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Oto/Ijanikin, Lagos
with a campus at Odo Noforija, Epe

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NATIONAL CONFERENCE ON**

Rethinking Nigerian Education System for Best Global Practices



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		IN MAINSTREAM SCHOOLS	
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IMPACT OF EDUCATIONAL ADMINISTRATORS' RESILIENCE AND INNOVATIVE DRIVE ON THE RETENTION OF PRIVATE SECONDARY SCHOOL IN LAGOS STATE: IMPLICATION FOR BEST GLOBAL PRACTICES

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ABSTRACT

Effective school management has been found to be critical for national educational emancipation yet high percentage of private secondary schools close down every year in Nigeria particularly in Lagos state. This has been a major concern in Nigerian entrepreneurial space and calls for an understanding of how to tap from best global practices. Hence, this study investigated the impact of resilience and innovative drive of educational administrators on teachers' retention in private secondary schools. Quantitative method and survey design were adopted. The population of registered schools owners was 21,544 and a stratified random method of sampling was adopted. The schools were stratified in line with the three senatorial districts of the state and two stages of schools; early and advanced stages. The early stage schools are those that are less than five years in operation and the advanced staged schools are those that are above five years of operation. The sample size of 378 was determined by researcher's advisor table. A self-structured questionnaire titled Resilience Innovative Drive and Secondary School Teachers' Retention Questionnaire (RIDASSTRQ) validated with a reliability coefficient of > 0.70 was used to collect data for the study. The data was analysed through descriptive and inferential statistics. Findings revealed that administrators' resilience has positive insignificant effect on teachers' retention, while administrators' innovative drive has positive and significant effect on teachers' retention. The study recommends encouragement of innovation strategies in driving successful management of school, new methods of operations and development of new systems in schools to facilitate success, Government policies that could enhance productivity and engender administrators' interest and innovative drive among others.

KEYWORDS: Educational Administrators, Innovative drive, Lagos state, Nigeria, Resilience

INTRODUCTION

The turbulent business environment in Nigeria has led to the closure of a significant number of private schools and has negatively impacted the performance of those that remain

operational during and after the COVID-19 pandemic (Organization for Economic Cooperation and Development, OECD, 2014). School administration has become increasingly complex, with the retention of qualified and experienced teachers posing a considerable challenge for school owners and Educational Administrators (Adams, 2019; Anekwe, Ndubusi-Okolo & Uzoezie, 2019). Coupled with rising inflation, administrators face immense pressure to balance human, material, and financial resources while still striving for profitability (UNDP-NBS Report, 2021). In this context, the success of educational institutions relies heavily on effective leadership and management, underscoring the need for administrators to be equipped with the psychological attributes like resilience and innovation necessary to motivate and retain skilled educators (Sabatino, 2016).

Globally, school businesses, classified as small and medium-sized enterprises (SMEs), play a critical role in economic development, contributing significantly to gross domestic product (GDP) and employment (Organization for Economic Cooperation and Development, OECD, 2014). The Organization for Economic Cooperation and Development (OECD) reports that SMEs account for over 55% of GDP and 65% of total employment in high-income countries. In low-income countries like Nigeria, micro, small, and medium enterprises (MSMEs) contribute over 60% of GDP and 70% of employment. Despite this potential, Nigeria's SMEs face significant challenges, with approximately 85% failing within five years (Organization for Economic Cooperation and Development, OECD, 2014).

Meanwhile, in a developing nation, like Nigeria, small and medium businesses are supposed to be a catalyst for socio-economic development and a tool for employment generation. However, the situation is the opposite. It was noted that 85% of SMEs failed before their fifth anniversary (Small and Medium Scale Enterprises' Development Agency of Nigeria Studies, SMEDAN, 2017). Schools are systems composed of administrators and those who are administered. Success of the school depends on the success of both the administrators and those administered. However, considering that the administrators pioneer the ones administered, effects of school administrators in the success of school is significant (Koçak, 2011). It has therefore become requisite that educational administrators are equipped with psychological attributes that can motivate and retain qualified and experienced teachers.

According to Darron, Carletta, and Hiraetta (2023), adverse experiences of teachers who have been in the field for at least two years may cause poor teacher retention while new teachers

have not yet dealt with stressors which the older ones have contended with. riding to Friedman (2021), psychological factors like Administrators' resilience and innovative drive are essential for effective functioning of a school, and the larger and more complex schools are, the greater the importance of the integration between leadership and management, globally and especially in contemporary times of swift environmental, social, and economic changes (Kellerman, 2004; Northfields,2014). The extensive literature in the field of educational psychology and management, public and private enterprise organizations has been dealing with this question for several decades, and educational administration theorists have been trying to adapt and modify the knowledge and expertise originating in this literature to school administration (Hogg, 2010; Northfields, 2014). Successful schools therefore, depend on the effective collaboration between administrators and educators, highlighting the critical influence of school leaders. As the educational landscape evolves, integrating educational Administrators' resilience and innovative drive into teachers' retention has become essential for fostering effective leadership and management amid rapid social and economic changes.

The level of resilience and innovation of educational administrators are the two independent variables considered in this study because they have been suggested by some researchers as ways of enhancing successful school management in turbulent periods that Nigeria and other developing nations are facing now. (Hudgins, 2016; Zheng et al., 2017) Kativhu, Mwale and Francis (2018) defined business resilience as the ability of business to adapt to disruptions that threaten existence, in line with this McNaughton and Gray (2017) define it as the capacity of a business to absorb shocks and downturns in the market environment by adapting their business models, strategies, and organization structures to the caprices of the environment, Purwanti and Hapsari (2021) established resilience as a strong determinant of a business's performance sustainability when facing a crisis such as natural disasters or pandemic outbreak using 286 Indonesian Small Medium Enterprises (SME) owners and managers with Partial Least Square (PLS) analysis they found that adaptive resilience and planned resilience have different influence on business performance.

Innovation, which is the second independent variable considered in this study has been described as an important feature of creativity because it involves developing new methods of practice (Pulakos et al., 2000). It has also been defined as a form of proactive psychological factor, which involves taking initiative, improving current circumstances and challenging

the *status quo* rather than being passive (Crant, 2000). The Global Innovation Index (2024) which ranks the innovation capabilities and results of world economies measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages, the creation, absorption and diffusion of knowledge and creative outputs. Studies examining proactive personality have shown that it correlates positively with satisfaction (Fuller and Marler, 2009; Li et al., 2010, 2017) but only weakly negatively correlates with turnover intentions (Joo et al., 2015). Sharma, Saboo and Kumar (2018) argued that innovation through new product development affects firm value and performance, depending on the characteristics of the process adopted. Similarly, Acar, Tarakci and Van Knippenberg (2019) found that the generation and conversion of creative ideas into innovations is positively related to competitive advantage.

The pathetic situation of closure of schools and lowering standard of education due to high inflation rate needs to be addressed urgently. More so, that there is a dearth of adequate research on the influence of school administrators' resilience and innovation on the job retention of teachers. It is against this backdrop that this research intends to investigate the influence of resilience and innovation of school administrators (Psychological factors) on the retention of teachers (successful school management) in private secondary schools in Lagos State, Nigeria.

Purpose of the Study

The focus of this study is to investigate the influence of psychological factors educational Administrators on successful school management of Lagos State Private Secondary schools and to specifically:

1. Investigate the relationship between school Administrators' resilience and teachers' retention in Lagos State Secondary schools
2. Find out the relationship between school Administrators' innovative ability and teachers' retention in Lagos State Secondary schools
3. Determine the joint contribution of school Administrators' level of resilience and innovation on the teachers' retention of teachers in Lagos State private schools.
4. Make necessary recommendations for best global practices on the retention of teachers in private secondary schools.

Research Hypotheses

The following research hypotheses were formulated for the study:

1. There is no significant relationship between school administrators' resilience and teachers' retention in Lagos State private schools.
2. There is no significant relationship between school Administrators' level of innovation and teachers' retention in in Lagos State Private Schools.
3. There is no significant joint contribution of school Administrator's level of resilience and innovation on teachers' retention in Lagos State private schools.

LITERATURE REVIEW

Research on factors predicting organizational outcomes have highlighted the significance of individual psychological attributes like resilience, self-concept and innovative drive of educational Administrators among others (Judge et al., 2001, 2002). According to Darron, Carletta, and Hiraetta (2023), a high propensity for teachers to leave is often associated with negative perceptions of school Administrators. A meta-analysis revealed that personality and motivational attitudes are valuable predictors of turnover, especially in schools experiencing teacher turnover rates between 5–14%. High turnover is disruptive and financially burdensome, impacting both organizational functioning and student achievement (Ronfeldt et al., 2013; Hanushek et al., 2016; Sutchter et al., 2016). Consequently, understanding the role of administrators' resilience and innovative drive in innovation in teacher retention is crucial for guiding effective recruitment strategies aimed at reducing premature turnover.

Resilience is defined as the ability to adapt to disruptions that threaten an organization's existence (Kativhu, Mwale, and Francis, 2018) and is crucial for maintaining performance during crises. Administrators exhibiting resilience can quickly develop coping strategies and respond effectively to challenges (Coutu, 2002). Research has shown that resilience correlates positively with job satisfaction and negatively with quitting intentions, yet there is limited exploration of how these psychological factors affect teacher retention. The literature identifies several determinants of business resilience, including leadership, staff competence, and planning (Kativhu et al., 2018). Job stressors can deplete teacher energy, leading to burnout (Blase, 1982; Jennings et al., 2017). Even experienced teachers with a variety of coping resources are vulnerable to high-stress conditions. Therefore, attributes that preserve coping resources are essential for sustaining teachers in the face of workplace demands.

Innovation, another key variable in this study, is defined as a proactive psychological factor involving the development of new methods and practices (Pulakos et al., 2000; Crant, 2000). Studies examining proactive personality have shown that it correlates positively with satisfaction (Fuller and Marler, 2009; Li et al., 2010, 2017) but only weakly negatively correlates with turnover intentions (Joo et al., 2015). Sharma, Saboo and Kumar (2018) argued that innovation through new product development affects firm value and performance, depending on the characteristics of the process adopted. Similarly, Acar, Tarakci and Van Knippenberg (2019) found that the generation and conversion of creative ideas into innovations is positively related to competitive advantage. Also in separate research, Oeij, Gaspersz, Vuuren and Dhondt (2017) confirmed that a relationship exists between leadership in innovation and organisational learning – and hence performance.

Scholars recognize teacher retention as a cost-efficient strategy that protects the schools against the negative impact of large annual turn-over rates and have thus identified educational administrators hiring decisions, as essential to success (Miller, 2013). Prifti and Alimehmeti (2017) also found that market orientation and innovation relate positively with SME performance. The research thus confirms the likely link between innovation and performance of organisations. In stressing how innovation could best produce performance through effective product positioning, Turner and Henry (2017) advanced that innovation relates to customer satisfaction, particularly in individuals with high entrepreneurial passion. Research indicates that innovation positively correlates with job satisfaction and plays a vital role in organizational performance (Oeij et al., 2017). With Nigeria's educational landscape facing challenges due to high inflation and school closures, this research aims to investigate how the resilience and innovation of school administrators influence teacher retention and overall management effectiveness in private secondary schools in Lagos State.

METHODOLOGY

Research Design

This study was conducted in Lagos metropolis, Lagos State, Nigeria and the research survey design was used because of its relevance to the research problem.

Population of the Study

The population of the study comprised 21,544 Educational Administrators in Lagos State, Nigeria.

Sample and Sampling Technique

Stratified sampling techniques was adopted to group Educational Administrators in different local government areas. This educational Administrators were conveniently selected from the population judging by their readiness to participate in the study.

Research Instrument

A self-structured questionnaire titled Resilience Innovative Drive and Secondary School Teachers' Retention (RIDASSTRQ) with a six-point likert-style scale to capture respondents' level of resilience, innovative drive and teachers' job retention was distributed through Google for format.

Method of Data Analysis

Simple regression was used to analyse the responses of the participants.

RESULT AND DISCUSSION

ANALYSIS

Table 1: Demographic Characteristics of Respondents

Variable	Category	Percentage
Gender	Male	38.6%
	Female	61.4%
Educational Status	SSCE	0.0%
	OND/HND	6.8%
	BSc.	70.5%
	MSc.	18.2%
	PhD.	4.5%
Years of Operation	0-5 years	13.6%
	6-10 years	11.4%
	11-15 years	13.6%
	16-20 years	0.0%
	Above 20 years	61.4%
Number of Students	1-500 students/pupils	70.45%
	501-1000 students/pupils	22.72%
	1001-2000 students/pupils	2.28%
	2001-5000 students/pupils	4.55%
Number of Teachers	1-90 teachers	95.46%
	91-180 teachers	2.27%
	181-250 teachers	2.27%

Researchers' Field Survey, 2024

The demographic characteristics of the respondents provide valuable insights into the profiles of individuals managing educational institutions. Notably, there is a strong female representation, with 61.4% of respondents identifying as women, indicating their significant role in school leadership and contributing to diverse leadership styles in educational management. The majority of respondents are well-educated: 70.5% hold a Bachelor's degree (BSc), 18.2% have a Master's degree (MSc), and 4.5% possess a PhD. This high level of educational attainment suggests a skilled group capable of making informed decisions in school management. Experience is also a key factor, with 61.4% of respondents having over 20 years of experience managing their institutions, reflecting a wealth of expertise and commitment to education. Additionally, most respondents oversee smaller schools, with 70.45% managing 1-500 students and 95.46% employing 1-90 teachers, fostering intimate learning environments that allow for personalized attention and a close-knit community. Overall, the demographic data highlights a group of highly experienced and educated professionals predominantly managing smaller, more personalized educational settings.

Table 2: Analysis of Response for Administrators' Resilience

S/ N	Items	Administrators' Resilience (AdRES) RESPONSES						DESCRIPTIVE STATISTICS	
		Very High (VH)	High (H)	Mode rately High (MH)	Mode rately Low (ML)	Low (D)	Very Low (SD)	Mean	STD
1	Effective Leadership	40.9%	38.6%	13.6%	6.8%	0.0%	0.0%	5.14	0.905
2	Managem ent Skill	36.4%	43.2%	13.6%	6.8%	0.0%	0.0%	5.09	0.884
3	Core Competenc e	31.8%	54.9%	11.4%	2.3%	0.0%	0.0%	5.16	0.713
4	Situational Awareness	25.0%	43.2%	25.0%	4.5%	2.3%	0.0%	4.84	0.939
5	Effective Planning	29.5%	52.3%	9.1%	9.1%	0.0%	0.0%	5.02	0.876
6	Degree of Flexibility	27.3%	38.6%	29.5%	2.3%	2.3%	0.0%	4.86	0.930

Researchers' Field Survey, 2024

The analysis of administrators' resilience highlights their strengths in leadership, management, and core competence, with leadership receiving high ratings from 79.5% of

respondents and a strong mean score of 5.14. Management skills were similarly praised, with 79.6% rating them highly and a mean score of 5.09. Core competence emerged as the top-rated factor, with 86.7% of participants expressing strong confidence in administrators' expertise, reflected in a mean score of 5.16. However, situational awareness and flexibility showed more variability, with 68.2% and 65.9% giving high ratings, but some respondents rated these areas lower, suggesting room for improvement. Despite this, effective planning remained a strength, positively rated by 81.8%. Overall, administrators are seen as resilient leaders, though opportunities for growth exist in adaptability and flexibility.

Table 3: Analysis of Response for Administrators’ Innovative Drive

S/ N	Items	Administrators’ Innovative Drive (AdINO) RESPONSES						DESCRIPTIVE STATISTICS	
		Very High (VH)	High (H)	Mode rately High (MH)	Mode rately Low (ML)	Low (D)	Very Low (SD)	Mean	STD
1	Level of Process Innovation	18.2%	61.4%	15.9%	4.5%	0.0%	0.0%	4.93	0.729
2	Level of Product Innovation	18.2%	22.7%	15.9%	4.5%	0.0%	0.0%	4.91	0.802
3	Degree of System Innovation	15.9%	45.5%	27.3%	11.4%	0.0%	0.0%	4.66	0.888
4	Idea Generation	34.1%	47.7%	15.9%	2.3%	0.0%	0.0%	5.14	0.765
5	Technological Tenacity	25.0%	25.0%	31.8%	18.2%	0.0%	0.0%	4.57	1.065
6	Effective Communication	45.5%	38.6%	11.4%	2.3%	2.3%	0.0%	5.23	0.912

Researchers’ Field Survey, 2024

Analysis of administrators' innovative drive reveals their strong role in fostering creativity and improving organizational processes. Nearly 80% of respondents rated their process innovation efforts highly, with a mean score of 4.93, and similarly high ratings for product innovation (mean score of 4.91), reflecting their visionary approach to transforming ideas into practical offerings. They particularly excel in idea generation, with over 80% giving high ratings and a mean score of 5.14. However, system innovation (61.4%, mean score of 4.66) and technological tenacity (50%, mean score of 4.57) show areas for improvement. Effective

communication stands out as a major strength, with 85% rating it positively and a mean score of 5.23, underscoring their ability to inspire and lead teams. Overall, administrators are seen as dynamic innovators with opportunities for growth in system-wide innovation and technology adoption.

Analysis of Response for Teachers’ Retention

S/ N	Items	Teachers’ Retention (TeRen) RESPONSES						DESCRIPTIVE STATISTICS	
		Very High (VH)	High (H)	Mode rately High (MH)	Mode rately Low (ML)	Low (D)	Very Low (SD)	Mean	STD
1	Effective Recruitment Decision	18.2%	40.9%	31.8%	9.1%	0.0%	0.0%	4.68	0.883
2	Turnover Rate	13.6%	43.2%	22.7%	6.8%	6.8%	6.8%	4.30	1.374
3	Degree of Job Satisfaction	11.4%	45.5%	40.9%	2.3%	2.3%	4.5%	4.66	0.713
4	Degree of Teachers’ Motivation	15.9%	36.4%	38.6%	4.5%	4.5%	0.0%	4.55	0.975
5	Amount of Job Stressors	11.4%	31.8%	36.4%	13.6%	2.3%	4.5%	4.23	1.179
6	Degree of Intention to Quit	9.1%	4.5%	20.5%	22.7%	22.7%	20.5%	2.93	1.516

The analysis of teachers’ retention highlights key factors influencing the retention rates in educational institutions. Effective recruitment decisions contribute positively, with 59.1% of respondents rating them as "Very High" or "High" (mean score 4.68), indicating that schools generally make sound hiring choices. However, turnover rates present challenges, as only 56.8% rated them positively, and 20.4% gave low ratings, suggesting difficulties in retaining teachers, potentially due to poor working conditions or better opportunities elsewhere. Job satisfaction and motivation are relatively strong, with 56.9% and 52.3% rating them positively, helping reduce turnover. However, job stress is a concern, with 43.2% rating it "Moderately High" or "High," and the intention to quit has a low mean score of 2.93, with

65.9% considering leaving. Addressing stress and turnover will be critical for improving retention rates.

Hypothesis One: Administrators’ Resilience and Teachers’ Retention

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.205a	.042	.019	3.580	1.819

a. Predictors: (Constant), Administrators' Resilience

b. Dependent Variable: Teachers' Retention

The model summary reveals a weak positive relationship between administrators' resilience and teachers' retention, with a correlation coefficient (R) of 0.205. This suggests that while an increase in administrators' resilience may slightly improve retention rates, other factors are likely more influential. The R Square value of 0.042 indicates that only 4.2% of the variance in teacher retention can be attributed to administrators' resilience, emphasizing the complexity of retention dynamics. Additionally, the Adjusted R Square value of 0.019 further underscores the limited predictive power of resilience in this context. The Standard Error of 3.580 reflects considerable variability in retention rates, and the Durbin-Watson statistic of 1.819 confirms no autocorrelation in the residuals. Overall, the findings suggest that administrators' resilience alone is not a major determinant of teacher retention, highlighting the need to explore additional factors such as job satisfaction, work environment, and professional development.

ANOVA^a

Model		Sum Squares	Mean Square	F	Sig.
1	Regression	23.698	23.698	1.849	.181b
	Residual	538.189	12.814		
	Total	561.886			

a. Dependent Variable: Teachers' Retention

b. Predictors: (Constant), Administrators' Resilience

The ANOVA table provides a critical evaluation of the relationship between administrators' resilience and teachers' retention, assessing the effectiveness of the regression model. The

Regression Sum of Squares is 23.698, indicating that a small portion of the variability in teachers' retention is attributable to administrators' resilience. With 1 degree of freedom, the Mean Square for the regression is also 23.698. However, the F-statistic of 1.849, coupled with a significance value of 0.181 (above the 0.05 threshold), suggests that the relationship is not statistically significant. This implies that the observed correlation between resilience and retention is likely due to chance. The Residual Sum of Squares is 538.189, representing the variability in retention not explained by the model, and the Total Sum of Squares is 561.886, covering all retention variability. Overall, the ANOVA results demonstrate that administrators' resilience has a limited impact on teachers' retention, signaling the need to explore additional factors in promoting teacher retention.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	20.066	3.916		5.124	.000
Administrators' Resilience	.175	.129	.205	1.360	.181

a. Dependent Variable: Teachers' Retention

The coefficients table provides key insights into the relationship between administrators' resilience and teachers' retention. The constant value of 20.066, with a Standard Error of 3.916, indicates that when administrators' resilience is zero, the expected level of teachers' retention is 20.066. This constant is statistically significant, with a t-value of 5.124 and a p-value of .000, confirming its importance in the model. The Unstandardized Coefficient (B) for administrators' resilience is 0.175, meaning that for every one-unit increase in resilience, teachers' retention is predicted to increase by 0.175 units. However, the Standardized Coefficient (Beta) of 0.205 indicates that the effect of resilience is relatively small. Additionally, the t-value of 1.360 and p-value of .181 suggest that this relationship is not statistically significant, highlighting that administrators' resilience alone may not have a substantial impact on retention. This emphasizes the need to investigate other factors that could more significantly influence teachers' retention decisions.

Hypothesis Two: Administrators' Innovative Drive and Teachers' Retention

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.355a	.126	.105	3.420	1.662

a. Predictors: (Constant), Administrators' Innovative Drive

b. Dependent Variable: Teachers' Retention

The model summary highlights a moderate positive correlation ($R = 0.355$) between administrators' innovative drive and teachers' retention, suggesting that as administrators become more innovative, teachers' retention rates tend to improve. However, this correlation is not strong, indicating that while innovation plays a role, it is not the primary factor influencing retention. The R Square value of 0.126 shows that only 12.6% of the variance in retention can be explained by administrators' innovative drive, leaving over 87% to other factors. The Adjusted R Square of 0.105 supports this, indicating limited improvement even with additional predictors. The Standard Error of 3.420 and the Durbin-Watson statistic of 1.662 suggest a reasonable model fit and no significant autocorrelation. Overall, administrators' innovative drive contributes to retention, but other factors must also be considered to foster long-term teacher retention.

