary spending. Larger households prioritize basic necessities over non-essentials, while smaller households show a broader expenditure range. Education emerged as a critical factor, with households headed by individuals with higher education levels allocating more resources toward diversified and long-term spending, including education and healthcare. Income level was also a significant determinant, as wealthier households exhibited broader consumption patterns and higher spending on discretionary items, whereas lower income households focused on survival needs. Labor force participation was found to have a notable impact, particularly in dual income households, which reported increased spending on education, housing, and other non-essentials. Moreover, the study found that income inequality drives disparities in consumption patterns, with wealthier households enjoying enhanced spending flexibility compared to their lower-income counterparts. The findings underscore the need for targeted policy interventions to address the diverse needs of different demographic groups. Recommendations include enhancing access to quality education, promoting financial literacy, and implementing income-generating programs to reduce dependency ratios and foster economic resilience. Strengthening social safety nets and addressing income inequality are also vital for ensuring equitable consumption opportunities across various household types. This research contributes to understanding the intricate relationship between household demographics and consumption behaviors in Zambia. By offering actionable insights, it provides a foundation for policymakers, businesses, and development organizations to design targeted strategies that improve household welfare, promote sustainable economic growth, and reduce socio-economic disparities in urban communities.

Keywords: Consumption, Household, Demographics

1. Introduction

1.1 Background

The relationship between household demographics and household consumption is a topic of significant interest and importance in understanding the economic dynamics and social patterns in Zambia. As a landlocked country in southern Africa, Zambia has experienced notable economic growth and social changes in recent years particularly slowed economic growth to 6.6% in

2011 from 7.6% in 2010 as a result of weaker mining performance. Exploring how household demographics influence household consumption can provide valuable insights into the consumption patterns and trends that shape the Zambian economy.

Zambia is classified as a lower-middleincome country, with agriculture, mining, and manufacturing being key sectors of its economy. This means that GNI per capita is between $1,036 and $4,045 (World Bank, 2021). Over the years, Zambia has undergone substantial economic reforms, resulting in increased trade openness, infrastructure development, and foreign direct investment (Chibwe, 2019). These economic changes have had a direct impact on household consumption patterns.

Understanding the demographic profile of households in Zambia is essential for examining the relationship between household demographics and consumption. Zambia has a diverse population, comprising various ethnic groups, with the majority being Bantu-speaking tribes (Central Statistical Office, 2010). The country has also experienced population growth, urbanization, and changes in household structures (Chola, 2018). These demographic shifts influence household consumption patterns in terms of preferences, needs, and income distribution. The country recorded an average growth rate of 3.2% in the decade to 2022, just above the sub-Saharan Africa's average growth rate of 3.0%.

Income inequality is also a prominent issue in Zambia, with a significant portion of the population living below the poverty line (World Bank, 2021). The distribution of income among households has a direct influence on their consumption behavior. Higher-income households tend to have different consumption patterns compared to lower-income households.

Understanding the relationship between household demographics and income distribution is crucial in comprehending consumption disparities within Zambia.

Culture, other hand, plays a vital role in shaping household consumption patterns. In Zambia, cultural norms, traditions, and beliefs influence preferences for certain goods and services. For instance, cultural celebrations, ceremonies, and religious practices may impact household consumption during specific periods (Kaluba, 2015) [17]. Exploring the interplay between cultural factors, household demographics, and consumption behavior can provide valuable insights into the Zambian context.

The findings from this study on household demographics and household consumption in Zambia can have significant policy implications. Understanding the consumption patterns of different demographic groups can assist policymakers in designing targeted interventions, social welfare programs, and economic policies that address the specific needs and challenges faced by different households. Moreover, it can aid in identifying strategies to promote inclusive growth, reduce income disparities, and improve overall societal well-being.

Examining the relationship between household demographics and household consumption in Zambia is crucial for gaining insights into the economic dynamics and social patterns within the country. By understanding the influence of demographic factors on consumption behavior, policymakers, businesses, and researchers can develop strategies to foster sustainable economic growth, address income disparities, and enhance the well-being of households across different demographic groups in Zambia.

