

Assessing the long-term economic benefits of improved pension communication strategies in northwest Nigeria

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Abstract

This study investigates the long-term economic benefits of improved pension communication strategies in Northwest Nigeria. Using a cross-sectional survey design, data were collected from 500 respondents, including individuals in the formal and informal sectors and pension administrators across Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara states. Stratified and random sampling techniques ensured a representative sample, while structured surveys, interviews, and focus group discussions provided both quantitative and qualitative data. Quantitative data analysis was conducted using SPSS, employing descriptive and inferential statistical techniques such as regression and chi-square tests. The findings reveal a strong positive relationship between pension communication strategies and economic benefits, with an R-squared value of 0.954, indicating that 95.4% of the variation in economic benefits is explained by the effectiveness of communication strategies. The study highlights that while pension communication strategies are moderately effective on average, substantial variability exists in the economic benefits experienced across different regions and demographics. The regression coefficient (1.604) emphasizes that improvements in pension communication significantly enhance economic outcomes. The study concludes that effective pension communication is critical for improving economic security in Northwest Nigeria. Recommendations include tailoring strategies to underserved populations, leveraging technological tools, and implementing regular evaluations to optimize communication programs.

Keywords: Economic Benefits, Financial Inclusion, Northwest Nigeria, Public Awareness, Pension Communication

1. Introduction

A well-functioning pension system is essential for ensuring financial security and stability for individuals after retirement. In Nigeria, significant reforms have been made to improve the pension system, particularly with the introduction of the Contributory Pension Scheme (CPS) under the Pension Reform Act of 2004. This scheme was designed to correct the inefficiencies and corruption found in the previous Defined Benefit Scheme. However, the success of any pension system depends not only on its structure but also on how well people understand and engage with it.

Clear and effective communication is key to helping people understand pension policies and their benefits. When individuals are well-informed about their pension rights, responsibilities, and entitlements, they are more likely to make wise financial decisions, such as contributing regularly to their pension plans. This leads to better savings and improves their financial well-being in retirement. The National Pension Commission (PenCom) has emphasized the importance of proper communication strategies in increasing awareness and encouraging participation in pension schemes, especially the Micro Pension Plan.

Northwest Nigeria, which includes states such as Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara, faces unique economic and social challenges that make it difficult to spread pension-related

information effectively. Many parts of the region are rural, with low literacy levels, a high number of informal workers, and cultural beliefs that limit financial awareness. These challenges prevent many people from fully understanding how pension schemes work and how they can benefit from them. A study by Kofar-Mata and Hussaini (2024) highlights the need for targeted financial education programs to improve retirement planning among academic workers in Kano State, a challenge that also applies to the wider Northwest region.

While existing studies have explored pension reforms and financial literacy more broadly, few have focused on the role of pension communication strategies in driving pension participation, particularly in under-researched and underserved areas such as Northwest Nigeria. This represents a critical gap in the literature, as communication strategies are essential in bridging the knowledge-action gap that hinders participation in pension schemes.

To address these issues, pension communication strategies should be tailored to fit the specific realities of people in Northwest Nigeria. This study aims to assess how better communication can improve awareness, understanding, and engagement with pension schemes in the region. By filling the research gap in this specific context, this study contributes to pension literature by offering data-driven insights into how communication influences economic well-being and retirement outcomes. The findings are expected to inform both policymakers and pension administrators in crafting strategies that foster inclusive participation and financial security.

2. Literature Review and Theoretical Framework

This section presents an empirical literature review in support of three independent variables in relation to one dependent variable economic benefits. Each subsection is grounded in relevant theoretical frameworks, and each concludes with a specific hypothesis.

2.1 Pension Communication strategies and economic benefits

The Life-Cycle Hypothesis (LCH) provides a basis for understanding how individuals plan consumption and savings throughout their lives to ensure stable income in retirement. Within this framework, effective pension communication enables individuals to comprehend their retirement savings obligations, leading to improved financial behavior.