ANOVA^a

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	70.722	70.722	6.048	.018b
	Residual	491.164	11.694		
	Total	561.886			

a. Dependent Variable: Teachers' Retention

b. Predictors: (Constant), Administrators' Innovative Drive

The ANOVA table highlights the significance of the regression model analyzing the relationship between administrators' innovative drive and teachers' retention. With a Regression Sum of Squares of 70.722, it shows that a portion of the variability in retention can be explained by innovative drive, while the Residual Sum of Squares of 491.164 indicates that other factors also influence retention. Key statistics, including an F-statistic of

6.048 and a p-value of 0.018, confirm that the relationship is statistically significant, underscoring the importance of fostering innovation in educational leadership to improve teacher retention rates.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	16.070	3.805		4.224	.000
Administrators' Innovative Drive	.315	.128	.355	2.459	.018

a. Dependent Variable: Teachers' Retention

The Coefficients table highlights the positive impact of administrators' innovative drive on teachers' retention. The constant (B = 16.070) suggests a baseline retention level even in the absence of innovation, while the key predictor, administrators' innovative drive, shows a coefficient of B = 0.315, indicating that each one-unit increase in innovative drive raises retention by 0.315 units. The Standardized Coefficient (Beta = 0.355) shows a moderate influence, supported by a t-statistic of 2.459 and a p-value of 0.018, confirming statistical significance. These findings underscore the importance of fostering innovation in leadership to enhance teacher retention.

Hypothesis Three: Administrators' Resilience, Administrators' Innovative Drive and Teachers' Retention

Model Summary^b

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.362a	.131	.088	3.451	1.639

a. Predictors: (Constant), Administrators' Resilience, Administrators' Innovative Drive

b. Dependent Variable: Teachers' Retention

The Model Summary table reveals the combined influence of administrators' resilience and innovative drive on teachers' retention, indicating a moderate positive correlation (R = 0.362) between leadership traits and retention rates. With an R Square of 13.1%, the model explains

a modest portion of the variance in teacher retention, highlighting the role of resilient and innovative leadership in fostering stability. However, the Adjusted R Square of 0.088 suggests some limitations in the model's explanatory power. The Standard Error of 3.451 reflects reasonable accuracy, and the Durbin-Watson statistic of 1.639 indicates minimal autocorrelation, reinforcing the model's reliability.

ANOVA^a

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	73.488	36.744	3.085	.057b
	Residual	488.399	11.912		
	Total	561.886			

a. Dependent Variable: Teachers' Retention

b. Predictors: (Constant), Administrators' Resilience, Administrators' Innovative Drive

The ANOVA table evaluates the effectiveness of administrators' resilience and innovative drive in predicting teachers' retention, with a Regression Sum of Squares of 73.488, highlighting the variance attributed to these leadership traits. However, the Residual Sum of Squares of 488.399 indicates that much of the variance in retention remains unexplained, suggesting other influential factors beyond resilience and innovation. The Mean Square values (36.744 for regression and 11.912 for residuals) further reflect the model's explanatory power. With an F value of 3.085, the model shows some significance, though it falls short of conventional robustness, pointing to the need for deeper exploration of additional retention factors.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	16.770	4.106		4.085	.000
Administrators' Innovative Drive	.379	.185	.427	2.044	.047
Administrators' Resilience	-.086	.178	-.101	-.482	.633

a. Dependent Variable: Teachers' Retention

The Coefficients table highlights the distinct effects of administrators' innovative drive and resilience on teachers' retention. The constant value of 16.770 suggests a baseline retention level independent of these leadership traits, indicating that other factors also influence retention. Administrators' innovative drive shows a positive and significant impact, with an unstandardized coefficient of 0.379, meaning that for each unit increase in innovation, retention rises by 0.379 units. The standardized beta of 0.427, t-value of 2.044, and p-value of 0.047 confirm this relationship's statistical significance, emphasizing that innovation promotes retention. In contrast, resilience has a minimal and non-significant effect, with an unstandardized coefficient of -0.086, t-value of -0.482, and p-value of 0.633, suggesting it does not play a crucial role in retaining teachers in this context.

DISCUSSION

The result of the first hypothesis shows positive effect of administrators' resilience on teachers' retention though not statistically significant showing several other factors are responsible for teachers' retention other than the administrative resilience as corroborated by the value difference of the regression and residual. This finding aligns with McNaughton and Gray (2017) that revealed resilience variability of communities and entrepreneurship through differ from the findings of the studies of Pal, Mattila and Mattila (2014)' Saad et. al (2021) as well as Sabatino (2016). conceptually speaking, it is expected that the resilience of the administration in strategy implementation or execution should facilitate retention but

empirically as noted in this study, several other variables may be more potent in achieving teachers' retention in this research context as shown by the findings.

The effect of administrators' innovative drive on teachers' retention showed a positive and significant effect on teachers' retention. This finding supports the position of Jin and Lee (2020) that established positive effect of managerial innovation capacity in an entrepreneurial setting. Also, the work of Ng, Kee and Ramayah (2019) revealed the mediating role of innovativeness in the line of core competencies and performance of organisations. Other studies that corroborated and explained how innovation drives major performance variables of every organisations are Turner and Henry (2017) and Acar, Tarakci and van Knippenberg (2019).

The third findings revealed positive combined effect of administrators' resilience and administrators' innovative drive on teachers' retention with a positive significant effect of innovative drive on teachers' retention. The findings followed the trend noted in the findings of McNaughton and Gray (2017), Saad et.al (2021), Jin and Lee (2020). however, the negative effect of resilience on teachers' retention could be explained from social-psychological grounded theory of teachers' stress and burnout, even when the administrators slowed down in their dexterity to drive performance, teachers will still continue with their jobs giving the past level of motivations and work environments.

CONCLUSION

The study concludes that administrators' resilience has positive insignificant effect on teachers' retention, while administrators' innovative drive has positive and significant effect on teachers' retention. In the combined system of equation, the administrators' resilience and innovative drive positively affect teachers' retention but the effect of resilience is negative, revealing that in situation of administrative burnout and stress, teachers could still be retained by past achievements and motivating work environment. It also denoted that retention of teachers does not immediately react to administrators' resilience. This means that resilience and innovation are important skills Educational Administrators must possess to retain good teachers and to be able to compete globally with best practices

RECOMMENDATIONS

In order to ensure best Global Practices, Private Secondary School Administrators should strive to:

1. Develop skills, capabilities and attitudes that would enable them to embrace life-long learning, build supportive relationships that will help them to cope with the demands of hike in prices and inflation.
2. Create systematic learning opportunities for developing complex skills needed to lead, manage their emotions, embrace changes and disappointments in order to enhance their ability to transform and retain contemporary teachers.
3. Create opportunities for global networking and dialogue to enhance their improvement in leadership and retention of teachers and students.
4. Combine resilience with other forms of strategies like proactiveness and empathy.

Government should make policies that could

1. Encourage innovation strategies, new methods of operations and development of new systems in driving successful management of schools.
2. Enhance productivity and engender administrators interest, like the introduction of capacity building framework that not only increases knowledge, but also enhance professional practices
3. Establish regulatory bodies that will help school administrators improve themselves

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MOTIVATIONALLY TONED COMMUNICATION AMONG PARENTS, TEACHERS AND PUPILS AS A CAUSAL FACTOR IN ACADEMIC PERFORMANCES OF PUPILS

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Abstract

Motivating students to learn in school is a topic of great concern for educationists today and remains one of the greatest challenges of this century. Lack of motivation is a big barrier in learning and a pertinent cause in the deterioration of education standards. Investigating the effect of motivationally toned communication on academic performances using a quasi-experimental approach is the focus of this study. Two hundred basic five pupils from four schools in the Eredo Local Council Development Area and two hundred parents were used. A structured questionnaire serving as an anecdotal record validated through pilot testing ($N=40$, $r=0.66$), administers to the pupils to assess the frequencies, quality and feedbacks of communication among parents, teachers and pupils using the pre and post-test experimental approach. Three (3) research hypotheses raised were analyzed descriptively using frequency counts and Repeated Measures Analysis of Variance. The result showed that Motivationally-Toned-Communication ($F(2,168)= 16.62$, $p<0.05$) has a statistical significant effect on the academic achievement of pupils in the middle basic class. These findings underscore the importance of fostering open and collaborative communication channels within the educational system to support the academic success of middle basic pupils. The study thus recommends that government should make necessary adjustments and arrangements on the in-service training of teachers towards inculcating the practice of motivation focused communication among parents, teachers and pupils

Keywords: Communication frequencies, Anecdotal records, Middle basic pupils, Causal Factor

Introduction

Academic achievement of pupils is of utmost importance to parents, educators, concerned Nigerians and government. Achievement simply put is accomplishing whatever goals one sets for oneself. It is also the attainment of a standard of excellence (Umeano, 2010). Academic achievement is the extent to which pupils make success in academic work. O'Donnell, Reeve and Smith (2006) perceive academic achievement as the extent of an individual's knowledge in a given task in school. They further explained that it indicates how well a learner performs after learning experiences. Academic achievement is a mark of

success for both pupils and teachers. It is commonly measured by examination or continuous assessment. As stated by Scales and Roehlkepartan (2003) academic achievement in the school system is the overall academic performance of a student in the school; it is measured within the term and at the end of school session.

Primary school education plays a fundamental role in the nation's development plan. This is why successive Nigerian governments have made several efforts to improve the standards of learning through enacting edicts believed to have the potential to reposition the education sector. However, despite these efforts, the standard still seems to remain low, especially at the primary school level. This has prompted several researches into discovering effective ways of improving academic standards. It is speculated that inadequate motivation for parents to get involved, teachers' inability to be real professionals and failure of students to show readiness are issues that are pertinent for improving standards (Agunbiade and Ayanwale 2021). Stimulating or encouraging motivation between parent-child interaction and teacher-pupil relation seem to hold the key to enhancing academic motivation and then achievement. School is a child's workplace, so it is vital that the educational environment be a positive one. Thus for a child, parents are the dominant force at home, and teachers are the dominant force at school. Therefore, a triangle of teacher-student-parent is given in a child's life.

One of the most important factors that leads individuals to fulfillment of their goals is the drive they have. This drive is known as motivation. Motivating students to learn in school is a topic of great concern for educationists today, and remains one of the greatest challenges of this century. Lack of motivation is a big barrier in learning and a pertinent cause in the deterioration of education standards. Motivation is the driving force behind our actions and affects our needs, desires and life ambition, motivation is greatly appreciated because of the consequences it produces. Psychologists believe that motivation is a necessary ingredient for learning. (Rabideau, 2005).

Kraft, M. A., & Dougherty, S. M. (2013) opined that schools are established with the aim of imparting knowledge and skills to those who go through them and behind all these is the idea of enhancing good academic achievement. Motivation is what gets one going, and determines where one is to go. It is something which prompts, compels and energizes an individual to act or behave in a particular manner at a particular time for attaining some specific goal or purpose. One definition that is consistent with prior research is that motivation is the process by which goal directed activities are instigated and sustained

Eniko (2023) opined that schools are established with the aim of imparting knowledge and skills to those who go through them and behind all these is the idea of enhancing good academic achievement. Over the years, parents, teachers and counselors have expressed considerable concern over the deteriorating pupils' achievement in schools. Aremu (2002) stressed that academic failure is not only frustrating to the children and the parents, its effects are equally grave on the society in terms of dearth of manpower in all spheres of economy and politics. Investigation of factors that influence academic motivation and academic achievement of pupils over the years have attracted the interest and concern of teachers, school psychologists, researchers and school administrators in Nigeria.

There is substantial research on the importance of teacher-pupil and parent-child relationships in the early elementary years (Hamre & Pianta, 2001). A qualitative study to explore how parental involvement is realized in communication between the two actors was conducted by Eniko (2023). In the framework of a qualitative study, semi-structured interviews were conducted with 31 teachers teaching in elementary schools, and the analysis was performed using the Atlas.ti software. Based on the findings, it was concluded that regular communication, common language use, a positive attitude from both parties, and the appropriate use of information and communication technology tools are essential for effective communication. The practical significance of this is that teacher trainees should also emphasize practical education, with a special focus on their ability to establish appropriate communication with parents of different socioeconomic backgrounds

In another related study, Asnart (2024) did a study to explore the expectations and needs of parents during transition of pupils from one basic level to another, as well as the perspectives of teachers regarding parental engagement. The findings highlight the critical importance of accessible communication, genuine attentiveness to pupil's emotional states, and continuous transparency in sharing classroom activities. Challenges such as inconsistent communication and varying levels of responsiveness are identified. Teachers, despite lacking formal training in parent engagement, have developed strategies to manage interactions effectively. The study underscores the necessity for targeted professional development to enhance teacher-parent interactions, ensuring a smoother transition for students. The research also reveals the complex emotional landscape parents navigate, emphasizing the need for sensitive communication and robust support systems to facilitate positive educational outcomes.

Numerous factors have been identified as causes of academic motivation and achievement. For instance, Morakinyo (2003) believes that the falling level of academic achievement is attributed to teacher's non-use of verbal reinforcement strategy. The attitude of some teachers to their job, poor teaching method and the likes influence pupil's academic motivation and achievement. Several other studies also indicated that family factors including parental monitoring, involvement in youngsters' education as well as a good quality relationship with parents are indeed social capital resources that motivate positive behavior towards academics, (Spera, 2005) In the view of Ajila and Olutola (2007) the state of the home influences the children since the parents are the first socializing agents in a child's life. Therefore, child relationships with parents/teachers and other significant others in the first few years of life are very important for the establishment of competences such as cognitive, socio-emotional and self-regulatory skills.

It is pertinent to note that none of these studies considered the input feedback of the pupils themselves in the communication line between parents and teachers. To broaden our understanding of these relationships in Nigeria, it is out of this concern that the current study would examine motivation focused communication of parent-teacher-pupil relationships as predictors of academic achievement among primary school children in Epe local government of Lagos State, Nigeria. In addition, the study examines the current state of communication between parents and teachers in middle basic classes, investigates the factors that influence the quality of communication between parents and teachers and identifies strategies that can be used to improve communication between parents and teachers.

The following hypothesis guided the study

Ho1: There is no significant main effect of treatment (motivationally-toned-communication) on pupils' academic achievements.

Ho2: There is no significant main effect of parent's gender on pupils' academic achievements

Ho3: There is no significant interaction effect of treatment and parent's gender on pupils' academic achievements

Research Design

This study adopts a quazi experimental design using the survey design approach.

Population and Sample

The population of the study is all public primary school pupils in Eredo Local Council Development Area of Lagos State, Nigeria. Four (4) primary schools were randomly selected for this study. Fifty (50) pupils were randomly selected to participate in the study from each of the schools making a total sample of two hundred (200) pupils, eight (8) teachers and two hundred (200) parents.

Research Instrument

The instrument used for this study is a structured questionnaire divided into two sections. Section A requests information on the demographic data of the respondents. Section B is filled with questions that have spaces for interactive feedback between teachers, parents and pupils. This is done on weekly basis and the interactive document becomes the treatment in the study.

Validity and Reliability.

To optimize validity, the researcher piloted the questionnaire with a small student sample and obtained feedback on item clarity. The reliability of the research instrument used in this study was assessed using Cronbach Alpha tool of SPSS and the result came out to be 0.66. This means that the instrument is 66% reliable for use.

Data Analysis Procedure

Data were analyzed descriptively using frequency counts and repeated measures analysis of variances statistics because there was no control group for the treatment.

Results

Table 1: **Demographic Representation of the Respondents.**

Respondents	Gender	
	Female	Male
Pupils	136 (68%)	64 (32%)
Parent	180 (90%)	20 (10%)
Teacher	6 (75%)	2 (25%)
Total	322	86

Table 1 shows that female pupils in the sample were 68%. One out of every four (4) teachers in the participants was a male and nine out of ten parents in the respondents was a female parent.

Testing Of Hypotheses

Hypothesis 1

There is no significant effect of treatment on pupils' academic achievement.

Table 2: Effect of Treatment on Pupils' Academic Achievement Scores

Source	Sum of Squares	Df	Mean Square	F	Sig.
Intercept	10063.213	1	10063.213	31.972	.000
TREATMENT	127.374	2	63.687	16.662	.000
Error	642.141	168	3.822		

Table 2 shows that the treatment has significant effect on the academic achievement of pupils, ($F(2,168) = 16.6$ $p < 0.05$). The null hypothesis is hereby rejected.

Hypothesis 2:

There is no significant effect of gender of parents on pupils' academic achievement.

Table 3: Effect of Gender of Parents on Pupils' Academic Achievement Scores

Source	Sum of Squares	Df	Mean Square	F	Sig.
Intercept	10063.213	1	10063.213	31.972	.000
Gender	7.694	1	7.694	2.013	.158
Error	642.141	168	3.822		

Table 3 shows that gender has no significant effect on the academic achievement of pupils, ($F(1,168) = 2.013$ $p > 0.05$). The null hypothesis is hereby not rejected.

Hypothesis 3:

There is no significant interaction effect of treatment and gender on pupils' academic achievement.

Table 5: Effect of Interaction of Treatment and Gender of parent on pupils' Academic Achievement Scores

Source	Sum of Squares	Df	Mean Square	F	Sig.
Intercept	10063.213	1	10063.213	31.972	.000
Treatment*Gender	6.455	2	3.227	0.844	.432
Error	52878.570	168	314.753		

Table 5 shows that gender has no significant effect on the treatment on the academic achievement of pupils, ($F(2,168) = 0.844$, $p > 0.05$). Thus the null hypothesis is hereby not rejected.

Discussion of Findings

Pupils' academic achievement has always been the major goal of every stakeholder in the education sector. Academic achievement is the extent to which a pupil has attained their short

or long-term educational goals or completion of educational benchmarks or set standard. Effective communication between parents and teachers can have many positive effects on pupils. Pupils who communicate well with their teachers understand concepts better and are more likely to participate in class, frequent communication can lead to higher rates of homework completion, class participation, and on-task behavior. It can also help build stronger relationships between teachers and students; help parents feel more confident and involved in their child's education and help create a supportive learning environment. When effective academic communication is in place, it can help prevent miscommunications and surprises by ensuring that everyone is on the same page about a student's progress and school activities.

The result of this hypothesis show that the academic focused communication between parents, teachers and pupils which was like an anecdotal record used in this study as treatment under three levels, that is, parents-teacher communication with pupils feedback involvement, parents-teacher communication without pupils feedback involvement, and no communication at all is statistically significant on the academic achievement of pupils. This further means and support the age long maxim of more communication between parents and teachers help pupils. The result shows that the group with pupils' feedback involvement recorded the highest academic achievement while the lowest academic achievement comes from the group without parent and teachers communication. Harris and Sines (2008), Muola (2010) and Zhang Liu Xiu et al (2013) all attested to this that the adequate communication between parents and teachers with pupils feedback involvement, among other factors, do have effect on the academic performance of pupils.

From the interpretation above, gender of the parents as a variable which varies universally on two levels, that is, male and female, either independently or when interacted with other variables in this study, is not able to manipulate the academic achievement of pupils. The result shows that the difference in the means of performances of male and female parents who responded on different levels of treatment is due to chance, the difference is not significant. This means that both male and female parents performed on the same statistical gauge. The differences in their mean scores could be due to some other factors not captured in this research endeavour.

This result is in tandem with the researches of Babbyh and Khajehpor (2011), Miwiigi (2014) and Nnamani and Oyibe (2016) which all opines and concluded in their separate researches that gender as an independent variable does not in any way statistically significantly affects the academic performances of pupils. If there are any differences in the academic achievements of pupils, the possible cause might be due to other manipulated or extraneous variables in the population. However, this research result does not support the results of Gani, Yaganaet all (2015) and Adigun, Onanuna et all (2015) in their separate researches which believes that gender of parent still contributes to the academic achievement of pupils.

Recommendations

This study recommends that pupils should be given an opportunity to know the comments of their parents and their teachers so as to give them the opportunity to work towards making necessary corrections to their academic progress. It is also recommended that government should make necessary adjustments and arrangements on the in-service training of teachers towards inculcating the practice of motivation focused communication among parents, teachers and pupils.

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3

ENHANCING PRIMARY SCHOOL SOCIAL STUDIES TEACHERS' EDUCATION THROUGH TECHNOLOGY INTEGRATION IN LAGOS STATE

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Abstract

The study focused on enhancing Lagos State primary school social studies teachers' education through technology integration. The study employed descriptive survey research design. The population of the study comprised of all the students offering social studies education in Lagos State University of Education (LASUED). 140 students were selected through multistage sampling procedure. Three self-design instruments titled Teachers Technology Integration Practices Questionnaire (TTIPQ), Teacher Technology Use Questionnaire (TTUQ) and Social Studies Teachers Technology Use Questionnaire (SSTTUQ) were used for the study;. A test-retest method was adopted to check the internal consistency of the instrument using the Cronbach Alpha technique, and a reliability coefficient of 0.81 (TTIPQ), 0.76 (TTUQ) and 0.84 (SSTTUQ) respectively. The findings of the study shows there is a significant difference in teaching effectiveness between primary school social studies teachers who integrate technology into their teaching practice and those who do not. There is also a positive significant relationship between social studies teachers' technological pedagogical content knowledge and their teaching effectiveness. The study therefore recommended that teachers should engage in continuous professional development to enhance technological pedagogical content knowledge and school should prioritize technological integration in social studies education.

Keywords: Human Management, Social Studies Education, Socialization, Technology Integration

Introduction

The increasing digitalisation of societies has triggered today's technology-based transformation of education, many components from educational environments to teaching processes have been included in the technological circle, in more detail; it has been observed

that one of the effects is on the planning, execution, and evaluation of the teaching process (Instefjord&Munthe, 2017; Bolick, 2017; Hew & Brush, 2007). This situation has caused changes in teacher roles and teaching practices. Thus, it became clear that the teacher should assume the role of a manager and provide a function that includes technology in educational environments (International Society for Technology in Education [ISTE], 2017; Wright & Wilson, 2009). In this regard, the Organisation for Economic Development and Cooperation stated that due to the change of school and teacher roles, there is an expectation from teachers to use information and communication technologies for teaching purposes effectively (Organisation for Economic Co-operation and Development [OECD], 2009).

Additionally, it has been stated by the National Council for the Social Studies (NCSS, 2013) that it is inevitable to include technology in teaching processes to adapt to the digital age and to connect with students in courses. There has also been an expectation for teachers to use information and communication technologies competently to plan the teaching process, develop digital materials, effective teaching, and evaluating teaching to support student development (Ozgur, 2020). These expectations are an important indicator of understanding of education in the 21st century, gradually moving away from traditional methods and evolving into a different understanding using digital technologies. However, since teachers have important obstacles in including information and communication technology in their courses and competencies, this new understanding requires a long process.

Education remains the potent tool for sustaining the development of the nations of the world. It is for total development whereby no one is expected to be educationally deficient in term of individual unique interest in learning and functionality (Oghenekowo, 2005). Education is the aggregate of all the process by which a child or young adult develops the abilities, attitudes and other forms of behaviour of positive values in the society in which he lives (Fafunwa, 1991). Education is a great tool of positive social change which trains young ones for adaptability so as to enable them to move with the changing world. Education enables individual to understand the demands of the society. It frees up people's minds allows opportunity for creativity and innovation, new prospects and ideas. This explains why every society provides education in one form or another to socialize its young into its desired ways of life. Education has been viewed by the international community as a fundamental human right and key development index. With the advent of western education in Nigeria, the development of sound values and moral character remained a cardinal national objective of education. It is in order to impress sound values in the minds of Nigerian students, that most

institutions adopt complementary slogans as their institutional mottos such as ‘ProbitasDoctrina’ (knowledge and character), ‘RecteSapereFons’ (fount of correct knowledge) and the likes.

