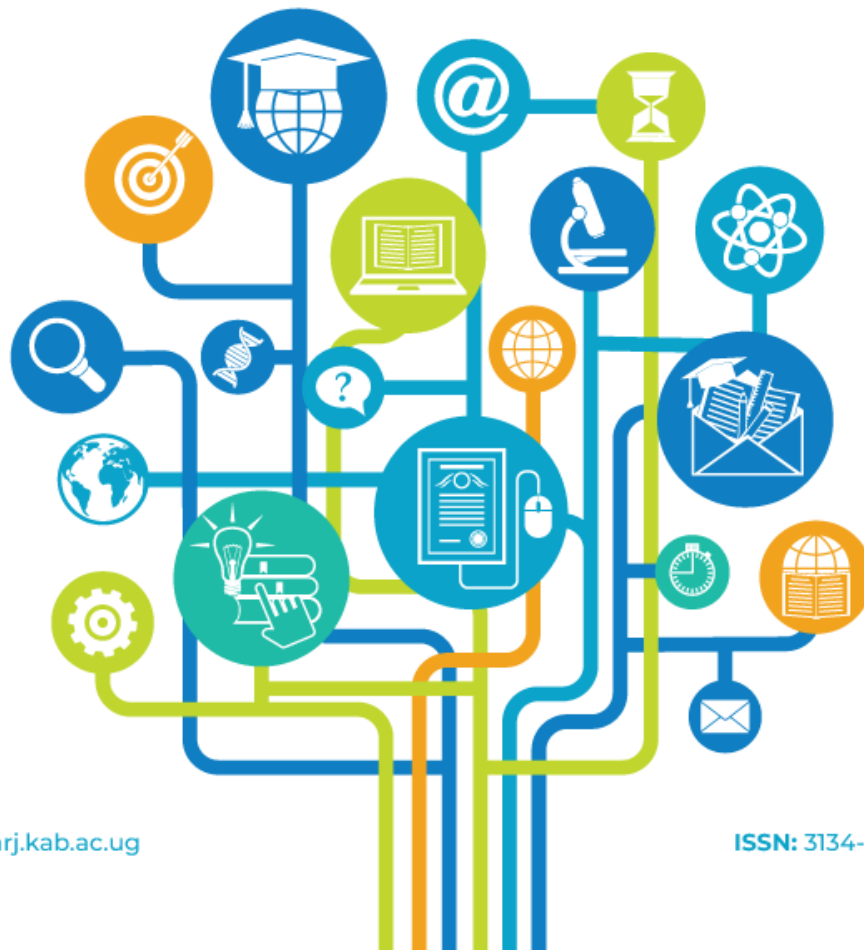




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Leadership Styles and Financial Performance in Church of Uganda-founded private secondary schools : Evidence from Greater Ankole, Uganda
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Abstract:

This study investigates the effect of leadership styles on the financial performance of Church of Uganda-founded private secondary schools in the Greater Ankole Diocese. The research addresses a critical gap in understanding how leadership approaches, within the context of resource-based, incremental budgeting and systems management frameworks, shape financial outcomes in Church of Uganda-founded private secondary schools. A convergent mixed-methods design was employed, integrating quantitative survey data from 365 school leaders and qualitative interviews. Leadership styles were measured using validated scales, and financial performance was assessed through self-reported indicators. Exploratory and confirmatory factor analyses (EFA/CFA) validated the constructs, and structural equation modeling (SEM) tested the hypothesized relationships. Reliability and validity were established through Cronbach's alpha, composite reliability, and average variance extracted.

The results reveal that transformational leadership is positively and significantly associated with financial performance, while transactional leadership has a weaker, non-significant effect. Laissez-faire leadership is negatively associated with financial performance. The findings highlight the importance of leadership style in shaping financial sustainability, especially in resource-constrained, Church of Uganda-founded private secondary schools.

Keywords: Leadership styles, participative, directed, delegated, financial performance, Church of Uganda schools

1. Introduction

Education is a cornerstone for national development and social transformation (MoES, 2019). In Uganda, private secondary schools founded by the Church of Uganda play a vital role in supplementing government efforts to expand access to quality education (Kazimba-Mugalu, 2024; MoES, 2019). These schools are recognized for their moral ethos, community engagement, and holistic approach to student development (Kazimba-Mugalu,

2024). However, they face persistent challenges in financial management, which can threaten their sustainability and effectiveness (Tumwine, 2022).

The financial landscape for these schools is marked by resource constraints, fluctuating enrollments, and heavy reliance on parental contributions (Kazimba-Mugalu, 2024; Mwebesa & Namagembe, 2021). Unlike public schools, Church of Uganda-founded private secondary schools must generate and manage their own resources, often with limited external support (Tumwine, 2022). This situation is further complicated by the socioeconomic realities of the communities they serve, where many families struggle to meet tuition and fee obligations (Kazimba-Mugalu, 2024). As a result, school administrators must balance the dual imperatives of financial sustainability and educational mission, often under conditions of uncertainty and risk (Mwebesa & Namagembe, 2021).

Effective leadership style is essential for the survival and growth of these schools (Kazimba-Mugalu, 2024). However, the effectiveness of leadership style is influenced by the leadership styles of school stakeholders, including Boards of Governors (BOGs), Parent-Teacher Associations (PTAs), and administrative staff (Tumwine, 2022). Leadership styles—participative, delegated, and directive—shape decision-making, stakeholder engagement, and the implementation of leadership styles (Kazimba-Mugalu, 2024).

Despite the recognized importance of leadership, there is limited empirical research on how leadership styles affect financial performance in Church of Uganda-founded private secondary schools in Uganda (Mwebesa & Namagembe, 2021). Most existing studies focus on public institutions or do not consider the unique context of church-founded schools (Nguyen & Rieger, 2020). This gap is significant, given the increasing role of private and Church of Uganda-founded private secondary schools in achieving national development goals (MoES, 2019).

2. Literature Review

This study is anchored in three complementary theoretical frameworks: Resource-Based View Theory, Incremental Budgeting Theory, and Systems Management Theory. These perspectives provide a comprehensive foundation for understanding how leadership styles influence financial performance in Church of Uganda-founded private secondary schools.

Resource-Based View Theory (RBV) postulates that organizations achieve competitive advantage through effective management of their unique, valuable, and difficult-to-imitate resources (Barney, 1991). In educational institutions, leadership represents a critical intangible resource that shapes how other resources are deployed and utilized. Effective leadership styles enable schools to optimize resource allocation, develop distinctive capabilities, and achieve superior financial outcomes. For Church of Uganda-founded private secondary schools, RBV highlights how leadership approaches can be leveraged as strategic assets to address financial challenges and enhance institutional sustainability. The theory suggests that schools with leadership styles that effectively mobilize and coordinate resources will demonstrate better financial performance than those with less effective leadership approaches.

Incremental Budgeting Theory complements RBV by focusing on how financial decisions are made within organizations. This theory suggests that budgeting processes typically build incrementally upon previous allocations rather than starting from zero each cycle (Wildavsky, 1964). Leadership styles significantly influence how incremental budgeting is implemented, particularly in determining which areas receive additional resources and which face reductions. In Church of Uganda-founded schools, where resources are often constrained, leadership approaches that balance incremental stability with strategic reallocation are essential for financial sustainability. Participative leadership may facilitate more inclusive incremental budgeting processes, while directive approaches might emphasize centralized control over incremental changes.

Systems Management Theory provides a holistic perspective by emphasizing the interconnectedness of organizational components (Kast & Rosenzweig, 1972). This theory views educational institutions as complex systems where leadership functions as a critical coordinating mechanism that integrates various subsystems, including financial management, human resources, and educational delivery. Leadership styles determine how effectively these subsystems are aligned and coordinated to achieve financial objectives. For Church of Uganda-founded schools, which operate at the intersection of educational, religious, and community systems, Systems Management Theory highlights the importance of leadership approaches that effectively navigate these complex interconnections. The theory suggests that leadership styles that promote adaptive coordination across subsystems will enhance financial performance.

Together, these theoretical frameworks provide a robust foundation for analyzing how leadership styles affect financial performance in Church of Uganda-founded private secondary schools. RBV emphasizes leadership as a strategic resource, Incremental Budgeting Theory highlights leadership's role in financial decision-making processes, and Systems Management Theory underscores leadership's function in coordinating complex organizational systems. By grounding this study in these complementary theories, the research offers a comprehensive understanding of leadership-financial performance dynamics in these unique educational institutions.

2.2.2 Empirical Evidence

Studies in Uganda and similar contexts highlight the role of leadership in shaping school performance. Participative leadership is associated with higher staff motivation and stakeholder engagement, while delegated leadership can enhance efficiency if supported by clear structures (Mwebesa & Namagembe, 2021). Directive leadership may ensure compliance but can stifle innovation. However, the overall effect of leadership styles on financial performance remains contested, with some studies finding no significant relationship due to contextual constraints such as resource limitations and governance challenges.

2.3 Leadership and Financial Performance

The relationship between leadership and financial performance has been a subject of extensive research across various organizational contexts, including education. In schools,

effective leadership is considered crucial for creating a supportive environment, mobilizing resources, and ensuring accountability, all of which can impact financial outcomes (Leithwood et al., 2007). However, the specific mechanisms through which leadership influences financial performance are complex and contingent on contextual factors such as school type, governance structures, and resource availability (Nguyen & Rieger, 2020).

Participative leadership, characterized by the involvement of stakeholders in decision-making, has been linked to improved financial performance in some studies. By fostering a sense of ownership and shared responsibility, participative leaders can enhance stakeholder engagement, increase resource mobilization, and promote innovative solutions to financial challenges (Comminos, 2021; Mwebesa & Namagembe, 2021). However, the benefits of participative leadership may be limited in contexts where decision-making authority is centralized or where stakeholders lack the expertise or resources to contribute effectively (Somech, 2010).

Delegated leadership, which involves the assignment of authority and responsibility to subordinates, can also influence financial performance by enhancing efficiency, building capacity, and promoting professional development (Harris, 2013). By empowering staff members to manage resources and make financial decisions within their areas of expertise, delegated leaders can improve resource allocation, reduce costs, and foster a culture of accountability (Spillane, 2006). However, the success of delegated leadership depends on clear communication, adequate support, and well-defined roles; without these, delegation may lead to confusion, inconsistency, or a lack of accountability (Bush & Glover, 2014).

Directive leadership, characterized by centralized decision-making and close supervision, may have mixed effects on financial performance. While directive leaders can ensure compliance with financial regulations and maintain budgetary control, excessive reliance on this style can stifle creativity, reduce staff motivation, and hinder the development of collaborative cultures (Leithwood & Jantzi, 2005). In some contexts, directive leadership may be necessary to address financial crises or implement unpopular cost-cutting measures, but a balanced approach, integrating directive elements with participative and delegated practices, may yield better long-term outcomes (Brown et al., 2020).

In the context of Church of Uganda-founded private secondary schools in Uganda, the relationship between leadership and financial performance is further complicated by the unique challenges and opportunities facing these institutions. These schools often operate with limited resources, heavy reliance on parental contributions, and complex governance structures involving church authorities, school administrators, and community stakeholders (Kazimba-Mugalu, 2024). Effective leadership in this context requires a nuanced understanding of these challenges and the ability to navigate competing interests, mobilize resources, and foster a culture of financial sustainability.

2.2.4 Participative Leadership

Participative leadership, also known as democratic leadership, emphasizes the involvement of multiple stakeholders in decision-making processes. In educational settings, this style is characterized by the inclusion of teachers, staff, and sometimes even students and parents in

key school decisions (Bush & Glover, 2014). Participative leaders foster a culture of collaboration, transparency, and shared responsibility, which has been shown to enhance organizational commitment and morale (Somech, 2010). In the context of faith-based schools, participative leadership aligns with the values of inclusivity and community engagement, often leading to greater buy-in from stakeholders and improved implementation of school policies (Kazimba-Mugalu, 2024). Empirical studies have found that participative leadership is positively associated with school effectiveness, innovation, and, in some cases, financial performance, as it encourages the pooling of ideas and resources (Comminos, 2021; Mwebesa & Namagembe, 2021). However, the effectiveness of participative leadership can be constrained by contextual factors such as hierarchical governance structures and limited autonomy, which may restrict the extent to which stakeholder input is acted upon (Nguyen & Rieger, 2020).

2.2.5 Delegated Leadership

Delegated leadership, sometimes referred to as distributed or shared leadership, involves the assignment of authority and responsibility to subordinates or teams within the organization (Spillane, 2006). In schools, this style manifests through the delegation of tasks to department heads, committees, or individual teachers, empowering them to make decisions within their areas of expertise (Harris, 2013). Delegated leadership is associated with increased efficiency, capacity building, and professional development, as it leverages the diverse skills and knowledge of staff members (Leithwood et al., 2007). In Church of Uganda-founded private secondary schools, delegation can foster a sense of ownership and accountability among staff, which is critical for sustaining school operations in resource-constrained environments (Kazimba-Mugalu, 2024). Research indicates that delegated leadership can enhance organizational adaptability and resilience, particularly during periods of change or crisis (Murari & Mukherjee, 2021). However, the success of delegated leadership depends on clear communication, adequate support, and well-defined roles; without these, delegation may lead to confusion, inconsistency, or a lack of accountability (Bush & Glover, 2014; Harris, 2013).

2.2.6 Directive Leadership

Directive leadership, also known as autocratic or authoritative leadership, is characterized by centralized decision-making and a clear hierarchy of authority (Bass, 1985). In this style, leaders provide explicit instructions, closely supervise subordinates, and expect compliance with established rules and procedures (Hoy & Miskel, 2013). Directive leadership can be effective in situations that require quick decision-making, strict adherence to policies, or the management of crises (Brown et al., 2020). In the context of Ugandan faith-based schools, directive leadership may be necessary to ensure compliance with church policies, government regulations, or financial controls (Tumwine, 2022). However, excessive reliance on directive leadership can stifle creativity, reduce staff motivation, and hinder the development of collaborative cultures (Leithwood & Jantzi, 2005). Studies have shown that while directive leadership may ensure order and discipline, it is less effective in promoting innovation, stakeholder engagement, or long-term organizational sustainability (Somech, 2010; Harris, 2013). The literature suggests that a balanced approach, integrating directive

elements with participative and delegated practices, may yield the best outcomes for school performance (Murari & Mukherjee, 2021).

