

## Assessing the Role of Laundry and Dry Cleaning Services in Reducing Unemployment in Zamfara State

BY

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### Abstract

*This research focuses on evaluating the contribution of laundry and dry cleaning services in addressing unemployment in Zamfara State. The study seeks to assess how laundry services contribute to reducing unemployment and to determine the extent to which dry cleaning services play a similar role. A descriptive survey design was adopted, targeting a population of 93 laundry and dry-cleaning entrepreneurs across the three senatorial districts of the state. Data were obtained through structured questionnaires and analyzed using the Partial Least Squares Structural Equation Model (PLS-SEM). The measurement model was applied to test construct validity and reliability, while the structural model examined the relationships among the variables. The findings reveal that both laundry and dry cleaning services significantly contribute to reducing unemployment in Zamfara State. The study concludes that strategic investments in training, infrastructure, and business support can enhance these sectors' employment-generating capacity. It recommends that government and private stakeholders should introduce specialized training programs to build relevant skills and establish policies that strengthen small-scale entrepreneurs in these industries.*

**Keywords:** laundry, dry cleaning, unemployment, infrastructure, services

### Introduction

Unemployment remains one of the most pressing socioeconomic challenges globally, with causes ranging from structural and cyclical issues to individual-level factors (Bal-Domańska, 2022). Economic recessions, weak education and skills development, mismatches in labor markets, and a lack of job opportunities all contribute significantly to unemployment. Nigeria has grappled with high unemployment long before recent global concerns. The nation's economy has been affected by prolonged recessions, particularly since the oil market collapse of the 1980s, which left both formal and informal sectors struggling (Richard, 2022).

By 2022, Nigeria's unemployment rate was projected at 33%, up from 32.5% the previous year. Trends show a persistent rise in unemployment over time, with rates remaining near 10% in 2021, almost unchanged from 2020. Both educated and uneducated Nigerians are affected, forcing government, communities, and philanthropists to address the issue to reduce its damaging socioeconomic effects (Zhang et al., 2023). In Zamfara State, unemployment exacerbates poverty and social instability. While large-scale industries and public employment have traditionally been seen as solutions, small and medium-sized enterprises (SMEs), particularly in the service sector such as laundry and dry cleaning, are emerging as alternative sources of job creation.

Laundry and dry cleaning services have become vital components of the service economy, meeting household and commercial needs for fabric care in the face of urbanization, lifestyle changes, and rising incomes. Globally, this sector has shown potential in creating jobs across skill levels, from basic service roles to specialized positions (Suhaimi et al., 2024). In Nigeria, increasing urbanization and a cultural shift toward outsourcing domestic chores have fueled growth in this industry, offering viable entrepreneurial opportunities with relatively low startup capital. In Zamfara, however, many operators remain informal, with businesses mostly run as sole proprietorships or micro-enterprises. Despite its potential, growth in this sector is constrained by poor access to equipment, unstable power supply, and lack of formal training. Understanding the sector's employment capacity, required skills, and structural challenges is essential to fully unlock its potential in reducing unemployment in Zamfara State.

### **Research Problem**

Unemployment is a global challenge, and Nigeria is no exception. In Zamfara State, the problem persists due to limited sustainable employment opportunities in formal sectors. Although SMEs have been recognized as key drivers of employment elsewhere, their specific role in Zamfara's economy—especially in the laundry and dry-cleaning industry—has not been thoroughly investigated. Many businesses in this sector operate informally and lack structured training programs, limiting their capacity to generate large-scale employment. Further barriers such as poor infrastructure, insufficient funding, and inconsistent government policies restrict growth. Previous research on unemployment and SMEs in Nigeria often centers on sectors like agriculture, technology, and manufacturing, leaving service-based industries underexplored. Studies by Chinze (2023), Osaiga & Omote (2019), and Ashmore (2024) have mainly focused on urban or more developed contexts, neglecting regions such as Zamfara. Furthermore, existing research often adopts either qualitative or quantitative

approaches, leading to partial insights. This study seeks to bridge these gaps—geographical, theoretical, and methodological—by adopting a mixed-methods approach to examine the role of laundry and dry cleaning in employment generation.

### **Objectives of the Study**

The central aim of this research is to analyze the contribution of laundry and dry cleaning services to reducing unemployment in Zamfara State. The specific objectives are:

1. To assess the extent to which laundry services reduce unemployment in Zamfara State.
2. To examine the contribution of dry cleaning services in lowering unemployment in Zamfara State.

### **Research Questions**

To guide the study, the following questions were raised:

1. What capacity do laundry services have in reducing unemployment in Zamfara State?
2. How effective are dry cleaning services in addressing unemployment in Zamfara State?