Consequently, as is obtainable in all human societies, education is as old as human existence in Nigeria. In the pre-colonial Nigeria, education particularly through apprenticeship system was a powerful vehicle of equipping the child (in terms of skills, ethics, moves, customs, traditions and values) for effective participation in the society.

Learners all over the world need a unique and peculiar type of education which will enable them participate effectively in life. In order to find solutions to problems and make decisions on social issues, learners need education to guide and help them in enquiries, investigations, discoveries, discussions and experimentation. The appropriate school subject that is able to help the students fulfill the above need is Social Studies education (Mofoluwawo, 2013). This is because Social Studies is concerned with the study of the social, economic, political, cultural, religious and technological activities and problems of mankind. Many scholars have come up with different definitions of Social Studies. For instance Adeyemi (2000) opines Social Studies is the studies of people, how they live, behave, socialize and are organized in groups; the relationship and interactions they have with their physical and social environments. It is an integrated subject which focuses on the study of man’s environmental relationships for the purpose of citizenship education (Okunloye, 2001). National Council of Social Studies (NCSS) (2002) gave the Social Studies definition as quoted by ELISO (2002) as the “integrated study of social science and humanities to promote civic competence within the school programme. Social Studies derive its contents from related areas in economics, geography, history, law, philosophy, political sciences, psychology, religion and sociology as well as from the humanities and natural science. The primary purpose of Social Studies Education is to help the young people to develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse democratic society in an independent world”.

Prior to 1977, when the schools were taken Over Validation Decree was promulgated which enabled the Federal and State governments to take over the total ownership and control of schools from the missionaries, it was always an accepted truism, filled with longing by the then school leavers, that the then schools and their management really tackled the issue of discipline as their anchor for good values and mannerisms (Igbaniho, 2011). The products then actually shone like the northern star in all their endeavours in life. Universally accepted

values such as respect for elders, honour, helpfulness, truthfulness, kindness, generosity were seen in the characters of these students. That does not mean that there were not bad eggs among them, but the issue at stake is that character education was seen as the main plank that was infused in the learners by the mission schools so that these students will be the cynosure of all eyes in all their endeavours in life. For instance, Fafunwa (1991) said “missionaries were strong disciplinarians and they had abiding faith in manual labour and the rod as the cure to all ills-idleness, laziness, slow learning, truancy, disobedience and the like”.

Unfortunately, with the take-over of schools by the Federal and State governments in 1977 and whittling down of the powers of the missionaries in controlling the schools, character education and inadvertently value education were thrown to the back burner. This marked the beginning of debased value in Nigeria. Coupled with the above was the commercial sale of oil in the world market with the concomitant effects in respect of the gains of the petrol-dollars made Nigerians think of becoming rich as quickly as possible. This was the period when men and women left farms and fishing settlements with barely and requisite academic credentials and went into the world of businesses. As a result of this new development many Nigerians threw aside courtesy, decorum and honour in exchange for other negative means of becoming rich. Then in actual fact, rogues, criminals, fraudsters became highly respected. Unfortunately, these negative traits found way into the schooling system that culminated into bad mannerism, disrespectfulness, gangsterism, examination malpractices, robbery to mention a few that are the negative hallmark of public schools.

The decay in the Nigerian society has affected the standard of values and moral character formation. This is demonstrated in the myriads of anti-social vices exhibited by Nigerian citizens. Antisocial vices exhibited include dishonesty, greed, violent crimes, lack of accountability, indiscipline, corruption, disrespect for constituted authorities, laziness, and low moral courage among many others. All of these pose a serious moral problem for the Nigerian state and continue to set back all sincere efforts targeted at achieving sustainable development goals by 2030. Hence, a greater and heavier demand is placed on schools, to develop and inculcate acceptable values in young ones for an auspicious future. The survival of value education becomes imperative because of nostalgia of the past, disappointed of the present and hope of the future generations.

Social Studies Education was considered an innovative and versatile subject that will lead to the attainment of the aims and objectives enunciated in the national policy on education (Akinlaye,1996). Advancing reasons for these, Akinlaye (1996) posited that Social Studies

was a subject that was geared towards self realization, better human relationship, individual and national efficiency, effective citizenship, national unity and national consciousness among others. This is in line with Peters (1972) view of education as being the transmission of what is worthwhile to those who become committed to it. Accordingly, the subject was viewed as capable enough to address and modify the dysfunctionalities of the inherited educational system. The Nigerian Educational Research Council now Nigerian Educational Research and Development Council (NERDC) defined the subject as a way of life of man, it focuses on how man influences the environment and is in turn influenced by the environment.

Social Studies: Its Meaning and Objectives

The philosophical underpinnings of Social Studies stem from the realization that knowledge must be value-based, holistic, broad, applied, usable, and analytical in order to recognize the interconnectedness, interdependence, and interrelatedness of human knowledge. This realization is what gave rise to Social Studies and has kept it alive (Nworji, 2017). Its purview covers different subject disciplines, predominantly social sciences. It is therefore a synthesis of aspects of anthropology economics, geography, history, philosophy, political science, social psychology, and religion and health education. It is also interested in the influence of science and technology on human beings, human institutions and human environment (Aboluwarin, & Oyedapo, 2023). There are theoretical issues with the precise definition of Social Studies. Therefore, there is no watertight or straightjacket definition of Social Studies. However, academics have made an effort to develop the following definitions:

According to Bulya and Nongo (2010), Social Studies are a synthesis of a variety of academic fields, such as history, political science, geography, anthropology, psychology, and economics. In order to create successful and future citizens of Nigeria, teachers and other subject stakeholders must be aware that Social Studies is a problem-approach discipline through which man studies and learns about issues of survival in his surroundings. The inter-disciplinary nature of Social Studies is well-captured in this description, which suggests that the “themes,” “issues,” “problems,” “concerns,” and aspirations that typically fall under the scrutinizing spotlight of Social Studies must also be inter-disciplinary in nature.

These definitions center on the role of man in the universe, his comprehension of his varied environments, and his knowledge, skills, attitude, and values. It is intended to support the person who is aware of and ready to fulfill his or her social function. These definitions explain why Social Studies education has come to be recognized as a suitable medium for the

dissemination of the knowledge, abilities, attitudes, and values that make up the subject's curriculum. According to Nigeria Educational Research and Development Council (NERDC, (2006), the overall goals of Social Studies at the primary and junior secondary level of education are to develop a person's capacity to adapt to his or her changing environment, to become a responsible and disciplined person able and willing to contribute to the development of their societies, to instill the proper types of values, to develop a sense of comprehension toward other people, and their sense of solidarity and sharing based on confidence in one's own identity is another goal, as is learning how to understand the various facets of being human in various cultural and social circumstances. Understanding the purpose and goals of Social Studies Education leads to the development of top-notch content at all levels of Social Studies instruction. This is demonstrated by the fact that the aforementioned Social Studies objectives have already been set in motion for fulfillment in accordance with the NCCE's (2002) minimum standard courses for the Pre-NCE and NCE programs (Kazi, 2017).

Roles of Information and Communication Technology (ICT) in Social Studies Education

The advantages that accrue and functions that modern technology plays are too many to be ignored, notwithstanding the slow pace at which developing nations are integrating it into education. Secondly, because modern technology is infrastructure based, there has been a steady rise in information-related activities important to a country's socioeconomic development. It also serves as a fulcrum for complex civilizations, facilitating the distribution of knowledge and rules among its numerous components for the smooth operation of the system (Abimbade, 2015).

The benefits of modern technology are felt across all social strata, as evidenced by the e-learning, job training, healthcare, food security, environmental management, government efficiency, e-commerce, and e-banking industries, among others. Due to the abundance of powerful tools available to improve teaching and learning, modern technology has a significant impact on education. With the proper environment and circumstances, such as the provision of sufficient facilities, adequate training, and support, new technology can positively impact teaching and learning. Through individualized instruction, in which students learn at their own pace, the promotion of equal opportunity for all learners, the provision of learning materials (Software), and the promotion of interdependence of learning among learners, modern technology also offers the potential to meet the needs of learners in

terms of education. By simultaneously assessing its purpose and the extent of its reach on a global scale, it is crucial to determine the range of ICT use and its impact on our societies.

Throughout the past two decades, research at local, national, and worldwide for a have mostly focused on the integration of Information, Communication, and Technology in education. These studies evaluated the suitability, significance, and application design of new technology facilities that are available as well as the difficulties associated with using technology to deliver instruction, such as Social Studies in schools and the impact of computers on students' academic performance. Several studies have shown a strong association between instructors' attitudes and behaviour towards the use of computers as a teaching tool (Michiele, 2017).

The attitude of instructors toward knowledge acquired outside of the conventional modes of instruction and their level of readiness to use new knowledge obtained through technology will determine how successfully new technology is incorporated into the educational system. With a greater focus on the students than the teachers, more opportunities for the students to connect with peers, and the best possible use of the computer and internet to meet their learning needs, teachers have the ability to change their instructions and foster better understanding. Yet, many teachers seem more at ease using their traditional teaching methods than the current method; as a result, modern technology tools are used in educational settings in an unprepared, edgy, and inadequate manner. According to a study by Anderson and Weert (2018), teachers would prefer computer literacy over computer applications, even while they do not use modern technology to conduct instruction. Yet, a related study found a substantial correlation between teachers of social science's computer awareness and their use of computers, which led to an increase in the use of computers in the classroom on their part. Should society follow the global information technology revolution that has swept across all countries in the previous 25years, or should it remain enmeshed in the cocoon of traditions and customs? Social transformation must be urgently discussed in order to put this subject in its proper context.

The integration of technology into primary school social studies education has the potential to transform teaching and learning. However, the effective use of technology remains a challenge for many teachers. Despite the growing importance of technology in education, primary school social studies teachers in public schools face significant challenges in integrating technology into their teaching practices. These include; limited technological pedagogical content knowledge, inadequate access to digital resources and infrastructure and

ineffective use of technology to enhance student learning outcomes. Therefore, the paper seeks to investigate role of technology in reshaping primary school social studies teachers' education in public schools.

Research Questions

The following research question guided the study

How does technology integration impact the teaching practices of primary school social studies teachers in public schools?

1. To what extents do technology-based professional development programs enhance primary school social studies teachers' pedagogical skills?

Research Hypotheses

H₀₁: There is no significant difference in the teaching effectiveness of primary school social studies teachers who integrate technology into their teaching practices and those who do not..

H₀₂: There is no significant relationship between primary school social studies teachers' technological pedagogical content knowledge and their teaching effectiveness

Methodology

Research Design

A descriptive survey research design was adopted for the study.

Population of the study

The population of the study comprised of all the students offering social studies education at Lagos State University of Education (LASUED).

Sample and Sampling Technique

The sample of the study made of 140 participant. Multistage sampling procedure was adopted for the study. Simple random sampling technique was used to select Lagos State University of Education from all the universities in Lagos State. Purposive sampling technique was used to select the department of social studies education. Purposive sampling technique was also used to select 300 level students that were on their teaching practice exercises. Simple random sampling technique was used to select 140 teaching practice teachers.

Research Instruments

Three instruments were used for the study title; Teachers Technology Integration Practices Questionnaire (TTIPQ), Teacher Technology Use Questionnaire (TTUQ) and Social Studies Teachers Technology Use Questionnaire (SSTTUQ).

Reliability of the study

A test-retest method was adopted to check the internal consistency of the instrument using the Cronbach Alpha technique, and a reliability coefficient of 0.81 (TTIPQ), 0.76 (TTUQ) and 0.84 (SSTTUQ) respectively.

Method of Data Analysis

The data collected were analyzing using inferential statistical of t-test and Pearson Product Moment Correlation (PPMC).

Results

Test of Hypotheses

Ho1: There is no significant difference in the teaching effectiveness between primary school social studies teachers who integrate technology into their teaching practices and those who do not.

Table 1 Summary of T-test difference in the teaching effectiveness of Primary School Social Studies Teachers and Integration of Technology into Teaching Practices

Variable	N	Mean	Std.D	df	t	sig.	Remark
Social studies teachers who integrate technology	87	3.24	0.81				
				138.		621	0.01
significant							
Social studies teachers who do not integrate technology	53	2.93	0.83				

The table above affirms that there is a significant difference in the teaching effectiveness between primary school social studies teachers who integrate technology into their teaching practice and those who do not ($t=0.62$; $df 138$; $p<0.05$). Therefore, the null hypothesis 1 is rejected. Result in Table 1 also showed that social studies teachers who integrate technology into their teaching practices have higher mean scores of ($m= 3.24$) than teachers who do not integrate technology in their teaching practice.

H₀₂: There is no significant relationship between primary school social studies teachers’ technological pedagogical content knowledge and their teaching effectiveness

Table 2: Summary of Primary School Social Studies Teachers’ Technological Pedagogical Content Knowledge and Teaching Effectiveness

Variable	N	Mean	Std.D	r	Sig.	Remark
Social studies teachers TPCK	140	6.334	2.891			
significant				.463**		0.000
Social studies teachers teaching effectiveness	140	13.522	7.516			

The table above depicts a positive significant relationship between social studies teachers’ technological pedagogical content knowledge and their teaching effectiveness ($r= 0.46$; $p<0.05$). The null hypothesis of no significant relationship was therefore rejected. This positive relationship implies that majority of social studies teachers make use of technological pedagogical content knowledge in their teaching and learning process.

Discussion of Findings

The findings from the hypothesis one revealed that there is a significant difference in teaching effectiveness between primary school social studies teachers who integrate technology into their teaching practice. The finding of this present study is in line with the studies of Michiele (2017) who found a strong association between instructors’ attitudes and behaviour towards the use of computers as a teaching tool. The attitude of teachers towards knowledge acquired outside conventional modes of teaching and their level of readiness to use new knowledge obtained through technology will determine how successfully new technology is incorporated into the educational system.

The findings from hypothesis two revealed positive significant relationship between social studies teachers’ technological pedagogical content knowledge and their teaching effectiveness. This finding is in line with that of Abimbade, (2015) who found that that the advantages that accrue and the functions that modern technology plays are too many to be ignored, notwithstanding the slow pace at which developing nations are integrating it into education. Secondly, because modern technology is infrastructure based, there has been a steady rise in information-related activities important to a country’s socioeconomic development. It also serves as a fulcrum for complex civilizations, facilitating the distribution

of knowledge and rules among its numerous components for the smooth operation of the system.

Conclusion

Based on the findings from the study, it is concluded that the integration of technology into primary school social studies teachers' education in Lagos State has the potential to transform teaching and learning. This study investigated the impact of technology integration on teachers' pedagogical skills, students learning outcomes and the challenges faced. Addressing challenges and leveraging opportunities can enhance teaching and learning, preparing students for an increasingly complex and technology-driven world.

Recommendations

Based on the findings of this study, the following recommendations are considered:

1. Teachers should engage in continuous professional development to enhance technological pedagogical content knowledge.
2. Schools should prioritize technological integration in social studies education.
3. Government should invest in technology infrastructure and training of teachers

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4

Advancing Counsellors' Effectiveness in Nigerian Schools through Global Professional Development Practices

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Abstract

This study explores advancing counsellors' effectiveness in Nigerian Schools through global professional development Practices, with a focus on how compare to best global practices. It highlights the significant role of continuous learning in enhancing the skills and competencies of school counselors, empowering them to effectively address students' academic, social, and emotional needs. The study used descriptive survey research design. The population consist of school counselors in Lagos state secondary schools, administrators, and education policymakers. A sample of 165 participants was selected using a purposive sampling technique. The sample comprised 150 school counselors from state education districts, 10 school administrators, and 5 education policymakers. The instrument used to collect data was self-constructed questionnaires named Advancing Counsellors' Effectiveness in Nigerian Schools through Global Professional Development Practices (ACENSGPDPQ). The reliability analysis for the instrument using Cronbach's Alpha yielded 0.80. Data collected from the questionnaires were analyzed using descriptive statistics. Findings reveal that professional development significantly enhances counselors' abilities, but barriers such as inadequate funding and lack of institutional support limits access to quality training in Nigeria. These challenges emphasized the need for policy reforms to align Nigerian professional development opportunities with international standards. It was recommended among others that government and educational institutions should increase investment made on the professional development of school counsellors in order to provide more resources and opportunities necessary for growth. Establishment of collaborations with international organizations can also enhance best global practices that will help Nigerian counselors gain exposure to international standards in counselling.

Keywords: Counsellor Effectiveness, Professional Development, School Counsellors, Nigerian Schools.

Introduction

Professional development is an essential factor in enhancing the skills, knowledge, and overall effectiveness of professionals, including school counsellors. In the context of

Nigerian schools, where the education system faces challenges such as inadequate resources, understaffing, and a lack of training opportunities, professional development can be a transformative tool. School counsellors in Nigeria play essential role in addressing students' academic, social, and emotional needs. However, many Nigerian counselors often work with limited resources and support, which may hinder their effectiveness. Counsellors are not only expected to assist students in career decision-making but also to help manage behavioural problems, provide psychological support, and foster students' personal growth (Paolini, 2019). This expansive role underlines the necessity of continuous professional development to help counselors remain effective amidst growing demands and changing societal contexts.

Counsellor effectiveness reflects a counselor's ability to positively impact client outcomes through skilled interventions, effective communication, and a supportive relationship. Effective counselling often hinges on a counsellor's interpersonal qualities, such as empathy, self-awareness, and professional competence, which allow them to build strong therapeutic relationships and encourage positive change. Effectiveness in this role is further influenced by a counsellor's approach to professional development and adaptability to clients' unique cultural and psychological needs, which collectively strengthen counselling outcomes over time (Sperry & Sperry, 2020). School counsellors are specialized professionals within educational settings who provide students with academic, career, social, and emotional support. They play a critical role in students' personal development and help create positive school environments. School counsellors often serve as a bridge between students, teachers, and parents, working to address challenges such as mental health issues, academic concerns, and future career planning. Their effectiveness often hinges on establishing trust and support networks with students and tailoring interventions to meet diverse needs (Sari et al., 2024). In the counselling field, professional development refers to ongoing education and training aimed at improving skills, knowledge, and ethical practices. This concept is essential for counselors, who face evolving challenges in mental health care, including the integration of new technologies like telehealth. Counsellors' participation in continuing education, conferences, supervision, and certifications, maintain and expand their competency. This commitment to growth helps them stay aligned with current best practices and ethical standards, ultimately enhancing their effectiveness in helping clients (DeDiego et al., 2023). These concepts are interconnected; thus counselor effectiveness depends heavily on both professional development and, for school counselors, the specific skills required to support students in educational settings.

Globally, professional development has been acknowledged as a significant contributor to enhancing the effectiveness of counsellors. According to UNESCO (2020), continuous professional development is necessary for school counselors to maintain their skills and to adapt to new developments in counselling techniques and educational policies. For instance, in the United States and Europe, professional development programmes focusing on trauma-informed care, cultural competency, and mental health interventions have greatly improved the efficacy of school counsellors in addressing students' diverse needs (Friedman & Whiston, 2021).

In Nigeria, professional development opportunities are not as widely available, and this gap can severely impact the quality of counseling services provided. Many school counselors in Nigeria operate without the structured training or continuing education programmes that are available in more developed countries, making it difficult for them to stay updated on best practices (Adeyemi & Ojo, 2019).

The dynamic nature of the counselling profession necessitates that practitioners keep up with advancements in the field. This includes developments in psychological theories, counselling techniques, and educational policies that affect student behaviour and well-being. Meanwhile, professional development helps counselors refine their skills in areas such as crisis intervention, ethical practices, and the use of technology in counselling. Nweze and Umeifekwem (2021) posited on the professional development of counselors in Nigerian schools and showed that those who participated in workshops, seminars, and online training were better equipped to handle the complexities of student issues than those who did not. These counselors were more skilled at addressing mental health concerns, understanding diverse student backgrounds, and implementing career guidance programs. This suggests that professional development can have a direct impact on the effectiveness of counsellors in the Nigerian school system.

Professional development plays a crucial role in enhancing the effectiveness of school counselors in Nigerian schools. Research indicates that when counselors engage in continuous learning and training, they acquire advanced skills and strategies that significantly improve their ability to support students' academic, social, and emotional well-being. The impacts of professional development on counselor effectiveness include:

- **Improved Counselling Skills:** One of the most significant impacts of professional development is the enhancement of core counseling skills. Professional Development

programs allow counselors to update their knowledge in areas such as career guidance, adolescent psychology, and crisis management, enabling them to provide more targeted and effective support to students (Eleke, 2023). In Nigeria, where many students face academic and social challenges, updated counselling skills are necessary for addressing these issues in a meaningful way.

- **Increased Awareness of Mental Health Issues:** Globally, there is growing recognition of the importance of mental health in schools. Professional development provides counselors with the necessary tools to identify and manage mental health concerns such as depression, anxiety, and trauma in students. In Nigeria, mental health issues are often stigmatized and misunderstood, but professional development can empower counsellors to play a proactive role in breaking down these barriers (Adamu & Babangida, 2019).
- **Application of New Technologies in Counseling:** The COVID-19 pandemic has accelerated the use of digital tools in counselling. Professional development in the form of webinars and online training programs has enabled counselors globally to adopt tele-counselling and virtual platforms for reaching students. Nigerian counsellors who have access to professional development programs focusing on digital counselling are better able to support students in remote areas or during crises like school closures (Obiageli & Nwachukwu, 2022).
- **Enhanced Ethical and Cultural Competency:** With Nigeria's multi-ethnic and multicultural society, professional development helps counsellors become more culturally competent. Counselors who undergo training on cultural sensitivity and ethical practices are better equipped to address the unique needs of students from various backgrounds (Jarwan & Al-frehat, 2020). In this way, professional development contributes to creating an inclusive and supportive school environment, fostering better counselor-student relationships.

According to Olaniyan and Okunola (2020), counselors who regularly participate in workshops, training programs, and continuous education courses demonstrate significantly higher competencies in addressing students' academic and behavioural issues compared to those who do not engage in such activities. This emphasized that professional development not only boosts counselors' technical skills but also improves their confidence in delivering guidance and support to students facing emotional and social challenges.

Moreover, professional development equips counsellors with the skills to identify early warning signs of academic or social distress in students, allowing for timely interventions that can prevent more serious issues. Continuous learning also helps counselors adapt to the changing dynamics of student behaviour influenced by technological advancements and societal changes. Okeke et al. (2021), posited that counselors who engage in professional development are more likely to implement evidence-based practices and are better at building rapport with students, leading to improved outcomes in the students' academic and emotional well-being.

Furthermore, professional development helps counselors stay up-to-date with modern counselling techniques, ethical standards, and best practices, enabling them to provide evidence-based interventions suitable for individual student's needs. By improving their competencies, school counselors can build stronger relationships with students, providing more relevant and impactful guidance and support tailored to students' academic growth, personal development, and overall well-being (Ibiyemi & Olanrewaju, 2024).