1.2 Statement of the Probem

Despite the growing recognition of the influence of household demographics on household consumption patterns in Zambia, there is a lack of comprehensive research that examines the specific dynamics and implications of this relationship (Mambo, 2018; Mwale &Mulenga, 2019) [22, 25]. Similar studies on effects of interest rate on household by Kabwe &Kabubi (2020) [16] and determinants of household credit demand in Zambia by Wabei (2012) tackled only part of this study. GDP being a crucial performance indicator in these variables showed that the country between 2000-2009 recorded an average of 17.2%. Negatively, as a result of external debt in recent past led to about 36.5% of GDP in 2016 from 8.4% of GDP in 2011 (Lusaya & Mulunda, 2022) [21]. This knowledge gap hinders our understanding of the complex factors shaping consumption behaviors and their impact on the Zambian economy. Therefore, there is a need to investigate the precise nature of the relationship between household demographics and household consumption in Zambia, taking into account the economic, demographic, cultural, and policy contexts (Kasweshi, 2017; Simpasa *et al*., 2020) [18, 27]. By addressing this gap, policymakers and stakeholders can develop evidence-based strategies to promote inclusive growth, reduce income disparities, and enhance the well-being of households across different demographic groups in Zambia (World Bank, 2019; Central Statistical Office, 2021) [30, 8].

1.3 Research Objectives

The general objective of this study is to analyze the effects of household demographics on household consumption patterns in Zambia between 2018 and 2023, focusing on dependency ratio, labor participation, and the demographic characteristics of household heads., with the aim of understanding the dynamics and implications of these effects on the Zambian economy. The specific objectives of this study include: To examine the relationships between the demographic characteristics of the head of the household and household consumption, To examine the correlation between labor force participation rates and household consumption and To analyze the threshold levels of dependency ratio that significantly influence household consumption, in Chawama constituency.

1.4 Theoretical Framework

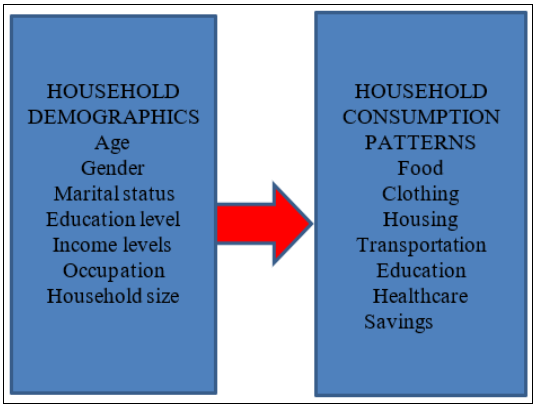
The study will be based on the theory of consumer behavior, which posits that consumers' decisions are influenced by a range of factors, including demographic characteristics. The study will also draw on the life-cycle theory of consumption, which argues that consumption patterns are influenced by households' stage in the life cycle. The study is grounded in the theory of consumer behavior, which suggests that consumers' purchasing decisions are influenced by various factors. These factors can be categorized into three main groups: personal factors, social factors, and psychological factors. Personal factors include demographics, lifestyle, personality, and socioeconomic status. Social factors encompass culture, family, social class, and reference groups. Psychological factors include motivation, perception, learning, and attitudes.

The life-cycle theory of consumption posits that households' consumption patterns change as they progress through different stages of the life cycle. These stages include the bachelor stage, newlywed stage, full nest stage, empty nest stage, and solitary stage. Each stage is characterized by distinct financial responsibilities and consumption patterns. For instance, households in the full nest stage tend to allocate a larger proportion of their income towards education and childcare expenses.

The conceptual framework illustrates the relationships between household demographics and household consumption patterns. The framework consists of household demographics, contextual factors, household consumption patterns, and outcomes. Household demographics include dependency ratio, labor force participation, and demographic characteristics of household heads. Contextual factors encompass socioeconomic status, education level, and access to infrastructure. Household consumption patterns refer to expenditure on food, education, healthcare, and other essential and non-essential items. Outcomes include financial stability, economic well-being, and quality of life.

The framework suggests that household demographics influence household consumption patterns, which in turn affect financial stability, economic well-being, and quality of life. Contextual factors moderate these relationships, highlighting the importance of considering the broader socioeconomic context in which households operate. By examining the interplay between household demographics, contextual factors, and household consumption patterns, the study aims to provide insights into the factors that shape consumption behavior and inform policy interventions that promote economic welfare and social well-being.

The diagram below clearly indicates the anticipated effects of household demographics which is an independent variable on household consumption, which is the dependent variable.