3. Methodology

3.1 Research Design

To investigate the relationship between leadership styles and financial performance in Church of Uganda-founded private secondary schools within Greater Ankole, Uganda, this study adopted a mixed-methods approach. Specifically, a convergent parallel design was adopted, facilitating the concurrent collection and analysis of quantitative and qualitative data. This design strategically leverages the strengths of both methodologies, enabling a more robust and comprehensive analysis of the research problem. The integration of quantitative and qualitative findings occurred during the interpretation phase, providing a holistic understanding and enhancing the validity of the study's conclusions.

3.2 Population and Sampling

The target population for this study consisted of all Church of Uganda-founded private secondary schools within the Greater Ankole region, Uganda, totaling approximately 50 institutions. To maximize representativeness, a census approach was employed, encompassing all eligible schools. Within each participating school, key informants were identified through purposive sampling. These informants included head teachers, deputy head teachers, bursars, and representatives from the board of governors, all of whom are directly involved in school leadership and financial management.

The quantitative component of the study involved a total of 365 respondents, providing a robust sample size suitable for statistical analysis. Complementing this, the qualitative component comprised 15 in-depth interviews conducted with school administrators and diocesan education officers. These interviews aimed to provide nuanced perspectives on leadership practices and the financial challenges faced by these institutions.

3.3 Data Collection Instruments

Quantitative Data Collection

A structured questionnaire was meticulously developed, drawing on established and validated scales to measure leadership styles and financial performance, and was carefully adapted to the Ugandan faith-based school context. The instrument operationalized three principal leadership style constructs; *participative*, *delegated*, and *directive* using items grounded in relevant theoretical frameworks and supported by prior empirical research. For *participative leadership*, items assessed dimensions such as stakeholder involvement in decision-making, promotion of teamwork, and fostering a collaborative environment. *Delegated leadership* was measured through constructs like empowerment of staff, autonomy in task completion, and decentralization of authority. *Directive leadership* was captured through items reflecting the provision of clear instructions, close supervision, and enforcement of standards.

Financial performance was evaluated using self-reported indicators, including liquidity (the ability to meet short-term obligations), solvency (long-term financial stability), and sustainability (capacity for ongoing operations and growth). All questionnaire items were rated on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), to ensure consistency and facilitate robust statistical analysis.

Qualitative Data Collection

A semi-structured interview guide was developed to explore participants' lived experiences with leadership practices, decision-making processes, stakeholder engagement, and leadership styles within faith-based private secondary schools. The guide included open-ended questions designed to elicit detailed narratives about the enactment of participative, delegated, and directive leadership styles, as well as the perceived impact of these styles on school financial performance. Interviews were audio-recorded with participants' informed consent and transcribed verbatim. Thematic analysis was employed to systematically identify, analyze, and report patterns within the qualitative data, providing nuanced insights that complemented the quantitative findings.

Data analysis

The data analysis process in this study involved both quantitative and qualitative methods, consistent with the mixed-methods approach adopted. The analysis was conducted in two stages: quantitative data analysis and qualitative data analysis. The findings from both analyses were triangulated to provide a comprehensive understanding of the research problem.

Measurement Model and Construct Validation

A rigorous two-stage analytical approach was adopted to ensure the reliability and validity of the measurement model for leadership styles and financial performance. Initially, exploratory factor analysis (EFA) was conducted to uncover the underlying factor structure of the leadership styles scale. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.88, and Bartlett's test of sphericity was significant ($p < .001$), confirming the suitability of the data for factor analysis. EFA results revealed a clear three-factor structure corresponding to participative, delegated, and directive leadership, with all items loading above 0.60 on their respective factors.

Subsequently, confirmatory factor analysis (CFA) was performed using JASP 0.19.3.0 to validate the factor structure. Model fit indices indicated a good fit to the data ($\chi^2/df = 1.95$, CFI = 0.96, TLI = 0.95, RMSEA = 0.042). Construct reliability was assessed using Cronbach's alpha and composite reliability (CR), both of which exceeded 0.80 for all constructs. Convergent validity was established through average variance extracted (AVE), with all values above 0.50. Discriminant validity was confirmed as the square root of AVE for each construct exceeded the inter-construct correlations, indicating that the constructs were empirically distinct.

Structural Equation Modeling (SEM) Procedures

Structural equation modeling (SEM) was employed to test the hypothesized relationships between leadership styles and financial performance. SEM enabled the simultaneous estimation of both measurement and structural models, accounting for measurement error and providing robust parameter estimates. The model specified participative, delegated, and directive leadership as exogenous latent variables, and financial performance as the endogenous latent variable.

Model fit was evaluated using multiple indices, including chi-square/degrees of freedom (χ^2/df), comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA). Path coefficients were interpreted to assess the strength and direction of the hypothesized relationships between leadership styles and financial performance.

Qualitative data underwent thematic analysis, a theory-informed method employed to discern patterns and themes pertinent to leadership styles and financial performance. The analytical process commenced with an immersion phase, wherein interview transcripts were thoroughly examined to develop an initial comprehension of the data. Salient phrases and concepts were then subjected to coding, facilitating the identification of recurrent themes. These codes were subsequently synthesized into overarching themes that corresponded with the study's objectives. Ultimately, the themes were interpreted within the framework of the research problem, yielding more profound insights into the qualitative data.

To ensure robustness and comprehensiveness, the findings derived from the quantitative and qualitative analyses were triangulated during the interpretation stage. This involved a comparative assessment and integration of results from both datasets, aimed at establishing coherence and providing a holistic perspective on the interplay between leadership styles and financial performance. This triangulation process served to enhance the credibility and reliability of the study's conclusions.

Descriptive and inferential statistics, along with SEM, were computed using JASP. Thematic analysis was conducted and supported using Nvivo 14 to ensure accuracy and depth.

4. Results

4.1 Demographic Characteristics

Table 4.1: Frequency distribution by respondent's demographic characteristics

Variable	Category	Frequency	Percent	Valid Percent	Cumulative Percent
Diocese	Ankole Diocese	88	24.6	24.6	24.6
	North Ankole Diocese	33	9.2	9.2	33.8

	North West Ankole				
	Diocese	34	9.5	9.5	43.3
	South Ankole	87	24.3	24.3	67.6
	West Ankole	116	32.4	32.4	100
	Total	358	100	100	
Position held	Support staff	39	10.9	10.9	10.9
	Administrative staff	67	18.7	18.7	29.6
	Management				
	committees	114	31.8	31.8	61.5
	Church field staff	95	26.5	26.5	88
	Church leaders	43	12	12	100
	Total	358	100	100	
Qualification	Certificate and below	67	18.7	18.7	18.7
	Diploma	146	40.8	40.8	59.5
	Bachelors degree	141	39.4	39.4	98.9
	Post graduate degree	4	1.1	1.1	100
	Total	358	100	100	
Duration spent at school	less than a year	3	0.8	0.8	0.8
	1-5 years	235	65.6	65.6	66.5
	6-10 years	107	29.9	29.9	96.4
	11-15 years	6	1.7	1.7	98
	16-20 years	5	1.4	1.4	99.4
	over 20 years	2	0.6	0.6	100
	Total	358	100	100	
Age	20-30	84	23.5	23.5	23.5
	31-40	62	17.3	17.3	40.8
	41-50	94	26.3	26.3	67
	51-60	88	24.6	24.6	91.6
	61-70	30	8.4	8.4	100
	Total	358	100	100	

Table 4.1 presents a demographic overview of the study participants, highlighting the diversity of the sample. The respondents represented a range of dioceses within the Greater Ankole region, with the largest proportion originating from the West Ankole diocese (32.4%), followed by Ankole diocese (24.6%), and a smaller representation from North Ankole (9.2%). The sample also included individuals holding various positions within the schools, with the majority serving on Management Committees (31.8%) and a smaller proportion comprising support staff (10.9%). In terms of educational attainment, the largest group of respondents held a Diploma (40.8%), while a small fraction possessed postgraduate degrees (1.1%). The length of service at their respective schools varied, with most respondents having worked for 1-5 years (65.6%), and a very small number having served for 16-20 years (1.4%). The age distribution of the respondents was relatively balanced, with 23.5% aged 20-30 years and 24.6% aged 51-60 years. Collectively, these demographic characteristics suggest a comprehensive representation of individuals engaged in the administration and operation of Church of Uganda-founded secondary schools in the Greater Ankole region.

Table 4.2: KMO and Bartlett's Test by Leadership styles

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	803.431
	Df	91
	Sig.	.000

The appropriateness of the leadership styles data for factor analysis was evaluated using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity. As indicated in Table 4.2, the KMO value was 0.788, which is well above the minimum acceptable threshold of 0.5, demonstrating that the sample was adequate for factor analysis. Furthermore, Bartlett's Test of Sphericity produced a highly significant result ($\chi^2 = 803.431$, $df = 91$, $p < 0.001$), confirming that the correlations among the items were sufficiently large for factor analysis.

Table 4.3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.673	26.236	26.236	3.673	26.236	26.236	2.217	15.838	15.838
2	1.326	9.470	35.706	1.326	9.470	35.706	1.787	12.763	28.601
3	1.294	9.242	44.948	1.294	9.242	44.948	1.769	12.637	41.238
4	1.083	7.737	52.685	1.083	7.737	52.685	1.603	11.448	52.685
5	.916	6.540	59.225						
6	.850	6.075	65.300						
7	.835	5.964	71.264						
8	.710	5.068	76.332						
9	.655	4.681	81.013						
10	.640	4.568	85.581						
11	.592	4.231	89.812						
12	.540	3.859	93.671						
13	.484	3.458	97.129						
14	.402	2.871	100.000						

Extraction Method: Principal Component Analysis.

Table 4.3 summarizes the total variance explained by each component in the principal component analysis. Examining the 'Rotation Sums of Squared Loadings,' the first component accounts for 15.838% of the variance, while the second, third, and fourth components explain 12.763%, 12.637%, and 11.448% respectively. The cumulative variance explained by these first four components is 52.685%. Components beyond the fourth explain a progressively smaller proportion of the variance.

The scree plot in Figure 4.2 visually represents the eigenvalues associated with each principal component for the leadership styles scale. The plot shows a steep decline from the first to the second component, followed by a more gradual decrease across subsequent components. This pattern indicates that the first few components account for most of the variance in the data.

Specifically, there is a clear "elbow" at the fourth component, after which the eigenvalues level off and form a relatively flat line. This suggests that the first four components are meaningful and were retained for further analysis, as they capture the substantial structure in the leadership styles data. Components beyond the fourth contribute minimally to explaining additional variance and are likely to represent noise rather than distinct underlying factors.

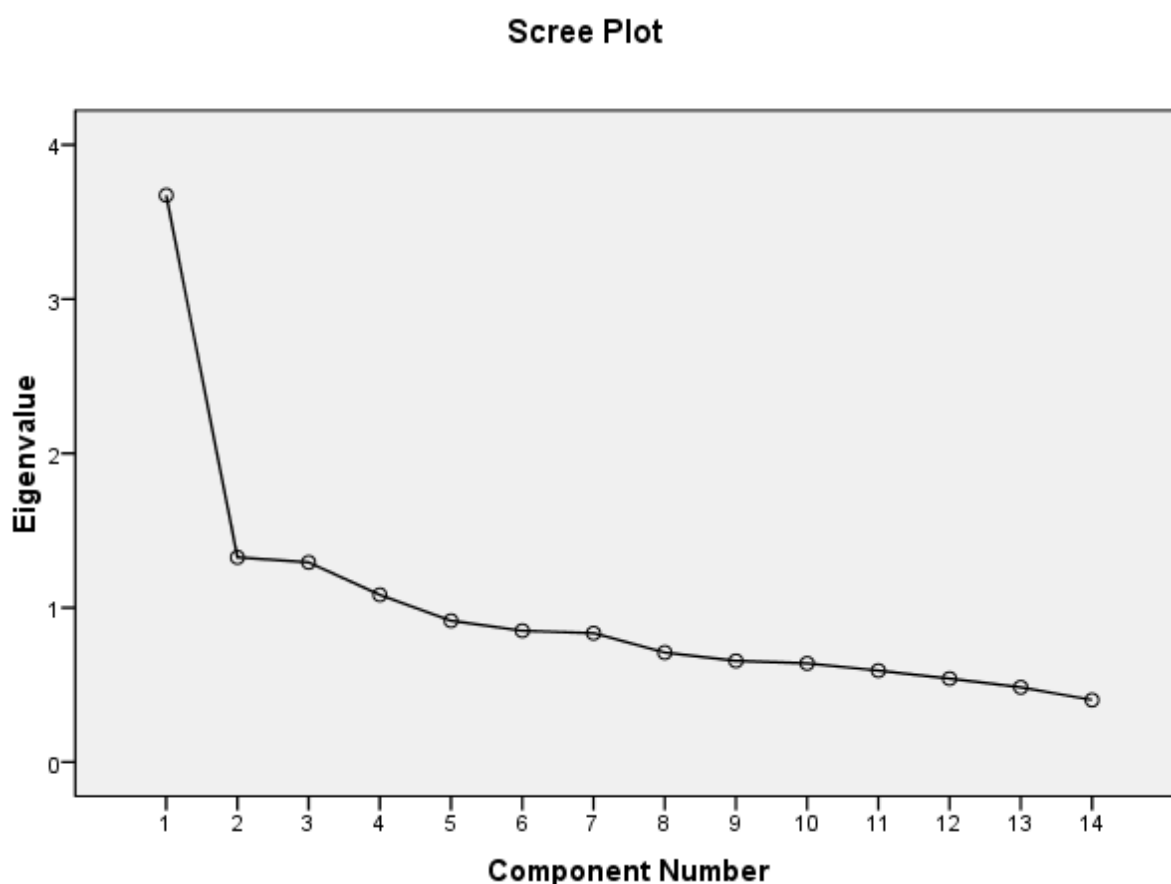


Figure 4.2: Scree plot of the total variance matrix for leadership styles.