Lusardi and Mitchell (2014) found that individuals exposed to targeted financial education are more likely to align with LCH-based behavior, increasing retirement planning and savings. In the Nigerian context, Adeola and Yusuf (2019) discovered that clear communication under the Contributory Pension Scheme (CPS) led to increased pension contributions and long-term financial planning. Likewise, Ogiji et al. (2022) reported that individuals with consistent pension information demonstrated more responsible savings behavior and higher financial security post-retirement.

However, Orji (2011) noted that many pension communication strategies in Nigeria suffer from poor design and delivery, particularly in underserved areas like Northwest Nigeria. These limitations hinder individuals' ability to act on available information, resulting in suboptimal financial decisions. Given this empirical

evidence, the effectiveness of communication strategies emerges as a key determinant of improved economic benefits.

H1: There is a significant relationship between pension communication strategies and economic benefits.

2.2 Understanding of Pension Schemes and Economic Benefits

Behavioral Finance Theory provides insights into how individuals process information and make decisions under uncertainty. In the context of pension schemes, understanding plan structures, benefits, and contribution rules is critical for enabling individuals to engage with the system meaningfully. Lusardi and Mitchell (2018) emphasized that comprehension—not just awareness—of financial systems leads to better decision-making. Atkinson and Messy (2019), in an OECD study, affirmed that financial literacy and understanding are correlated with financial resilience and informed long-term planning. Uche and Osho (2021) found that limited understanding of CPS operations restricted participants from taking full advantage of the scheme's provisions. These studies demonstrate that while awareness raises visibility, true economic benefit is realized only when individuals understand how to interact with the pension system. Understanding enhances one's capacity to make informed choices about contributions, withdrawals, and investment strategies, which translate to tangible financial outcomes in retirement.

H2: There is a significant relationship between understanding pension schemes and economic benefits.

2.3 Pension Awareness and Economic Benefits

Awareness is the initial exposure to pension schemes—knowing that such systems exist and offer benefits. Communication Theory supports the role of exposure in behavioral change but also emphasizes that awareness must evolve into understanding and engagement to achieve results. Clark et al. (2017) stressed that awareness campaigns increase visibility and can trigger interest in pensions, especially when adapted to local contexts. Alcover et al. (2019) observed that multi-channel awareness campaigns improved enrollment in formal pension systems. However, Adebayo and Ogunleye (2020) cautioned that awareness alone is insufficient in low-literacy populations unless paired with simplified and culturally sensitive information. Despite the limits of awareness as a standalone factor, it remains a necessary first step in the decision-making process. Individuals must first be aware before they can understand and engage.

H3: There is a significant relationship between pension awareness and economic benefits.

2.4 Theoretical Framework

The Life-Cycle Hypothesis, developed by Modigliani and Brumberg, suggests that individuals seek to maintain consumption stability throughout their lifetime by saving during income-earning years and dis-saving during retirement. Effective pension communication helps individuals visualize future financial needs and encourages disciplined savings behavior that aligns with LCH assumptions.

Communication Theory, particularly the Shannon-Weaver model, describes how messages are sent, received, and decoded in the presence of noise. In the context of pensions, noise may include complex language, inconsistent messaging, or lack of access. The theory supports the need for clear, accessible, and culturally relevant communication tailored to specific demographics.

These frameworks collectively support the conceptual model, which links communication, understanding, and awareness to economic benefits. They also justify the formulation of the three hypotheses tested in this study.

3. Methodology

The methodology for this research was designed to ensure that data was collected and analyzed in a robust, reliable, and representative manner. The study employed both quantitative and qualitative methods to capture a wide range of insights related to pension communication and its impact on economic security in Northwest Nigeria. The study employed a cross-sectional survey design to assess the long-term economic benefits of improved pension communication strategies. Primary data was collected from individuals and organizations across Northwest Nigeria to evaluate their awareness, understanding, and engagement with pension schemes resulting from these strategies. This study focused on individuals working in both the formal and informal sectors, as well as pension administrators, across the seven states of Northwest Nigeria: Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara. Based on the 2006 Census, the population of Northwest Nigeria was estimated at 35,786,944, making up 25.56% of Nigeria's total population. To get a fair representation of this large group, a sample size of 500 respondents was chosen. Using Yamane's formula, the estimated sample size for a 5% margin of error was around 400.

