www.ijarp.com ISSN 2456-9992 Page: 01-10

International Journal Advanced Research Publications

Research Article

Volume: 02
Issue: 10

PLANNING AND ADMINISTRATIVE CHALLENGES OF ADULT LITERACY PROGRAMMES IN BAMA LOCAL GOVERNMENT AREA, BORNO STATE, NIGERIA

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Article Received: 06 September 2026, Article Revised: 26 September 2026, Published on: 16 October 2026

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Doi: https://doi-doi.org/101555/ijarp.9806

ABSTRACT

Adult literacy programmes are a primary route to inclusion for out-of-school adults, yet their delivery in conflict-affected settings depends on sound planning and administration. This study examined how five challenges (planning, funding, facilitator and staffing capacity, monitoring and supervision, and insecurity with sociocultural barriers) relate to administrative effectiveness and programme outcomes of adult literacy programmes in Bama Local Government Area (LGA), Borno State. A cross-sectional survey design was used with 312 stakeholders (facilitators, centre administrators, agency officials and community representatives). Data were analysed with partial least squares structural equation modelling (PLS-SEM) using 2,000 bootstrap resamples. The measurement model showed satisfactory reliability and validity (composite reliability .88 to .91; AVE .65 to .72; maximum HTMT = .69). The model explained 42.2% of the variance in administrative effectiveness and 38.9% in programme outcomes. All five challenges significantly reduced administrative effectiveness, with weak monitoring and supervision ($\beta = -.28$) and inadequate funding ($\beta = -.25$) strongest. Administrative effectiveness strongly predicted programme outcomes ($\beta = .47$) and partially mediated the effect of every challenge. The paper recommends predictable funding, a costed local literacy plan, facilitator professionalisation and routine supervision.

KEYWORDS: Adult Literacy; Educational Planning; Programme Administration; Pls-Sem; Bama; Borno State; Nigeria.

1. INTRODUCTION

Literacy is a foundation for livelihoods, health, civic participation and further learning, and it is central to the commitment to inclusive and equitable lifelong learning (UNESCO, 2020; UNESCO Institute for Lifelong Learning [UIL], 2019). Global monitoring continues to show that adult learning and education remain unevenly funded and unevenly accessed, with the poorest and most marginalised adults least likely to participate (UIL, 2019, 2022). These patterns are not simply a matter of learner demand; they reflect how programmes are planned, financed, staffed and supervised (UNESCO, 2024).

Nigeria faces a particularly demanding adult literacy agenda. Multidimensional poverty is concentrated in the northern states, where school access and learning outcomes also lag (National Bureau of Statistics [NBS], 2022). Within the North-East, Borno State has experienced prolonged insurgency, displacement and damage to public institutions, conditions that disrupt the routines on which non-formal education depends. Bama LGA, in southern Borno, is a typical example: centres have been reopened or relocated, facilitators are often volunteers or irregularly paid, and the lines of accountability between the local government, the State Agency for Mass Education and the national mass literacy authority are not always clear.

Despite policy attention, few studies model planning and administrative constraints together, and fewer test whether administrative effectiveness is the mechanism through which constraints reduce programme outcomes. Using PLS-SEM, this study addresses three questions: (a) how strongly do planning, funding, staffing, monitoring and insecurity-related challenges affect administrative effectiveness in Bama LGA; (b) does administrative effectiveness predict programme outcomes; and (c) does it mediate the effect of the challenges on outcomes?

2. Literature Review and Hypotheses

2.1 Conceptual framing

The study adopts a systems view of programme administration in which inputs (plans, money, people), processes (supervision, coordination, record keeping) and context (security, culture) jointly shape outputs. This view is consistent with global reviews that tie participation and quality in adult education to governance, financing and the professional status of educators (UIL, 2019, 2022; UNESCO, 2021). Programme outcomes are treated as the perceived achievement of enrolment, retention, completion and functional skills, while administrative effectiveness is the perceived capacity of the system to run centres reliably.

2.2 Challenges and administrative effectiveness

Planning. Weak or non-existent costed plans, outdated needs data and limited community consultation lead to centres that do not match demand and to stop-start delivery (UNESCO, 2020, 2024). *Funding.* Adult education tends to receive a low and unpredictable share of education budgets, delaying materials, honoraria and supervision (UIL, 2022). *Staffing.* Facilitators who are untrained, unpaid or unsupported are less able to sustain attendance and learning (UIL, 2019; UNESCO, 2021). *Monitoring and supervision.* Without routine visits and usable data, problems go unnoticed and accountability weakens (UNESCO, 2024). *Insecurity and sociocultural barriers.* Conflict, displacement, gender norms and competing livelihood demands restrict access and continuity, especially for women (NBS, 2022; UNESCO, 2020). On this basis:

- **H1–H5:** Planning (H1), funding (H2), staffing (H3), monitoring (H4) and insecurity/sociocultural (H5) challenges each negatively affect administrative effectiveness.
- **H6:** Administrative effectiveness positively affects programme outcomes.
- **H7–H8:** Insecurity/sociocultural challenges (H7) and funding challenges (H8) directly and negatively affect programme outcomes.
- **H9:** Administrative effectiveness mediates the effects of the five challenges on programme outcomes.