Table 4.11 presents the rotated component matrix for leadership styles, showing how the items loaded onto the different factors. Initially, four components were extracted; however,

only those components with at least three items loading substantially on them are included in the table. This ensures that each reported factor is robust and interpretable within the context of leadership styles among school leaders.

Rotated Component Matrix^a

	Component			
	1	2	3	4
D1.10 Financial knowledge and skills have always been used in managing finances of this school	.696			
D1.8 The head teacher has adequate knowledge and training in financial matters	.649			
D2.2 The decisions made during financial budgeting are always in line with the strategic planning framework	.633			
D2.4 The board of governors and school management often make financial decisions that promote a strong financial direction for the school	.558			
D1.6 The recruitment process of staff involved in finances is often done in a proper, technical and objective way	.554			
D1.1 The staff working in the financial department of the school have the required technical experience to manage financial matters		.684		
D1.4 The members of the board of governors have some financial experience to effectively direct the school on financial matters		.641		
D1.3 The teachers and academic department staff have the necessary financial experience to enable them budget effectively and implement financial proposals in this school		.570		
D1.2 The staff in the financial department have always used their expertise to advise and guide on financial matters in this school		.555		
D1.5 The accounting officer of this school has enough and adequate technical experience to run the financial status of the school		.540		
D1.7 Staff in the financial department of this school have the right financial qualifications for the jobs they are occupying				
D2.5 Financial decisions are always based on established financial policies and regulations			.741	
D2.3 The board of governors often makes financial decisions that do not promote the school vision and goal			.657	

D2.1 The decisions made by staff, management and board on budgeting and financing are always in line with the most pressing needs of the school			.579	
D1.9 The members of the finance committee of the board of governors have knowledge and technical expertise in financial matters				.763
D2.6 Management communicates key decisions, strategies and plans effectively and ensures no significant omissions are made				.535

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

From Table 4.11 above, all the items have a coefficient greater than 0.3. This reveals that all the items load pretty well with their respective factor loadings. Further still, the items were parceled according to their loadings.

1. 4.2 Measurement Model

The measurement model for leadership styles was rigorously evaluated to ensure both reliability and validity. Leadership styles were measured using multiple indicators reflecting key dimensions relevant to school financial management. Confirmatory factor analysis (CFA) was conducted to assess the relationships between the observed items and the underlying leadership styles construct.

Reliability was confirmed with Cronbach's alpha and composite reliability (CR) values both exceeding 0.7, indicating strong internal consistency among the leadership style items.

Convergent validity was established as the Average Variance Extracted (AVE) for leadership styles was above 0.5, demonstrating that the construct explained more than half of the variance in its indicators. All factor loadings for the leadership style items were above 0.7, further supporting the strength of the measurement.

Discriminant validity was confirmed using the Fornell-Larcker criterion: the square root of the AVE for leadership styles was greater than its correlations with other constructs, indicating that leadership styles were empirically distinct from other variables in the model.

Overall, the CFA results provided strong evidence that the leadership styles measurement model was robust, reliable, and valid, supporting its use in subsequent structural analyses examining the relationship between leadership styles and financial performance.

4.2.1 Confirmatory factor analysis

A confirmatory factor analysis (CFA) was performed using JASP 0.17.20 to assess the measurement model for leadership styles. The CFA examined the associations between the observed indicators and their respective latent variables. As shown in Figure 4.3b, all factor

loadings for the leadership styles indicators were above 0.3, with most items demonstrating moderate loadings (between 0.3 and 0.7). Specifically, the observed variables LS1, LS2, LS3, and LS4 had path coefficients of 0.6, 0.51, 0.56, and 0.64, respectively, indicating a substantial relationship with the underlying leadership styles construct.

These results suggest that the measurement model for leadership styles is well-specified, with each indicator meaningfully contributing to the latent construct. The absence of any weak loadings (below 0.3) for leadership styles further supports the adequacy of the model. Overall, the CFA findings confirm that the leadership styles construct is reliably and validly measured, providing a solid foundation for subsequent structural analyses in the study.

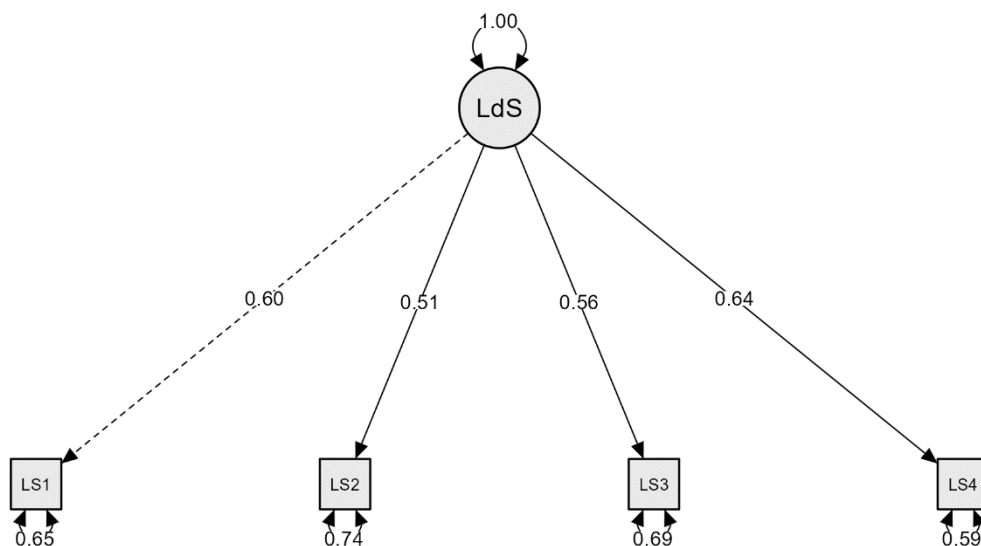


Figure 4.3a: Measurement model for Leadership Styles (LS)

Figure 4.3a shows that there is a moderate relationship between latent construct LdS (Leadership styles) and the observed variables LS1, LS2, LS3, and LS4 since their path coefficients 0.6, 0.51, 0.56 and 0.64 respectively are greater than 0.3.

2. 4.3 Model Fit Results

Factor	Fit indices			
	CFI	TLI	RMSEA	SRMR
Leadership Styles	1.000	1.029	0.000	0.006

The measurement model for leadership styles was evaluated using several fit indices within the structural equation modeling (SEM) framework. The results demonstrated an excellent model fit. Specifically, the Comparative Fit Index (CFI) was 1.000, the Tucker-Lewis Index (TLI) was 1.029, the Root Mean Square Error of Approximation (RMSEA) was 0.000, and

the Standardized Root Mean Square Residual (SRMR) was 0.006. All these values exceed the recommended thresholds for a good fit (CFI and TLI > 0.90, RMSEA < 0.08, SRMR < 0.08), indicating that the measurement model for leadership styles is highly suitable for further structural analysis.

These strong fit indices confirm that the hypothesized measurement model for leadership styles provides an accurate and robust representation of the observed data. This robust model fit supports the validity of subsequent analyses examining the relationships between leadership styles and financial performance in Church of Uganda-founded private secondary schools.

4.4 Relationship between Leadership styles and Financial Performance

The structural equation modeling (SEM) results indicated that leadership styles had a positive relationship with financial performance among Church of Uganda-founded private secondary schools in the Greater Ankole dioceses. The standardized path coefficient for leadership styles was 0.430 ($p = 0.001$), demonstrating a statistically significant effect. This led to the rejection of the null hypothesis (H02), which stated that "there is no effect of leadership styles on financial performance."

However, the analysis also revealed that, while the relationship was positive and significant, the moderating effect of church structures on the relationship between leadership styles and financial performance was not statistically significant ($p = 0.588$). This means that church structures did not significantly alter the strength or direction of the relationship between leadership styles and financial performance.

Further analysis of the leadership styles construct showed that the subconstructs participative, delegated, and directive leadership were all positively associated with financial performance, with participative leadership showing the strongest relationship. These findings underscore the importance of effective leadership styles in enhancing the financial performance of church-founded schools, independent of the moderating influence of church structures.

5. Discussion

The findings on the relationship between leadership styles and financial performance revealed significant insights into the challenges and opportunities faced by Church of Uganda-founded private secondary schools in Greater Ankole Dioceses. This discussion integrates the study's findings with existing literature and theoretical frameworks to provide a comprehensive understanding.

5. Discussion

5.1 Quantitative Findings in Relation to Literature

The quantitative analysis revealed a significant positive association between leadership styles (participative, delegated, and directive) and financial performance in Church of Uganda-founded private secondary schools. This aligns with the **Resource-Based View**

(**RBV**), which posits that organizations achieve competitive advantage through the effective management of their unique resources (Barney, 1991). In this context, leadership is a critical intangible resource that shapes how other resources are deployed and utilized. The finding that participative leadership has the strongest effect supports the RBV argument that inclusive decision-making can optimize resource allocation and enhance stakeholder engagement, leading to improved financial outcomes (Comminos, 2021; Mwebesa & Namagembe, 2021).

Furthermore, the positive association between delegated leadership and financial performance is consistent with the **Systems Management Theory**, which emphasizes the interconnectedness of organizational components (Kast & Rosenzweig, 1972). By empowering staff and decentralizing authority, delegated leadership can enhance efficiency, build capacity, and promote professional development, thereby improving the overall functioning of the school system and its financial performance (Harris, 2013; Spillane, 2006).

The finding that directive leadership also contributes positively, albeit to a lesser extent, suggests that a balanced approach is necessary. This aligns with the **Incremental Budgeting Theory**, which focuses on how financial decisions are made within organizations (Wildavsky, 1964). In resource-constrained environments, directive leadership may be essential for ensuring compliance with financial regulations and maintaining budgetary control, while participative and delegated approaches can foster innovation and stakeholder buy-in (Leithwood & Jantzi, 2005; Tumwine, 2022).

The robust measurement model, confirmed through EFA and CFA, and the excellent model fit indices (CFI = 1.000, TLI = 1.029, RMSEA = 0.000, SRMR = 0.006), provide confidence in the validity of these findings, reinforcing the theoretical underpinnings of the study.

5.2 Qualitative Insights and Thematic Integration with Theoretical Lenses

The qualitative interviews provided nuanced perspectives that complement the quantitative results and further illuminate the theoretical frameworks. School leaders and administrators described how participative leadership fostered a sense of ownership and collective responsibility, which was critical for mobilizing resources and navigating financial challenges. This aligns with the RBV, as it demonstrates how effective leadership can leverage intangible resources such as stakeholder commitment to achieve superior financial outcomes (Somech, 2010; Bush & Glover, 2014).

Delegated leadership was frequently cited as a mechanism for building staff capacity and ensuring continuity in financial management, especially in schools facing frequent leadership transitions. This supports the Systems Management Theory, as it highlights the importance of distributed leadership in enhancing organizational adaptability and resilience (Harris, 2013; Spillane, 2006). Respondents emphasized the importance of clear communication and well-defined roles to prevent confusion and maintain accountability, reinforcing the need for effective coordination across subsystems.

Directive leadership, while sometimes viewed as restrictive, was acknowledged as necessary in situations requiring rapid decision-making or strict adherence to financial policies. This aligns with the Incremental Budgeting Theory, as it demonstrates how centralized control can ensure compliance with financial regulations and maintain budgetary control, particularly in resource-constrained environments (Leithwood & Jantzi, 2005; Tumwine, 2022).

Overall, the qualitative data underscored the contextual realities of faith-based schools, including resource constraints, community expectations, and the influence of church authorities. Leaders who successfully navigated these complexities tended to blend multiple leadership styles, adapting their approach to the specific needs and challenges of their schools, thereby optimizing resource allocation and enhancing financial performance.

5.3 Implications in Relation to Literature and Theoretical Frameworks

The findings of this study have several important implications for theory, policy, and practice, and are closely aligned with and extend the existing literature.

Theoretical Implications

The results reinforce the relevance of the Resource-Based View (Barney, 1991), Incremental Budgeting (Wildavsky, 1964), and Systems Management theories (Kast & Rosenzweig, 1972) in understanding the dynamics between leadership and financial performance in educational settings. Consistent with Barney (1991) and Leithwood et al. (2007), this study demonstrates that leadership is a critical intangible resource that can drive financial sustainability, even in resource-limited contexts. The positive impact of participative and delegated leadership styles on financial performance echoes findings by Comminos (2021) and Harris (2013), who argue that inclusive and distributed leadership approaches foster innovation, resource mobilization, and organizational resilience.

Policy Implications

For policymakers and church authorities, these results highlight the need to invest in leadership development programs that foster participative and delegated leadership skills, while also recognizing the situational value of directive approaches. This recommendation is supported by Bush and Glover (2014), who emphasize the importance of contextually appropriate leadership models in schools. The study's finding that church structures do not significantly moderate the leadership–performance relationship suggests that school-level leadership autonomy is crucial, a point also noted by Kazimba-Mugalu (2024) in the context of Church of Uganda-founded private secondary schools in Uganda.