1.5 Literature Review

The relationship between household demographics and consumption patterns has been extensively studied in various contexts. In Zambia, research has shown that demographic characteristics of household heads, such as age, gender, and education level, significantly influence household consumption patterns (Kaluba, 2015) [17]. For instance, households headed by individuals with higher education levels tend to allocate a larger proportion of their income towards nonessential expenses (Chola, 2018). Similarly, households headed by older individuals tend to allocate a larger proportion of their income towards healthcare and other age-related expenses (Mwale & Mulenga, 2019) [25].

Education has also been identified as a significant factor influencing household consumption patterns. Households with higher levels of education tend to allocate a greater proportion of their resources towards education and healthcare (Chibwe & Moyo, 2016). Musonda and Mwiya (2018) [24] also found that educated individuals are more likely to prioritize their spending on goods and services that have a positive impact on their long-term quality of life. Labor force participation rates have also been linked to household consumption patterns. Households with higher labor force participation rates tend to have higher incomes and diverse spending (Wabei, 2012). In Zambia, studies have examined the relationship between labor force participation and household expenditure patterns. For example, Lusaya and Mulunda (2022) [21] found that households with higher labor force participation rates tend to allocate a larger proportion of their income towards education and healthcare expenses. Kabwe and Kabubi (2020) [16] also found a positive correlation between labor force participation rates and household income. The dependency ratio, defined as the ratio of dependents to working-age individuals in a household, has been shown to significantly influence household consumption patterns (Mambo, 2018; Mwale & Mulenga, 2019) [22, 25]. Households with high dependency ratios tend to have lower disposable income and altered consumption patterns. In Zambia, research has explored the impact of dependency ratio on household expenditure patterns. For example, Kabwe and Kabubi (2020) [16] found that households with high dependency ratios tend to allocate a larger proportion of their income towards food and other essential expenses, while reducing expenditure on nonessential items.

Furthermore, gender dynamics within households have been identified as influential factors in shaping consumption patterns. Research has shown that women and men often exhibit different allocation patterns of their income (Musonda & Mwiya, 2018) [24]. Women tend to allocate a higher proportion of their income towards essential family needs, while men may allocate a larger share of their income towards personal expenses. Banda (2017) also highlighted that women's lower income levels, resulting from limited educational and employment opportunities, may restrict their ability to contribute significantly to household expenditures. In conclusion, the literature review highlights the significance of household demographics in shaping consumption patterns. The findings of this review emphasize the need for policymakers to consider the demographic characteristics of households when designing policies aimed at promoting economic development and reducing poverty. By understanding the relationship between household demographics and consumption patterns, policymakers can develop targeted interventions that address the unique needs of different household types.

2. Research Methodology

2.1 Research Design/Methods/Approach

According to Stogdil (2016), the research design serves as a comprehensive framework or strategy that guides the entire research process, allowing researchers to analyze a specific and testable research topic of interest. In line with this, the present study employed a descriptive quantitative survey research design to examine the opinions and perceptions of

household members residing in the Chawama of Lusaka, Zambia. By using a quantitative survey approach, this study aimed at provide a systematic and quantitative description of the attitudes, experiences, and opinions of the selected sample population.

The selection of a quantitative survey method was deemed appropriate for this study due to its ability to collect numerical data that can be analyzed statistically. This approach enabled the researcher to gather information on various aspects of household consumption practices, including preferences, behaviors, and among others. By utilizing a semistructured self-completed questionnaire, the researcher distributed the identified target population, ensuring a consistent and standardized data collection process.

Through the implementation of a quantitative survey research design and the administration of a structured self-completed questionnaire, this study to provided valuable data that was analyzed and interpreted to address the research objectives. The quantitative nature of the survey enabled the generation of statistical data, allowing for a more comprehensive understanding of the factors influencing household consumption practices in the selected areas of Lusaka. The target population consisted of households in Chawama constituency, with a focus on households with varying dependency ratios, labor force participation rates, and demographic characteristics of household heads. The population of interest comprised residents of Lusaka, estimated to be approximately 3 million according to the Zambia Statistical Agency (Zamstats, 2023). A stratified sampling method was employed, incorporating sub-sets of population segmentation known as strata, from which a unique population sample was retrieved (Graves, 2008). The primary population strata of focus were identified, and from each stratum, a random sample of households was selected.