### **Hypotheses of the Study**

The following null hypotheses were formulated:

**H01:** Laundry services have no significant capacity to reduce unemployment in Zamfara State.

**H02:** Dry cleaning services have no significant impact on reducing unemployment in Zamfara State.

## **Review of Related Literature**

### **Conceptual Framework**

Laundry and dry cleaning businesses provide fabric care services that are classified as part of the service industry. Mata (2022) defines cleaning as a systematic effort to eliminate unwanted substances from the environment. Like other services, these industries are intangible, heterogeneous, and dependent on customer perception of quality. Though often discussed together, laundry and dry cleaning differ in method. While laundry relies on water and detergents, dry cleaning uses chemical solvents, most commonly perchloroethylene, to remove stains (Karuppuchamy et al., 2024).

### **Laundry**

Laundry refers to the washing, drying, and sometimes ironing of clothes and textiles (Garg & Dewan, 2022). It has existed as long as humans have worn clothes, making it a subject of

historical and cultural interest (Ochieng, 2022). Laundry may be done manually or with machines, and involves detergents or cleaning agents to remove dirt and odors. It applies to household chores as well as commercial enterprises like laundromats or professional laundry services (Godin et al., 2020).

### **Dry Cleaning**

Dry cleaning uses solvents rather than water to clean fabrics (Ceballos, 2021). Though not literally “dry,” this method is suitable for delicate fabrics that would shrink or lose quality if washed in water. Solvents like perchloroethylene or eco-friendly alternatives dissolve stains and grease, making dry cleaning ideal for items like suits, coats, formal wear, and upholstery. Specialized machines apply and recover solvents during the process, ensuring fabrics are thoroughly cleaned while preserving their quality (Lepage, 2022).

### **Unemployment**

Unemployment has long posed a serious socioeconomic challenge in Nigeria (Akwara et al., 2013). Udu and Agu (2005) define it as the condition where individuals able and willing to work cannot find paid jobs. Similarly, Koliev (2022) describes it as the absence of employment among people actively seeking work. Unemployment affects economic stability, social cohesion, and national security. Addressing the problem requires investment in job-creating SMEs, including laundry and dry cleaning businesses (Udochukwu, 2024).

### **Theoretical Framework**

This study is anchored on **Entrepreneurship Theory** and **Human Capital Theory**.

**Entrepreneurship Theory** (Schumpeter, 1934) emphasizes that entrepreneurship fosters economic growth by introducing innovations, new ventures, and self-employment. In Zamfara, laundry and dry cleaning businesses provide opportunities for small-scale entrepreneurship with low capital requirements. These businesses can create direct jobs (washers, pressers, delivery staff) and indirect ones (suppliers of detergents and equipment). Innovative services such as doorstep delivery or eco-friendly cleaning further expand their contribution to the local economy.

**Human Capital Theory** (Becker, 1964) argues that investments in training and skills increase employability and productivity. The laundry sector requires both basic skills and specialized knowledge of fabrics, stain treatment, and modern equipment. Training workers improves service quality, enhances profitability, and ensures job sustainability. For those with limited education, laundry skills can provide a pathway to economic independence. Targeted

programs can empower youth and women in particular, helping them overcome employment barriers.

Together, these theories highlight how small enterprises in laundry and dry cleaning can reduce unemployment by promoting entrepreneurship and equipping individuals with employable skills.

### **Empirical Review**

Scholars have examined unemployment and entrepreneurship from various perspectives. Anyadike, Emeh, and Ukah (2012) observed that Nigeria's youth unemployment crisis could be mitigated through integrating entrepreneurship into education. Eme (2014) revealed that Nigeria's economy has grown in size without corresponding job creation, warning of dire consequences if unemployment is not addressed. Salami (2013) described youth unemployment as a ticking time bomb and argued for innovative interventions. Chidiebere, Iloanya, and Udunze (2014) stressed that corruption and weak governance limit the impact of entrepreneurship on job creation.

Other studies provide international perspectives. Asad, Ali, and Islam (2014) in Pakistan found a negative correlation between unemployment and entrepreneurship development. Taiwo (2014) demonstrated in Nigeria that entrepreneurship directly leads to job creation. Ilori and Ayedun (2022) linked entrepreneurship education to reduced graduate unemployment. Lawal, Usman, and Mohammed (2023) showed how informal sector activities in Katsina State reduce unemployment through small-scale enterprises.