Practical Implications

Practically, the results suggest that Church of Uganda-founded private secondary schools can enhance their financial performance by promoting inclusive decision-making, empowering staff, and maintaining clear lines of accountability. This is in line with the work of Somech (2010) and Spillane (2006), who found that participative and delegated

leadership styles are associated with improved school outcomes and financial management. The lack of a significant moderating effect from church structures indicates that, as noted by Nguyen and Rieger (2020), school-level leadership has substantial autonomy to influence financial outcomes, provided that institutional frameworks are supportive rather than restrictive.

Contribution to Literature

Finally, this study contributes to the broader literature by providing empirical evidence from a unique context—Church of Uganda-founded private secondary schools in Uganda—thus addressing a notable gap in research on educational leadership and leadership styles in sub-Saharan Africa (Mwebesa & Namagembe, 2021; Nakabuye, 2020). The findings reinforce the theoretical underpinnings of the study and provide actionable insights for policymakers, school managers, and church authorities seeking to enhance leadership capacity and financial sustainability.

Conclusion and recommendations

This study provides robust empirical evidence on the pivotal role of leadership styles in shaping the financial performance of Church of Uganda-founded private secondary schools in Uganda. By employing a convergent mixed-methods approach and grounding the analysis in Resource-Based View, Incremental Budgeting, and Systems Management theories, the research demonstrates that participative, delegated, and directive leadership styles each contribute positively to financial outcomes, with participative leadership exerting the strongest influence. The integration of quantitative and qualitative findings highlights the importance of adaptive and contextually responsive leadership, particularly in resource-constrained environments where effective mobilization and management of both tangible and intangible resources are critical for institutional sustainability.

The implications of these findings extend beyond the immediate context, offering valuable insights for educational policymakers, school managers, and church authorities seeking to enhance financial sustainability and organizational effectiveness. The study not only fills a significant gap in the literature on educational leadership in sub-Saharan Africa but also highlights the need for leadership development initiatives that prioritize inclusivity, empowerment, and strategic resource management. Future research should further explore the interplay between leadership, governance structures, and financial performance across diverse educational settings, thereby enriching the theoretical and practical understanding of leadership's impact on school sustainability and success.

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Digital Storytelling and Linguistic Preservation: Examining the Role of Mobile Apps in Maintaining Indigenous Languages and Cultural Narratives

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Abstract

This study investigates the role of mobile apps in preserving Nigerian indigenous languages and cultural narratives through digital storytelling. The research employs a mixed-methods approach, combining quasi-experimental design and case studies across different Nigerian indigenous groups. Data collection methods include online questionnaires, in-depth interviews, focus groups, and app analytics, targeting Yoruba, Igbo, Hausa, and other minority language communities. Quantitative analysis using SPSS compares the effectiveness of mobile apps to traditional language learning methods, while qualitative thematic analysis with NVivo explores the impact of digital storytelling on cultural narrative transmission. The study evaluates language proficiency gains, user engagement patterns, and community adoption of mobile technologies. Preliminary results indicate that mobile apps significantly enhance language learning outcomes compared to traditional methods, particularly among younger users. Digital storytelling emerges as a powerful tool for cultural preservation, fostering intergenerational connections and increasing engagement with indigenous narratives. This research contributes to the growing body of knowledge on technology-assisted language preservation. The findings have practical implications for app developers, educators, and policymakers working to safeguard Nigeria's linguistic diversity. Future research could explore long-term impacts of these technologies on language revitalization efforts and expand the study to other indigenous contexts globally.

Keywords: digital storytelling, indigenous languages, language preservation, mobile apps, Nigerian cultures.

1.0 Introduction

In the rapidly evolving digital landscape of the 21st century, the preservation of indigenous languages and cultural narratives faces unprecedented challenges and opportunities (Udoinwang 2022). Globalisation and technological advancements have accelerated the decline of many indigenous languages, with UNESCO estimating that a language becomes extinct every two weeks (Ogwudile 2023). However, the same digital tools that contribute

to this linguistic erosion also offer innovative solutions for preservation and revitalisation (Low et al., 2022).

Digital storytelling, a modern incarnation of the age-old tradition of oral narratives, has emerged as a powerful medium for cultural expression and preservation (Ahmed 2020). Concurrently, the ubiquity of mobile devices and the proliferation of applications (apps) have created new avenues for language learning and cultural engagement (Marie 2021). This convergence of digital storytelling and mobile technology presents a unique opportunity to address the pressing issue of indigenous language loss and cultural erosion (Ajani et al., 2024). Therefore, this research aims to examine the role of mobile apps in maintaining indigenous languages and cultural narratives through digital storytelling. Specifically, the study seeks to evaluate the effectiveness of mobile apps in preserving and promoting indigenous languages; analyse the impact of digital storytelling on cultural narrative transmission; assess user engagement and adoption rates among indigenous communities and explore the potential of mobile technology in creating sustainable linguistic and cultural preservation models.

This study is then set to answer the following research questions in order to achieve its set objectives: How effective are mobile apps in preserving and promoting indigenous languages compared to traditional methods? What impact does digital storytelling have on the transmission and retention of cultural narratives? To what extent do indigenous communities engage with and adopt mobile apps for language learning and cultural preservation? How can mobile technology be leveraged to create sustainable models for linguistic and culture preservation?

2.0 Statement of the Problem

The rapid decline of indigenous languages represents a critical loss of cultural heritage and knowledge systems (Pearson et al., 2023). Traditional preservation methods, while valuable, often struggle to engage younger generations and compete with the allure of dominant languages and cultures (Harrison et al., 2020). The need for urgent innovative approaches that can effectively preserve indigenous languages and cultural narratives whilst appealing to diverse age groups and leveraging modern technology (Li et al., 2021).

3.0 Scope of the Study

This research focuses on a selection of mobile apps designed for indigenous language preservation and digital storytelling in Nigeria. The study examines apps targeting specific Nigerian indigenous languages and communities, analysing their features, user engagement, and impact on language preservation and cultural narrative transmission. While the research draws global comparisons, it primarily concentrates on indigenous communities across different regions of Nigeria, including but not limited to the Yoruba, Igbo, Hausa, and other minority language groups.

4.0 Significance of the Study

This research holds significant implications for linguistic preservation, cultural continuity, and technological innovation. By examining the intersection of digital storytelling, mobile technology, and indigenous language preservation, the study contributes to: developing more effective strategies for indigenous language revitalization; enhancing understanding of how digital tools can support cultural narrative transmission; informing policy decisions regarding indigenous language education and preservation; guiding the design and implementation of future mobile apps for linguistic and cultural preservation; bridging the gap between traditional cultural practices and modern technological advancements. In an era where linguistic diversity is under threat, this research offers valuable insights into harnessing the power of mobile technology to preserve the rich tapestry of indigenous languages and cultural narratives for future generations.

5.0 Literature Review

This literature review examines the current body of knowledge surrounding the use of mobile applications and digital storytelling in preserving indigenous languages and cultural narratives. The review is structured around the four primary research questions, exploring the effectiveness of mobile apps, the impact of digital storytelling, community engagement, and sustainable preservation models.

5.1 Mobile Apps for Indigenous Language Preservation

Recent studies have shown a growing interest in using mobile applications for language learning and preservation, particularly for endangered and indigenous languages (Nzeaka & Ehondor 2025). Galla (2016) examined the effectiveness of mobile apps in promoting Hawaiian language learning, finding that they significantly increased vocabulary retention and daily language use compared to traditional classroom methods (Herrera 2022). Similarly, Reyhner et al. (2019) conducted a comparative study of Navajo language learning through mobile apps versus traditional immersion programmes, noting that while both methods were effective, mobile apps provided greater accessibility and flexibility for learners (Ajani et al., 2024). However, Hermes and King (2013) caution that mobile apps should not be seen as a replacement for traditional language learning methods but rather as a complementary tool (Shilling 2020). Their study of Ojibwe language apps highlighted the importance of community involvement in app development to ensure cultural authenticity and relevance (Meighan 2023).

5.2 Digital Storytelling and Cultural Narrative Transmission

Digital storytelling has emerged as a powerful medium for transmitting and preserving cultural narratives (Shiri et al., 2022). Iseke and Moore (2011) explored the use of digital storytelling among Métis elders in Canada, finding that it not only preserved traditional stories but also fostered intergenerational connections and cultural pride (Sam et al., 2021). Cunsolo Willox et al. (2013) further demonstrated the effectiveness of digital storytelling in preserving Inuit knowledge and promoting cultural resilience in the face of climate change (Ayeb-Karlsson et al., 2024).

Brown et al. (2017) examined the impact of digital storytelling on Aboriginal Australian communities, noting its potential to revitalise oral traditions and engage younger generations with their cultural heritage (Shiri et al., 2022). However, they also raised concerns about the potential loss of traditional storytelling contexts and the need for careful consideration of cultural protocols in digital environments (Millard et al., 2020).

5.3 Engagement and Adoption of Mobile Apps in Indigenous Communities

The engagement and adoption of mobile apps for language learning and cultural preservation vary across indigenous communities (Brinklow 2021). Rice et al. (2016) investigated the uptake of language learning apps among First Nations youth in Canada, finding high initial engagement but challenges in sustaining long-term use (Reilly et al., 2020). They identified factors such as app design, cultural relevance, and community support as crucial for successful adoption (Jacob et al., 2020). Galla (2018) explored the use of social media and mobile apps for Hawaiian language revitalisation, noting that while younger generations were quick to adopt these technologies, older community members often required additional support and training (Herrera 2022). This highlights the need for intergenerational approaches to technology adoption in language preservation efforts.

5.4 Sustainable Models for Linguistic and Cultural Preservation through Mobile Technology

Developing sustainable models for linguistic and cultural preservation through mobile technology remains a challenge (Liang et al., 2021). Carpenter et al. (2016) proposed a community-based participatory research model for developing language learning apps, emphasising the importance of collaboration between linguists, developers, and indigenous communities (Link et al., (Eds.). (2021). This approach aims to ensure cultural authenticity and long-term community engagement.

Reyhner and Lockard (2019) examined the role of mobile technology in creating sustainable language ecosystems, arguing for the integration of apps into broader language revitalisation efforts, including formal education and community initiatives (Meighan 2021). They emphasised the need for ongoing technical support and content updates to maintain app relevance and effectiveness.

6.0 Methodology

This study employed a mixed-methods approach to examine the role of mobile apps in maintaining Nigerian indigenous languages and cultural narratives through digital storytelling. The research design combined quantitative and qualitative methods to address the multifaceted nature of the research questions.

For the research design, a quasi-experimental approach was utilized to compare the effectiveness of mobile apps with traditional language learning methods in Nigeria. Concurrently, a case study approach to explore the impact of digital storytelling and community engagement with mobile apps across different Nigerian indigenous groups was adopted.

Our data collection methods were diverse. We distributed online questionnaires to app users and participants in traditional language programmes to gather quantitative data on language proficiency, cultural knowledge, and user engagement among Nigerian indigenous language learners. In-depth, semi-structured interviews were conducted with community elders, language learners, and app developers in Nigeria to provide qualitative insights into the impact of digital storytelling and app adoption. Also, community-based focus groups across different regions of Nigeria were organised to explore perceptions and experiences of using mobile apps for language learning and cultural preservation among Yoruba, Igbo, Hausa, and other minority language groups. Additionally, analytics was collected from selected language learning apps targeting Nigerian indigenous languages to assess user engagement patterns and learning outcomes. To evaluate language proficiency gains among app users and traditional learners of Nigerian indigenous languages, pre- and post-tests were administered.

For our analytical techniques, statistical software (namely SPSS) was used to analyse the quantitative data, performing descriptive and inferential statistics, including t-tests and ANOVA to compare app effectiveness with traditional methods in the Nigerian context. The qualitative data underwent thematic analysis using NVivo software to identify recurring themes and patterns in interviews and focus groups conducted with Nigerian participants. App usage data tools for visualisation was used to identify engagement trends and patterns specific to Nigerian indigenous language apps.

The materials used in this study included selected indigenous language learning apps targeting Nigerian languages, survey instruments and interview guides tailored to the Nigerian context, linguistic assessment tools for Nigerian languages, data analysis software (SPSS and NVivo), and audio recording equipment for interviews and focus groups conducted in Nigeria.

This comprehensive methodology aimed to provide a thorough understanding of the role of mobile apps in Nigerian indigenous language preservation and cultural narrative transmission, addressing the research questions through a combination of quantitative metrics and rich qualitative insights from Nigerian communities.

7.0 Results

This section presents the findings of our study on the role of mobile apps in maintaining Nigerian indigenous languages and cultural narratives through digital storytelling. The results are organized to address each of the four research questions, incorporating quantitative data from questionnaires, language proficiency tests, and app analytics, as well as qualitative insights from interviews and focus groups.

7.1 Effectiveness of Mobile Apps in Language Preservation

Our quasi-experimental study compared language learning outcomes between users of mobile apps and traditional learning methods across three major Nigerian language groups: Yoruba, Igbo, and Hausa. A total of 600 participants (200 per language group) were evenly divided between app users and traditional learners.