The determination of an appropriate sample size was crucial to ensure the reliability and generalizability of the findings. A stratified random sampling technique was employed, and the sample size was calculated taking into account factors such as the desired level of confidence, margin of error, population size, and expected response rate. A confidence level of 95% and a margin of error of ±5% were set. The final sample size consisted of 132 households. Data were collected using a semistructured questionnaire administered to household heads. The questionnaire elicited information on household demographics, income, expenditure patterns, and other relevant variables (Klein, 2017) [19]. Descriptive and inferential statistics were used to analyze the data. Regression analysis was employed to examine the relationships between labor force participation and household expenditure patterns. The quantitative data were analyzed using Stata software, which facilitated efficient data manipulation, analysis, and visualization. Data triangulation was achieved by using multiple data sources, including survey data and secondary data from government reports. This study employed a quantitative research approach, utilizing quantitative methods exclusively.

3. Research Results Findings Summary Statistics on Consumption, Income and Household Members

Variable	Obs.	Mean	Std. Dev.	Min	Max
Consumption	132	4222.727	1911.34	1500	10500
Income	132	4716.667	2636.97	1500	14000
Household Members	132	6.53	2.266	2	15

The summary statistics for household consumption, household monthly income, and household members provide valuable insights into the characteristics of the households in the sample. The average household consumption is 4,222.73, with a significant amount of variation, as indicated by a standard deviation of 1,911.34. The minimum and maximum household consumption values are 1,500 and 10,500, respectively, highlighting the significant variation in household consumption patterns. The average household monthly income is 4,716.67, with a standard deviation of 2,636.97. The minimum and maximum household monthly income values are 1,500 and 14,000, respectively, indicating significant variation in household income levels. The average number of household members is 6.53, with a standard deviation of 2.27. The minimum and maximum number of household members are 2 and 15, respectively.

Overall, the findings highlight the significant variation in household consumption patterns, income levels, and household size. These variations may be due to differences in income, family size, education levels, employment opportunities, or other factors. The results emphasize the need to consider multiple factors when analyzing household behavior and developing policies to support households.

Matrix of Correlations Between Household Consumption, Household Monthly Income and Size of the Household

Variables	(1)	(2)	(3)
(1) household consumption	1.000		
(2) income	0.972	1.000	
(3) household members	0.397	0.392	1.000

The correlation matrix presents the correlation coefficients between three variables: household consumption, household monthly income, and household members. The matrix is based on a sample of 132 observations. The results show a very strong positive linear relationship between household consumption and household monthly income, with a correlation coefficient of 0.9716. There is also a moderate positive linear relationship between household consumption and household members, with a correlation coefficient of 0.3970. Similarly, the correlation coefficient between household monthly income and household members is 0.3919, indicating a moderate positive linear relationship.

The correlation matrix suggests that household monthly income is the most important factor influencing household consumption. The strong positive relationship between household consumption and household monthly income

indicates that increases in household monthly income tend to lead to increases in household consumption. The moderate positive relationships between household consumption and household members, as well as between household monthly income and household members, provide additional insights into the factors influencing household consumption patterns.

Regression on Household Consumption, Income and Household Size of the Household

Household Consumption	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Income	.699	.016	42.68	0	.666	.731	***
Household members	16.202	19.049	0.85	.397	-21.486	53.891	
Constant	821.042	124.391	6.60	0	574.931	1067.152	***
Mean dependent var	4222.727		SD dependent var			1911.340	
R-squared	0.944		Number of obs			132	
F-test	1093.403		Prob > F			0.000	
Akaike crit. (AIC)	1993.087		Bayesian crit. (BIC)			2001.736	

*** $p<.01$, ** $p<.05$, * $p<.1$

This linear regression analysis examines the relationship between household consumption and two demographic characteristics: household monthly income and household members. The analysis reveals a strong positive relationship between household monthly income and household consumption, with a coefficient of 0.699. This relationship is statistically significant at the 1% level, suggesting that household monthly income is a critical determinant of household consumption.

In contrast, the number of household members does not have a significant impact on household consumption. The coefficient for household members is 16.202, but it is not statistically significant. The constant term, or intercept, is 821.042, representing the expected value of household consumption when both household monthly income and household members are equal to zero. The R-squared value is 0.944, indicating that approximately 94.4% of the variation in household consumption can be explained by the two predictor variables. The F-test statistic is 1093.403, which is statistically significant at the 1% level, indicating that the overall model is significant.