Professional development opportunities for Nigerian school counselors often fall short compared to best global practices. In many developed countries, there is a well-structured framework for continuous training, certification, and specialization of school counselors. These frameworks typically involve regular workshops, training sessions, and access to professional resources, which are tailored to the evolving needs of students. In contrast, Nigerian school counselors face several barriers that limits their access to similar opportunities. These barriers include limited funding, lack of institutional support, and inadequate access to resources such as training materials or experienced facilitators (Ajayi & Oyedepo, 2019). Additionally, the hierarchical structure of the Nigerian education system often places less importance on the role of counselors, thereby deprioritizing their professional growth. Addressing these barriers will be essential to improving the effectiveness of counsellors in Nigerian schools. These challenges are compounded by systemic issues such as the lack of standardized professional development guidelines across Nigerian states and the absence of a unified certification process for counselors. While some states in Nigeria have made efforts to standardize credentialing, there is still a significant need for a cohesive approach to ensure that all school counselors have access to high-quality training that aligns with international standards (Ibiyemi & Olanrewaju, 2024). Al Hamad et al. (2024) identified barriers such as limited funding for educational initiatives, insufficient institutional support, lack of exposure to international best practices, and outdated training

curricula. In additionally, there is often a lack of motivation and incentives for counselors to pursue professional growth due to inadequate career progression opportunities within the Nigerian educational system. Cultural and logistical barriers also play a role, with many training programs being concentrated in urban areas, making it difficult for counselors in rural regions to participate.

Moreover, issues like poor internet connectivity and lack of digital resources further restricts access to online professional development courses, which are becoming increasingly prevalent worldwide. Addressing these barriers requires comprehensive strategies, including increased funding, policy reforms, and partnerships with international organizations to facilitate knowledge exchange and access to training materials (Al Hamad et al., (2024). Hence, Comprehensive strategies, such as policy reforms, increased funding, and international collaborations, have been identified as crucial for establishing a strong support system for Nigerian counselors. These measures are considered vital in aligning counseling practices in Nigerian schools with global best practices.

Statement of the Problem

In Nigeria, school counsellors play an important role in addressing students' academic, emotional, and social needs. However, many counsellors face challenges that limits their effectiveness, including inadequate access to professional development opportunities. The lack of continuous training leaves many counsellors unprepared to handle complex issues such as mental health concerns, career guidance, and crisis intervention, which are becoming increasingly relevant in today's schools. Furthermore, the counselling profession in Nigeria is under-resourced, with many counselors lacking institutional support, updated tools, or exposure to best global practices. This situation is compounded by limited government investment in professional development for counselors and a lack of collaborative platforms for knowledge sharing. As a result, many Nigerian school counselors struggle to provide the high-quality support that students need, contributing to gaps in students' well-being and academic success. Addressing these challenges through accessible and structured professional development programs is essential to improving the effectiveness of school counsellors in Nigeria. Therefore, this study seeks to explore the impact of professional development on the effectiveness of school counsellors, comparing the Nigerian context with global best practices and identifying barriers to accessing professional growth opportunities.

Purpose of the Study

1. To examine the impact of professional development on the effectiveness of Nigerian school Counsellors.
2. To compare the professional development opportunities available to Nigerian school counsellors with best global practices.

Research Questions

1. How does professional development impact the effectiveness of school counsellors in addressing students' academic, social, and emotional needs in Nigerian schools?
2. How do professional development opportunities for school counsellors in Nigeria compare with best global practices, and what barriers hinder their access to such opportunities?

Methodology

Research Design:

The study used descriptive survey research design to explore personal experiences and perspectives of counselors, and gather measurable data on their performance, training, and outcomes.

Population of the Study:

The population consist of school counsellors in Lagos state secondary schools, administrators, and education policymakers.

Sample and Sampling Technique:

A sample size of 165 comprising of 150 school counselors from state education districts, 10 school administrators and 5 education policymakers was selected using purposive sampling technique to select counselors who have undergone recent professional development training and those who have not, to allow for comparison.

Method of Data Collection:

The instrument used to collect data was self-constructed structured questionnaires named Advancing Counsellors' Effectiveness in Nigerian Schools through Global Professional Development Practices Questionnaire (ACENSGPDPQ), face and content validity was certified by the expert in test and measurement, and 5-Likert scale was used. The reliability analysis for the instrument using Cronbach's Alpha yielded 0.80. All participants were

informed about the purpose of the study, and their consent obtained prior to participation; the anonymity of the participants maintained, and data handled confidentially.

Method of Data Analysis:

Data collected from the questionnaires were analyzed using descriptive statistics

Ethical Consideration:

All participants was informed about the purpose of the study, and their consent obtained prior to participation.

Results

The study aimed to assessing the impact of professional development on the effectiveness of school counsellors and the comparing the professional development opportunities available to Nigerian school counsellors with best global practices.

Research Question one: How does professional development impact the effectiveness of school counsellors in addressing students' academic, social, and emotional needs in Nigerian schools?

Table 1: Impact of Professional Development on Counsellor Effectiveness

S/N	Items	Mean	Standard Deviation	Remarks
1	Professional development has improved my ability to address students' academic challenges.	4.2	0.75	Agree
2	Participating in professional development programs has enhanced my skills in managing students' behavioural issues.	4.0	0.80	Agree
3	I feel more confident in providing career guidance to students after attending professional development workshops.	4.3	0.65	Strongly Agree
4	Professional development has equipped me with the necessary tools to support students' mental health and well-being.	3.9	0.85	Agree
5	My communication skills with students have improved as a result of participating in professional development activities.	4.1	0.70	Agree
6	I am more effective at identifying and responding to students' emotional needs due to my professional development experiences.	4.0	0.78	Agree
7	Professional development has increased my knowledge of the latest counseling techniques and strategies.	4.2	0.68	Agree
8	I can better handle crisis situations in school after undergoing professional development training.	3.8	0.90	Agree
9	The professional development programs I have attended have significantly contributed to my overall effectiveness as a school counselor.	4.4	0.60	Strongly Agree
10	I believe that continuous professional development is essential to maintaining my effectiveness as a school counsellor.	4.5	0.55	Strongly Agree
Weighted Mean		4.14		

In table 1, the results indicated a positive correlation between professional development and the effectiveness of school counselors in addressing students' academic, social, and emotional needs. The mean score for the items assessing this impact was relatively high (Mean = 4.2 on a 5-point scale), with a standard deviation indicating low variability among responses (SD = 0.45). This suggests that counselors believe professional development significantly enhances their ability to support students effectively.

Research Question two: How do professional development opportunities for school counsellors in Nigeria compare with best global practices, and what barriers hinder their access to such opportunities?

Table 2: Comparison of Professional development opportunities available to Nigerian school counsellors with Best Global Practices

S/N	Items	Mean	Standard Deviation	Remarks
1	The professional development opportunities available to school counsellors in Nigeria are comparable to those in developed countries.	3.5	0.82	Neutral
2	Nigerian school counselors have adequate access to internationally recognized training and certification programs.	3.2	0.90	Neutral
3	The content of professional development programs for school counsellors in Nigeria is up-to-date with global best practices.	3.7	0.78	Agree
4	Nigerian school counsellors have opportunities to engage with global experts and professionals in the field of counseling.	3.4	0.85	Neutral
5	The professional development programs available in Nigeria address the diverse needs of students as effectively as those in other countries.	3.3	0.88	Neutral
6	Professional development opportunities in Nigeria provide exposure to innovative counselling techniques practiced globally.	3.6	0.79	Agree
7	Nigerian school counselors receive the same level of institutional support for professional development as their counterparts in developed nations.	3.1	0.92	Neutral
8	The frequency of professional development workshops and training in Nigeria is comparable to that in other countries.	3.4	0.87	Neutral
9	I believe the funding for professional development in Nigeria is on par with global standards.	3.0	0.95	Neutral
10	Overall, the professional development opportunities for school counselors in Nigeria align well with global best practices.	3.8	0.76	Agree
Weighted Mean		3.4		

In table 2, when comparing the professional development opportunities available to Nigerian school counselors with best global practices, the results highlighted several gaps. The mean score for items assessing the availability and quality of these opportunities was lower (Mean

= 3.1), with a standard deviation reflecting more variability in responses (SD = 0.75). This indicates that while some counselors have access to good professional development, many others face significant barriers, such as inadequate resources and training opportunities.

Discussion

Research Question One revealed that professional development has a substantial positive impact on the effectiveness of school counselors in Nigerian schools. The findings indicate a strong consensus among respondents, with a weighted mean of 4.14 reflects that School Counsellors engaging in continuous learning and training significantly enhances their skills in handling students' academic, social, and emotional challenges. It was corroborated with Studies of Nweze and Umeifekwem, (2021); Eleke (2023) that counselors who participate in professional development activities, such as workshops and training sessions, demonstrate improved competencies in areas like crisis management, career guidance, and mental health support. It was supported by Olaniyan and Okunola (2020) that these activities not only provide counsellors with the tools to addressing students' specific needs but also increase their confidence in implementing evidence-based interventions that cater to diverse student backgrounds. Adamu and Babangida (2019) agreed that professional development empowers counselors to identify early warning signs of academic or social distress in students, which allows them to intervene proactively and prevent more severe issues from developing. This proactive approach is critical in a context like Nigeria, where mental health issues are often stigmatized and under-addressed. Obiageli and Nwachukwu (2022) aligned that the use of updated counseling techniques and digital tools, as highlighted during the COVID-19 pandemic, further demonstrates the transformative role of professional development in enhancing the adaptability and effectiveness of school counselors.

Research Question two answered the comparison of professional development opportunities for Nigerian school counsellors with global best practices reveals significant gaps. The weighted mean score of 3.4 suggests a neutral perception among counselors regarding the adequacy and quality of professional development in Nigeria. This neutral stance reflects mixed experiences where some counselors benefit from available resources while others face substantial barriers. In line with Ajayi and Oyedepo (2019) that the key barriers identified include inadequate funding, lack of institutional support, and limited access to training resources (Ajayi & Oyedepo, 2019). This observation is supported by Al Hamad et al. (2024), who noted that, unlike in developed countries where structured frameworks for continuous

training and specialization are well-established, Nigerian school counselors often face significant challenges due to the lack of necessary resources. These challenges include limited access to funding, training opportunities, and institutional support, which impede their ability to engage in regular professional development. As a result, Nigerian counselors are at a disadvantage in acquiring the advanced skills and knowledge required to effectively address the evolving needs of students. This situation leads to a disparity in the quality of training received by counselors, depending on their location and the level of support from their institutions. Additionally, the absence of a standardized certification process across Nigerian states further exacerbates the issue, as not all counselors have equal access to high-quality training that aligns with international standards (Ibiyemi & Olanrewaju, 2024). This lack of cohesion means that even when professional development opportunities are available, they may not be tailored to meet global standards or the evolving needs of students. The findings suggested that while some progress has been made, more needs to be done to bridge the gap between Nigeria and other countries regarding professional development for school counselors. Comprehensive strategies, including policy reforms, increased funding, and international collaborations, are essential to create a robust support system for Nigerian counselors that aligns with global best practices (Moses & Udoh, 2021).

Conclusion

Professional development plays a vital role in enhancing the effectiveness of school counsellors in Nigerian schools. Counsellors who engage in continuous learning are better equipped to support students' academic success and address their social and emotional needs. However, despite the acknowledged benefits, Nigerian school counselors face significant challenges in accessing quality professional development, which hinders their ability to stay updated with global best practices.

Recommendations

Based on the findings of this study, the following recommendations were suggested by the researchers:

1. There is a need for government and educational institutions to increase investment of the professional development of school counsellors in order to provide them with the resources and opportunities necessary for growth.

2. Educational policymakers should develop and implement policies that prioritize the professional development of school counselors, making it mandatory and well-structured to ensure that all counsellors have access to training that meets international standards.
3. Schools and educational institutions should offer more support to their counsellors by providing access to digital resources, mentorship programs, and opportunities to engage with global experts in the field.
4. To address the challenge of geographical barriers and limited access in rural areas, online training and webinars should be promoted as an integral part of professional development for school counselors in Nigeria.
5. Establishing collaborations with international organizations can help bring in best global practices, offer better training materials, and create exchange programs to help Nigerian counsellors gain exposure to international standards in counseling.

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BEHAVIOURAL DISPOSITION AMONG SECONDARY SCHOOL STUDENTS' IN IBADAN METROPOLIS

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Abstract

The rate of indiscipline in schools in present day contemporary times is quite alarming and has made students consistently exhibit inappropriate behaviours such as bullying, fighting, truancy, disrespect, aggression and varied anti-social behaviours that are detrimental to their wellbeing, functioning and educational progression.

Indiscipline secondary school students might be at academic risk of dropping out of school. Studies have revealed that highly indiscipline students' are poorly motivated students with low academic self-efficacy and learned helplessness. These have some implications on their intellectual and developmental well-being. Though, studies have been carried out on the impact of indiscipline and achievement motivation on students. However, there is dearth of studies on impact of counseling on the behaviour disposition of students. Therefore, this study investigated guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis, with specific focus on counselling, information and orientation counselling services offered to students and the consequence on their expressed discipline behaviour. The study adopted a descriptive research survey design of ex-post facto type. The population for this study consisted of all the secondary school students in Ibadan Metropolis. Four hundred students were purposively selected from ten randomly selected secondary schools in Ibadan Metropolis. Guidance and Counselling Service Enhancing Student Discipline Scale (GCSESDS) which is a self-constructed instrument by the researcher was used for data collection. Data was analyzed using Pearson Product Moment Correlation and Multiple Regression Analysis statistical tools at 0.05 level of significance. The result indicates that significant relationship exist between the independent variables and the dependent variable (disciplined behavioural disposition among secondary school students) in order of magnitude as thus:, counselling service ($R=0.342$, $p<0.05$), information service ($R=0.283$, $p<0.05$) and orientation service ($R=0.237$, $p<0.05$). The independent variables has significant joint impact of 25.59% on dependent variable $F(4/395) = 25.59$; $p<0.05$. Counselling had the highest relative impact ($\beta=0.396$) followed by information ($\beta=0.310$) and then orientation ($\beta=0.281$) made the least contribution. Counselling service, $r(398) = 0.342$, $p<.05$; information service, $r(398) = 0.283$, $p<.05$ and orientation service $r(398) = 0.237$, $p<.05$ correlates significantly with disciplined behavioural disposition among secondary school students. Therefore, government and concern agencies should give necessary and adequate funding and support to guidance and counselling activities in schools as a means to help foster discipline in schools and support students to discover their potentials and maximize them productively.

KeyWords: Counselling Service, Discipline, Guidance, Information Service, Orientation Service, School, and Students.

Introduction

The rate of indiscipline in schools in present day contemporary times is quite alarming and has made students consistently exhibit inappropriate behaviours such as bullying, fighting, truancy, disrespect, aggression and varied anti-social behaviours that are detrimental to their wellbeing, functioning and educational progression. However, discipline is characteristically considered to have significant positive impact on students' behavioural dispositions in and outside the classroom environment. This is often made possible when students are well guided and counselled to develop and attain the right values, virtues and dispositions that will enable them behave in the best appropriate manner. Utilizing guidance and counselling services provided by professionally trained and qualified School Guidance Counsellor that helps modify students' maladaptive behaviours to positively adaptive ones often serves as a golden opportunity for students to reflect and learn about the consequences of inappropriate behavioural dispositions, instill good shared values, and encourage the development of behaviours that are acceptable in school and classroom.

Students discipline in school is an essential part of their moral and intellectual development, the quality of education they attain that would help shape their future and life space. Guidance counsellors are crucial facilitators of behaviour modification process in schools, and they play a significant role in ensuring that students are well behaved, disciplined and that they receive worthwhile education that would add value to their lives. This indicates that the provision of guidance and counselling services to students are critical components of an ideal educational school system. This is because one of the key purposes of providing guidance and counselling services to students in schools is to help them develop their self-awareness and self-confidence. These are essential qualities that would enable students to appropriately take responsibility of their actions in life, make dynamic decisions and live a disciplined life. However, students who lack these qualities are inclined to exhibit disruptive behaviour, express indiscipline acts in the classroom and tend to struggle with their studies (Darakhshan & Shameem, 2023).

Sahu (2020) posits that guidance and counselling services provided for students in school is pivotal for their all-round developmental wellbeing as it helps foster quality growth and the building of sound personality in children. Through the provision of guidance and counselling services, children are helped to develop the capacity required to manage emotional challenges and effectively control socio-personal problems that could negatively impair their developmental progress. Sahu (2020) further contended that ideal guidance and counselling services will help students integrate valuable experience in their day to day life.

Some experience could see students developing problem solving skills that will enable them have the ability to handle psycho-emotional problems that can impact negatively on their ability to concentrate on their studies in school. Invariably, this helps to positively shape behavioural dispositions of students and instill desired discipline in them.

Students that are well counselled and guided by school counsellors do learn how to appreciate self and others in a peaceful manner and equally live in harmony with others within and outside the school community. It aids to facilitate peaceful relationship between school administration and the students since proper counselling allows students to have the willpower to freely discuss with their teachers about diverse experiences that are unpleasant to them. Through this, they can easily share certain problems they might find difficult to share with their parents at home. For example, issues related to unemployment, sexual abuse, depression, drug abuse, alcohol abuse, fear of failing in exam, personal-social feelings, peer pressure to be involved in indiscipline acts, career challenges, etc, that can make them feel troubled and express anti-social behaviour towards self and others (Sahu, 2020).

According to Darakhshan and Shameem (2023) when counsellors render effective guidance and counselling services in school, it helps to foster creative collaboration between counsellors, parents, teachers, administrative personnel and significant others in school and it promotes a supportive, innovative and disciplined learning environment for students. This creative collaboration often help to identify and address issues of students indiscipline and maladaptive behaviours early, leading to improved personal and academic development. This shows that the provision of guidance and counselling services in schools is critical to students learning, behavioural conduct and discipline.

Guidance Counsellors provide varied guidance and counselling services for students in schools that help them adjust favourably and express disciplined behavioural dispositions in their daily conduct. For example, services such as: information, remedial, evaluation, orientation, counseling, individual inventory, placement, research and follow-up services are rendered to students to support their all-round positive development. However, the focus of this research study is on investigating guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis, with specific attention on counselling, information and orientation counselling services offered to students.

Yusoff and Abdullah (2021) research determined the effect of counselling in enhancing discipline among secondary school students in Malaysia and found that the effective use of non-directive and directive counselling strategies helped indiscipline students

to rediscover the danger associated with indiscipline and the need to adopt a positive discipline behavioural conduct and way of life. Vuleza (2021) affirmed that issues of indiscipline among students in Busia County in Kenya are on the increase in the like of drug abuse, truancy, bullying, theft, fighting, etc. Okirigwe (2020) study examined the influence of counselling services on students discipline and academic adjustments in secondary schools in Rivers State and found that Counselling Services has positive influence on students' obedience to rules and regulation, of the school social environment, adaptation to physical school environment and the motivation to learn. Ngole (2022) stated that the use of counselling services help enhance discipline and deliver social-psychological support to students in Tanzanian schools and despite years of the provision of counselling services, some schools are still experiencing issues of indiscipline such as; trancies, sexual and drug abuse, truancy, sexual molestation and dropouts from school.

Mogbana, et al (2022) found that information service provided by consellers in school to students help improve discipline, creative students teachers engagement and enhance competent interpersonal relationship. Thus, information services ensures positive development of students and makes teaching and learning take place in a conducive environment. It is in recognition of this development that information services that can stimulate students' consciousness of the need to be discipline and facilitate effective teaching and learning experience in schools are given the needed attention by school counsellors and educational planners. Researchers Mogbana, et al (2022) and Oviogbodun (2015) affirmed that In the process of guidance and counselling interactive relationship, information given help students' development holistically and prevent development of anti-social behaviour. Thus, information services serves as an ideal therapy to foster discipline behaviour among school children as it helps them develop the capacity to solve their problems in an effective manner that will ensure their emotional stability and functional adaptability.

Oduh, et al (2020) study determined the relationship between counselling information service and level of students' indiscipline among public secondary schools in Delta state North Senatorial District using correlation design and the outcome of the study shows that information service provided through counselling help prevent the expression of indiscipline behaviour by students. Cheruiyot and Simatwa (2016) hypothesized that provision of orientation counselling services positively enhanced students' disposition of good behavior and improved academic performance. Eremie and Jackson (2019) reported that orientation services offered to students in schools indeed improves students' behavioural conduct and academic performance positively. The outcome of Shehu et al. (2021) study revealed that

80% of the respondents affirmed that they became well behaved and discipline after they received counselling orientation service in school. Ribadu (2021) stated that 63 % of respondents in his study strongly agreed that orientation programme enhances discipline among students and equally improve their academic performance.

Also, Hamilton Wentworth District School Board Report (2021) revealed that orientation programme provided in schools help promote a positive relationship climate that supports student to attain high academic achievement, sound mental health, and general well-being. The orientation policy detail proactive approach that utilizes strategies to promote the building of social skills, interventions to reinforce good discipline behaviour and to change students' maladaptive behaviours to adaptive ones and progressive discipline. Furthermore, orientation programme ensures that student enjoys and experience caring, safe and bias free learning environment that is free from discrimination and harassment. Thus, orientation Programmes focuses on providing equity educational experience, prevention of bullying behaviour, building pro-social skills and building healthy relationships within a school. To the best of my knowledge, there is paucity of research on guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis. Therefore, to fill this research gap, this study investigated guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis, with specific focus on counselling, information and orientation counselling services offered to students and the consequence on their expressed discipline behaviour.

Statement of the Problem

Maintaining discipline in secondary schools in Nigeria has being a recurring challenge over the years and worst off, in contemporary time, secondary school students have often display negative deviant behaviours that are detrimental to their developmental wellbeing. The rapid spread associated with the use of Information Communication Technology (ICT) have witness the manifestation of behaviours such as bullying, cyber bullying, sexual abuse, indecent dressing, sagging, drug use and abuse, truancy, fighting, social harassment, examination malpractice etc. These expressed behaviours show cases act of indiscipline that have critically impaired the academic performance and behavioural dispositions of students in secondary school negatively. Therefore, based on this context, this study investigated guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis, with specific focus on counselling,

information and orientation counselling services offered to students and the consequence on their expressed discipline behaviour.

Objective of the Study

This study is focused on using empirical measures to investigate guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis.

Purpose of the Study

The purpose of this empirical study is to investigate guidance and counselling services as predictors of disciplined behavioural disposition among secondary school students in Ibadan Metropolis and to specifically:

1. Determine the predictive impact of counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis.
2. Find out the joint impact counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis.
3. Establish the relative impact that counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis

Research Questions

1. What associative impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?
2. What joint impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?
3. What relative impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?

Research Hypotheses

1. There is no significant relationship between the provision of counselling service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis
2. There is no significant relationship between the provision of information service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis
3. There is no significant relationship between the provision of orientation service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis

Methodology

The descriptive research survey design of ex-post facto type was adopted for this study. This type of design is used to establish relationships with the researcher having no control of the variables of interest and because of this; the variables cannot be manipulated by the researcher.

Population

The population for this study consisted of four thousand and fifty (4050) senior secondary school students (SSSII) in Ibadan Metropolis (Oyo State Ministry of Education).

Sample and Sampling Procedure

Four hundred (400) students were purposively selected from ten randomly selected secondary schools in Ibadan Metropolis. The four hundred purposively selected secondary school students were those that have received guidance and counselling services from their school counsellors. Forty secondary school students were selected from each of the ten secondary schools and these amounted to four hundred in total.