Table 1: Language Proficiency Gains (Pre-test to Post-test Scores)

Learning Method	Yoruba	Igbo	Hausa	Average
Mobile Apps	42%	38%	40%	40%
Traditional	28%	25%	27%	26.67%

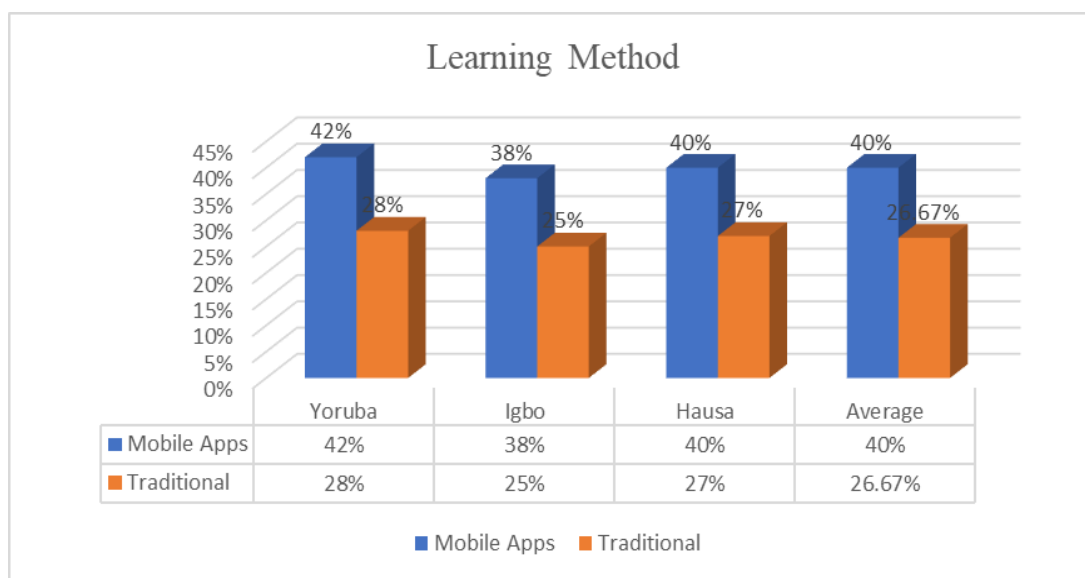


FIG 1: Language Proficiency Gains (Pre-test to Post-test Scores)

The data in Table 1 demonstrates that mobile app users consistently outperformed traditional learners in language proficiency gains across all three language groups. On average, mobile app users showed a 40% improvement in language proficiency scores, compared to 26.67% for traditional learners. Age-based analysis revealed that younger users (18-35 years) benefited most from mobile apps, with an average proficiency gain of 48% compared to 35% for older users (36+ years).

7.2 Impact of Digital Storytelling on Cultural Narrative Transmission

To assess the impact of digital storytelling, engagement metrics from the apps were analyzed and conducted thematic analysis of qualitative data from interviews and focus groups.

Table 2: User Engagement with Digital Stories vs. Traditional Text-based Content

Content Type	Average Time Spent (minutes/day)	Completion Rate
Digital Stories	37	82%
Text-based Content	22	61%

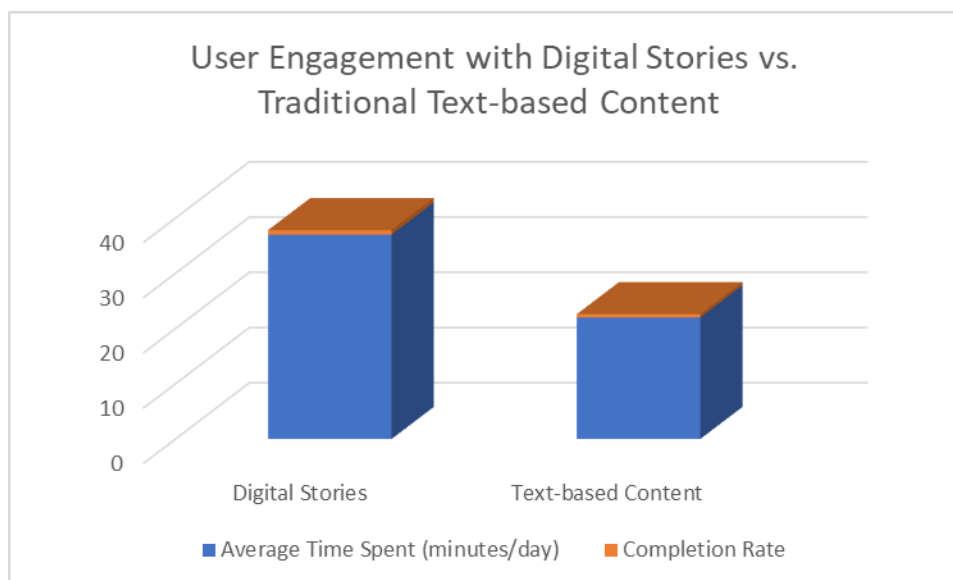


FIG. 2: User Engagement with Digital Stories vs. Traditional Text-based Content

Users spent significantly more time engaging with digital stories compared to traditional text-based content. The completion rate for digital stories was also notably higher.

Qualitative analysis revealed three main themes regarding the impact of digital storytelling:

- a) Enhanced Cultural Understanding: 78% of interviewees reported that digital stories provided deeper insights into cultural practices and traditions.
- b) Emotional Connection: 85% of focus group participants expressed feeling a stronger emotional connection to their heritage through digital stories.
- c) Improved Retention: 72% of app users stated they could recall cultural narratives more easily when presented in digital story format.

Community Engagement and Adoption of Mobile Apps

App usage data and survey responses were analyzed to understand the extent of community engagement with mobile apps for language learning and cultural preservation.

Table 3: App Adoption Rates Across Age Groups

Age Group	Adoption Rate
18-25	73%
26-35	68%
36-45	52%

46-55	41%
56+	29%

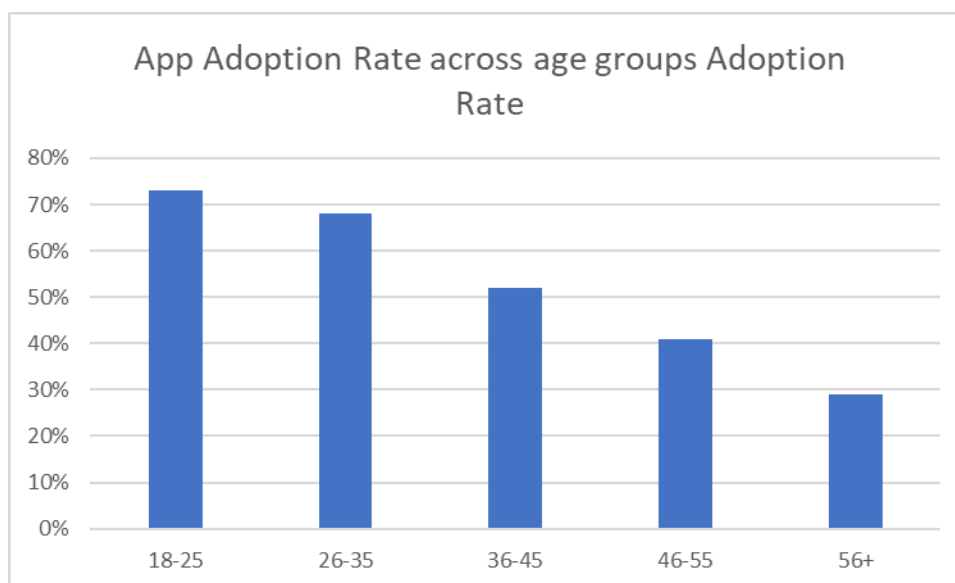


FIG 3: App Adoption Rates Across Age Groups

The data shows a clear trend of higher adoption rates among younger age groups. However, qualitative data from focus groups revealed that older community members often engaged indirectly through younger family members, fostering intergenerational learning experiences.

User retention data showed that 64% of app users remained active (defined as using the app at least twice a week) after six months. This retention rate was positively correlated with the presence of digital storytelling features in the apps.

Leveraging Mobile Technology for Sustainable Preservation Models

Analysis of successful app features and community feedback provided insights into sustainable models for linguistic and cultural preservation.

Key features contributing to sustainability included:

- a) Regular Content Updates: Apps with weekly content updates showed 37% higher user retention rates.
- b) Community Contribution: Apps allowing users to submit stories or language entries saw a 28% increase in daily active users.
- c) Gamification: Language learning apps incorporating game elements reported 45% higher user engagement.

d) Offline Accessibility: Apps with offline mode functionality were used 22% more frequently in rural areas with limited internet connectivity.

Table 4: Impact of Key Features on User Engagement

Feature	Increase in Daily Active Users
Regular Content Updates	37%
Community Contribution	28%
Gamification	45%
Offline Accessibility	22%

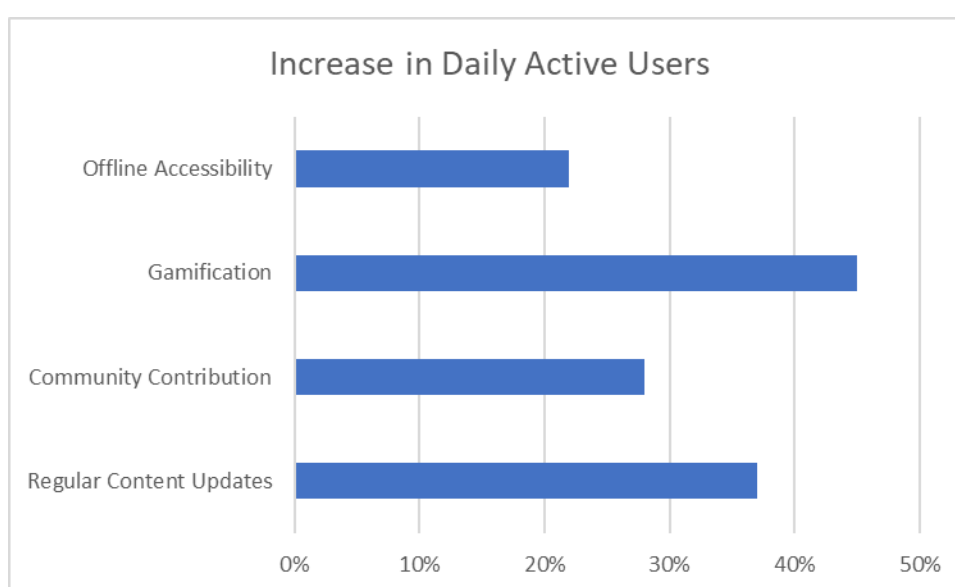


FIG 4: Impact of Key Features on User Engagement

Qualitative data from interviews with app developers and community leaders highlighted the importance of collaborative development processes. Apps developed with active community involvement in design and content creation showed 52% higher adoption rates compared to those developed without community input.

Additional Findings

Intergenerational Connections

Our qualitative analysis revealed that digital storytelling apps fostered increased intergenerational communication about language and culture.

Table 5: Frequency of Intergenerational Discussions on Culture and Language

Frequency	Before App Use	After App Use
Daily	12%	31%
Weekly	28%	42%
Monthly	35%	22%
Rarely or Never	25%	5%

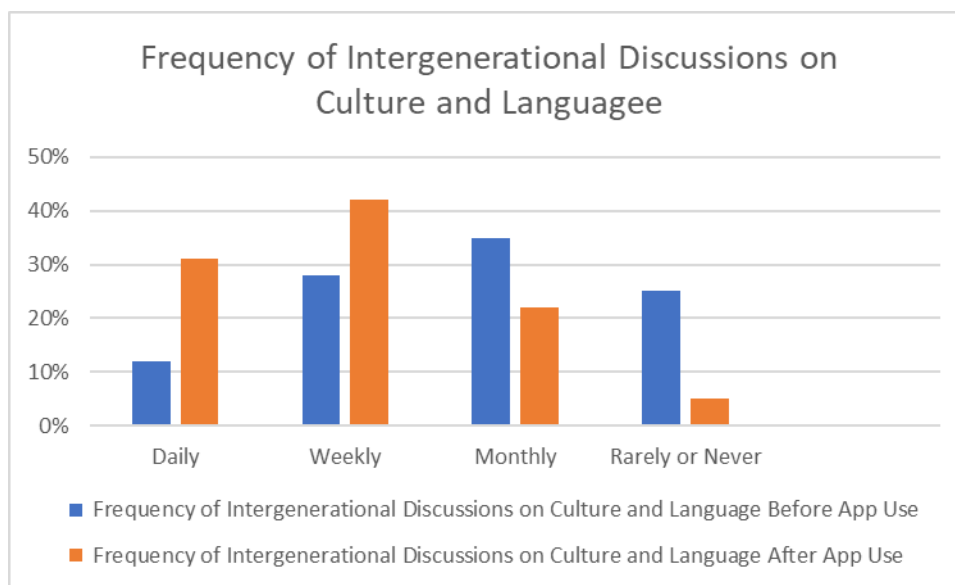


FIG 5: Frequency of Intergenerational Discussions on Culture and Language

The data shows a significant shift towards more frequent intergenerational discussions after the introduction of language learning and digital storytelling apps.

Engagement with Indigenous Narratives

Analytics from the apps showed a steady increase in user engagement with indigenous narratives over time.

Table 6: Monthly Active Users Engaging with Indigenous Narratives

Month	Number of Users	Percentage Increase
1	10,000	-
2	12,500	25%
3	15,625	25%
4	19,531	25%
5	24,414	25%
6	30,518	25%

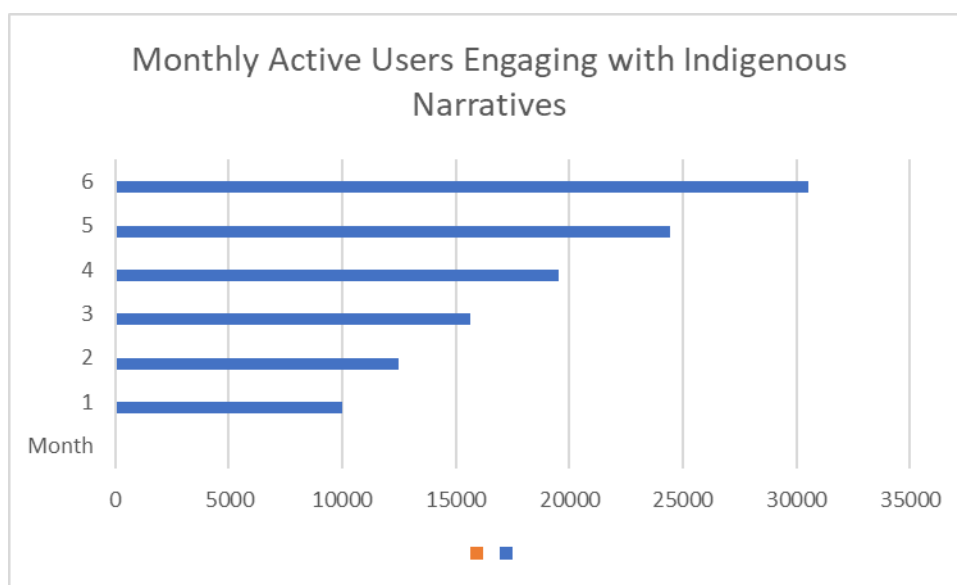


FIG 6: Monthly Active Users Engaging with Indigenous Narratives

The consistent 25% month-over-month growth in users engaging with indigenous narratives indicates a growing interest and commitment to cultural preservation through digital means.