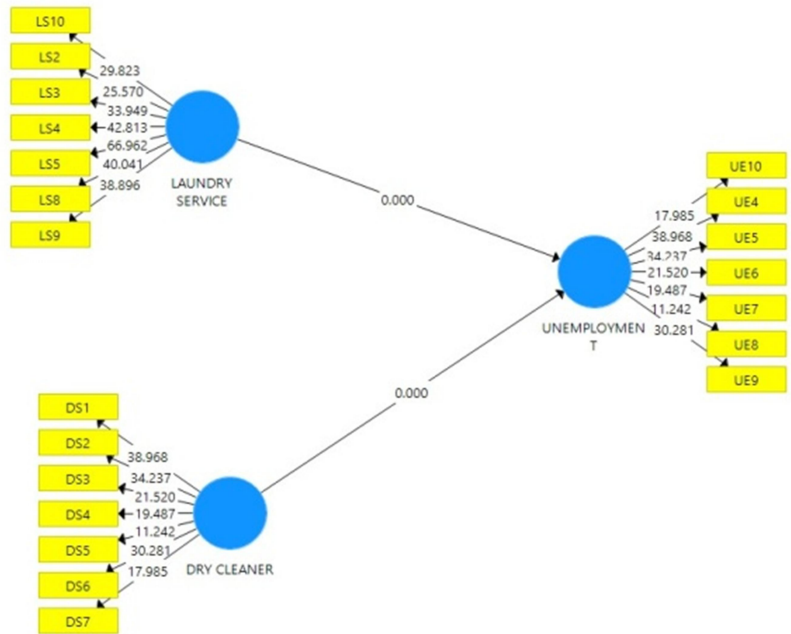
However, these studies vary in scope, methodology, and focus, leaving gaps in understanding service-based industries like laundry and dry cleaning in less developed regions such as Zamfara. This gap motivates the present study.

### **Methodology**

A descriptive survey research design was employed. The study covered three local government areas—one from each senatorial zone—with the headquarters selected for data collection. Due to the informal nature of the industry and absence of official records, purposive sampling was applied to select 93 available laundry and dry cleaning operators.

Data were collected through structured questionnaires designed on a five-point Likert scale (Strongly Agree = 5, Agree = 4, Undecided = 3, Disagree = 2, Strongly Disagree = 1). Analysis was carried out using the Partial Least Squares Structural Equation Model (PLS-SEM). The measurement model assessed construct reliability and validity, while the structural model tested the hypothesized relationships among variables.

**Model of the study**



Smart-PLS output, 2024.

**Construct Reliability and Validity**

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
<b>DRY CLEANER</b>	<b>0.915</b>	<b>0.919</b>	<b>0.933</b>	<b>0.665</b>
<b>Laundry Service</b>	<b>0.949</b>	<b>0.952</b>	<b>0.958</b>	<b>0.767</b>
<b>Unemployment</b>	<b>0.915</b>	<b>0.919</b>	<b>0.933</b>	<b>0.665</b>

Smart-PLS output, 2024.

### Reliability

**Cronbach’s Alpha:** This indicator evaluates internal consistency by examining how closely related the items within each construct are. The results—Dry Cleaner (0.915), Laundry Service (0.949), and Unemployment (0.915)—all surpassed the acceptable benchmark, demonstrating that the items in each construct consistently measure the intended variable.

**rho\_A:** Serving as a complementary reliability measure to Cronbach’s Alpha, rho\_A further strengthens the assessment. The recorded values—Dry Cleaner (0.919), Laundry Service (0.952), and Unemployment (0.919)—exceeded the required threshold, confirming that the constructs exhibit strong consistency and reliability.

**Composite Reliability (CR):** CR integrates item reliability with shared variance among indicators to evaluate construct reliability. The CR values for Dry Cleaner (0.933), Laundry Service (0.958), and Unemployment (0.933) all surpassed the threshold, reaffirming that the items within each construct are dependable and valid for measuring the targeted concept.

### Validity

**Average Variance Extracted (AVE):** AVE assesses how much variance is explained by a construct relative to variance caused by measurement error. The AVE results—Dry Cleaner (0.665), Laundry Service (0.767), and Unemployment (0.665)—all exceeded the minimum requirement, confirming strong convergent validity. This indicates that the items within each construct effectively represent the underlying dimensions they were designed to measure.

Overall, the analysis establishes both the reliability and validity of the measurement model, with all constructs meeting or surpassing the recommended thresholds. Among them, Laundry Service shows the strongest performance, emphasizing its significant role in the study. These outcomes verify the soundness of the measurement instruments and justify their application in further structural model analysis to explore the relationships among variables.

### R Square

	R Square	R Square Adjusted
Unemployment	0.890	0.880

Smart-PLS output, 2024.

### R-Square Analysis

The **R Square value** indicates the proportion of variation in the dependent variable—Unemployment—that can be explained by the independent variables, Laundry Service and Dry Cleaner. In this study, an R Square of **0.890** shows that 89% of the variability in

unemployment is accounted for by these predictors. This very high value reflects the strong explanatory power of the model.