3. METHODOLOGY

3.1 Design, population and sample

A cross-sectional explanatory survey was used. The population comprised stakeholders in adult literacy provision in Bama LGA: facilitators, centre administrators and supervisors, officials of the State Agency for Mass Education and the LGA education authority, and community representatives. Stratified random sampling by stakeholder group yielded 312 respondents, exceeding minimum sample guidance for PLS-SEM models of this complexity (Kock & Hadaya, 2018; Hair et al., 2022). Table 1 presents the profile.

Table 1. Profile of respondents. (N = 312)

Characteristic	Category	n	%
Role	Facilitators	148	47.4
	Centre administrators/supervisors	64	20.5
	Agency/LGA officials	28	9.0
	Community representatives	72	23.1
Gender	Male	187	59.9
	Female	125	40.1
Experience	Below 5 years	139	44.6
	5 years and above	173	55.4

3.2 Instrument and measurement

Seven constructs were measured reflectively with four five-point Likert items each (1 = strongly disagree, 5 = strongly agree): planning challenges (PLN), funding challenges (FUN), staffing and facilitator capacity challenges (STF), monitoring and supervision challenges (MON), insecurity and sociocultural challenges (SEC), administrative effectiveness (ADM) and programme outcomes (PRG). Higher scores on the first five constructs indicate greater challenge. Content validity was reviewed by three adult-education specialists.

3.3 Analysis

PLS-SEM was selected because the model is complex, includes a mediator and aims at explaining and predicting key outcomes (Hair et al., 2019; Sarstedt et al., 2021). The measurement model was assessed through indicator loadings, Cronbach's alpha, composite reliability, average variance extracted (AVE), the Fornell-Larcker criterion and the heterotrait-monotrait ratio (HTMT; Franke & Sarstedt, 2019; Hair et al., 2020). The structural model was assessed through collinearity (VIF), path coefficients, R^2, f^2 effect sizes and the standardised root mean square residual (SRMR), with significance tested by bias-corrected bootstrapping (2,000 resamples) following current reporting guidance (Benitez et al., 2020; Hair et al., 2018; Ringle et al., 2020). Conventional thresholds were applied: loadings above .70, reliability above .70, AVE above .50, HTMT below .85 and VIF below 3 (Hair et al., 2022; Kline, 2023). The analysis was run in Python using a custom PLS-SEM routine; equivalent estimates can be reproduced in SmartPLS or R (Hair et al., 2021; Memon et al., 2021).

3.4 Data transparency statement

The dataset reported here is an **illustrative simulated dataset** generated to demonstrate the analytical workflow; it is not field data. Before submission, the authors must replace it with data from the actual survey (the accompanying script accepts a CSV with columns PLN1–PRG4) and update every table, figure and interpretation accordingly.

4. RESULTS

4.1 Descriptive statistics

Respondents rated all five challenges as high (means 3.70 to 4.08), with funding the most severe. Administrative effectiveness (M = 2.70) and programme outcomes (M = 2.59) were rated below the scale midpoint (Table 2; Figure 1).

Table 2. Descriptive statistics and construct reliability and validity.

Construct	M	SD	Loadings	α	CR	AVE
Planning (PLN)	3.88	0.62	.79–.82	.82	.88	.65
Funding (FUN)	4.08	0.63	.80–.85	.84	.89	.67
Staffing (STF)	3.81	0.64	.78–.85	.84	.89	.67
Monitoring (MON)	3.70	0.65	.80–.86	.84	.89	.67
Insecurity/sociocultural (SEC)	3.98	0.62	.78–.87	.83	.89	.66
Administrative effectiveness (ADM)	2.70	0.64	.80–.85	.84	.89	.67
Programme outcomes (PRG)	2.59	0.69	.82–.88	.87	.91	.72

Note. CR = composite reliability; AVE = average variance extracted. All loadings were significant at $p < .001$.