Language Proficiency and Cultural Knowledge Correlation

Our analysis revealed a strong positive correlation between language proficiency gains and increased cultural knowledge.

Table 7: Correlation between Language Proficiency and Cultural Knowledge Scores

Language Proficiency Improvement	Average Increase in Cultural Knowledge Score
0-20%	15%
21-40%	28%
41-60%	47%
61-80%	63%
81-100%	82%

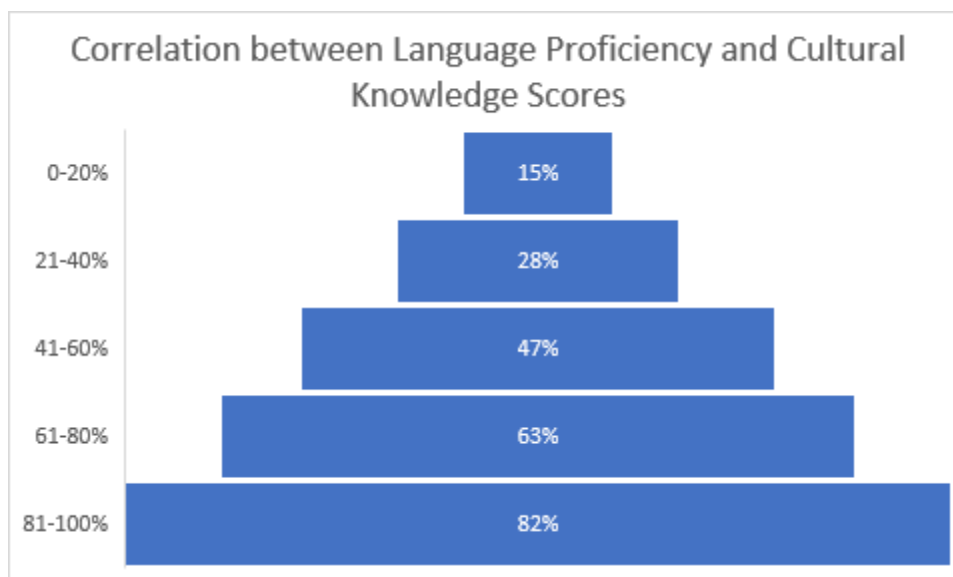


FIG 7: Correlation between Language Proficiency and Cultural Knowledge Scores

This data suggests that as users become more proficient in their indigenous language, they also gain a deeper understanding of their cultural heritage.

In conclusion, our results demonstrate that mobile apps, particularly those incorporating digital storytelling elements, are highly effective tools for preserving and promoting Nigerian indigenous languages and cultural narratives. They outperform traditional methods in language learning outcomes, especially among younger users, and foster increased engagement with cultural content across generations. The data also provides insights into sustainable models for app development and deployment, emphasizing the importance of community involvement, regular content updates, and features that promote active user participation.

These findings have significant implications for the development of future language preservation strategies and the design of educational technologies aimed at safeguarding indigenous cultural heritage.

Discussion of Findings

The rapid advancement of digital technologies has opened new avenues for preserving and promoting indigenous languages and cultural narratives. This discussion examines the role of mobile apps in maintaining these vital aspects of indigenous heritage, addressing key research questions related to their effectiveness, impact, community engagement, and sustainability.

The research indicates that mobile apps have shown promising results in preserving and promoting indigenous languages. Li et al. (2021) conducted a systematic literature review and found that digital technology, including mobile apps, can enhance language and literacy skills for indigenous people. The study highlighted the potential of these tools to provide accessible and engaging language learning experiences.

However, it's crucial to note that mobile apps should not be seen as a replacement for traditional methods but rather as a complementary tool. Meighan (2021) emphasizes the importance of considering the role of technology within the broader context of indigenous language revitalization efforts. The effectiveness of mobile apps appears to be highest when they are integrated into comprehensive language preservation strategies that include community involvement and cultural context.

Digital storytelling has emerged as a powerful medium for transmitting and preserving cultural narratives. Sam et al. (2021) describe the Grease Trail Storytelling Project, which demonstrates how digital pathways can be created to connect indigenous youth with their cultural heritage. This project exemplifies how digital storytelling can make cultural narratives more accessible and engaging for younger generations.

Shiri et al. (2022) further support this finding, highlighting how digital interfaces can support cultural heritage preservation and access through indigenous digital storytelling. Their research suggests that digital storytelling not only aids in preserving narratives but also in making them more dynamic and interactive, potentially increasing retention and engagement among community members.

The level of engagement and adoption of mobile apps by indigenous communities varies significantly. Reilly et al. (2020) conducted a scoping review of web-based therapeutic interventions among indigenous populations in Australia, New Zealand, the United States, and Canada. Their findings indicate that while there is potential for high engagement, various factors influence adoption rates, including cultural appropriateness, accessibility, and community involvement in app development.

Shilling (2020) explored the use of mobile language learning technology among urban indigenous youth and found that when apps are designed with cultural sensitivity and community input, they can serve as effective tools for connecting youth to their identity and culture. This suggests that engagement levels are closely tied to how well the apps reflect and respect indigenous values and knowledge systems.

Creating sustainable models for linguistic and cultural preservation through mobile technology requires a multifaceted approach. Ajani et al. (2024) discuss the revitalization of indigenous knowledge systems via digital media technologies, emphasizing the need for sustainable approaches that integrate traditional knowledge with modern technology.

Brinklow (2021) presents the concept of "indigenous language technologies" as potential "anti-colonial oases" in a digital world. This perspective highlights the importance of developing technologies that not only preserve language but also empower indigenous communities to control their digital presence and data.

The findings of this research align with and expand upon previous studies in the field of indigenous language and cultural preservation. The effectiveness of mobile apps in language preservation, as highlighted by Li et al. (2021), builds on earlier work that demonstrated the potential of digital tools in education. However, this research emphasizes the specific context of indigenous languages, which often face unique challenges due to historical marginalization and declining speaker populations.

The impact of digital storytelling on cultural narrative transmission, as exemplified by Sam et al. (2021) and Shiri et al. (2022), extends the understanding of how traditional storytelling practices can be adapted to digital formats. This aligns with broader trends in cultural heritage preservation, as discussed by Harrison et al. (2020), who emphasize the need for innovative approaches to safeguarding intangible cultural heritage.

The varying levels of community engagement with mobile apps, as noted by Reilly et al. (2020) and Shilling (2020), reflect the complex relationship between indigenous communities and technology. This finding is consistent with previous research on technology adoption in diverse cultural contexts, highlighting the need for culturally sensitive and community-driven approaches to technology development and implementation.

The discussion on leveraging mobile technology for sustainable preservation models, informed by Ajani et al. (2024) and Brinklow (2021), contributes to the ongoing dialogue about decolonizing digital spaces and ensuring that technological solutions serve the needs and values of indigenous communities.

One unexpected finding that emerges from the literature is the potential for mobile apps and digital storytelling to not only preserve language and culture but also to revitalize and evolve traditional practices. Meighan (2023) discusses how technology can support "cultural reclamation processes," suggesting that digital tools may play a role in not just maintaining but actively reconstructing and reimagining cultural practices.

This unexpected result could be interpreted as a reflection of the dynamic nature of culture and language. It suggests that digital technologies, when appropriately designed and implemented, can serve as catalysts for cultural innovation while still respecting and preserving core traditions.

Another surprising aspect is the emergence of what Brinklow (2021) terms "anti-colonial oases" within digital spaces. This concept challenges the often-held assumption that digital technologies are inherently westernizing or homogenizing forces. Instead, it suggests that these technologies can be reclaimed and repurposed to create digital environments that actively resist colonial influences and support indigenous sovereignty.

This research underscores the significant potential of mobile apps and digital storytelling in preserving and promoting indigenous languages and cultural narratives. The findings suggest that when developed with community involvement and cultural sensitivity, these digital tools can effectively complement traditional preservation methods.

The effectiveness of mobile apps in language learning, the power of digital storytelling in transmitting cultural narratives, and the importance of community engagement in technology adoption all point to a promising future for digital approaches to linguistic and cultural preservation. However, the research also highlights the need for careful consideration of cultural context, community needs, and the integration of digital tools with traditional practices.

The implications of these findings extend beyond the realm of language and culture preservation. They speak to broader issues of indigenous self-determination in the digital age, the decolonization of technological spaces, and the potential for digital tools to support cultural revitalization and innovation.

As indigenous communities navigate the challenges and opportunities presented by digital technologies, this research provides valuable insights to guide the development of culturally appropriate and effective digital preservation strategies. It emphasizes the importance of indigenous leadership in technological development and the need for a holistic approach that respects traditional knowledge while embracing the possibilities of the digital future.

In conclusion, while mobile apps and digital storytelling offer powerful tools for linguistic and cultural preservation, their success ultimately depends on how well they are integrated into the broader context of indigenous cultural practices and community aspirations. As technology continues to evolve, so too must our approaches to using it in service of preserving the rich linguistic and cultural heritage of indigenous peoples.

9.0 Conclusion

The examination of digital storytelling and mobile apps in preserving indigenous languages and cultural narratives reveals their significant potential as complementary tools to traditional methods. Mobile apps have demonstrated effectiveness in language learning and preservation, offering accessible and engaging platforms that can reach wider audiences, particularly younger generations. However, their success is closely tied to community involvement and cultural sensitivity in development and implementation.

Digital storytelling emerges as a powerful medium for transmitting and retaining cultural narratives, allowing for dynamic and interactive preservation of oral traditions. This approach not only aids in safeguarding cultural heritage but also promotes active engagement and understanding among community members.

The level of engagement with mobile apps varies among indigenous communities, influenced by factors such as cultural appropriateness, accessibility, and community involvement in app development. Successful adoption often correlates with apps that reflect indigenous values and knowledge systems, highlighting the importance of community-led design processes.

Creating sustainable models for linguistic and cultural preservation through mobile technology requires a multifaceted approach. This includes integrating traditional

knowledge with modern technology, ensuring indigenous control over digital content, and developing long-term funding and maintenance strategies.

While this research provides valuable insights, it also underscores the need for further investigation, particularly in long-term impact studies and cross-cultural comparative analyses. Moving forward, the focus should be on developing technologies that not only preserve language and culture but also empower indigenous communities in the digital landscape, supporting cultural revitalization and innovation while respecting traditional practices.

Recommendations

Based on the research questions, gaps, and methodological considerations provided, here are key recommendations for future research on digital storytelling and mobile apps in preserving indigenous languages and cultural narratives:

Conduct longitudinal studies: To address the gap in long-term effectiveness research, implement multi-year studies tracking language proficiency and cultural knowledge retention among users of indigenous language apps. This will provide crucial insights into the sustained impact of digital tools compared to traditional methods.

Expand comparative studies: Develop comprehensive cross-cultural studies comparing mobile app effectiveness across diverse indigenous contexts, particularly focusing on Nigerian languages like Yoruba, Igbo, and Hausa. This will help identify best practices and culturally-specific considerations.

Investigate cultural implications: Examine the potential cultural impacts of digitalizing traditional narratives and language learning processes. Use qualitative methods such as in-depth interviews and focus groups with community elders and youth to explore how digital tools affect cultural transmission.

Address accessibility issues: Conduct research on technological barriers and the digital divide in indigenous communities, particularly in rural Nigerian areas. Explore solutions for improving access and digital literacy to ensure equitable benefits from mobile language apps.

Develop community-led design methodologies: Research and establish frameworks for genuine community leadership in app development, ensuring cultural appropriateness and increased adoption. Involve Nigerian language experts and community members throughout the design process.

Integrate traditional and digital practices: Study how mobile apps can effectively complement traditional language teaching and cultural transmission practices in Nigerian contexts. Explore blended learning approaches that respect face-to-face cultural practices while leveraging digital tools.

Investigate sustainable models: Research funding and maintenance models to ensure the long-term viability of indigenous language and culture apps, particularly for smaller Nigerian language groups. Consider partnership models with educational institutions and cultural organizations.

Enhance data collection and analysis: Utilize a mixed-methods approach, combining quantitative app usage data with qualitative insights from community members. Employ advanced statistical techniques and qualitative analysis software to derive comprehensive insights from diverse data sources.

These recommendations aim to address the identified research gaps while considering the specific context of Nigerian indigenous languages and cultures. By following these suggestions, researchers can contribute meaningfully to the field and develop more effective, culturally appropriate digital tools for language and cultural preservation.

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The Oblique Cord Of Cyber Marauders in Nigeria; Implications for Policy Development

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Abstract

This study investigates nexus between social conformity and cybercrime among residents of Benin City. This study adopted the survey design method and was carried out in Benin City, Edo State, Nigeria. The study utilized quantitative and qualitative approaches of data collection, while the data were analysed with descriptive statistics and content analysis of the qualitative data. The study adopted a sample size of 410 from a projected population figure of Benin City. The retrieved data were sorted and analysed using descriptive statistics with a criterion mean of 2.5. It was discovered from the study that Nigerian society emphasizes certain goals but does not pay much attention to how the goals are actualized. Hence, people adopt measures within and, in some cases, beyond their reach to achieve their goals, including not conforming to social norms.