Instrumentation

Guidance and Counselling Service Enhancing Student Discipline Scale (GCSESDS) is a researcher self-constructed instrument used for data collection. This instrument is divided into five sub-sections consisting of (A) the demographic personal data, section (B) Student discipline, with items such as: My experience with guidance and counselling service in school has made me to: Be focused in school; Attend classes regularly; stop being a truant;

Obey school rules and regulations; Dress decently. Section (C) Counselling service, has items such as due to counselling I received in school, I know the importance of: obeying rules; not involving in examination malpractice; not bullying other students; dressing neat to school; respecting my teachers and peers Section (D) Information service, has items such as the information I receive in school has help me to: be aware of my strength and weaknesses; develop good study habit; be attentive in class; use the library very well; consult with my teachers; and Section (E) Orientation service has items such as: The orientation service I receive in school has helped me to: manage peer pressure; be confident of myself; have self-control; avoid bad gangs; participate actively in school activities. Sub-sections B, C, D, and E have five items each with a five point Likert response pattern of: strongly agree, agree, not sure, disagree and strongly disagree. The instrument has a coefficient reliability of .82 gotten through a test-re-test method.

Procedure for Administration

The researcher obtained permission to conduct this research work from the principals of schools used. Also, the consent of the counsellors was sort to help in identifying students that have gone through guidance counselling experience and instruments administered on them. The students were instructed that their responses were for research purposes and the researcher will treat it confidentially. The administration of the instrument last for three months and thereafter they were collected back for analysis.

Data Analysis

Data was analyzed using Pearson Product Moment Correlation and Multiple Regression Analysis statistical tools at 0.05 level of significance. Multiple regressions were used to find out the joint and relative contributions of the independent variables on students' discipline. Also, PPMC was used to determine if the level of relationship between the variables was statistically significant to warrant rejection or acceptance of the hypotheses

Results

The results of the findings are thus, presented in the tables below:

Research Questions answered in the study

Research Question One: What associative impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?

Table1: Descriptive Statistics and Correlation Matrix of Relationship between the variable

Variables	N	Mean	Std Dev	1	2	3	4
Student Discipline	400	33.26	7.07	1.000			
Counselling Service	400	30.48	8.42	.342	1.000		
Information Service	400	27.37	6.86	.283	.420	1.000	
Orientation Service	400	24.36	5.19	.237	.393	.405	1.000

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 1 shows the zero order correlation, mean and standard deviation of the variables. The results on the table indicates that significant relationship exist between the independent variables and the dependent variable (student discipline) in order of magnitude as thus:, counselling service (R=0.342, p<0.05), information service (R=0.283, p<0.05) and orientation service (R=0.237, p<0.05). This indicates that guidance and counselling services such as counseling, information and orientation has positive relationship with student discipline. This implies that counselled, well informed and oriented students are well behaved, focused and disciplined in school.

Research Question Two: What joint impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?

Table 2: Joint impact of the independent variables on the dependent variable

R	0.412					
R Square	0.169					
Adjusted R Square	0.164					
Std. Error of the Estimate	6.4619					
ANOVA						
	Sum of Squares	Df	Mean Square	F	P	Remark
Regression	11022.94	4	2755.74	25.59	.000	sig
Residual	42530.73	395	107.67			
Total	53553.67					

Table 2 shows that the independent variables (counseling, information, orientation services) has significant joint impact of 25.59% on dependent variable (student disciplined behavioural disposition) $F(4/395) = 25.59; p < 0.05$.

Research Question Three: What relative impact does counselling, information and orientation counselling services offered to students have on their expressed disciplined behavioural disposition in Ibadan Metropolis?

Table 3: Relative impact of the independent variables on the dependent variables

Variable	Unstandardised Coefficient		Standardised Coefficient	Rank	t	p	Remark
	B	Std. Error	Beta				
Constant	25.20	1.179	-		21.38	.000	sig
Counselling Service	.749	.093	.396	1 st	9.62	.000	sig
Information Service	.587	.071	.310	2 nd	7.611	.000	sig
Orientation Service	.503	.067	.281	3 rd	5.880	.000	sig

Table 3 shows that counselling had the highest relative impact on students discipline ($\beta=0.396$) followed by information ($\beta=0.310$) and then orientation ($\beta=0.281$) made the least contribution. This indicates that these independent variables are vital in enhancing students discipline in school.

Research Hypotheses One: There is no significant relationship between the provision of counselling service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis

Table 4: PPMC summary table showing significant relationship between counselling and expressed disciplined behavioural disposition of secondary school students.

Variable	N	Mean	SD	R	Df	P
Student Discipline	400	33.26	7.07	.342	398	sig
Counselling Service	400	30.48	8.42			

Table 4 reveals that counselling service significantly correlates with expressed disciplined behavioural disposition of secondary school students, $r(398) = 0.342$, $p < .05$, the mean and standard deviation for counseling service was 30.48 and 8.42 respectively. With this result, the H_0 : is thus, rejected.

Research Hypotheses Two: There is no significant relationship between the provision of information service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis

Table 5: PPMC summary table showing significant relationship between information service and expressed disciplined behavioural disposition of secondary school students

Variable	N	Mean	SD	R	Df	P
Student Discipline Information Service	400	33.26	7.07	.283	398	sig

Table 5 reveals that information service significantly correlates with expressed disciplined behavioural disposition of secondary school students, $r(390) = 0.283, p < .05$. The mean and standard deviation for information service was 27.37 and 6.86 respectively. With this result, the H_0 is thus, rejected.

Research Hypotheses Three: There is no significant relationship between the provision of orientation service and expressed disciplined behavioural disposition of secondary school students in Ibadan Metropolis

Table 6: PPMC summary table showing significant relationship between orientation service and expressed disciplined behavioural disposition of secondary school students

Variable	N	Mean	SD	R	Df	P
Student Discipline Orientation Service	400	33.26	7.07	.237	398	Sig

Table 6 shows that orientation service correlates significantly with expressed disciplined behavioural disposition of secondary school students, $r(398) = 0.237, p < .05$. The mean and standard deviation for self-concept was 36.37 and 9.805 respectively. With this result, the H_0 is thus, rejected.

Discussion of findings of the Study

The findings of the first research question shows that significant relationship exist between the independent variables and the dependent variable (disciplined behavioural disposition among secondary school students) in order of magnitude as thus:, counselling service ($R=0.342, p < 0.05$), information service ($R=0.283, p < 0.05$) and orientation service ($R=0.237, p < 0.05$). This indicates that guidance and counselling services such as counselling, information and orientation has positive relationship with expressed disciplined behavioural disposition among secondary school students. This implies that counselled, well informed and oriented students are well behaved, focused and disciplined in school. This indicates that

the provision of guidance and counselling services to students are critical components of an ideal educational school system. This is because one of the key purposes of providing guidance and counselling services to students in schools is to help them develop their self-awareness and self-confidence. These are essential qualities that would enable students to appropriately take responsibility of their actions in life, make dynamic decisions and live a disciplined life. This is consistent with the assertions of Sahu (2020) that guidance and counselling services provided for students in school is pivotal for their all-round developmental wellbeing as it helps foster quality growth and the building of sound personality in children. Through the provision of guidance and counselling services, children are helped to develop the capacity required to manage emotional challenges and effectively control socio-personal problems that could negatively impair their developmental progress. Sahu (2020) further contended that ideal guidance and counselling services will help students integrate valuable experience in their day to day life. Some experience could see students developing problem solving skills that will enable them have the ability to handle psycho-emotional problems that can impact negatively on their ability to concentrate on their studies in school. Invariably, this helps to positively shape behaviour of students and instill desired discipline in them.

The result of the second research question shows that the independent variables (counselling, information and orientation services) has significant joint impact of 25.59% on dependent variable (disciplined behavioural disposition among secondary school students) $F(4/395) = 25.59$; $p < 0.05$. This implies that guidance and counselling services such as (counselling, information, and orientation services) when offered to secondary school students, has significant positive predictive impact on their behavioural conduct, discipline and general developmental wellbeing. This corroborate the assertion of Sahu (2020) That students that are well counselled and guided by school counsellors do learn how to appreciate self and others in a peaceful manner and equally live in harmony with others within and outside the school community. It aids to facilitate peaceful relationship between school administration and the students since proper counselling allows students to have the willpower to freely discuss with their teachers about diverse experiences that are unpleasant to them. Through this, they can easily share certain problems they might find difficult to share with their parents at home. For example, issues related to unemployment, sexual abuse, depression, drug abuse, alcohol abuse, fear of failing in exam, personal-social feelings, peer pressure to be involved in indiscipline acts, career challenges, etc, that can make them feel troubled and express anti-social behaviour towards self and others (Sahu, 2020).

The findings of the third research question indicates that Counselling had the highest relative impact on students discipline ($\beta=0.396$) followed by information ($\beta=0.310$) and then orientation ($\beta=0.281$) made the least contribution. This shows that counselling serves as an ideal mechanism that is used to positively modify students' behaviour. Guidance Counsellors provide varied guidance and counselling services for students in schools that help them adjust favourably and express disciplined behavioural dispositions in their daily conduct. According to Darakhshan and Shameem (2023) when counsellors render effective guidance and counselling services in school, it helps to foster creative collaboration between counsellors, parents, teachers, administrative personnel and significant others in school and it promotes a supportive, innovative and disciplined learning environment for students. This creative collaboration often help to identify and address issues of students indiscipline and maladaptive behaviours early, leading to improved personal and academic development. This shows that the provision of guidance and counselling services in schools is critical to students learning, behavioural conduct and discipline.

The result of the first research hypotheses shows that counselling service significantly correlates with disciplined behavioural disposition among secondary school students, $r(398) = 0.342, p < .05$, the mean and standard deviation for counseling service was 30.48 and 8.42 respectively. This indicates that counselling service can be effectively used to help students' develop the capacity to self-regulate their behavioural dispositions positively. This finding corroborates that of previous researchers. For example, Okirigwe (2020) found that counselling services has positive influence on students' obedience to rules and regulation, of the school. Ngole (2022) reported that counselling was effectively used to manage and improve discipline among secondary school students.

The findings of the second research hypotheses revealed that information service significantly correlates with disciplined behavioural disposition among secondary school students, $r(398) = 0.283, p < .05$. The mean and standard deviation for information service was 27.37 and 6.86 respectively. This implies that information service can help students' appropriately appraised their strength and weaknesses and self-rediscover their potentials. For example, Mogbana, et al (2022) found that information service provided by consellers in school to students help improve discipline, creative students teachers engagement and enhance competent interpersonal relationship. Thus, information services ensures positive development of students and makes teaching and learning take place in a conducive environment. Researchers Mogbana, et al (2022) and Oviogbodu (2015), affirmed that In the process of guidance and counselling interactive relationship, information given help students'

development holistically and prevent development of anti-social behaviour. Thus, information services serves as an ideal therapy to foster discipline behaviour among school children as it helps them develop the capacity to solve their problems in an effective manner that will ensure their emotional stability and functional adaptability.

The result of the third research hypotheses revealed that orientation service significantly predict disciplined behavioural disposition among secondary school students, $r(398) = 0.237$, $p < .05$. The mean and standard deviation for self-concept was 36.37 and 9.805 respectively. This shows that orientation is vital for students' intellectual, behavioural and developmental adjustment for functionality and productivity. Also, Hamilton Wentworth District School Board Report (2021) revealed that orientation programme provided in schools help promote a positive relationship climate that supports student to attain high academic achievement, sound mental health, and general well-being. The orientation policy detail proactive approach that utilizes strategies to promote the building of social skills, interventions to reinforce good discipline behaviour and to change students' maladaptive behaviours to adaptive ones and progressive discipline. Likewise, Oduh et al (2020) study found that majority of the students agreed that the use of orientation programme help reduce the incidence of indiscipline among students and enhance the expression of disciplined good behaviour by students.

Recommendations

1. Students should be given adequate orientation, of the benefit of utilizing guidance and counselling services as a means for them to maximize their potentials. This would encourage them to go for counselling as the need arises.
2. The school authorities should give positive support to the activities of trained professional counsellors and provide them conducive environment and facilities to function in school.
3. The government and concern agencies should give necessary and adequate funding and support to guidance and counselling activities in schools as a means to help foster discipline in schools and support students to discover their potentials and maximize them productively.

Conclusion

The provision of guidance and counselling services such as counselling, information and orientation are crucial to facilitating needed behaviour modification process in schools, and

they play a significant role in ensuring that students are well behaved, disciplined and that they receive worthwhile education that would add value to their lives.

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6

RETHINKING ADULT LITERACY PROGRAMMES FOR YOUTHS' EMPLOYABILITY AND EMPLOYMENT CREATION IN EPE COMMUNITY, LAGOS STATE

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Abstract

This study investigated rethinking adult literacy programmes for youth employability and employment creation in Epe community, of Lagos State, Nigeria. Three objectives and three research questions were drawn with two research hypotheses formulated to address various issues pointed out in the statement of the problem for this research. Descriptive survey research design was adopted for the study. The population of the study was comprised of 20 adult instructors selected from five adult literacy centers and 150 participants who enrolled in adult literacy programme to make a total of 170. Questionnaire were administered to the entire respondents. The reliability coefficient of the structured questionnaire recorded was $r=0.888$. The retrieved questionnaires were analysed using descriptive statistics for the research questions and to test the hypotheses raised for the research. The study revealed, among other things, that adult literacy programmes designed to address the employability of youths in Epe community has no impact on the lives of the participants. The need to rethink adult literacy programmes through the establishment of programmes that are geared towards the needs of the participants has become imperative. This has become necessary in the light of the high technological driven world as it relates to functionality and promotion of capacity building of the participants in Epe community. Based on the findings of the study, it was recommended that there is urgent need to rethink adult literacy programmes and that government should establish literacy centers with effective supervision of the centers for functionality as well as to promote capacity building of the participants in Epe local government community in Lagos State, Nigeria.

Keywords: Adult literacy programmes, employability, functionality, job creation, Epe community

Introduction

Adult illiteracy is a growing problem in Nigeria today with an estimated 23 million adults considered to be functionally illiterate (Itasanmi, Akintolu & Oni, 2021). The existence of these adult populations with weak literacy skills is not peculiar to Nigeria alone as researches have shown that a low level of literacy also exist in other high-income countries. In recent

years, direct assessments of adult literacy skills in richer countries reveals a significant percentage of adults whose literacy and numeracy skills fall below a minimal proficiency level (Journal of literacy research, 2023). More importantly, the awful illiteracy level in Nigeria informed the giant stride taken by the government, Non-Governmental Organisation (NGOs), Educators, Stakeholders and policy makers, towards the eradication of illiteracy through various adult literacy programmes. However, for such adult literacy programmes to be meaningful in the lives of the recipients, it must be functional in terms of its ability to transfer knowledge gained from such programmes to solving personal and societal problems. Radley, Quigley and Bailey (2021) stated that functional literacy is an intellectual equipment for the individual to enable him/her to become not only literate but to be able to perform other tasks that are beneficial to him/her and to the society in which he/she lives. Functional literacy is thus work-oriented, career, or occupation-oriented literacy. Therefore, for adult literacy programmes to be meaningful and impactful, it must not be limited to just teaching of reading, writing and computing, it must be functional while satisfying adults' collective and individual needs in order to make them functional members of their society (Priksat, Montague, Connell, & Burgess, 2021)

Regrettably, existing evidence indicates that due to low quality instruction, inappropriate materials and/or unqualified teachers, many participants of adult literacy programmes are unable to sustain initially realised skills gained over time. Thus, the likelihood of poorly educated adults remedying an inadequate acquisition of literacy skills later in life is weak. The global scale of this problem is difficult to assess, since the international monitoring of adult literacy programme attendance is uneven and, in many countries, the tendency is to equate the number of enrollees with the number of beneficiaries (Nwafor & Agi, 2021)

However, with the growing increase for a high-level demand for increasingly complex literacy skills due to changing technologies and labour markets, the need to embrace 21st century technological demand has become imperative, hence the focus of this study is to assess the functionality of adult literacy programmes for youths' employability and employment creation in Epe Community, Lagos State. It examined whether the skills gained by the adults who participated in literacy programmes are sustainable and to what extent these programmes are affecting the young adults in the community in terms of employment creation which is a critical concern of policy makers worldwide. As young adults are getting to a working age, they make up the hope of the future, but if today's employment rates remain unchanged, only 40 percent of the additional job market entrants will get jobs

(Suleman, 2022) Finding jobs, especially jobs that offer secure earnings, is particularly difficult for young people who often lack the experience, skills, social networks and assets to access wage- or self-employment. Therefore, the Long spells of unemployment or underemployment will continue to undermine future job prospects for the youths and can also lower future earnings.

As noted by Moore and Morton (2022). These young people have become fragile especially in conflict prone or violent countries which renders them vulnerable to crimes and owing to limited livelihood opportunities which predisposes and makes them susceptible to participating in violence and/or conflicts. These demographic, social, economic and political factors have thus positioned policy makers to focus on the importance of ensuring sustainable employment opportunities for the youths.

This study conceptualises employability as a set of attributes and skills perceived as important for young adults to gain employment within the labor market in order to realize their potentials through sustainable employment outcomes which refer both to direct and indirect job creation, including firm start-up, as well as improvements in the quality of jobs as manifested in higher earnings as self-employment or increase in household income using adult literacy programmes as a vehicle to achieving these goals. According to Garimella, Shenoy, Pai and Shetty (2022), various adult literacy programmes exist for achieving the objective of helping young adults in terms of employability. These include women empowerment programmes, vocational skills acquisition and training, advocacy and conscientization programmes, digital skills training and all the various ICT training programmes.

In the light of this identified problem, the study tested and examined the hypothesized relationships between adult literacy programmes and employability and employment creation for youths in Epe local government area of Lagos State. To guide the study, the following research questions were formulated. 1. What functional impacts has adult literacy programmes made on the young adults' employability in Epe Community? 2. What are the functional impacts of adult literacy programme in ensuring employability of the participants? What functional impacts has adult literacy programme made on the young adults in job creation?

Statement of the Problem

The global literacy challenge is a call to action to all stakeholders to work constructively in promoting more focused and better-conceived adult literacy programmes and strategies for youth employability and job creation. Despite the efforts of all concerned in achieving these lofty goals, many youths still lack the skill for sustainable employment opportunities and job creation.

This has serious consequences as many of these young adults are unable to find jobs, especially jobs that offer secure earnings, owing to lack of experience, skills, social networks and assets to access wage-or self-employment. Thus, these long spells of unemployment or underemployment have continued to undermine future job prospects for the youths, majority of whom have become fragile, alienated, disappointed and frustrated and are thus contributing to social unrest and violence in the society.

Given the apparent chaos, there is reason to be concerned that these young people are increasingly becoming a menace to the social environment. This is evidenced by the significant negative consequences that are directly related to the demographic, social, economic and political factors affecting youth's employability and ability to create jobs.

Purpose of the Study

The purpose of the study was to investigate the relevance of adult literacy programmes on youths' employability and employment creation in Epe Community In Lagos State. Specifically, the objectives of this study are to:

- i. examine the relevance of adult literacy programmes on youth employability in Epe community in Lagos State
- ii. determine the effectiveness of adult literacy programmes in ensuring employment creation of youths in Epe community
- iii. investigate the extent to which beneficiaries of these programmes have utilized the skills gained in enhancing the quality of their lives

Research Questions

- i. To what extent has the relevance of adult literacy programmes influenced youth employability in Epe community, Lagos State?

- ii. How significant is the effectiveness of adult literacy programmes in ensuring employment creation of youths in Epe community?
- iii. In what ways has the beneficiaries of these programmes been able to utilise the skills gained in enhancing the quality of their lives?

Research Hypothesis

- i. Youth participation in adult literacy programmes will not have significant relevance on their employability status
- ii. Youth participation in adult literacy programmes will not have relevant impact on employment creation.

Research Methodology

Research Design-In this study, a descriptive survey was adopted as the research design. This is a research method that uses survey to gather data about a population or phenomenon in order to describe it accurately. This design was found to be appropriate to this study as it enables the researchers to gain an understanding of the phenomenon being studied. This involves the collection of data through surveys, interviews and observations.

To investigate the impact of adult literacy programmes on youth employability and employment creation, it is necessary to discover and describe the experiences and perspectives of the individuals involved. Hence, the research questions were descriptive.

The Study Area : Epe was chosen as the study area and it is a suburb in the metropolitan city of Lagos State located on the Northern side of the Lekki Lagoon, with a population of 181, 409 (Nigeria Population Commission, 2013). Epe was selected owing to the peculiar nature of the area and the vast array of unemployed youths which provided samples for the research. **The Population of the Study-** The population of the study was made up of all adult learners (youths) and instructors in all (10) Adult Education Centers in Epe Local Government Area which consisted of twenty-five (45) Adult instructors and one two hundred and sixty-five (265) registered adult learners (youths).

The target population: This consists of twenty (20) adult educators and one hundred and fifty (150) adult learners which constitutes the youths that participated in the literacy programmes.

Sample and Sampling Techniques

The sample size of the study was 170 respondents comprising of 20 adult instructors and 150 adult learners. The sample size was arrived at using Simple Random Sampling technique of 'Hat and Drop' to select 5 adult learning centers from the existing 10 centers in Epe local government area of Lagos State obtained from the Agency for Mass Education, Alausa, Ikeja. The sample size of the adult learners/youths was determined using Taro Yamane (1967) statistical model cited by Adam (2020). The choice of this technique was informed by the simplified formula for calculating sample sizes.

Research Instruments

In order to assess the impact of the adult literacy programmes on youth employability and employment creation, the instrument for data collection was research-made questionnaire made up of eighteen (18) items. The instrument was made up of two sections-A and B section A was centered on the Bio-data of the respondents while section B is made up of three clusters each containing items related to each of the research questions respectively. The items were assigned a four-point response scale of Strongly Agree, Agree, Disagree and Strongly Disagree. These had a corresponding value of 4, 3, 2, and 1 respectively.

Content Validity- The instrument was face validated by three experts (Lecturers in the department), one in Measurement and Evaluation and two in Adult Education all in Lagos State University of Education, Epe Campus, Odo-Noforija, Lagos State .

The comments and suggestions made by the experts were used to modify the items on the instruments.

Reliability of the instrument was ascertained using test-retest method, with time lag of two weeks outside the area of the study. Using Pearson Product Moment Correlation, a correlation co-efficient of 0.78 was obtained.

Procedure For Data Collection

The researchers administered copies of the questionnaire to the respondents with the help of three research assistants. All the copies of the questionnaire administered were well filled and retrieved. The data was analyzed using mean Statistics. Mean score of 2.50 was used as cut-off point.

Data Analysis

Quantitative and qualitative data were analyzed using acceptable professional standards. The qualitative data were analysed using thematic analysis while the Quantitative analysis was done with the aid of SPSS version 23. The data from the questionnaire were analyzed using frequency count, simple percentages, mean and standard deviation.

Analysis of Results

Table 1: Mean responses on functional impacts of adult literacy programme on youths' employability in Epe Local government

S/N	Items Statement	SA	A	D	SD	X	Decision
1	Adult Literacy Programme equips participants with skills that enhances their employability?	35 20.6%	30 17.6%	50 29.4%	55 32.3%	1.9	Disagreed
2	Adult Literacy Programme helps Participants in acquiring social skills needed for employment creation?	30 17.6 %	50 29.4%	55 32.3%	35 20.6 %	1.6	Disagree
3	It enables them to discover their innate abilities, an essential quality of employability	30 17.6%	44 25.9%	66 38.8%	30 17.6%	1.9	Disagree
4	Adult Literacy Programme helps participants to develop better relationship with colleauges?	20 11.8%	45 26.5%	67 39.4%	38 22.4%	2	Disagree
5.	Through Adult Literacy Programme participants are well enlightened on the relevance of skill acquisition for job creation	27 15.9%	55 32.3%	70 41.2%	18 10.6%	1.5	Disagree
6.	Adult Literacy Programme has helped the participants become better qualified and prepared for employability?	25 14.7%	45 26.5%	70 41.2%	30 17.6%	1.2	Disagree
Total Mean				2.91			

Source: Field Survey, 2024

Table 1 shows the mean responses of the participants on the functional impacts of Adult Literacy programmes on their employability. All the six items were rejected by the respondents with mean scores of 1.9, 1.9, 2.0, 1.5, and 1.5. This implies that Adult Literacy

Programme has negative impacts on the employability status of the participants enrolled in Adult Literacy Programme.