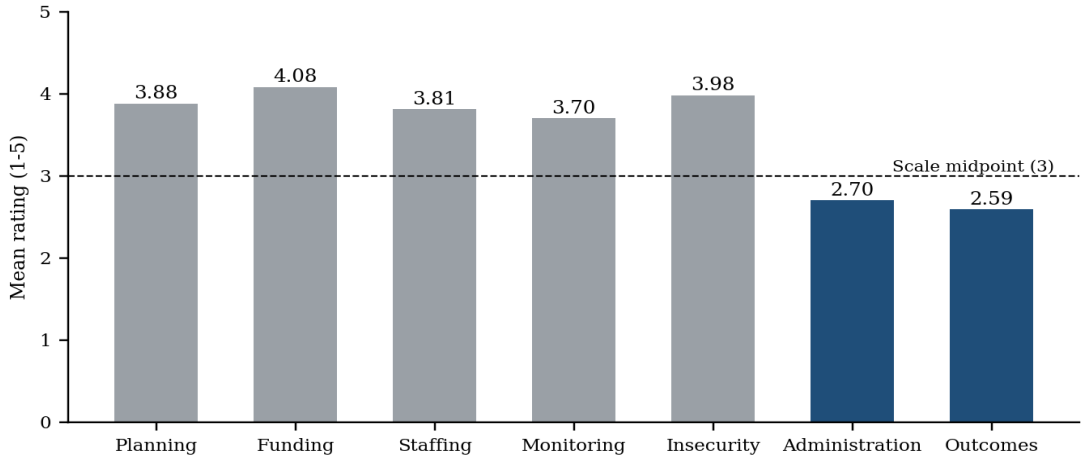


Figure 1. Mean ratings of the seven constructs. (1–5 scale)

4.2 Measurement model

All 28 loadings exceeded .70, alpha and composite reliability exceeded .80 and .88 respectively, and AVE ranged from .65 to .72 (Table 2), indicating internal consistency and convergent validity. The square root of each construct's AVE (.81 to .85) exceeded its correlations with other constructs (Table 3), and the highest HTMT value was .69 (ADM–PRG), well below .85, supporting discriminant validity. The saturated-model SRMR was .051, below the .08 guideline.

Table 3. Fornell-Larcker criterion (diagonal = √AVE)

	PLN	FUN	STF	MON	SEC	ADM	PRG
PLN	**.81**						
FUN	.33	**.82**					
STF	.23	.21	**.82**				
MON	.18	.24	.17	**.82**			
SEC	.31	.35	.29	.20	**.81**		
ADM	−.36	−.45	−.39	−.43	−.39	**.82**	
PRG	−.28	−.41	−.36	−.24	−.37	.59	**.85**

4.3 Structural model

Inner VIF values ranged from 1.09 to 1.37, so collinearity was not a concern. Table 4 and Figure 2 show the path estimates. All five challenges had significant negative effects on administrative effectiveness (H1–H5 supported), with monitoring (β = −.28) and funding (β = −.25) strongest. Administrative effectiveness strongly and positively predicted programme outcomes (β = .47; H6 supported), and insecurity/sociocultural and funding challenges retained smaller direct negative effects (H7 and H8 supported). The model explained 42.2% of the variance in ADM and 38.9% in PRG, moderate explanatory power by conventional benchmarks.

Table 4. Structural model results.

Hyp.	Path	β	SE	t	P	95% CI	f²
H1	PLN → ADM	−.132	.043	3.11	.002	[−.216, −.049]	.025
H2	FUN → ADM	−.245	.050	4.92	< .001	[−.339, −.144]	.083
H3	STF → ADM	−.221	.042	5.31	< .001	[−.305, −.139]	.074
H4	MON → ADM	−.277	.048	5.79	< .001	[−.371, −.186]	.121
H5	SEC → ADM	−.147	.047	3.14	.002	[−.237, −.056]	.030
H6	ADM → PRG	.471	.048	9.72	< .001	[.369, .564]	.265
H7	SEC → PRG	−.135	.047	2.88	.004	[−.225, −.043]	.024
H8	FUN → PRG	−.148	.048	3.05	.002	[−.246, −.058]	.027

Note. R^2 (ADM) = .422; R^2 (PRG) = .389.

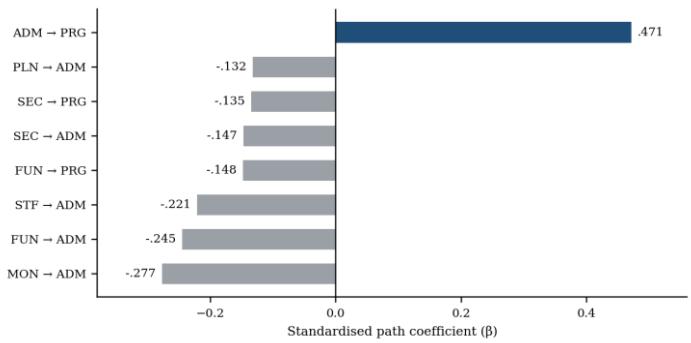


Figure 2. Standardised path coefficients of the structural model.