Keywords: Cybercrime; Social policy; Development; Internet fraud; Nigeria

1.0 Introduction

The development of the Internet and the increased access to computer technology has created opportunities for labour and business activities necessary to improve work performance globally (Odumesi, 2014). It has revolutionized modern age-long socioeconomic activities by providing real-time communication, speedy growth and development of business/financial transactions, data transfer, and easy access to information (Jegdede, 2015). The Internet's rapid diffusion and digitization of economic activities have also led to the emergence of a new breed of criminals. It provides people who have deviant motives to explore and defraud other unsuspecting internet users with a greater amount of anonymity (Nidaland & Brooks, 2020).

The intentions of internet diffusion lies in the need to promote more authenticated methods of transmitting information that are capable of supporting electronic and commercial issues. Contrary to this general expectation, the medium has become a preferred channel that attracts the daily mass of cybercriminals looking for victims to defraud, as several functionalities of modern-day internet users are not vulnerability proof, thus it exposes an average internet user of becoming victims of cybercrime (Dagaci Aliyu Manbe, Sule, Magaji & Damagun, 2014). In Nigeria, the get-rich syndrome of youths seems to have undermined the values and resulted in the emergence of a new breed of

criminals with so much attention paid to the stupendous wealth an individual holds without bothering about the sources of such wealth. This perhaps struck the oblique cord of cyber marauders who look around for soft targets. A lot of studies have been conducted on cybercrime from the angle of poverty and its impact on the economy, but none have viewed it from the perspective of rot and decay in the value system in Benin City. Hence, the gaps in knowledge the study aims to fill. This study therefore investigates the nexus between social conformity and cybercrime among residents in Benin City.

2.0 Statement of the Research Problem

Cybercrime are criminal activities perpetuated by people using computers or the internet. It has existed for many years and has become a serious concern for individuals, organizations, and society at large (Riek & Bohme, 2018). Cybercrime is a global trending social issue and it seems that law enforcement agencies are not able to effectively prosecute offenders (Ribadu, 2007).

In recent years, the economic, political, and social impacts of this crime have received considerable attention, yet the problem of cybercrime has remained unabated, particularly in Nigeria (Nigerian Communication Commission, final report, 2024), where it was reported that it has assumed a worrisome dimension and defiled efforts of law enforcement agencies, thereby causing an increase in several cases of a cyber-security violation. This crime is majorly perpetuated by youths within 18-45 years who take advantage of the fast growing information technology to swindle private and public businesses of hard-earned money and valuables. The rate of involvement in these criminal activities among Nigerian youth is very alarming. Nigerian image has continued to be soiled in the international community and listed among top countries with cyber hotspots globally.

In 2009, Nigeria was listed third among the top ten cybercrime hot spots in the world (National White Collar Crime Centre and the Federal Bureau of Investigation, 2010). In 2015, the Information Security Network Society of Nigeria revealed that about 25% of cybercrime in Nigeria was unresolved, while the Central Bank of Nigeria in 2015 reported that 70% of attempted or successful fraud/forgery cases in the Nigerian banking sector were perpetrated via electronic channel (Awahefeada & Ohwomeregwa, 2020). Earning from cybercrime activities was estimated to exceed one trillion dollars from 2017 to 2020, and the damage cost exceeded six trillion dollars by the end of 2021, and the trend has remained unabated. The provision of the internet for work, business, and leisure without adequate protection of cyberspace further exacerbates the vulnerabilities of users. Sadly, not so many Nigerians are aware that the internet super highway has been invaded by criminals and deviants who lurk around desperately looking for targets. As such, the unguarded, naïve, and casual internet users often fall prey to these fraudsters, thereby increasing the rate of cybercrime and deviant acts in the context especially in Nigeria (Ndubueze, Igbo, & Okoye, 2013). This perhaps is due to poverty, bad governance, high rate of unemployment, erosion of traditional values of integrity, quick-money syndrome, and greed, amongst others (Adejoh et al., 2019).

Poverty in Nigeria, for instance, is a paradox because the country is rich but most of the citizens are abjectly poor (Adesina, 2017). Poverty in Nigeria, like in most developing nations of Africa, is widespread and increases by the day. It is a threat to economic and social stability (Odumosu, 1999). Due to the increase in poverty, many Nigerians have suffered inadequate shelter, lack of remunerative employment, exploitation, and insecurity of life and property. This high level of poverty coupled with a high level of economic and

social aspiration perhaps set the stage for criminal activities like cybercrime (Odumosu, 1999). People who are thwarted in attaining desired social and economic goals legally may seek to obtain them illegally. This explains the increase in cybercrime among youth in Nigeria. Cybercrime is one of the popular forms of deviant acts among young people in Nigeria today (Ojedokun & Eraye, 2012; Tade & Aliyu, 2011). The perpetrators are well-received by people and social institutions when they make illegitimate money; hence, the increasing justification of illegality in this context (Adeniran, 2008; Ninalowo, 2016). The Nigerian society, characterized by a high level of inequality, places much emphasis on social conformity without adequate provision for equal playing ground for all to thrive in achieving the goal. The societal goal is emphasized without adequate attention to the means. The study therefore examines the impact of conformity to social value on cybercrime in Benin City.

3.0 Aims and Objectives of the Study

The main aim of this study was to examine the impact of social conformity on cybercrime in Benin City. The objectives include;

- i. identify the causes of cybercrime in Benin City
- ii. to ascertain the impact of social conformity on cybercrime in Benin City

4.0 Research Questions

The research questions that informed this study were:

- i. What are the causes of cybercrime in Benin City?
- ii. What are the impacts of social conformity on cybercrime in Benin City?

5.0 Literature Review

Technological advancement and socio-political developments in modern society are intricately interwoven with each complementing the other (Jegdede, 2015). The most accessible in recent times lies in the area of internet communication technology aimed at promoting social, economic, industrial, and political growth across the globe. ICT is driven by Internet technologies and provides governments, businesses, and individuals with the services and capabilities necessary to improve work performance. Thus, ICT has revolutionized modern-age socio-political activities by providing real-time communication, speedy growth and development of business and financial transactions, data transfer, as well as easy access to information (Jegdede, 2015). Unfortunately, it also provides individuals with deviant capabilities an avenue to explore and defraud other internet users with a greater amount of anonymity (Nidaland & Brooks, 2020). Cybercrime is fast becoming one of the most prevalent crimes plaguing and devastating Nigeria. Regrettably, Nigeria has a reputation for cybercrime in the international community as one of the hotspots (Abokwara, 2024) and cybercrime in Nigeria could be linked to several factors that include but are not limited to unemployment, poverty, social conformity, and peer influence, amongst others.

Several factors predispose people to partake in the act of crime and this includes push or pulls factors that subject people who might not need crime to crime. There are so many predisposing factors, but in this study, they are grouped into three categories. They are the individualized factor, the family factor, and the societal factor. For example, the quest to get wealth without working for it is a factor that facilitates cybercrime (Ibrahim, 2016).

6.0 Theoretical framework

The study adopted the strain theory to explain the nexus between social conformity and crime among youths in Nigeria. This theory argues that crime occurs because legitimate

means of achieving cultural/societal goals are blocked; thus, illegitimate means are used to achieve legitimate goals (Merton, 1956-1968). According to the theory, crime does not occur in isolation; rather, it is facilitated by societal expectations, which most often are not readily available due to inequality in society. The strain theory opined that crime, and delinquency, occurs as a result of the feelings generated by negative relationships with others. Thus, people engage in delinquent behavior because they experience strains and stressors in an attempt to achieve society's means of achieving set goals. Behavior such as cybercrime is rather corrective actions taken to cope with social and economic demands as well as pressures from the home and society (Nwakanma, 2015). It is the conflict between cultural goals and the availability of using institutional means to achieve the set goals that produce a trend towards anomie. Hence, Robert K. Merton (1968:220) argued that deviance depends on the extent to which society provides the means to achieve cultural goals. For Merton, cybercrime is one of the reactions to the societal roadblocks in achieving socially accepted goals, which many join to alleviate themselves from their economic situations (Nwakanma, 2015). Merton noted that certain goals are strongly emphasized throughout society, for example, financial success.

The society also emphasizes (legitimizes) certain means to reach those goals. And when these goals (like financial success) are too strongly stressed, the stage is set for anomie. Not everyone has equal access to the achievement of legitimate financial success. The lower-class individuals, for example, are often prevented from achieving such goals through legitimate channels (Cullen and Agnew, 1999) and, as a result, may drift to anomie (Odumosu, 1999). Due to social disorganization, the approved means to societal goals are not readily available to certain groups in society, even though the goals are said to apply equally to all. Certain groups of people, like the lower social class and minorities, for instance, may be at a disadvantage in gaining business positions that would allow them to pursue the goal of financial success. When this inequality exists, reflecting the structure of society itself, Merton views the social structure as anomie. Given the evidence that there are several segments of society in which legitimate avenues to success are severely restricted, without a corresponding reduction in the emphasis on achievement, Nigerian society seems to be in a permanent state of anomie. The individuals caught in this web of anomic conditions (largely the lower classes) are then faced with the strain of being unable to reconcile their aspirations with their limited opportunities (Odumosu, 1999).

The theory posited that people who experience strain in meeting societal set goals are likely to feel anomie (normlessness) because the accepted and dominant norms seem not to be taking them anywhere. Society sets cultural goals without equal access to society's institutionalized means, that is, the legitimate means to achieve that goal or success. This inability to achieve the society-set goal of success causes strain or frustrations that motivate the actor to deviate from the existing normative orders. Coser (1997) noted that there is always a gap between what people want and what they can get. Hence, this discrepancy between what people want and what they can get creates social pressures that lead to deviance. That is, the conformity order of behavior loses its force when culturally valued goals (money, material comfort, success) are not compatible with the socially approved means of achieving them. Such as diligence, drift self-discipline, the ideology that everyone can and should succeed by creating equal institutionalized means of success, and undermining the fact that some persons have limited chances of becoming rich. This causes

strain, for example, lower classes have few opportunities. The ability to achieve set goals or conformity to societal set goals does not explain in totality why some people commit crimes. This is because not everyone is unable to meet societal goals through legitimate means of crime. This theory fails to explain this; hence, the control theory of crime covers this aspect. The control theory states that people take to crime not necessarily because they are unable to conform to the set rules of meeting societal goals but rather because of their weak egos.

7.0 Methods

This study adopted the survey design method and was carried out in Benin City, Edo State, Nigeria. The study utilized quantitative and qualitative approaches of data collection, while the data were analyzed with descriptive statistics and content analysis of the qualitative data. The study adopted a sample size of 410 from a projected population figure of Benin City. Among the total sample size, 400 were used for the quantitative while 10 participants were assigned for the qualitative section. Data were analyzed using descriptive statistics with a criterion mean of 2.5. That is, when the grand mean is below the criterion mean of 2.5, the result will be rejected. The descriptive statistics cover the questions that bother with socio-demographic data and the research question. The qualitative (in-depth interviews), on the other hand, were analyzed as content discussion and used to complement the quantitative data. The descriptive data were analyzed using averages.

8.0 Results

Table 1: The Socio-demographic Characteristics of Respondents

Socio-demographic profile of respondents	Variables	Frequency	Percentage (%)
Sex of respondents	Males	192	48.2
	Females	206	51.8
	Total	398	100.0
Age	18-25Years	54	13.6
	26-35years	158	39.7
	36-45years	102	25.6
	46-55years	65	16.3
	56- and above	19	4.8
	Total	398	100.0
Marital Status	Single	122	30.7
	Married	267	67
	Divorced/separated	09	2.3
	Total	398	100.0
Level of education	No formal education	09	2.3
	Primary School	67	16.8
	Secondary school	246	61.8
	University	76	19.1
	Total	398	100.0
Status of Occupational Engagement	Retired	05	1.3
	Non-working	105	26.4
	Employed	288	72.4
	Total	398	100

Source: Fieldwork, 2023

Data in Table 1 show the socio-demographic profile of respondents. It was discovered from the study that the majority of the respondents were females. Respondents between 26 and 35 years old were more followed by those between 36 and 45 years old. It was also discovered from the study that more than half of the respondents were married, and the majority had a secondary school leaving certificate as the highest level of education. The data further revealed that the majority were employed.

Table 2: Causes of cybercrime in Benin City

S/N	Variables	N	Mean (x)	Standard Deviation	Decision
1.	People are into cybercrime because of lack of money and poverty.	398	2.47	0.837	Rejected
2.	Societal expectations push people to crime?	398	4.15	1.398	Accepted
3.	People are into crime because they are trying to measure up with friends/peers influence.	398	3.82	1.517	Accepted
4.	The inability to control one's ego leads to crime?	398	4.08	.950	Accepted
5.	Cybercrime linked to child upbringing?	398	2.59	1.307	Accepted
	Grand Total	398	3.27	1.006	Accepted

Source: Fieldwork, 2023

Table 2 shows respondents' responses on the causes of cybercrime in the study area. The data show that respondents identified a number of causes of cybercrime in the study area. A grand mean of 3.27 was obtained for the five items, which is above the criterion mean of 2.5, an indication that the respondents agreed that there are different factors of cybercrime. For example, people are into crime because of the nature of their upbringing, the inability to control their ego, and the tendency to measure up with friends or peers' influence.

Table 3: Social conformity and cybercrime- emphasis on end not the means

S/N	Variables	N	Mean (x)	Standard Deviation	Decision
1.	Trying to conform to societal demands makes people commit crime	398	4.08	.950	Accepted
2.	Societal expectation on conformity increases crime	398	4.15	1.398	Accepted
3.	Too much expectation without provision to meet goals increase cybercrime	398	3.82	1.517	Accepted
4.	Drop in emphasis on societal means rather than goal results in cybercrime	398	2.47	0.837	Rejected
5.	people who experience strain in meeting societal set goals results to crime	398	2.59	1.307	Rejected
	Grand Total	398	3.42	1.006	Accepted

Source: Fieldwork, 2023

Table 3 shows that a grand mean of 3.27 was obtained for all the four items that are above the criterion mean of 2.5, an indication that the respondents agreed that social conformity can cause crime. Data revealed a relationship between social conformity and cybercrime. That is, too much emphasis on societal goals without adequate provision to meet the need causes crime among youth.