Table 2: Mean responses on the effectiveness of adult literacy programmes in ensuring employment creation of youth in Epe community LG

S/N	Items Statement	SA	A	D	SD	X	Decision
7.	Adult Literacy Programmes equip participants with skills that enhances their employability and employment creation?	25 14.7%	50 29.4%	70 41.2%	25 14.7%	1.9	Disagree
8.	The level of training acquired was sufficient enough to create employment?	30 17.6%	40 23.5%	55 32.3%	45 25.9%	2.1	Disagree
9.	It enables them to discover their innate abilities, an essential quality of employability	35 20.6%	40 23.5%	55 32.3%	40 23.5%	2.4	Disagree
10.	Participants were well exposed to the various skills required to set up one's business?	30 17.6%	50 29.4%	50 29.4%	40 23.5%	2.0	Disagree
11.	Through Adult Literacy Programmes participants were well grounded with the fundamentals of successful job creation	25 14.7%	35 20.6%	70 41.2%	40 23.5%	2.0	Disagree
12.	Adult Literacy Programmes have helped the participants become better qualified and create employment opportunities for others	10 5.9%	70 41.2%	65 38.2%	25 14.7%	2.4	Disagree
Total Mean						2.91	

Source: Field Survey, 2024

Table 2: shows the mean responses of the respondents on the functional impact of Adult Literacy Programmes on the effectiveness of ensuring employment creation. All the items are rejected with mean scores follows; 1.9, 2.1, 2.4, 2.0, 2.0, 2.0, and 2.4. The result shows that Adult Literacy Programme has not impacted youths with employment creation.

Table 3: Mean responses on the functional impacts of adult literacy programmes on the extent to which beneficiaries of these programmes have utilized the skills gained in enhancing the quality of their lives.

S/N	Items Statement	SA	A	D	SD	X	Decision
13.	The Participants were able to utilize the skills acquired for themselves	10 5.9%	65 38.2%	60 35.3%	35 20.6%	1.5	Disagree
14.	The set of skills acquired was immensely useful for setting one's own job?	50 29.4 %	70 41.2%	30 39.4%	20 11.8%	2.4	Disagree
15.	There is a correlation between the skills acquired and personal development enhancement in the process of employment creation?	30 17.6%	35 20.6%	50 29.4%	55 32.3%	2.2	Disagree
16.	Participants were able to create their own jobs from the knowledge gained while attending the programmes	30 17.6%	40 23.5%	55 32.3%	45 26.5%	2.0	Disagree
17.	Exposure to the basic entrepreneurship skills greatly impacted the participants in becoming employable while creating their own jobs	25 14.7%	50 29.4%	55 32.5%	50 29.4%	1.0	Disagree
18.	Participants were able to attain all the objectives set out before, and this was demonstrative in the outcome in terms of the goals achieved?	30 17.6%	50 29.4%	60 35.3%	40 23.5%	1.8	Disagree
Total Mean						2.91	

Source: Field Survey, 2024

Table 3 shows the mean responses of the respondents on the functional impact of Adult Literacy Programme on the extent to which beneficiaries of these programmes have utilized the skills gained in enhancing the quality of their lives. Four out of five items were accepted with mean score as follows: 1.5, 2.4, 2.2, 2.0, 1.0 and 1.8. This implies that Adult Literacy Programme did not influence the youths positively as it relates to the objectives of the programme.

ANALYSES OF RESEARCH HYPOTHESES

Hypothesis one: Youth participation in adult literacy programmes has no significant impact on their employability status

Table 4: Adult literacy programmes on the employability of youths in Epe Local government undergraduates

	Estimate	S.E.	C.R.	P	LABEL
<---Adult Literacy Programmes	.806	0.34	23.637	***	NOT SIGNIFICANT

Source: Researcher’s field, 2024

To determine the effect of Adult literacy programmes on employability of youths in Epe local government, simple regression analysis method was used. Employability represents the dependent variable while adult literacy programmes represent the independent variable. The result of the analysis revealed that adult literacy programme (Estimate = .806, $p < .001$) has no significant effect on the employability of youths. Hence, the hypothesis is accepted at 95% confidence interval since $p = 0.001 < 0.05$; therefore, adult literacy programmes will not significantly influence employability of youths in Epe local government. By implication with regard to the effect of the study, the table revealed that the adult literacy programme has not made the significant effect on the participants.

Hypothesis two: Youth participation in adult literacy programmes has no significant impact on employment creation

Table 5 Adult literacy programmes on employment creation

	Estimate	S.E.	C.R.	P	LABEL
<---youth participation in adult literacy programme	-.20	0.35	-551	.581	NOT SIGNIFICANT

Source: Researcher’s field survey, 2024

To determine the effect of youth participation in adult literacy programmes on employment creation of youths in Epe local government, simple regression analysis method was used. Employment creation represents the dependent variable while adult literacy programmes

represent the independent variable. The result of the analysis revealed that adult literacy programmes (Estimate = .30, $p < .26$) have no significant effect on the employment creation of youths in Epe local government. Hence, the hypothesis is accepted at 95% confidence interval since $p = 0.260 > 0.05$; youth participation in adult literacy programmes will not significantly influence employment creation of youths in Epe local government

Discussion of Findings

Table 1 indicated that the Adult Literacy Programmes provided for the youths in Epe local government area of Lagos State is not functional and has no significant input in their lives. The result shows that the programme has not in any way proved to be beneficial to the youths. This finding agrees with Fox and Kaul (2021) who states that the most important reason for the failure of any programme is when it is not aligned to the needs of the participants. He further explains that for adult literacy programmes to be relevant, functional and beneficial it must be designed in line with the interest and immediate needs of the beneficiaries. Regrettably, adult Literacy Programmes have not made much impact on the lives of the youths in the community.

Result in Table 2 equally showed that Adult Literacy Programme has no significant influence on employment creation. This finding agrees with Clarke (2021) who states that adult Literacy Programmes should not only teach the adult learners how to read and write, but also how to manage adequately their own businesses, to increase productivity and improve their vocational and technical skills and aptitudes. He stresses that for youths to survive economically and independently in the twenty-first century, with its competing demands, they need to be adequately prepared through training. According to Carr-Hill and Roberts (2020), literacy programmes prepare people to bring healthy changes in the society, so that the future is planned to be better than the past and the present. It was however observed that adult Literacy Programmes offered to the youths in Epe local government has not helped them to attain the requisite functional skills they need to function effectively and efficiently in their capacity as future leaders of tomorrow.

Conclusion

The study delved into the functional impact of Adult Literacy Programmes in youth employability and employment creation in Epe local government area of Lagos State. The rationale behind the study as stated in the purpose was to find out the extent of the adult literacy programme as presently conducted in Epe community, help in giving the participants

the required skills to make them employable as well as creating jobs for others. Research findings from the study clearly showed the adult literacy programmes as run in the various centers has not in any way made significant effects on the lives of the participants as majority of the participants that were interviewed agreed that they did not benefit from the programme.

From the findings it is therefore, concluded that Adult Literacy programmes provided for the youths of Epe L.G.A were not functional and as a result did not in any way influence the youth positively in improving their lives. These are vital issues that need to be tackled through functional literacy in order to create an enabling environment for meaningful development in the community

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The need to Rethink Adult literacy programme. Organizers should carry out periodic assessment of the needs of community and plan their programmes accordingly.
2. A Ministry of Adult and Literacy, non-formal Education should be created to take over the administration of Adult literacy programmes in Nigeria.
3. **Funding:** Adult Education should be adequately funded to meet the demands of its various programmes.
4. Professionals and well qualified adult educators only should be employed to teach in adult literacy programmes in the country.
5. Private Business bodies should also be involved in the design of relevant skills and programmes that will bring about job creation and Employability of adults that are engaged in Adult Literacy programmes.

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7

TEACHERS' AND STUDENTS' PERCEPTIONS OF CHEMISTRY EDUCATION IN THE NEW CHEMISTRY CURRICULUM AT EDUCATION DISTRICT III SENIOR SECONDARY SCHOOLS, LAGOS STATE

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Abstract

Chemistry education involves various activities that occur in the environment to live a fulfilled life through chemistry knowledge. Therefore, this study explored the perceptions of teachers and students about chemistry education using the new chemistry curriculum in senior secondary schools in Education District III, Lagos State. Three research questions guided the study. The research method was non-experimental with a descriptive survey research design. The population comprised the senior secondary schools in Education District III, Lagos State where a multi-stage sampling procedure was used to select 487 chemistry students and 54 chemistry teachers for the study. Teachers' Perceptions of Chemistry Curriculum Questionnaire and Students' Perceptions of Chemistry Curriculum Questionnaire were constructed (Likert-type response format) to elicit responses from the sample for the study. Face and construct validity of the items were established, and the reliability established using Ordinal Alpha ($\alpha=0.78$). Standard deviations of the responses were found to be 6.99 for teachers and 0.77 for students. Descriptive and thematic analyses were used, and results generated discussed accordingly. Conclusions revealed that senior secondary school chemistry teaching is carried out by qualified personnel in ED III, Lagos. Also, the realization of government intentions for her citizenry through chemistry education needs progressive continuity. Recommendations made included inclusions of state actors in the curriculum process and the need to spread professional development programmes across the teaching staff in Education District III, Lagos State.

KEYWORDS: Perceptions of teachers and learners, chemistry education, new chemistry curriculum

Introduction

Education is a process of exposing individuals in every society to the rudiments of having fulfillment in life endeavours. This begins from childhood and continues through life journey for most individuals. It is an unending process which transcends generations such that better understanding and retention of ideas can be enhanced. Education process is for increased creativity and innovation using the acquired knowledge through critical thinking and problem-solving by self-motivated engaged learners. Transcendence in education is about adding value to what has been acquired for transformation both directly and indirectly in the environment. It is about making impacts both qualitatively and quantitatively to the immediate and larger society. This often results in changes in students' perspectives, values, and understanding of him or herself in this sphere.

Nigerian Education System is structured into the following; thus, basic education (early childhood care and education, lower basic education, middle basic education and upper basic education), post-basic education and career development centres (senior secondary schools, technical colleges and vocational centres) and tertiary education (Monotechnics, Polytechnics, and Universities) (FRN, 2014). Chemistry education, a avenue of exposing growing individuals to the environment, begins very early in life both consciously and unconsciously in every society. Taber (2013) explained that chemistry education is the process of guiding and supporting students to develop how to understand the chemical world, its concepts, principles, processes, and applications in and out of the classroom.

Smith (2017) said that chemistry education is the study of teaching and learning chemistry, with the goal of developing scientifically literate citizens. Chemistry studies matter, its properties and compositions. Matter is any substance that occupies space and has mass. The visible and non-visible, living and non-living substances in every environment are referred to as matter. These materials exist in numerous different forms known as phases. Chemistry deals with the properties of chemicals and the changes chemicals can undergo. Chemicals make up what we have, see and use around us. Chemicals are substances that have definite composition, always made of the same stuff from any origin in the world (Myers, Oldham, & Tocci, 2021).

Therefore, chemistry is compulsory for Science and Mathematics, and Technology options as fields of study for senior secondary education apart from the crosscutting subjects for post-basic and career development education stage in Nigeria (FRN, 2014). Chemistry study at

senior secondary stage prepares learners for pure and applied science programmes in higher institutions globally.

Nigerian Chemistry curriculum has witnessed several reviews based on meeting up with emerging change(s) both in the immediate environment and the larger society. Under the 6-5-4 educational system (6 for six years for primary education, 5 for five years for secondary education, and 4 for four years minimum for tertiary education). Initially, the chemistry syllabus was recommended by the West African Examinations Council (WAEC) as the examining body under the 6-5-4 dispensation. Teaching and learning about chemistry contents began at the basic education both directly and indirectly before it was introduced as a compulsory subject for science and mathematics, and technology students under senior secondary education.

The themes in chemistry curriculum cover these four areas: thus (i) chemistry and industry, (ii) chemistry and environment (iii) the chemical world, and (iv) the chemistry of life. The single-subject curriculum is thematic in approach because it desires to bring up learners such that they can link schooling and daily-life experiences as they learn chemistry in the classroom. These themes take cognizance of both living and non-living things as desired by the goals captured under the Sustainable Development Goals. This has led to making chemistry an important requirement to pursue some programmes in higher institutions of learning. The new chemistry curriculum for senior secondary schools in Nigeria encompasses both the 6-3-3-4 and the 10-3-4 systems simultaneously.

The Chemistry curriculum accommodates Education for All (EFA) and the Millennium Development Goals (MDGs) along with National Economic Empowerment and Development Strategies (NEEDS) programme, a home-grown structure (FRN, 2004) meant to meet the contemporary needs to be among the first twenty (20) economies in the world by the year 2020 but, yet to be fully actualized. The government has extended the plan to 2030 to accommodate the Sustainable Development Goals (SDGs) Agenda which began in 2015 with a target to actualize seventeen (17) goals by year 2030 all over the world. These goals are based on attaining peace and prosperity for both living and non-living things everywhere in the universe (UN, 2020). With all the preparations and intentions for chemistry education in schools, there is need for stakeholders' incorporation into the curriculum process especially the direct stakeholders such that everyone will be involved and contribute to the realization of the desired intentions. Hitherto, not too much evidence attests to this in Nigerian curriculum

processes. Hence, the need to gain perceptions toward the current chemistry curriculum from both learners and teachers in Education District III, Lagos State.

Perceptions can be seen as the process of organising and interpreting sensory information to give meaning to an issue at hand. Kotler and Keller (2016) defined perception as a process experienced by an individual in selecting, organizing, and interpreting information used to create a perspective of something. It is the way individuals recognise and interpret the situation on ground. Therefore, perceptions about new chemistry curriculum among teachers and learners will be linked to Gestalt theory where perception was referred to as the organization of experiences and exposures into meaningful structures and relationships. Gestalt viewed perception on how substances are perceived by different people around in the same environment. Substances are referred to as matter in chemistry and ability to link substances around as an entity through chemistry knowledge is germane. Gestalt came up with five principles that can assist chemistry teachers in the process are proximity, similarity, continuity, connectedness, and closure.

Therefore, teachers need to relate the contents to available substances in the environment such that this will awaken the sensory stimuli in the learners to achieve the stated objectives for chemistry education in Nigeria. Learning is the reconstruction of material(s) provided by the teacher, in the mind of each learner. It is the personal reconstruction of what individuals received clarity on from the new material presented, and moderated by the existing knowledge, beliefs, and others. Therefore, perceptions of teachers and learners about the content taught and learnt in chemistry are essential to determine how chemistry education is faring in Education District III, Lagos State. This is why this study sought out how much of these intentions have been imbibed by teachers and learners as direct stakeholders in curriculum process.

Inability to realize government intents are traced to some factors that beclouded curriculum implementation among which are effect of scheme of work from examination syllabus on students' academic achievement and interest in chemistry carried out in Enugu State which showed that academic performance of the experimental group taught using scheme of work from recommended curriculum was better compared to control group taught using the scheme of work from examination syllabus. This established that the content coverage by teachers to learners involved was different despite exposing them to the same examination and there was disparity in learning outcomes between the experimental and control groups in Enugu State.

Gurung (2023) explored issues around the school curriculum and its relationship with teaching and learning in three public senior secondary schools, Nepal. This engaged the concurrent mixed method to collect needed data from key stakeholders including curriculum experts from Curriculum Development Centre, Kathmandu. The findings revealed that key stakeholders had not enough involvement in the curriculum development process and, centralised Nepal school praxis was greatly affected by centralised convictions and assumptions about the curriculum. Factors discovered from the qualitative data sorted had six (6) themes; thus, effect of a centralised curriculum and centralised educational system, effects of contexts with respect to social, economic, culture, unstable politics and policies, curriculum content compromises, stakeholders' interests differences in curriculum development process, assessment challenges, teachers' content and pedagogical knowledge and capacity to implement and enact curriculum intents.

Okorie and Akubilo (2013) conducted a study on ascertaining the extent of teachers' knowledge about the new Nigerian Educational, Research and Development Council chemistry curriculum in use in Nigerian secondary schools and determined if the recommended pedagogical approach was used in implementing the curriculum in schools. The sample used was drawn from Makurdi in Benue State and Enugu in Enugu State. The results revealed that 10% of the teachers are not familiar with the new curriculum, 15% of the teachers are not knowledgeable about the unique structure of the curriculum and 20% of chemistry teachers are not knowledgeable about the different dimensions embedded in the new chemistry curriculum (Okorie and Akubilo, 2013).

Also, curriculum fidelity in curriculum implementation contribute to unpreparedness among students for subsequent stages in the education ladder (Nevenglosky, Cale and Aguilar, 2018). The problems identified as clogs in the wheel of curriculum implementation affect the stakeholders in curriculum process but, the level differs between the two (2) categories which are primary, and secondary stakeholders (Adekola, 2021). In view of the problems lingering through the stakeholders concerned, this study found out the perceptions of chemistry teachers and students about the chemistry curriculum currently in use in senior secondary schools in Education District III, Lagos State.

Teachers and students as stakeholders are state actors in the curriculum implementation process therefore, they are directly affected from the onset of the processes involved. Teachers need to understand the curriculum developed before it can be used with clarity on

the learners both in and out of the classroom. Under normal circumstances, teachers supposed to be part of stage setter developing a new curriculum this is one of the reasons why this study decided to gather the views of chemistry teachers along with chemistry students with respect to chemistry education in Education District III, Lagos State.

Research Questions

1. What is the profile of chemistry teachers in Education District III in terms of age, qualification and attendance at professional development programmes?
2. What are the perceptions of chemistry teachers and their challenges about the new chemistry curriculum for senior secondary schools in Education District III, Lagos State?
3. What are the perceptions of chemistry students and their challenges about the new chemistry curriculum for senior secondary schools in Education District III, Lagos State?

Methodology

Research Design

The research method was non-experimental because no variable manipulation was required. Also, descriptive survey research design was adopted since data used were collected through questionnaire.

Population

This comprised the senior secondary schools in Lagos State.

Sampling Technique and Sample

A purposive sampling technique was used to select senior secondary schools in Education District III. Eligible senior secondary schools were discovered through the West African Senior Secondary Certificate Examinations (WASSCE) chemistry results for Education District III where Epe zone has 20 senior secondary schools, Eti-Osa zone has 8 senior secondary schools, Ibeju Lekki zone has 14 senior secondary schools and Island zone has 22 senior secondary schools respectively. Students needed from each zone were determined through proportional sampling technique where 156 students came from Epe zone, 63 students from Eti-Osa zone, 109 students from Ibeju-Lekki zone and 172 students from Island zone. 487 students filled the questionnaire, and 54 chemistry teachers returned the filled questionnaire, these constituted the sample for the study.

Instruments for Data Collection

Two instruments used to collect data are Teachers' Perceptions of Chemistry Curriculum Questionnaire (TPCCQ) and Students' Perceptions of Chemistry Curriculum Questionnaire

(SPCCQ). Teachers' Perceptions of Chemistry Curriculum Questionnaire (TPCCQ) was employed to gather opinions from chemistry teachers on chemistry curriculum in Education District III, Lagos State. Section A collected demographic information of the chemistry teachers in Education District III, Lagos State. Section B contained the Likert-type response format questions were scored using frequency and percentages. Item number 12 was utilized to determine from the teachers at least two (2) areas of the new chemistry curriculum included in their classroom interactions, and item number 13 expected chemistry teachers to list challenges confronting them in teaching chemistry in their various schools under Education District III, Lagos State.

Students' Perception of Chemistry Curriculum Questionnaire (SPCCQ) was used to collect information from chemistry students on chemistry curriculum in Education District III, Lagos State. The questionnaire explored chemistry students' perceptions, beliefs, and attitudes towards learning chemistry. Section A collected demographic information from chemistry students chosen for the study. Section B gathered information on chemistry students' perspectives on chemistry curriculum in Education District III, Lagos State. The Likert-type response format was adopted using frequency counts for responses and recorded for interpretation. Item number 16 was used to determine at least three (3) problems confronting chemistry students under Education District III, Lagos State.

Validation of Instruments

Face and content validity of the items constructed were carried out by chemistry experts and the reliability was determined using Ordinal Alpha (α) = 0.78 respectively.

Data analysis

Analyses of data collected were carried out using descriptive and thematic analysis.

Results

Research Question 1: What is the profile of chemistry teachers in Education District III in terms of age, qualification and attendance at professional development programmes?

Table 1: Chemistry Teacher Profile in Education District III, Lagos State

Variables	Frequency	Percentage
(i) Age		
21-30	13	24.1
31-40	25	46.3
41-50	6	11.1
51-60	10	18.5
(ii) Qualifications		
NCE	2	3.7
B.Sc. (Ed.)	37	68.5
B.Sc.	6	11.1
M.Sc.	1	1.9
M.Sc. (Ed.)	4	7.4
M.Ed	2	3.7
B.Sc. + PGDE	2	3.7
(iii) Professional Development Programmes Attendance		
Conferences	10	18.5
Individual or collaborative research on new topic(s)	5	9.3
Mentor/mentee activity as part of formal school arrangement	5	9.3
Networking	3	5.6
Observation visits to other schools	5	9.3
Seminars	14	25.9
Vacation Courses	3	5.6
Workshops	6	11.1
Informal dialogue with colleagues	5	9.3

Table 1 revealed that the age of chemistry teachers in EDIII fell between 21-60 years. In which age range 31-40 has the highest frequency 25(46.3%) while age range 41-50 has the least frequency 6 (11.1%). Qualifications of chemistry teachers revealed that the minimum qualification for entry into teaching profession was the least possessed by chemistry teachers in Education District III. B.Sc. (Ed) has the highest frequency 37 (68.5%) while only 7 (13%) of chemistry teachers are without education qualification in the district. Also, it was discovered that chemistry teachers in Education District III have attended varied professional development programmes in which seminars have the highest attendee 14 (25.9%) and the least attended were networking and vacation courses respectively. This showed that teaching of chemistry in Education District III, Lagos State, was carried out by professional teachers which still undergo on-the-job training as the opportunity comes their way to improve teacher proficiency.

Research Question 2. What are the perceptions of chemistry teachers and their challenges about the new chemistry curriculum for senior secondary schools in Education District III, Lagos State?