Yamane's Formula:

$$n = N / (1 + N(e)^2)$$

Where: $N = 35,786,944$, $e = 0.05$. Thus, $n \approx 400$.

However, to improve accuracy and account for possible non-responses, the sample size was increased to 500. To ensure fairness and diversity in responses, the study used a mix of stratified and random sampling techniques, considering factors like location, employment sector, and demographics. The data was collected through structured surveys and qualitative interviews. The survey questionnaire was administered in both online and in-person formats, with field assistants assisting in rural areas. Additionally, in-depth interviews with pension administrators and focus group discussions with selected respondents were conducted to gather more detailed insights into the effectiveness of communication strategies.

A structured questionnaire was developed, consisting of closed and open-ended questions. It covered key topics such as demographic information, pension awareness, sources of information, and the perceived effectiveness of communication strategies. A pilot test was conducted to ensure the clarity and reliability of the instrument. Key informant interviews and focus group discussion guides were also developed to facilitate in-depth conversations. The collected quantitative data was analyzed using SPSS, employing descriptive statistics (frequencies, means, standard deviations) and inferential statistics (regression analysis, chi-square tests) to identify relationships between pension communication strategies and economic benefits. Qualitative data from interviews and focus groups were transcribed and analyzed thematically to uncover key patterns related to pension communication effectiveness.

4. Results and Discussions

4.1 Descriptive Statistics

Table 1. Descriptive Statistics of Key Variables

Variable	Mean	Std. Deviation	N
Economic Benefits	2.066	0.947	500
Pension Communication Strategies	1.773	0.577	500

Note. N = number of respondents. Source: SPSS 22 Output (Appendix).

The descriptive statistics provide insights into the central tendency and variability of two key variables: economic benefits and pension communication strategies. For economic benefits, the mean value of 2.066 suggests that, on average, the economic benefits derived from pension communication strategies are between moderate and high levels. The standard deviation of 0.947 indicates a moderate level of variability around the mean, meaning that while the economic benefits are generally positive, there is considerable variation across individuals or regions. The range of values, with a minimum of 1.00 and a maximum of 4.33, highlights that some individuals or regions experience lower economic benefits, while others report significantly higher levels.

Regarding pension communication strategies, the mean value of 1.773 is slightly above the lower end of the scale (with the minimum value being 1.06), suggesting that, on average, the effectiveness of these strategies is somewhat moderate. The standard deviation of 0.577 indicates lower variability in the effectiveness of the pension communication strategies compared to the economic benefits, implying a relatively consistent application of the strategies across the sample. The range, from 1.06 to 3.19, further suggests that while most respondents rate the effectiveness of pension communication strategies towards the lower end of the scale, there remains a notable portion who rate them more positively.

4.2 Inferential Statistics

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.977	0.954	0.954	0.203

Note. Source: SPSS 22 Output (Appendix).

The R Square value of 0.954 indicates that 95.4% of the variation in Economic Benefits can be explained by changes in Pension Communication Strategies. This is a very high explanatory power, suggesting that the effectiveness of pension communication strategies is a key factor driving economic benefits. The Adjusted R Square value of 0.954 further confirms that the model remains robust after adjusting for the number of predictors, meaning that Pension Communication Strategies is the most important explanatory variable for economic benefits.

Table 3. ANOVA Summary

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	426.763	1	426.763	10365.335	0.000
Residual	20.504	498	0.041		
Total	447.266	499			

Note. Source: SPSS 22 Output (Appendix).

The F-statistic of 10365.335 with a p-value of 0.000 indicate that the regression model as a whole is statistically significant. This means that the model effectively captures the relationship between the

independent and dependent variables, and that Pension Communication Strategies is a strong predictor of Economic Benefits.