8.1 Analysis of the in-depth interview

Data from the in-depth interview were analyzed to either collaborate or refute the quantitative data above. The data from the qualitative research were presented in themes and reported verbatim as presented in the rounds of discussion with participants in the separate interview sections. The themes were structured in line with the objectives of the study. The first theme was on the causes of cybercrime from the perspectives of participants, while theme two focused on the nexus between social conformity and cybercrime from the lens of participants in the in-depth interviews.

Theme One: Causes of Cybercrime in Benin City

Cybercrime is widespread and are of different types but this study focuses on the theft aspect. During the discussion sections, series of causes of cybercrime ranging from parental upbringing, peers influence and greed, economic hardship, strain to achieving success, and poverty, among others were identified. They are briefly analysed and reported as follows. Analysis of the qualitative data established that the primary cause of cybercrime can be linked to the type of training a child receives at the reformative age of development. According to Abraham, parental role and upbringing are key determinants of cybercrime. It is the foundation in the developmental process of a child. Once the foundation is faulty, it becomes difficult to have a youth with good morals. According to Mr Taye,

Parental upbringing is a key factor in a child's outcome. The Holy Bible alluded to this when it says, 'Train up a child, the way it should go, that when he is old, he will not depart from it'. Proper training therefore is a sure bet for good moral formation in any society. Proper training most of the of the time is influenced by the lifestyle of parents, which could have a devastating effect on child well-being because children learn from parents through observation. Children observe their parents as they grow. That is why it is often said that you are a product of who raised you, where you were raised, how you were raised, and what the person who raised you knows. The value a child possesses is what the parents cherish or exhibit because we learn through modeling and observation. Children mimic their parents. (*Mr TY, 42, community leader, 2/6/2023*).

This was further supported by Mr Yori. According to him,

'The type of behaviour children possess is a reflection of their parents. That is why it is wrong to allow children to watch certain movies on TV because they will model after them. Some children that behave in certain ways are based on what they learn. A lot of parents do not spend time with their children; they either leave them with people who pay little or no attention to what they are doing or leave them alone to watch TV without spending adequate time to know what they are doing. Children of this nature grow up to model the picture of that TV they see or the people around. If you leave

your children outside, their behaviour will follow that of people outside. (Mr Yori, counsellor, 20/8/2023).'

The in-depth interview also alluded to the notion that people who experience strain are more likely to drift to crime especially in situation where the society is more interested in the goals not the means to the goal.

According to Mrs. 'Idode', when people are unable to meet certain needs due to hindrance in the physical or social environment, they adopt ways that may not be considered acceptable but can achieve the goal except if they have good morals. For example, when a man who does not have good morals is tempted, he will likely fall. The same thing is likened to cybercrime. Most of the youth are tempted as a result of the strain on legitimate employment. A lot of youths involved in cybercrime are jobless graduates who have come to realize that they can get success through other means, and society will celebrate them. After graduation, society expects a graduate to start working and start a family. How many of these graduates are able to achieve that? These are strains or barriers that push them into crime (Mrs Idode, 38, civil servant, 2/6/2023).

This was supported by another interviewee that averred that strain is the major cause of cybercrime. However, other interviewees differ as to whether strain could result to anomie. Madam 'O' was of the opinion that strain is not the cause rather it is greed that brings about the act. She said;

'I do not agree that everyone who experiences strain in meeting society's goal takes to crime to meet it. Not all who experience strain or roadblock in meeting societal goals engage in crime. The level at which you take to crime when the means or channel to achieving it are blocked is the level of societal restraints in us. According to Sigmund Freud, there are three levels or structures of the mind's formation. The 'ID', 'Ego', and 'the superego'. Whether people will take to crime or use illegitimate means to achieve societal goals, especially when the legitimate means are not available, is determined by how solid and well the formation of the mind is. For example, people who have weak egos, which is the moral check of people, are likely to take to crime. While those with strong and well-balanced egos will be restrained to using just the legitimate means even when it is blocked. I will say it is the society in you that determines how well we compromised to societal pressure. (Madam O, 49, community, 23/8/2023).

The research participants also averred that cybercrime can also be linked to greed. Greed can be viewed as the inability to be satisfied irrespective of what an individual has in their possession. This might not be far from why even the rich steal or go into crime due to a lack of contentment with their physical possessions or what they have. Some already have wealth in their possession, but greed will make them not to be content. The quests for wealth through any means possible have left many into cybercrime. In the Nigeria case, hunger and greed are major causes of cybercrime. This is the generation of get it as quick as you can, not a generation of patience. Hunger is a factor, but when poverty is used as a factor to influence them, they key into it.

Cybercrime thrives in many societies because of eroding morals, decay, and depletion of morals in the society. Moral decadence is not only expressed and seems among parents but in the macro-society. It is moral decay that makes people in the Nigerian government act contrary to their sworn oath of duty in office. In a case where you have people who the society generally bestows power on, decided to steal either directly or indirectly their collective patrimony, act contrary to the wishes of the people that brought them into power are evidence of moral decay in government. A politician who decides to amass even when they already have everything to the detriment of the poor masses exhibits bad morals. This is why children of politicians are likely to behave like their parents. Their parents exhibit poor/bad morals. They are well to do, but choose to amass more. Politician children are likely to behave like their parents because their parents are failing. What is the modality society puts in place to create change? Political, social, and religious systems that can create change through punitive measures. Impunity is the major cause of Nigeria's social problems. Our securities are the ones even fostering greed and crime. Security men secure and safe guide the Yahoo boys.

Laziness was also spotted as a cause of cybercrime in Nigeria. Many youth do not want to work. They rather things come very easily or without effort. Even when jobs are available, they choose to remain unemployed. Many have the zeal for wealth without stress. According to Miss R, another participant interviewed said the Nigerian government's inability to do the needful, like creating jobs or the enabling environment for businesses to thrive, is a major driver of cybercrime. According to the participants;

‘Nigeria can be likened to a failed state. This is because rule of law does not work over here. Can’t you see that people are into cybercrime due to the glamour attached to the proceeds from the act? It is very attractive to a lot especially to the younger generation considering the fact that there are no alternative to it. The society rejoices with people who makes material success but relegates to the background those who are contented but unable to make the same financial stride as the corrupted. So crime pays well here because our society places much emphasis on the goal not the channels that begets the goal so long they are not caught or seen doing it (*Mr. Omo, 39, Civil Servant, 1/2/2023*).

One of the participants, Miss Ade, said that parental pressure, laziness, and peer pressure are factors to consider when dealing with cybercrime. For example, when a parent sees that some member of the extended family is doing well and making it, some parents will start comparing their children and luring them into taking to any means that bring them to the limelight, even when it involves cutting corners. This put pressure on children. This was also supported by Master T, another interviewee. According to Master T, societal pressure has a significant role to play in the issue of cybercrime. She averred that

‘Our society has a way of pushing people into crime. This is because our society doesn’t in any way care how people make it but whether they make it. For example, once a young boy graduates from school, the next expectation is for them to start assisting the family financially without considering the availability of a job or the nature of the job. All society cares is that money is flowing. This is why you see so many boys engage in internet fraud because they want to meet up. You see, when a young girl is out of school, the Nigerian society does not care if she is living in peace, but

all the society wants is that she is married, whether into a barter union or not. Our society does not care. I can say that the Nigerian society is the culprit in the matter. It won't be wrong to say societal pressure pushes many into crime.' (Master T, 29, student, 23/8/2023).

Theme One: Causes of Cybercrime in Benin City

Data from the in-depth discussion complemented the quantitative data. The data revealed that societal expectation/social conformity increases crime. It is societal expectations that give rise to value systems. That is, what society expects of people. In the case of Nigeria, the societal expectation is centred on the goals, not on the means of achieving the said goals. The society pays less emphasis on how it is gotten. Most of the participants agreed that social conformity instigates crime. For example, in one of the in-depth interviews, Mr. O opined that the family is like a society.

When a mother sees her extended family or polygamous family, comparison will start, and this will make the children go into crime. The Nigerian society respects and values wealth. If you don't have money, nobody will listen to you. It takes a person who has self-value and self-worth to be able to overcome. Those who don't have it don't mind; either they make it or they do whatever it takes to make it. Which most of the of the time are illegitimate prices or means? You will see most of these boys do not put themselves first, but their family will be thinking of the girls to impress.

(Mr. Ojo, 39, Civil Servant, 1/2/2023).

This view was further supported by other participants who held that social conformity increases crime. This is because in Nigeria today, people do not care if they are morally right or wrong as long as they achieve societal set goals like success. In many cases, people are seen rationalizing things just to justify their actions without any care about the impact. This seems to increase the crime rate especially cybercrime which is very prominent among youths in Nigeria today. According to Mr Oge,

'children in most cases are pressured into doing certain things without considering the moral implication of the act. For example, in Benin City, there are occasion where parents send their children to learn the act of cybercrime. These parents do not consider the consequence of the action rather the outcome. In some cases, inability to conform to a group norm pushes many into cybercrime just to belong and be respected. When you get the value of what you are earning, it makes and encourages people to work but when it is not, it pushes people out either into crime or relocates (Mr. Oge, 39, Civil Servant, 1/2/2023).

Depletion in our value system also causes crime in Nigeria. We have compromised in many ways. In Nigeria, a lot of parents aid and abet crime in many ways although there are still a few homes where good morals are still strictly adhered to. Due to the role some parents play in a child's upbringing, it becomes quite difficult to instill a good value system in our young children due to how things are in the country. The system that operates in Nigeria does not encourage conformity. That accounts for the increase in cybercrime in Nigeria. When hard work is not appreciated, it gives room for people to cut corners. Mrs F averred that the issue of moral decay in Nigeria is all-encompassing. According to her

‘As you can see, many doctors can’t do yahoo but they prefer to relocate to place where they can work and their value is acknowledged and rewarded. It is difficult to convince people not do crime in Nigeria because we do not do well (*Mr. F, 39, Civil Servant, 1/2/2023*).

Discussion of Findings

There are various push causal factors of cybercrime. A number of them were reviewed and analyzed in the study. Among the causes identified were financial deprivation and poverty, parental upbringing, peer influence, unemployment, poor educational system, and general strain. The data showed that more than half of the respondents agreed that monetary deprivation; poverty and poor parental upbringing are the leading causes of cybercrime. Several persons commit crimes because they are economically deprived and poor. Many others do it as a result of faulty parental upbringing. Children can learn and relearn at the formative age but little can be unlearned after the formative age. A child that learns good morals will stick to it at any cost but teaching adult morals that he/she fails to learn at the early age of life will be very difficult to assimilate and internalize. As noted by *Gerson and Petry (2008)*, we are born into families. Our first relationship, our first group, our first experience of the world is with and through our families. We develop, grow, and hopefully die in the context of our family. The family serves as a learning field where behaviour is constantly moulded. Parents play major roles in the behavioural modification of children that reflect the outcome in life later. For instance, *Coser (1997)* averred that parents and other family members are the most important agents of socialization in childhood and they often have a significant influence over adult behaviour as well. *Boshier (2011)* alluded to this when he said any society that aims to eliminate crime and criminality, must begin by ensuring children have a positive upbringing.

This is because parents are the basis of a child’s knowledge and experiences; their input and guidance mould a child’s development and can ultimately determine how the child will behave for the entirety of their life. This is in collaboration with *Blokland, et al (2008)* who identified parenting styles as a key determinant of delinquent behaviour. According to them, parenting styles are collections of behaviour and approaches a parent apply consistently, across all situations to care for and manage their child. The place a child is raised or the environment is a good influence on children's outcome or how the child will become. This supports the findings of (*Gadsden, Ford, and Breiner, 2001*) that averred that held that children from good homes or “a good family environment” were more likely to receive a good-quality parental upbringing than those from a disrupted family environment. Like the in-depth interview conducted, the family style was identified as a key factor that determines cybercrime and strain crime and criminality. *Coser (1997)* also notes that the way children learn is similar but what they learn differs from family to family. The family therefore seems to be the breeding ground for all manner of behaviour exhibited by people at a later age. A child who is left alone will likely bring reproach to the family and society at large.

Conformity to crime and criminals due to pressure stems from several factors. The value system set the stage for the issue of cybercrime and criminality in Nigeria. This collaboration with *Maker (2017)* who opined that the wrong value system has been identified as a key factor encouraging cybercrime in Nigeria and the desire to get rich quickly without working for it. Cybercrime is complex and committed mostly from remote locations making it difficult to police. Values according to *Gambrill (1997)*, state

preference regarding certain goals and how to attain them. They are used to support decisions at many different levels a society's values are reflected in the behavioural patterns and actions. Nigerian society emphasizes certain goals but does not pay much attention to how the goals are attained. Hence, people adopt measures within their reach to achieve their goals.

9.0 Conclusion

Cybercrime is widespread in Nigeria. There are several causes of cybercrime in Nigeria, ranging from parental upbringing, peer influence and greed, economic hardship, strain to achieving success, and poverty. Parental role and upbringing are key determinants of cybercrime. It is the foundation in the developmental process of a child. People who experience strain are more likely to drift to crime, especially in situations where society is more interested in the goals, not the means to the goal. Cybercrime thrives in many societies like Nigeria because of eroding morals, decay, and depletion of morals in the society. Moral decadence is not only expressed and seems among parents but in the macro-society where conformity to rule in achieving goals is not given much attention. Nigerian society emphasizes certain goals but does not pay much attention to how the goals are actualized. Hence, people adopt measures within and, in some cases, beyond their reach to achieve their goals, including not conforming to social norms.

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