In conclusion, this regression analysis highlights the strong positive relationship between household monthly income and household consumption. The model explains approximately 94.4% of the variation in household consumption, indicating a good fit. However, the number of household members does not have a significant impact on household consumption

Descriptive Statistics of Labor Force Participation Rate and Household Consumption

Variable	Obs.	Mean	Std. Dev.	Min	Max
Household consumption	132	4222.727	1911.34	1500	10500
Income	132	4716.667	2636.97	1500	14000
Labor force	132	4.136	1.624	1	8

The table provides descriptive statistics for three key variables: household consumption, household monthly income, and labor force participation. The data is based on 132 observations. Household consumption has a mean of 4,222.73 units, with a significant amount of variation, as indicated by a standard deviation of 1,911.34 units. Household monthly income also shows significant variation, with a mean of 4,716.67 units and a standard deviation of 2,636.97 units. This suggests substantial economic disparities among households. Labor force participation has a mean of 4.14 members per household, indicating that households tend to have multiple contributors to household income. The data highlights the wide variability in income and consumption among households. Both income and consumption have substantial ranges, with high standard deviations reflecting considerable economic disparities among households. The average labor force participation rate suggests that households tend to have multiple contributors to household income, which may provide some economic stability.

Overall, the statistics provide insight into household dynamics and form a foundation for analyzing relationships between income, labor force participation, and consumption. The data can inform policymakers and practitioners seeking to understand the factors that influence household consumption patterns and develop targeted interventions to support households in need.

Matrix of Correlation Between Household Consumption, Income and Labor Participation Rate

Variables	(1)	(2)	(3)
(1) Household consumption	1.000		
(2) Income	0.972	1.000	
(3) Labor force rate	0.890	0.878	1.000

The correlation matrix reveals strong positive correlations between household consumption, household income, and labor force participation rate.

Key findings:

Household consumption and household income have a very strong positive correlation (0.972), indicating that household income is a critical determinant of household consumption. Household consumption and labor force participation rate have a strong positive correlation (0.890), indicating that labor force participation rate is also an important determinant of household consumption. Household income and labor force participation rate have a strong positive correlation (0.878), indicating that labor force participation rate is an important determinant of household income.

These findings suggest that policies aimed at increasing household income and promoting labor force participation may be effective in promoting household consumption.

Regression on Consumption and Labor Force Participation Rate

Household consumption	Coef.	St.Err.	t- value	p- value	[95% Conf	Interval	Sig
Income	.703	.015	46.51	0	.674	.733	***
Labor force rate	8.13 6	4.638	56.68	0	6.04	12.312	
Constant	827.379	136.064	6.08	0	558.173	1096.584	***
Mean dependent var	4222.727		SD dependent var			1911.340	
R-squared	0.944		Number of obs.			132	
F-test	1091.027		Prob > F			0.000	
Akaike crit. (AIC)	1993.358		Bayesian crit. (BIC)			2002.007	

*** p<.01, ** p<.05, * p<.1

The linear regression analysis reveals strong positive relationships between household consumption and two key variables: household income and labor force participation rate.

Key findings showed that, for every unit increase in household income, household consumption increases by 0.703 units and for every unit increase in labor force participation rate, household consumption increases by 8.136 units. Household income and labor force participation rate explain approximately 94.4% of the variation in household consumption.

The relationships are statistically significant, indicating that household income and labor force participation rate are critical determinants of household consumption. The model is a good fit for the data, suggesting that the relationships are not due to chance.

Summary Table of Descriptive Statistics of Household Consumption and Dependency Ratio

Variable	Obs.	Mean	Std. Dev	Min	Max
Household consumption	132	4222.727	1911.34	1500	10500
Dependency ratio	132	75.293	8.599	50	88.889

The descriptive statistics table provides an overview of the distribution of two variables: Household Consumption and Dependency Ratio. Household Consumption has a mean of 4222.727, indicating that on average, households spend 4222.73 units on consumption. The standard deviation is 1911.34, suggesting significant variability in household consumption. The Dependency Ratio has a mean of 75.293, indicating that on average, households have a dependency ratio of 75.29. This means that for every 100 working-age members, there are approximately 75 dependents. The standard deviation is 8.599, indicating moderate variability in the dependency ratio.

The results suggest that there is considerable variability in household consumption, indicating differences in economic status, household needs, or spending priorities among households. The high dependency ratio may partially explain the variability in household consumption, as households with more dependents might allocate a larger share of income toward basic needs rather than discretionary spending.