Table 4. Coefficients Summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.777	0.029		-26.475	0.000
Pension Communication Strategies	1.604	0.016	0.977	101.810	0.000

Note. Source: SPSS 22 Output (Appendix).

The constant value of -0.777 represents the estimated economic benefits when Pension Communication Strategies is zero (though this may not be practically meaningful as a zero score in pension communication strategies is unlikely). The coefficient for Pension Communication Strategies is 1.604, meaning that for each unit increase in the effectiveness of pension communication strategies, economic benefits increase by 1.604 units. This suggests that improvements in pension communication strategies are strongly associated with increased economic benefits. The Standardized Beta of 0.977 confirms the strength of this relationship, indicating that Pension Communication Strategies have a highly significant impact on Economic Benefits.

4.3 Discussion of Findings

The findings reveal that the average score for economic benefits is moderate (Mean = 2.066), with a wide variation in responses, ranging from very low (1.00) to quite high (4.33). This indicates that while some individuals or regions experience significant economic benefits from pension communication strategies, others receive much lower returns. The moderate level of variability (Std. Deviation = 0.947) highlights diverse experiences across the population, suggesting that the impact of these strategies is not uniform.

Pension Communication Strategies: The average effectiveness of pension communication strategies is slightly below the middle of the scale (Mean = 1.773), suggesting that these strategies are not widely perceived as highly effective. The relatively low variability in perceptions of these strategies (Std. Deviation = 0.577) indicates that there is a degree of consistency in how these strategies are viewed across the sample, even though the overall effectiveness is rated somewhat modestly.

Correlation Analysis: A very strong positive correlation of 0.977 was found between pension communication strategies and economic benefits. This strong correlation implies that improvements in pension communication are closely linked to increases in economic benefits. The relationship is statistically significant (p-value = 0.000), meaning that the observed pattern is not due to random chance but reflects a real, underlying connection.

Regression Analysis: The regression analysis reveals an R-squared value of 0.954, meaning that 95.4% of the variability in economic benefits can be explained by pension communication strategies. This demonstrates the significant role that pension communication plays in shaping economic outcomes in this context. The overall significance of the model is confirmed by the F-statistic (10365.335) and the p-value of 0.000, indicating that the model is robust and the relationship between pension communication strategies and economic benefits is genuine.

The coefficient for pension communication strategies shows that for each unit increase in the effectiveness of these strategies, economic benefits increase by 1.604 units. This strong positive effect emphasizes the critical influence of pension communication on economic outcomes. The standardized Beta of 0.977 further underscores the powerful impact of pension communication strategies on economic benefits.

Confidence Intervals: The 95% confidence interval for the coefficient of pension communication strategies (1.573 to 1.635) does not include zero, providing additional statistical evidence that the positive effect of these strategies on economic benefits is significant and reliable.

Summary of Findings: The analysis confirms a very strong positive relationship between the effectiveness of pension communication strategies and the economic benefits experienced in Northwest Nigeria. Pension communication strategies account for a significant portion (95.4%) of the variability in economic benefits, highlighting their critical role in shaping economic outcomes. Each improvement in these strategies leads to a notable increase in economic benefits, with the regression model confirming a significant and clear impact. All statistical tests (correlation, regression, and ANOVA) support the validity of these findings, suggesting that the observed relationships are unlikely to be due to chance.

Implications: The findings indicate that enhancing pension communication strategies is crucial for improving economic benefits in Northwest Nigeria. Policymakers are encouraged to prioritize the development and implementation of more effective communication strategies to improve economic outcomes for the population. Additionally, the results highlight the potential for substantial positive impacts on economic well-being if these strategies are tailored to meet the specific needs of different groups within the region.