The **Adjusted R Square value** of **0.880** provides a refined measure by considering the number of predictors included in the model, making it more accurate when additional variables are introduced. The small decrease from 0.890 to 0.880 indicates that while the adjustment accounts for model complexity, the explanatory strength remains robust. This further suggests the model is efficient and free from overfitting.

In summary, the model demonstrates substantial explanatory capability, underscoring the importance of laundry and dry cleaning services in reducing unemployment. These findings provide policymakers and stakeholders with reliable evidence to design and implement targeted interventions within this sector.

**Path Coefficients**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ((O/STDEV))</b>	<b>P Values</b>
<b>Laundry Service -&gt; Unemployment</b>	<b>1.000</b>	<b>1.000</b>	<b>0.000</b>	<b>2.302</b>	<b>0.022</b>
<b>Dry Cleaner -&gt; Unemployment</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>4.555</b>	<b>0.000</b>

**Smart-PLS output, 2024.**

**Path Coefficients**

The results provide insight into the relationship between laundry services, dry cleaning services, and unemployment reduction in Zamfara State. The analysis tested the hypotheses to determine whether these services significantly influence employment levels.

**Laundry Services and Unemployment:** Both the Original Sample and Sample Mean recorded values of 1.000, showing a consistent effect of laundry services on unemployment. The Standard Deviation of 0.000 indicates no variability across the sample, reinforcing consistency in the observed effect. With a T-statistic of 2.302, which surpasses the critical threshold of 1.96, the relationship is statistically significant. Additionally, the P-value of 0.022 falls below the 0.05 benchmark, confirming significance and allowing rejection of the null hypothesis (H01). This implies that laundry services meaningfully contribute to reducing unemployment in Zamfara State.

**Dry Cleaning Services and Unemployment:** The Original Sample and Sample Mean were both recorded at 0.000, suggesting no direct baseline effect. However, statistical testing reveals otherwise. A Standard Deviation of 0.000 indicates consistency across responses, while the T-statistic of 4.555 is far above the 1.96 cutoff, demonstrating strong statistical significance. Similarly, the P-value of 0.000 confirms that the null hypothesis (H02) should be rejected. These results establish that dry cleaning services play a significant role in lowering unemployment in Zamfara State.

Overall, while both service types significantly influence unemployment reduction, dry cleaning services appear to exert a stronger statistical impact, as reflected in their higher T-statistic and lower P-value. The absence of variability in both constructs (0.000 Standard Deviation) suggests uniform responses across the sample, pointing to consistent employment outcomes in the sector.

### **Discussion of Findings**

The findings show that laundry and dry cleaning services both have significant effects on reducing unemployment in Zamfara State, though with varying magnitudes.

For **laundry services**, the T-statistic of 2.302 and P-value of 0.022 indicate a significant positive impact, supporting rejection of the null hypothesis (H01). This suggests that laundry businesses help alleviate unemployment by creating jobs such as washers, delivery staff, and managers, as well as providing opportunities for skill acquisition. The stability of the results indicates that laundry services consistently provide employment opportunities in the region. These findings align with earlier studies, including Chinze (2023), Osaiga & Omote (2019), and Ashmore (2024), which emphasized entrepreneurship as a tool for reducing unemployment.

For **dry cleaning services**, the statistical results were even stronger. The T-statistic of 4.555 and P-value of 0.000 confirm a highly significant positive relationship with unemployment reduction. These results demonstrate that dry cleaning businesses, like laundry services, consistently provide employment opportunities, but with a more pronounced effect. The uniformity in responses (0.000 Standard Deviation) further reinforces their role. This conclusion echoes the works of Godin et al. (2020), Garg & Dewan (2022), and Ceballos (2021), which established that professional laundry and dry cleaning services contribute to employment creation in socioeconomic contexts.

### **Conclusion**

The study concludes that both laundry and dry cleaning services significantly reduce unemployment in Zamfara State, with dry cleaning services having a comparatively stronger

impact. These industries offer substantial potential for job creation and local economic development, particularly in areas where formal sector employment is limited. The evidence suggests that enhancing training, business support, and infrastructure in these sectors can further expand their role in addressing unemployment. In sum, laundry and dry cleaning services should be recognized as essential contributors to reducing joblessness and promoting sustainable livelihoods in Zamfara State.

### **Recommendations**

Based on the findings, the study makes the following recommendations:

1. **Specialized Training:** Government and private stakeholders should establish targeted training programs focused on fabric care, garment handling, and dry-cleaning techniques. These programs will equip individuals—particularly youth and underemployed groups—with the skills necessary to succeed in the industry and access job opportunities.
2. **Support for Entrepreneurs:** Policies should be introduced to support small business owners in the laundry and dry-cleaning sectors. This may include access to microfinance, affordable equipment, and marketing assistance. Strengthening these businesses will not only create additional employment but also boost broader economic activity within the state.

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