Table 2a: ED III Chemistry Teachers' Perceptions about Chemistry Curriculum

Statements	SA	A	D	SD	U
New chemistry curriculum review involved teachers from Education District III, Lagos State	12(22.2%)	24(44.4%)	13(24.1%)	2(3.7%)	3(5.6%)
The new chemistry curriculum is very clear to teachers in Education District III, Lagos State	26(48.1%)	26(48.1%)	1(1.9%)	0	1(1.9%)
The new chemistry curriculum is relevant to real-life situations and societal activities	19(35.2%)	28(51.9%)	2(3.7%)	0	5(9.3%)
Learning objectives are both theoretical and practical oriented for every lesson	15(27.8%)	34(63.0%)	4(7.4%)	0	1(1.9%)
Chemistry teachers take chemistry students to relevant industries like soap/detergent factory, paint making company, water treatment plants, waste disposal sites, etc.	9(16.7%)	28(51.9%)	8(14.8%)	6(11.1%)	3(5.6%)
The new chemistry curriculum for senior secondary education can improve self-reliance among learners.	5(9.3%)	20(37.0%)	21(38.9%)	6(11.1%)	2(3.7%)
Teachers often use the new chemistry curriculum to prepare lesson note for chemistry classes	12(22.2%)	31(57.4%)	7(13.0%)	0	4(7.4%)
Chemistry teachers have Chemistry curriculum and Teacher Guide by Nigerian Educational, Research, and Development Council (NERDC)	11(20.4%)	30(55.6%)	10(18.5%)	0	3(5.6%)
The new chemistry curriculum and Lagos State Scheme of Work for Chemistry are the same.	13(24.1%)	35(64.8%)	2(3.7%)	1(1.9%)	3(5.6%)
Lesson periods allotted for teaching chemistry are adequate to finish the new chemistry curriculum.	8(14.8%)	25(46.3%)	12(22.2%)	7(13.0%)	2(3.7%)
Understanding chemistry will assist in other subjects due to the links among these subjects to	15(27.8%)	34(63.0%)	3(5.6%)	0(0%)	2(3.7%)

senior secondary chemistry
curriculum

Table 2a revealed the views expressed by chemistry teachers in EDIII, Lagos State. The standard deviation of the items $\sigma = 6.99$. This implied that about 68% consistencies were established in the responses while some responses are peculiar to the different chemistry teachers that participated in the study and other factors beyond the scope of this study.

Table 2b: Challenges identified by Education District III Chemistry Teachers, Lagos State.

Themes	Challenges identified	Frequency	%
I	Time for chemistry lesson	11	20.4
II	Equipment and Materials	23	42.7
III	Laboratory size/teaching and learning environment	10	18.7
IV	Knowledge of Curriculum Content	10	18.8
V	Teacher-Student Issue	2	3.7
VI	Funding	2	3.7

Table 2b revealed the challenges confronting EDIII chemistry teachers as identified by the sample under six (6) themes. Theme II (Equipment and materials) was identified by 23 (42.7%) as the most common challenge while teacher-student issue and funding had 2 (3.7%) each as the least problem among the chemistry teachers in Education District III, Lagos State. This implied that these problems are still existing, teachers need to prepare their minds on how to salvage the problem such that learning takes place however, it may be.

Research Question 3: What are the perceptions of chemistry students and their challenges about the new chemistry curriculum for senior secondary schools in Education District III, Lagos State?

Table 3a: ED III Chemistry Students' Perceptions about Chemistry Curriculum

Statements	SA	A	D	SD	U
I prefer chemistry to other science subjects.	8(1.6%)	54(11.1%)	234(48.0%)	181(37.2%)	10(2.1%)
Learning chemistry is an advantage when studying other science subjects.	248(50.9%)	214(43.9%)	15(3.2%)	5(1.0%)	5(1.0%)
Understanding chemistry helps me understand other subjects like Biology, Foods and Nutrition, Further Mathematics, Mathematics, Physics, Geography, and others.	184(37.8%)	240(49.3%)	48(9.9%)	7(1.4%)	8(1.6%)
Every student in SSS should study chemistry.	117(24.0%)	100(20.5%)	162(32.3%)	101(20.7%)	7(1.4%)
Every science student in SSS should study chemistry.	351(72.1%)	97(19.9%)	29(6.0%)	7(1.4%)	3(0.6%)
Chemistry contents should be different for various vocations.	107(22.0%)	199(40.8%)	113(23.2%)	28(5.7%)	40(8.2%)
Chemistry should not be offered beyond SSS	174(35.7%)	137(28.1%)	87(17.9%)	75(15.4%)	14(2.9%)
Everyone uses chemistry in some way in their daily life (food, toiletries, clothes, utensils).	270(55.4%)	153(31.4%)	45(9.2%)	10(2.1%)	9(1.8%)
Chemistry is related to many activities at home	227(46.6%)	186(38.2%)	57(11.7%)	10(2.1%)	7(1.4%)
It is beneficial to continue learning chemistry even at the tertiary level.	270(55.4%)	182(37.4%)	24(4.9%)	2(0.4%)	9(1.8%)
Chemistry curriculum contents for SSS is wide	233(47.8%)	203(41.7%)	34(7.0%)	8(1.6%)	9(1.8%)
Chemistry curriculum for SSS is available in our school.	236(48.5%)	175(35.9%)	48(9.9%)	18(3.7%)	10(2.1%)
Chemistry students should have a copy of the chemistry curriculum for senior	291(59.7%)	170(34.9%)	18(3.9%)	4(0.8%)	4(0.8%)

secondary schools.

Our chemistry teacher always brings the Lagos State Scheme of Work for chemistry to class. 295(60.6%) 161(33.1%) 18(3.9%) 5(1.0%) 8(1.6%)

Our chemistry teacher always provides the scheme of work for chemistry at the beginning of each term. 352(72.3%) 118(24.2%) 10(2.1%) 3(0.6%) 4(0.8%)

Composite Scores

Table 3a revealed the views expressed by chemistry students with respect to chemistry education in Education District III, Lagos State. Out of the fifteen items in the questionnaire, the responses showed that items 1 and 4 were not accepted by majority of the respondents while items 2, 3, 5, 6, 7, 8,9,10, 11, 12, 13, 14 and 15 were accepted by majority of the chemistry students in Education District III, Lagos State. This implied that many of the students have personally discovered the importance of chemistry to their daily lives and the subjects offered in senior secondary schools. Also, it showed that each vocation should study what relates to their subject contents such that the voluminous nature of chemistry contents can be streamlined for enhanced learning outcomes.

Table 3b: Challenges identified by Education District III Chemistry Students, Lagos State.

Themes	Challenges Identified	Frequency	%
I	Textbooks' non-availability	51	10.5
II	Equipment and materials in the laboratory	337	69.2
III	Reading style among learners	51	10.5
IV	Teachers' style of teaching	174	35.7
V	Laboratory Size	40	8.2
VI	Students issue	158	32.4
VII	Knowledge of Curriculum contents	12	2.5

Table 3b showed the challenges identified by chemistry students in Education District III, Lagos State under seven (7) themes. The result revealed that the challenges identified by chemistry students with highest frequency 337 (69.2%) was equipment and chemicals in the laboratory while the challenge identified with least frequency 12 (2.5%) was knowledge of curriculum contents respectively. This implied that problems identified during the previous

chemistry curriculum are still manifesting at various degrees. This is to alert every stakeholder to get ready to continually face these problems and devise what could be done to proffer solution whenever required such required teaching and learning takes place since government alone cannot do it all in every school.

Discussions

Findings from table 1 on age revealed that over 70% of chemistry teachers have over twenty years to teach chemistry if desired to stay at the secondary education stage while 18.5% of the staff are warming up for retirement. Akiri (2013) discovered the importance of teachers' experience on learners' academic performance in Delta State. Teachers' qualifications showed that Education District III have competent hands in chemistry education, this negates Ibhaze (2011). Therefore, with the crop of teachers on ground, there is need to overcome non-inclusion of stakeholders during curriculum development process as identified by Gurung (2023) in Nepal educational system such that innovations and reforms can be embraced with ease across the district and impact of professional training on the job.

Furthermore, findings from table 2a exposed that most of the teachers used the state scheme of work more than the chemistry curriculum for senior secondary schools in Nigeria. Some of the teachers could not differentiate the Lagos State scheme of work from the chemistry curriculum for senior secondary schools developed by Nigerian Educational Research and Development Council (NERDC). Chemistry teachers and students' responses showed that they are aware that chemistry knowledge cuts across the various activities both at home and in society. Findings on the challenges confronting both chemistry teachers and students in studying chemistry education in Education III, Lagos State have intersected factors to both sides which are equipment and materials, laboratory size and learning environment, and knowledge of curriculum contents.

Considering the knowledge of curriculum content among the students and teachers was consistent with what Okorie and Akubilo (2013) established, these stakeholders identified some topics that pose problems while teaching and learning chemistry among which are balancing equations, space chemistry shapes of molecules, acid, polymers, to mention a few. Other issues associated with curriculum contents were on broadness of some topics in the curriculum. If teachers have issues with contents to teach then, it will automatically have ripple effect on the learner which could be direct or indirect. It could be direct when some teachers skipped those topics or indirect when the topics are hapzardly treated during classroom interaction either during theory or practical session. The thinking of both teachers and learners are in consonance with Gestalt theory where substances in the environment are harnessed to link classroom activities to what makes the environment such that both can be seen as an entity. But equipment and chemicals remain a common problem and consistent with Okorie and Akubilo (2013) on non-availability of instructional resources.

Conclusion

This study looked at how chemistry education was carried out in Education District III, Lagos State by gathering the views of both teachers and students along with the challenges that

confront the teaching and learning of chemistry using the new chemistry curriculum for senior secondary schools in Nigeria. It was revealed that some of the problems identified as clogs in the wheel of curriculum process are still confronting chemistry education. The issue of human resources is gradually receiving appropriate attention since qualified personnel are on ground teaching chemistry in Education District III, Lagos State though, more chemistry teachers in the district will be added advantage. Though, an inference at this juncture can be there are substantial improvements in what operated before the new curriculum came on board. But at the same time, there is need for progressive continuity until the intentions for chemistry education are realized across board.

Recommendations

The following are the recommendations based on the evidence from the study.

- Impacts of stakeholders must be seriously attended to, such that every state actor in the curriculum process can be captured and contribute significantly to realizing desired intentions about chemistry in the schools and society at large.
- Professional Development Programmes need to be more pronounced and well spread to teachers to improve their efficiency on the job.
- Teachers need to be abreast of emerging innovations and reforms in their specialty.
- Availability of facilities for teaching and learning chemistry needs regular assessment for continuity in the school process.
- Human resources should not be ignored due to the observed improvement in Education District III senior secondary schools, Lagos State.

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8

A REVIEW OF SOME INSTRUMENTS USED FOR SELECTION AND PLACEMENT OF STUDENTS INTO INSTITUTIONS OF HIGHER LEARNING: IMPLICATIONS FOR BEST GLOBAL PRACTICES

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ABSTRACT

The selection and placement of students into higher education institutions is a critical process with significant implications for academic success and institutional outcomes. This review looks at the growing concern over the overreliance on standardised testing in admissions, which may not fully capture students' potential and can perpetuate bias and inequity. Through a comprehensive literature review, this paper examines various instruments and methodologies used in students' selection, ranging from traditional approaches like standardised tests to innovative techniques such as data-driven predictive models and individualised assessments. The paper identifies a growing trend toward more holistic and diversified selection methods by leaning on social justice theory. Key findings highlight the effectiveness of centralised admission systems and personalised evaluations in promoting fairness and recognising unique student talents. Based on these insights, the paper recommends a balanced, multi-method approach that combines standardised assessments with individualised evaluations, integrates data-driven models, and ensures regular updates to selection criteria. Training for admissions personnel is also emphasized to support these reforms. The proposed approach aims to create a more equitable, effective, and comprehensive selection and placement process, better serving both students and institutions of higher education.

Keywords: Global Practices, Higher Education Institutions, Placement, Selection, Social Justice, View

INTRODUCTION

Higher education institutions (HEIs) are independent, self-governing bodies active in teaching, research, and scholarship, established by the appropriate bodies slated for such. These include universities, colleges, and other specialised institutions that provide post-secondary education and award recognised qualifications. Globally, HEIs face challenges in selecting and placing students effectively to ensure both academic success and equitable access. According to Mulder et al. (2024, p.3), achieving diverse participation while

maintaining rigorous academic standards remains a critical concern for HEIs. As a result, prospective students undergo assessments using various selection instruments, which aim to evaluate their potential for success in higher education programs. These instruments include standardised tests, interviews, personal statements, and academic records.

Far back as the 1990s, Hills (1996) highlighted that testing primarily aims to gather information about an examinee's performance in specific domains. Over time, this purpose has expanded to include improving education, assessing general capabilities, and identifying potential challenges (Roediger & Butler, 2011). Equally, a study by Chavan and Mehta (2024) explored factors influencing students' selection of higher education institutions, revealing that academic prestige, geographical location, and sources of information about the university are significant determinants in students' choices while Yaseen (2015) pointed out its relevance in recruiting staff within HEIs as well.

Student testing in HEIs can be in various forms each designed for specific purposes. Achievement tests, including teacher-made tests, quizzes, and standardized exams, measure academic progress in schools because they are used to forecast which students will be the most successful and obtain the greatest benefit from graduate education in disciplines ranging from medicine to the humanities and from physics to law (Kuncel & Hezlett 2007, p:1080). Mental ability tests, often referred to as intelligence tests, assess general problem-solving skills and have been used extensively since Alfred Binet's scale for evaluating children in 1905 (Kendra, 2023). Aptitude tests focus on predicting success in specific areas, such as clerical occupations. Additionally, tests of developed abilities aim to measure quantitative and verbal skills considered prerequisites for academic success at various educational levels (Kuncel & Hezlett, 2007).

Additionally, tests can be used for personality appraisal through projective techniques, such as the Rorschach Inkblot Test. This method presents tasks that allow for an almost unlimited variety of responses, providing insight into a subject's thoughts and feelings even when they may be unaware of the intent of the procedure (Kendra, 2024). Other forms of testing include systematic census-like surveys of knowledge, skills, understandings, and attitudes. These surveys sample specific age levels across subject areas, such as national assessments, and report results for age groups rather than individuals or school grades. Collectively, these different testing methods contribute to improving educational practices and promoting equity in assessment (Mulder et al., 2024, p. 4).

While testing plays a crucial role in education, the increasing demand for limited places in institutions of higher learning has made the process of student selection and placement gradually complex. HEIs are fast recognising the limitations of relying solely on traditional metrics such as standardised test scores (Kuncel & Hezlett, 2007). For example, affirmative action policies, such as race-based quotas in Brazilian higher education, have proven effective in increasing enrolment among black students without evidence of mismatching or adverse effects on their peers (Zeidan et al., 2023). These developments highlight that there will always be need for some sort of selection into higher institutions admission at least until such a time when all those who qualify for admission can be conveniently absorbed into them. There is therefore the need for suitable instruments for selection and placement

The purpose of this review is to examine the various instruments used for student selection and placement in higher education, with a particular focus on identifying and analysing best global practices i.e. strategies, policies, and procedures that have been said to demonstrate success in diverse educational systems worldwide, serving as templates for addressing challenges and fostering equity in student placement. By exploring these approaches, this review aims to look at various instruments used for selection into institutions of higher learning, as a way of rethinking and identify their weaknesses and suggesting ways of reducing them.

OVERVIEW OF SELECTION AND PLACEMENT PROCESSES

The primary purpose of selection and placement is to match the right candidates with appropriate opportunities. Institutions benefit from this as appropriate selection mechanisms lead to better academic outcomes and fewer dropout rates. For instance, a study by Alnahdi (2015) examining the predictive validity of the General Aptitude Test (GAT) in Saudi Arabia found that the GAT was a significant predictor of student graduation success. The study concluded that combining high school GPA with standardised tests like the GAT enhances the ability to select students who are more likely to graduate. Similarly, research analysing university entrance exams in Finland by Häkkinen (2004) revealed that such exams are effective predictors of both graduation and the number of study credits earned by students, particularly in fields like engineering and social sciences. The findings suggest that entrance exams can be more effective than past academic performance in forecasting academic success in certain disciplines.

Accurate academic placement is crucial for student success, as it reduces the likelihood of academic failure and fosters personal development (Rai 2022, p:54). Research indicates that traditional placement methods, such as standardised tests, may not fully capture a student's potential. A study by Belfield & Crosta (2012) found that high school Grade Point Average (GPA) is a better predictor of student success than placement test scores. Furthermore, accurate placement can lead to improved outcomes in specific subjects. For example, a study on math placement in community colleges conducted by Wright (2017) found that when students are placed more accurately, they are more likely to complete their courses successfully, benefiting both the students and the institutions.

It could therefore be stated that selection and placement processes are fundamental for both institutions and students. From an institutional perspective, these processes contribute to the efficient allocation of resources and help maintain high academic standards. For students, effective selection ensures access to opportunities where they are most likely to succeed and grow, minimizing potential mismatches that could lead to frustration or failure as they ensure that individuals are matched to programs, courses, or opportunities that best align with their skills, interests, and potential (Kuncel & Hezlett, 2007, p:1080). These processes are essential because they directly impact the quality of learning, retention rates, and overall institutional effectiveness (Roediger & Butler, 2011)

Globally, selection and placement practices vary significantly, reflecting different educational priorities, societal contexts and resources. The United States uses a mix of standardised tests, such as the Scholastic Aptitude Test (SAT), American College Testing (ACT), Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), Law School Admission Test (LSAT), Medical College Admission Test (MCAT) alongside approaches that consider extracurricular activities, essays, and interviews. This multidimensional process emphasises not only academic performance but also the potential for leadership and community engagement. While this approach allows for diverse talent to be recognised, critics argue that standardised tests may favor students from more privileged socioeconomic backgrounds (Mulder et al 2024, p:3).

In Europe, selection processes often focus on academic performance, such as high school grades and results from nationally standardised exams. For example, countries like United Kingdom place importance on General Certificate of Education (GCE). In the same manner,

Germany and France place significant weight on entrance examinations, ensuring a merit-based system (McGrath et al, 2014). Also, The Organization for Economic Cooperation and Development (OECD) conducts the Programme for International Student Assessment (PISA) conducted every three years (Muench et al 2021, p:2) which evaluates global competence among students, providing a benchmark for international educational standards (Volante & Klinger 2021, p:45). While these systems aim to uphold academic rigor and fairness, critics argue that such rigid structures may overlook non-academic talents and place undue stress on students. Research by Högberg and Horn (2022) shows that high-stakes testing, common in many European systems, significantly contributes to heightened levels of anxiety and stress among students, particularly those preparing for university entrance exams. Additionally, the emphasis on standardised assessments in European higher education has been critiqued for neglecting the broader dimensions of student capabilities, such as creativity and critical thinking (Elken, 2017).

In many Asian countries, such as India, China, Japan, and South Korea, high-stakes exams are the cornerstone of the selection process. The gaokao in China, for instance, determines university placement and often dictates future career paths. While these exams academic rigor, they have been criticized for fostering extreme competition and neglecting creativity (Muench et al, 2021). Similarly, South Korea's college entrance examination system has been associated with significant stress and a lack of emphasis on non-academic talents, highlighting the pressures imposed on students by such assessment models (Kwon et al, 2017). In China, the focus on performance in standardized tests has been linked to rote memorization at the expense of creativity, echoing concerns about the rigid structure of the system (Suen & Yu, 2006). Meanwhile, India's Joint Entrance Examination (JEE), a critical gateway to prestigious institutions, underscores the widespread reliance on test scores across the region. Despite their role in ensuring merit-based selection, these examinations are often critiqued for their unintended consequences, including a detrimental effect on student well-being and innovative thinking (Muench et al, 2021).

In Africa, selection processes often reflect resource limitations and educational disparities. National exams like Kenya's Kenya Certificate of Secondary Education (KCSE) or Nigeria's Joint Admission and Matriculation Board (JAMB) as well as National Examination Council (NECO) play an important role in university admissions. Equally West African Senior School Certificate Examination (WASSCE) and is administered to Nigerians, Ghanaians and Sierra Leoners. While these exams aim to fairness, disparities in access to quality education often

lead to unequal opportunities, particularly for students from rural areas. For instance, research shows that despite the abolishment of school fees in Kenya, barriers such as limited access to quality resources and infrastructure continue to hinder students from disadvantaged backgrounds from competing equally (Bold et al., 2011). Similarly, in South Africa, the disparities in continuous assessment and matriculation examination scores emphasise the influence of socio-economic inequalities on educational outcomes (Van der Berg & Shepherd, 2010). Challenges such as poor test administration, unreliable scoring methods, and resource constraints also undermine the effectiveness of national exams, as seen in Malawi's high-stakes testing system like the Malawi School Certificate Examination (MSCE) as stated by Chakwera et al., (2004). These disparities emphasise the need for more equitable education systems to support fair selection processes not only across the African continent but every other.

High School Transcripts, Ordinary Level Certificates, Advanced Level Certificates, and International Baccalaureate (IB) Diploma are academic records that play a vital role in the selection of students. Besides that, interviews, essays, letters of recommendation, personal statements, and portfolios (for art, design, or performance-based programs) are also sometimes requested for selection purposes and widely used to assess academic readiness. Moreover, the use of computer-based testing (CBT), adopted by many institutions and organizations that oversee admissions, reflects technological advancements. Online Application Systems, Virtual Interviews, and Online Assessments have become instrumental in helping institutions evaluate applicants' academic abilities, skills, and potential for success.

THEORETICAL FRAMEWORK

Social justice education theory, as proposed by scholars like Gewirtz in Meng (2024, p.6), emphasises the need for redistributive, recognitional, and participatory justice in education policy. In HEIs, it focuses on creating equitable opportunities for student selection and placement, particularly for marginalised groups by emphasising the need to address systemic inequalities and ensure fair access, participation, and outcomes for all students. Thus, this framework integrates principles of distributive, recognition, and participatory justice to transform educational systems into more inclusive and supportive environments with the aim of dismantling barriers and promoting diversity and inclusion in HEIs. Meng (2024) stated the tenets of social justice education theory as: Redistributive justice, Recognitional justice and Participatory justice.

Elaborating on these tenets, Redistributive justice involves the fair allocation of resources and opportunities to ensure equitable access to higher education for all students, particularly those from marginalised backgrounds (Meng (2024) to adequate representation of students from underrepresented backgrounds. As such, this tenet strives for policies to focus on providing financial assistance such as scholarships, fee waivers, or targeted outreach programs to underserved communities., non-discriminatory admission processes, and support systems to address economic and social barriers that can help bridge the gap for underrepresented groups. Redistribution principles have framed equity and schooling policies in education reforms in a number of countries for a long time. Further discussing this Mena and Waitoller (2022, p.23), mentioned that redistribution focus on actions aimed at distributing, regardless of whether they are social goods, material or cultural resources. Their central point revolves around the criteria to choose when and where special resources or services are distributed. As such, we could agree with Mena and Waitoller that the principle of redistribution is reflected in the Sustainable Development Goals 4, dedicated to Quality Education, which calls for ensuring access to inclusive and equitable quality education and promoting lifelong learning opportunities for all learners as a fundamental basis for sustainable development.

Recognition justice emphasises acknowledging and valuing diverse cultural, linguistic, and social backgrounds within educational settings (Mena and Waitoller 2022) by this, there will be what Broido et al (2023) refers to as relational justice which involves promoting inclusive environments that respect and support the identities and experiences of all students, including those living with disabilities. Higher education institutions should adopt practices including assessment practices that challenge ableism and the success of disabled students, faculty, and staff. For example, a student with dyslexia can be given extra time to finish his or her assessments. Also, the adoption of culturally relevant curricula or the integration of diverse cultural histories and perspectives in teaching and assessment is encouraged.