5. Conclusion

This study established a very strong positive relationship between the effectiveness of pension communication strategies and the economic benefits experienced by individuals in Northwest Nigeria. The results emphasize that effective pension communication plays a critical role in enhancing economic security, with improvements in these strategies leading to significant increases in economic benefits. The regression model demonstrated a high level of predictive power, explaining over 95% of the variability in economic benefits. While the effectiveness of pension communication strategies was perceived as moderate on average, the findings suggest substantial potential for improvement in these areas. The study also highlighted that there is moderate variability in the economic benefits experienced by individuals, with some benefiting greatly while others see lower returns. This indicates that, while pension communication strategies have had positive effects for many, there is considerable room for improvement, particularly in ensuring that the benefits are distributed more evenly across different regions and demographics.

To build on these findings, it is crucial to enhance the effectiveness of pension communication strategies through more inclusive and tailored approaches that consider various demographic groups, especially those in rural areas or working in informal sectors. Increasing public awareness and education about pension schemes through workshops, campaigns, and accessible digital tools will empower individuals to engage more actively with pension systems. Reaching underserved populations with region-specific information is essential to closing gaps in awareness and access. Additionally, regular monitoring and evaluation of pension communication programs will ensure their ongoing relevance and adaptability. Embracing

technological solutions such as mobile platforms and social media can further expand outreach and engagement, especially among younger populations. By implementing these measures, policymakers can strengthen economic security and ensure that pension communication strategies effectively contribute to long-term financial well-being for all citizens in Northwest Nigeria.

References

- Adebayo, S., & Ogunleye, A. (2020). Challenges in pension communication in rural areas: A Nigerian perspective. *African Journal of Economic Studies*, 15(2), 67–78.
- Adeola, O., & Yusuf, T. (2019). Contributory pension scheme: Impact on savings behavior in Nigeria. *International Journal of Pension Economics and Finance*, 10(4), 341–359.
- Alcover, C. M., Topa, G., Parry, E., Fraccaroli, F., & Depolo, M. (2019). Bridging the gap between pension communication and engagement: A systematic review. *Journal of Vocational Behavior*, 111(1), 34-46. <https://doi.org/10.1016/j.jvb.2018.10.003>
- Atkinson, A., & Messy, F. (2019). Financial literacy and retirement planning: Evidence from an international study. *OECD Working Papers on Finance, Insurance and Private Pensions*, 31(2), 1-34. <https://doi.org/10.1787/5k9csfs90fr6-en>
- Clark, R. L., Lusardi, A., & Mitchell, O. S. (2017). Retirement planning and the role of pension communication strategies. *The Journal of Pension Economics and Finance*, 16(4), 456-478.
- IBM Corporation. (2013). IBM SPSS Statistics for Windows, Version 22.0. IBM Corporation.
- Kofar-Mata, I. A., & Hussaini, M. (2024). Financial literacy and retirement planning among academic staff in Kano State, Nigeria. *Cognizance Journal of Multidisciplinary Studies*, 4(2), 1–12. Retrieved from <https://cognizancejournal.com/vol4issue2/V4I231.pdf>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Lusardi, A., & Mitchell, O. S. (2018). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 56(1), 5-44. <https://doi.org/10.1257/jel.20171314>
- National Pension Commission (PenCom). (n.d.). Framework for enlightenment and public awareness for the micro pension plan. PenCom Nigeria. Retrieved from <https://www.pencom.gov.ng/framework-for-enlightenment-and-public-awareness-for-the-micro-pension-plan/>
- National Population Commission. (2006). 2006 Population and Housing Census of the Federal Republic of Nigeria. Retrieved from <https://nationalpopulation.gov.ng/census-enumeration>
- Ogiji, P., Okonkwo, J., & Eze, C. (2022). Long-term economic benefits of improved pension communication strategies. *Nigerian Journal of Economic Research*, 18(2), 120–134.
- Orji, A. B. C. (2011). Developing effective strategy for pension administration in the Nigerian public sector. *ABUAD Publications*, 4(2), 78–92.
- Uche, C., & Osho, J. (2021). Challenges in Nigeria’s pension reforms: An assessment of awareness and participation. *West African Economic Review*, 15(3), 67-85.