Summary table of Descriptive Statistics of household consumption and dependency ratio

Variable	Obs.	Mean	Std. Dev	Min	Max
Household consumption	132	4222.727	1911.34	1500	10500
Dependency ratio	132	75.293	8.599	50	88.889

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The results suggest that there is considerable variability in household consumption, indicating differences in economic status, household needs, or spending priorities among households. The high dependency ratio may partially explain the variability in household consumption, as households with more dependents might allocate a larger share of income toward basic needs rather than discretionary spending.

The Correlation Matrix Between Household Consumption and Dependency Ratio

Variable	(1)	(2)
(1)Household consumption	1.000	
(2)Dependency ratio	0.865	1.000

The correlation matrix reveals a strong positive correlation between household consumption and dependency ratio, with a correlation coefficient of 0.865. This indicates that as the dependency ratio increases, household consumption tends to increase, suggesting that households with higher dependency ratios, or more dependents, tend to have higher consumption levels.

Regression on Consumption and dependency Ratio

Consumption	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dependency ratio	2.53	.129	19.66	0	2.275	2.785	***
Constant	3467.044	131.924	26.28	0	3206.049	3728.039	***
Mean dependent var	4716.667		SD dependent var			2636.970	
R-squared	0.748		Number of obs			132	
F-test	386.428		Prob > F			0.000	
Akaike crit. (AIC)	2275.145		Bayesian crit. (BIC)			2280.911	

*** p<.01, ** p<.05, * p<.1

The linear regression analysis reveals a significant and positive relationship between the dependency ratio and household consumption. The coefficient for the dependency ratio is 2.53, indicating that for each unit increase in the dependency ratio, household consumption increases by 2.53 units. The model fit statistics indicate that approximately 74.8% of the variance in household consumption is explained by the dependency ratio. The F-test value is 386.428, with a pvalue of 0.000, indicating that the overall model is statistically significant.

In conclusion, the linear regression analysis suggests that the dependency ratio has a significant and positive effect on household consumption. The model is robust, explaining a substantial proportion of variation in consumption. The results are statistically reliable, indicating a strong relationship between the dependency ratio and household consumption.

3.2 Background Characteristics

Fig 1: Gender and Age of Respondents

Gender	**Age**				
	18-36	37-55	56-65	above 65	Total
Female	17	9	5	1	32
Male	46	37	7	10	100
Total	63	46	12	11	132

The table summarizes the distribution of household heads based on their gender (Female or Male) and their respective age categories with a total of 132 household heads. Females household heads were 32, representing approximately 24.24% of the total sample and male household heads were 100, representing approximately 75.76% of the total sample. This indicates that the majority of household heads in the dataset were males. Male household heads dominate in every age group. Among both genders, the 18–36 age group has the highest representation while female representation declines sharply in older age groups compared to males. The above table highlights trends in gender and age distribution among household heads, with potential implications for studies on household decision-making, economic activity, or resource allocation based on age and gender.

Fig 2: Gender and marital status of respondents (The table displays the distribution of 132 respondents by Gender (Female and Male) and Marital)

Gender	Marital status				
	Divorced	Married	Single	Widow/ Widower	Total
Female	10	0	14	8	32
Male	7	72	11	10	100
Total	17	72	25	18	132

Status (Divorced, Married, Single, and Widow/Widower). There are 32 female respondents and 100 male respondents. The majority of male respondents (72) are married, while no female respondents are married. In contrast, the majority of female respondents (14) are single. Additionally, there are 17 divorced respondents, with 10 being female and 7 being male.

The table provides insight into the marital status of the respondents, suggesting that marriage is more common among male respondents, while female respondents are more likely to be single or divorced. However, the table does not provide information about the age, income, or other demographic characteristics of the respondents**.**

Fig 3: Level of Education and employment status

H.H Education	H.H Employment status				
level	Full-time	Part-time	Retired	Self-empl	Total
College/University	38	5	11	16	70
Primary	1	1	0	18	20
Secondary	14	6	0	22	42
Total	53	12	11	56	132

An analysis of 132 observations reveals significant differences in employment outcomes based on education level. The findings suggest that education level is a critical determinant of employment outcomes.

College or university graduates are more likely to be in full-time employment (54.3%), retired (15.7%), or self-employed (22.9%). Household heads with primary education face significant challenges in securing stable employment, with 90% engaging in self-employment. Secondary-educated individuals fall somewhere in between, with 33.3% in full-time employment and 52.4% self-employed. Full-time employment is the most common, with 40.2% of household heads engaged in this type of work. Retirement is exclusively-educated individuals, highlighting the link between higher education and financial security in later life.