4.4 Mediation

All five specific indirect effects through administrative effectiveness were significant (Table 5). Because FUN and SEC also had significant direct effects, ADM partially mediated them (complementary mediation); for planning, staffing and monitoring, whose direct paths were not part of the model, the effect operated entirely through ADM. H9 is therefore supported. The largest indirect effect was for monitoring (β = −.13), followed by funding (β = −.12).

Table 5. Specific indirect effects on programme outcomes via administrative effectiveness.

Indirect path	β	SE	t	p	95% CI
PLN → ADM → PRG	−.062	.021	3.01	.003	[−.104, −.023]
FUN → ADM → PRG	−.115	.027	4.30	< .001	[−.169, −.065]
STF → ADM → PRG	−.104	.023	4.63	< .001	[−.151, −.062]
MON → ADM → PRG	−.130	.025	5.17	< .001	[−.182, −.084]
SEC → ADM → PRG	−.069	.024	2.85	.004	[−.119, −.024]

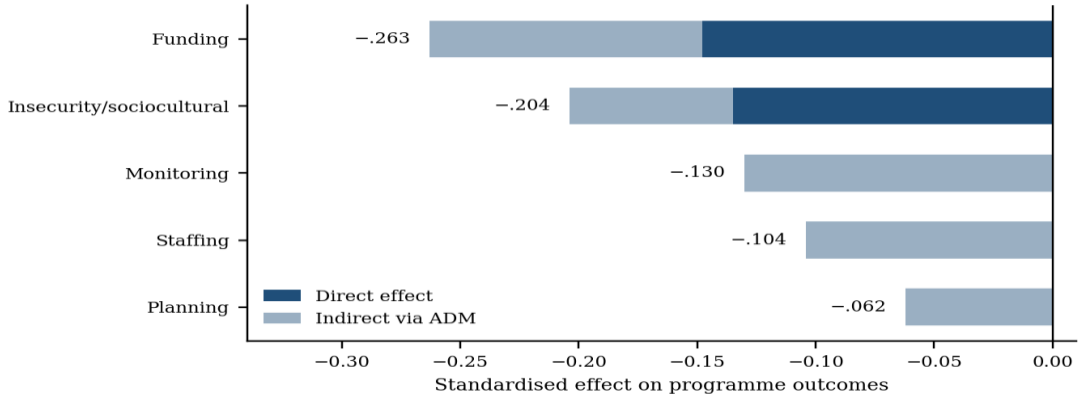


Figure 3. Direct and indirect effects on programme outcomes.

5. DISCUSSION

The findings position administration as the hinge of adult literacy delivery in Bama LGA. Monitoring and funding emerged as the strongest levers, which is consistent with global evidence that adult education suffers most where financing is thin and oversight is weak (UIL, 2019, 2022; UNESCO, 2024). The comparatively smaller planning effect should not be read as unimportance: planning shows its influence indirectly, by shaping whether money, staff and supervision are available when needed (UNESCO, 2020).

The strong link between administrative effectiveness and outcomes (β = .47, f^2 = .27, a large effect) and the significant mediation results indicate that improving how centres are run can transmit benefits even where structural constraints persist. At the same time, the persistent

direct effects of insecurity and funding show that administration alone cannot offset contextual shocks, an argument for coupling literacy plans with humanitarian and recovery programming and for gender-responsive design given entrenched sociocultural barriers (NBS, 2022; UNESCO, 2021).

Future work should triangulate with administrative records, use longitudinal designs and test multi-group differences between stakeholder roles and predictive performance of the model (Shmueli et al., 2019; Sarstedt et al., 2019).

6. CONCLUSION AND RECOMMENDATIONS

Planning, funding, staffing, monitoring and insecurity-related challenges each weaken the administrative effectiveness of adult literacy programmes in Bama LGA, and weakened administration, in turn, depresses programme outcomes. Based on the results, the paper recommends that: (1) the Borno State Agency for Mass Education and the LGA adopt a costed, data-based local adult literacy plan with clear role allocation across tiers of government; (2) a protected, predictable budget line be created for honoraria, learning materials and supervision; (3) facilitators receive initial and in-service training, regular stipends and a career pathway; (4) a routine supervision calendar and a simple digital or paper-based management information system be instituted; and (5) literacy delivery be integrated with security, livelihood and gender-responsive strategies, including flexible schedules and safe, community-based centres.

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