The analysis highlights the strong association between education level and employment outcomes. Higher education is linked to stable jobs, financial security, and retirement opportunities, while lower education levels limit access to formal employment and push individuals toward self-employment. These findings emphasize the need to improve access to education and address the inequalities in employment outcomes.

3.3 Discussion and Implication of Findings Household Consumption Pattern

The study found that household consumption patterns in Chawama constituency are influenced by various demographic characteristics, including age, gender, marital status, education level, employment status, and monthly income levels. The results showed that household consumption is significantly higher among households with higher incomes, education levels, and employment status.

Correlation Between Labor Force Participation Rates and Household Consumption

The correlation matrix reveals strong positive correlations between household consumption, household income, and labor force participation rate.

Key findings:

Household consumption and household income have a very strong positive correlation (0.972), indicating that household income is a critical determinant of household consumption. Household consumption and labor force participation rate have a strong positive correlation (0.890), indicating that labor force participation rate is also an important determinant of household consumption. Household income and labor force participation rate have a strong positive correlation (0.878), indicating that labor force participation rate is an important determinant of household income.

These findings suggest that policies aimed at increasing household income and promoting labor force participation may be effective in promoting household consumption.

Threshold Levels of Dependency Ratio

The study found that the dependency ratio has a significant and positive effect on household consumption. The results showed that for each unit increase in the dependency ratio, household consumption increases by 2.53 units, holding all else constant. The study also found that approximately 74.8% of the variance in household consumption is explained by the dependency ratio.

Implications of the Study

The study's findings have several implications for policymakers, practitioners, and researchers. The results suggest that policymakers should design targeted interventions to support households with high dependency ratios or low incomes. The study also highlights the need to improve access to education and employment opportunities to reduce economic disparities.

4. Conclusion and Recommendations

This study has provided valuable insights into the factors that influence household consumption patterns. The findings suggest that household income, labor force participation rate, and dependency ratio are critical determinants of household consumption. These results have important implications for policymakers, businesses, and organizations seeking to understand household consumption patterns and develop effective policies and strategies to support households.

The study's findings highlight the need for policymakers to consider multiple factors when designing policies aimed at promoting household consumption and economic growth. By taking into account the complex relationships between household income, labor force participation rate, dependency ratio, and household consumption, policymakers can develop more effective policies that support households in need.

Furthermore, the study's findings emphasize the importance of promoting economic growth and job creation to increase household income and labor force participation rates. Policymakers may consider implementing policies that support entrepreneurship, small business development, and job training programs to promote economic growth and job creation.

In addition, the study's findings highlight the need for policymakers to consider the impact of demographic changes on household consumption patterns. As populations age and dependency ratios increase, policymakers may need to adjust their policies to support households with high dependency ratios.

The study's findings also have implications for businesses and organizations seeking to understand household consumption patterns. By recognizing the importance of household income, labor force participation rate, and dependency ratio in determining household consumption, businesses can develop more effective marketing strategies and product offerings that meet the needs of households.

Overall, this study has contributed to our understanding of the factors that influence household consumption patterns. The findings have important implications for policymakers, businesses, and organizations seeking to support households and promote economic growth.

4.1 Recommendations

Based on the study's findings, the following recommendations are proposed:

- Increase household income: Policymakers should implement policies aimed at increasing household income, such as raising minimum wages, providing tax credits, or offering financial assistance.
- Promote labor force participation: Policymakers should implement policies that promote labor force participation, such as job training programs, mentorship schemes, and entrepreneurship support.
- Support households with high dependency ratios: Policymakers should consider implementing policies that provide support to households with high dependency ratios, such as cash transfers or subsidies to help households meet their basic needs.
- Improve access to education and employment opportunities: Policymakers should improve access to education and employment opportunities to reduce economic disparities and promote economic growth.
- Targeted interventions: Policymakers should design targeted interventions to support households with high dependency ratios or low incomes.
- Monitor and evaluate policies:
  Policymakers should monitor and evaluate the effectiveness of policies aimed at promoting household consumption and economic growth.
- By implementing these recommendations, policymakers and practitioners can develop more effective strategies to support households and promote economic growth and development

By implementing these recommendations, policymakers and practitioners can develop more effective strategies to support households and promote economic growth and development.

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