Mena and Waitoller (2022) highlights the need to involve students in decision-making processes and ensure their voices shape educational policies and practices. This principle can be operationalised through mechanisms like student representation in governance bodies, participatory forums, and regular surveys that solicit student feedback. it highlights participation as a foundational concept that connects redistribution, recognition, and representation Participatory justice can be operationalised through mechanisms such as student representation in governance bodies, participatory forums, and regular surveys that gather feedback. These approaches ensure that students, especially those from marginalised

groups, have a platform to share their perspectives. For example, engaging students in curriculum design or institutional planning fosters ownership and ensures relevance to their needs.

Participation is also important to the success of redistributive and recognitional justice. Without student involvement, redistributive policies may miss critical barriers, and recognitional efforts may fail to fully affirm diverse identities. For instance, policies supporting students with disabilities are most effective when informed by their experiences. However, achieving meaningful participation requires intentionality. Institutions must avoid tokenism and create genuine opportunities for student engagement, providing the necessary support to empower all students. By embedding participation in governance and decision-making, higher education institutions can build trust, foster inclusion, and prepare students to advocate for justice beyond academia. To this end, a social justice approach to student selection would thus take into account the multiple dimensions of identity, acknowledging how intersecting forms of oppression impact students' access to educational opportunities.

CHALLENGES AND LIMITATIONS OF TESTING

Selection and placement processes, while critical for aligning students with opportunities, face several challenges and limitations. These challenges often stem from issues of access, equity, cultural bias, standardisation, and an overemphasis on scores.

One significant barrier is access and equity, particularly for low-income or marginalised students as highlighted by Zeidan et al., (2023). These groups often lack the resources needed to prepare for standardised assessments, such as access to private tutoring or preparatory materials, which puts them at a disadvantage compared to their more privileged peers (Mulder et al 2024). Furthermore, systemic issues such as poorly funded schools and geographic disparities exacerbate these inequities, limiting opportunities for students from disadvantaged backgrounds (Bold et al., 2011). Cultural bias in assessment instruments is another critical limitation. Many standardised tests are designed with cultural assumptions that may not resonate with students from diverse backgrounds. For example, questions may include culturally specific references or language that disadvantage non-native speakers or those from different cultural contexts. This issue highlights a fundamental concern within the social justice framework which calls for the need to ensure that educational selection methods are free from systemic bias and that all students are assessed in a fair and inclusive manner.

Globally, education systems vary widely in curriculum, pedagogy, and priorities. Instruments that work well in one region may not align with the learning goals or evaluation standards of another. For instance, while the SAT emphasises critical thinking and problem-solving, countries with curriculum-based assessments like Nigeria may find such instruments less compatible with their systems.

Finally, the overemphasis on scores in selection processes can create undue pressure on students. High stakes testing often reduces students to numerical scores, ignoring attributes like creativity, leadership, or resilience, which are equally vital for success (Chakwera & Sireci 2004). This focus on scores can also lead to “teaching to the test,” narrowing educational experiences and stifling broader learning outcomes. In summary, while selection and placement processes are essential, they must be carefully designed to address challenges related to access, equity, cultural bias, standardisation, and overreliance on scores. By adopting more inclusive and holistic approaches, these processes can better serve diverse populations and foster equitable opportunities.

SUGGESTED BEST PRACTICES FOR GLOBAL RELEVANCE EDUCATIONAL ASSESSMENTS FROM SOCIAL JUSTICE LENS

In the pursuit of globally relevant educational assessments, there is a need to embrace the core principles of social justice framework to ensure inclusivity, accuracy, and adaptability. The practices that encompass fairness and equity, all-inclusive assessments, cultural sensitivity, technological integration, and regular updates are crucial.

Fairness and Equity: As highlighted by Zeidan et al. (2023), learners in lower-income areas of Brazil may not have access to the standardised tests required for them to progress in their education. It is thus imperative to ensure that educational assessment tests are accessible to students from all socioeconomic backgrounds across any country. This involves providing multiple pathways for students to meet learning standards, such as extended learning opportunities, online courses, and dual-enrolment programmes. Additionally, educators and educational institutions should disaggregate and analyse multiple sources of data to identify the needs of individual students and subgroups, thereby enabling timely feedback and instructional modifications.

All-inclusive Assessments: Relying solely on a single form of assessment instrument to determine a student’s academic strengths should be discouraged. To capture the full spectrum of students’ abilities, it is recommended to combine multiple assessment instruments for a

more well-rounded evaluation. In contrast to traditional standardised tests, global best practices advocate for comprehensive assessment methods such as project-based learning, portfolios, and performance-based assignments. These approaches offer a more authentic evaluation of students' skills, fostering critical thinking and deeper learning.

Cultural Sensitivity: Assessment instruments should be adapted to align with local contexts. It is essential for assessments to reflect the diverse cultural backgrounds of students. This entails adapting assessment tools to accommodate local languages, cultural peculiarities, and specific educational needs. By doing so, assessments become more relevant and equitable, ensuring that all students have a fair opportunity to demonstrate their knowledge and skills.

Use of Technology: The continuous rise in technology, including artificial intelligence (AI), presents opportunities to integrate technology into assessments, offering numerous benefits such as increased accessibility and personalised learning experiences. Online platforms like Kahoot and Quizlet can facilitate the administration of assessments, while AI-driven insights like Gradescope and Turnitin provide real-time feedback and highlight areas for improvement. This technological approach supports a more dynamic, efficient, and responsive assessment system.

Regular Updates: As the world evolves, it is essential to ensure that assessment instruments remain aligned with the changing educational sector. Regular updates to assessment tools and the accompanying data held by educational institutions are critical for maintaining relevance. This practice ensures that assessments accurately measure the competencies needed in a rapidly changing world. Engaging in ongoing professional development and staying abreast of current educational research are also essential for educators to uphold the effectiveness of their assessment practices.

By implementing these best practices, educational systems can develop assessments that are fair, comprehensive, culturally sensitive, technologically advanced, and adaptable to the changes that education experiences.

CONCLUSION

The selection and placement of students in higher education require a comprehensive and balanced approach. It is essential to combine multiple assessment instruments, such as aptitude tests, personality evaluations, achievement tests, and standardised reading ability assessments, to more accurately measure students' capabilities and potential for success. This

approach ensures that candidates are selected based on a well-rounded evaluation of their skills while also addressing the limitations of relying solely on any single test type.

In addition to diverse testing methods, it is crucial to design instruments that are fair and culturally sensitive, taking into account the varied backgrounds and needs of students worldwide. This requires adapting assessments to reflect local contexts while also incorporating modern technological tools to enhance accessibility and personalisation. Furthermore, assessments should be regularly updated to remain relevant to the evolving educational sector, ensuring that they continue to capture the competencies needed for success in the 21st century.

Finally, the goal of selection and placement processes should be to maximise educational outcomes by aligning students with opportunities where they are most likely to succeed. By adopting a holistic and inclusive approach to student evaluation, higher education institutions can create more equitable pathways, reduce educational disparities, and foster a diverse and dynamic academic environment.

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9

RE-THINKING DESIGNS FOR TEACHING AND LEARNING USING MEDIA TABLETS - AN EXPLORATION OF DIGITAL DIDACTIC DESIGNS

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Abstract

This paper reviews the advancement of digital media integration into teaching and learning as a shift from the traditional instructions. Varieties of media materials as high-tech, low tech and simple implements are available for enhancing the speed and efficiency of teaching and learning. The primary challenge on the integration of technology in education is the change in the mindset of teachers and learners to convey instructional process from preparation, presentation and evaluation using relevant technological facilities. The research approached rethinking the designs of instruction and learning process with the use of media tablets and associated multimedia devices and softwares. Constraints to the utilization of the media facilities should be tackled so as to avoid deterrent and facilitate the need to have a clear purpose for media technology in the teaching learning process. Digital Didactic Design offer technology driven network which transcend surface learning like remembering and repetition to innovative referent to real life situation, which facilitate multimedia exposure (access and retrieval), plenary engagements and the creation and practices of socio-technical pedagogical process through text, videos, audio, podcasts, screencast, animation, simulation websites and the likes. The Digital Didactic Design model require teachers and students to play central role towards specified aims, activities and process-based assessment.

Keywords: Media tablets, Traditional instructions, Technology, Didactic Design

Background to the study

Designing teaching and learning using media tablet involves a shift from traditional materials to the use of digital devices for creating experiences in acquisition, transfer and consolidation of knowledge and skills is more efficient, effective and inspiring. In addition to this, it involve an innovative re-imagining, retooling and reconstructing of teaching strategies, learning modalities, content engagement and interactive potentialities (Samuel, Akinola and Ariyibi, 2024). Media tablets like Lite Pad, Max, Google android, Discover note and Educational tablets equip the learning environment with rich capabilities for associative mechanism, reflective thinking, interactivity, co-operative and collaborative opportunities. This devices also enhance self-pace, flexibility and edutainment in the teaching-learning process just as it open new pathways to student-centred learning. With adaptive media-learning software, learners can be furnished with tailored content that is personalized and programmed to strengthen their weakness. The purpose of this article is to activate the use of media tablets as digital device in generating instructional designs for teaching and learning.

Tablet programs like instasize, xylem, dream Box, Khan Academy, Spotify, Zoom, Todoist, can observe and analyse learners ability and performance and provide a learning treatment pathway with congruent assessment and adjustment procedures. In this engagement, learners are made to learn at their own pace with provision of granular feedback, corrections and suggestions for adjusting the learning environment in real time. It is necessary to study the actual state of digital literacy since digitalization is impossible without optimal digital literacy (Liu et al, 2020), this will help to figure out new learning models in the educational system based on modern innovative technologies and digital learning methods.

Media tablets as digital devices offer immersive learning experiences relying Artificial Intelligence, Augmented Reality, and Virtual Reality such as titration in chemistry, virtual visceral dissection in Biology climatic change in Geography, archaeological pediments in history, making hazardous concepts and complex concepts accessible and practicable.

Media tablets are major instrument for innovative teaching strategies like Advance organizer, Blended learning, Flipped classroom (where learners study and monitor learning contents and relevant real life situation at home and practice/discuss work/assignment in school class). By this, active and interactive learning is promoted through student-centered learning. With media exploration, technology has become essential for the educational process and educational providers and teachers should begin to rethink and restructure instructional goals in the classrooms with the use of digital devices. The New teaching and training technologies is bound to evolve classrooms that are totally integrated with digital facilities in all facets.

Students are made to collaborate and share projects in real time, they co-create presentations, practice intra-group and inter-group scaffolds then share media screen and contents. Through media, learners are exposed to use various apps such as snapchat, VLC, Nova, Appso, Googledisc, Dulingo, Reddit, Spotify and other educational apps. Students educational experiences are enriched by these multimedia exposure, diversifying content, multifarious resources, multiple learning pathways, plenary engagements and access to varieties of media, like text, videos, audio podcasts, screencast, animations, simulations, websites, etc.

Media Access and the Precipitates of Digital Didactic Design

With social media, information are available in our pockets and handbags, this make content ubiquitous, available and accessible. Content building becomes open and easy, so is content presentation and learning. Access to content does not necessarily mean that a person learns. But with the modern day digital driven networked world, teaching practices can be made technology based from low extent to high extent to support different forms of learning with varieties of mobile technology.

As educational institutions often rely on the model of textbooks from which students learn to reproduce the knowledge of the textbooks, the teaching aim become closely associated with the textbooks. This supports surface learning like remembering and repetition but neglect deeper learning approaches like intellectual development and conceptual change (Kember, 1997; Chand, 2024). Innovation and utilization of new technologies (like mobile technology, and integration of media devices) in education programmes promote a new horizon for planning, implementing and reflecting on teaching and learning. It also supports new learning models in the formation of the digital knowledge society.

According to constructivism approach, active learning is related to the role of the learners where they are not only consumers of information but also active agents, creators and producers in the co-construction of new knowledge (Pro-consumers).

Teaching that supports both surface and deeper learning helps the learners expand their thinking beyond consumptive behaviour and beyond traditional reproduction of existing knowledge. This is a reflection of “The New Teacher Project (TNTP): Reimagining Teaching in a Blended Classroom”.

Following Kember’s empirical study, there are five quality levels of teaching: from surface levels (a) information delivery, (presentation of information) (b) providing structured

knowledge via (c) student-teacher interaction to deep levels (d) facilitating development and understanding and (e) students conceptual change (intellectual development). Surface learning can be described as remembering facts, whereas a deep learning approach focuses on skills like evaluating, creating, being critical, self-reflection, new ideas, collaborative reflections and multiperspectiveness. The approach of digital designs help to derive a scheme for data analysis (per course/classroom). With the main analysis focused on two issues, first how many elements are aligned, and secondly, what is the quality of the aligned elements and the design in total. The process illustrate how teachers create new designs to implement the act of teaching and to support learning. They show new design principles and themes of digital Didactics in co-located arenas where media and the classroom have been merged into new teaching spaces (Astriani, Mujib and Formansyah, 2022). The teachers' digital didactical designs embrace;

- new learning goals where more than one correct answer exists (it supports deeper learning).
- focus on learning as a process in informal-in-formal learning spaces using guided reflections,
- making learning visible in different products (e.g. texts, videos, podcasts, digital stories).

Media access and integration in education is changing many layers of education stretching from human (students and teachers) act in the classroom, the content building, academic agenda, content presentation, the activities and follow-up skills. The effect shows on different levels of didactic such as;

- (i) Teacher-student (Student didactic interaction model)
- (ii) The didactic design (Teaching aims, learning activities, and assessment)
- (iii) The didactic conditions including curriculum development (curriculum driven learning including learning modalities, styles, examination type, etc) institutional development and academic staff development.

Teachers are therefore capable of creating relationship between active learning, active teaching as well as creating digital media for self expression and developing ownership of the technology through authentic experiences (Akinola and Akintolure, 2023). Overall, as they motivate students with digital media and other relevant technologies, teacher become reflective decision makers, and advocates for media integration. In all these, the enablement of learning takes central concept. Teacher can restrict or enable learning by applying

different designs in order to promote the likelihood or extent of learning that takes place (Wildt, 2007). From the concept of “informed choices” (Olofsson & Lindberg, 2012), the Digital Didactic Design approach is an attempt to make a relation between design, education and technology integration visible (de-construction: Jacques Derrida, 1997).

Transcription of Digital Didactic Designs in the Teaching-Learning Process

Traditional based model classroom is transcribed into digital textbooks and media tablets using educational technology. In this digital age, processing is made easy by the presence of internet taking advantage of web 2.0, social media and mobile devices. Varieties of learning walk through are engineered on the traditional learning models which got it rebranded via the utilization of ubiquitous access to education on pedagogical practice and instructional system design. Jahnke and Kumar (2014), expand this further with patterns that enable designs for students to change from a consumer to a prosumer (producer-consumer) learner and to become learnerpreneurs who grows well in the learning processes. In the contemporary education (Liu, 2020) Information and Communication Technologies (ICTs) have provided opportunities through many multimedia and interactive educational products on campus, online and e-learning. Digital competence and its various elements are important components of learning in the 21st century. The growing tendencies in the development of new technologies such as internet of things, robotics, virtual reality and artificial intelligence among others pose new challenges and educational institutions cannot ignore them (Esteve-mon et al, 2020)

The approach of Digital didactical design offers a new thinking for planning, doing and reflecting on teaching and learning. It is an attempt to make the relationship between design, education and technology integration visible. The term didactics derives from the scandinavian and German concept of Didactic which level on the design for social relationships. For example, interactions involving teacher-student, student-student which stress the differences of teaching activities and learning activities (Zhu and Atompag, 2023).

Didactic in European education include ‘what’ to learn (curriculum and content), ‘How’ to teach (method), ‘why’ and ‘when/where’ (Kind of situation, spaces) and how it can be reached (resources, organizational development and academic development). More specifically teaching practice can be analysed from a digital didactical design perspective as the creation and doing of socio technical-pedagogical processes that aims to support students

learning. In an ideal world the teacher does design following five elements in a constructive alignment (Bigg and Tang, 2007).

- i. Teaching Aims (Intended Instructional outcomes stated by the teachers)
- ii. Students learning activities (Structured learning concepts)
- iii. Process Based Assessment (Guides, reflections, networked scaffolding, Bergstrom, 2001)
- iv. Social relations and roles (Jhanke et al 2003)
- v. Interactive media and ICT (e.g. media tablets integration)

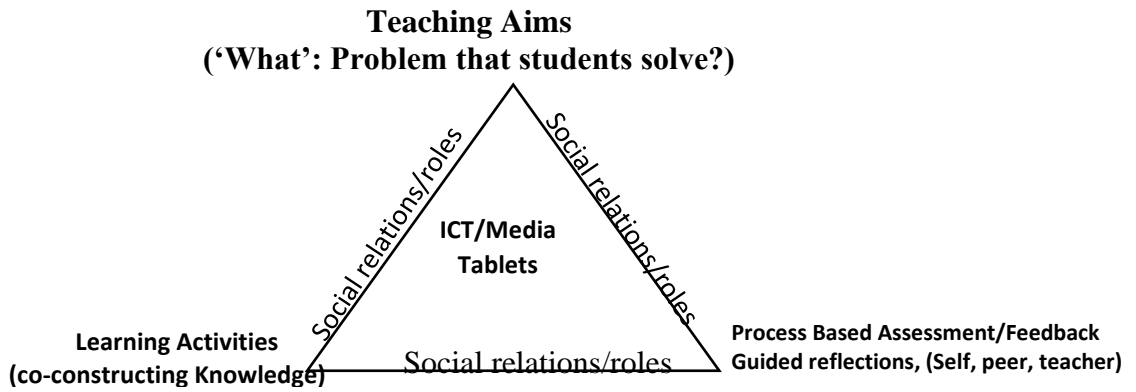


Fig. 1: Model of Digital Didactical Design and the relationship of the five elements

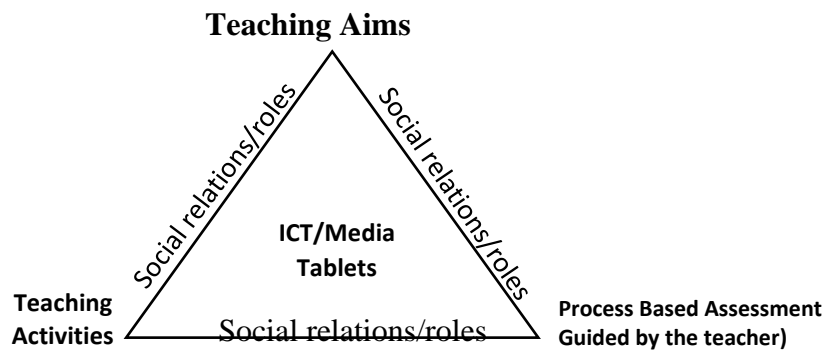


Fig. 2: Model of Digital Didactical Design: Teacher's Model

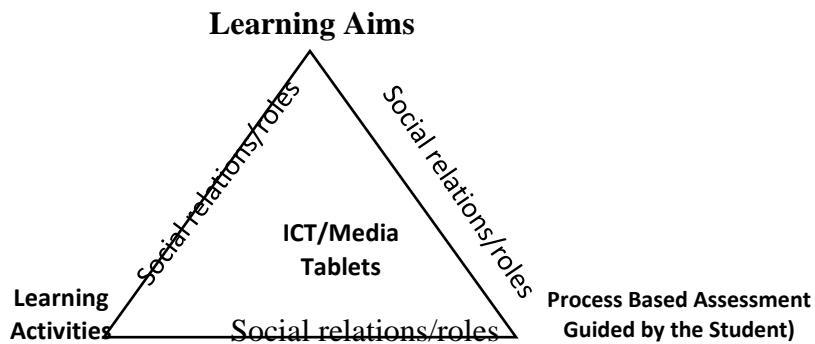


Fig. 3: Model of Digital Didactical Design: Students Model

Figure 2 and 3, shows that the digital didactical design model (figure 1) is compounded of two different designs; design for teaching (Figure 2) and design for learning (figure 3). The design for teaching embraces teaching aims, teaching activities and process based assessment, which the teacher defines while the design for learning (Fig.3) embraces learning aims, learning activities and process based assessment guided by the student. With all these elements constructively aligned, there is the likelihood that learning takes place and students are able to learn. The concept of design is a means to make specific actions and parts of activities of teaching practices visible; it focuses on certain elements but does not take the

whole reality into consideration. A design shapes a focus and key points and gives a form (Gestalt). A design has both a planned component and an operative component, it is a process and a product at once.

This view on didactic design puts studies on tablet enhanced teaching and learning into a new light. Learning is not only a cognitive effort and teaching is not only a tool to reach the cognitive dimension. Instead, teaching is rather activity driven design, and learning is an on-going activity of knowledge production and creation more than mere consumption. An elaborated example of activity design for learning is published in Hauge & Dolonen (2012), which shows that designing, teaching and learning needs a multimodal perspective (Astriani, Muiy and Firmansyah, 2022).

The blended classroom which adopted re-imaging teaching, shows that the traditional teachers versus blended teachers are a shift away from content creation to content curation; lesson planning to goal setting, assessment grading to performance feedback, whole group instruction to personalized instruction, classroom management to student agency.

Digital didactical designs shows the gap in what teachers want and what they really do, a gap between their didactical design thinking and doing, a gap in didactic design with and without ICT. Study on preference for blended teaching (Akinola, 2023) reveals that there is a practice of a teacher-students' loneliness in educational institutions. With digital didactic design the importance of creating a reflective teachers' community of practice where teachers discuss their situations, didactical designs and learn from it is brought into perspective.

Constraints in the Media Utilization for Teaching and Learning

Through media access and retrieval open a new pathway for innovation teaching and enriched student centred learning. It is pertinent to note that challenges of the application in identifying, attracting and sharing content and resources major ones include digital divide, accessibility, information overload, lack of teacher training, security constraints that impede instructional strategies, lack of administration support, lack of high speed school networks, basic resistance to change by many teachers, quality assurance and time constraints.

Conclusion

Following this constructivism approach, learning is demonstrated as knowledge co-construction that is, as co-creation of new knowledge that is an active process of constructing

rather than acquiring knowledge (Duffy & Cunningham, 1996). Constructivism theory allows the realization of students' potential and provide opportunities for independent learning, independent enquiry and independent construction of knowledge system. (Zhu and Atompag, 2023). For progress in educational development towards both professional teaching and the embroidery of surface and deeper learning, there is need to equip teachers' learning on how to create and apply didactical design thinking.

In synopsis, access through media tablets equip the teaching learning process with constant plenary engagement, reference of learning process to real world situation, instant access to information (unlike static textbooks, digital media are constantly updated with latest information).

Media retrieval provide access to varieties of examples and illustrations from local and global perspectives thus fostering robust and inclusive understanding of topics, content and issues. A teacher needs to have a clear purpose for the technology, what it will support or facilitate in an activity when designing the teaching activity. The add-on of a technology needs a clear benefit within a teaching and/or learning activity.

Recommendations

Emerging models of learning in educational system should be based on the integration of innovative low-tech and high technology facilities with digital teaching strategies. Media tablets offer immersive learning experiences through physical and virtual contacts and can be driven to explore the opportunities associated with digital didactics for attaining competencies in modelling and remodeling of instructional packages.

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10

DIGITAL TECHNOLOGY IN EARLY CHILDHOOD MATHEMATICS EDUCATION: SUPPORTING NIGERIAN CHILDREN WITH LEARNING DIFFICULTIES

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Abstract

This study explores the integration of digital technology in early childhood mathematics to support Nigerian children with learning difficulties. The research focuses on educators' perceptions of digital tools in two Local Government Authorities LGEAs, Badagry and Ojo, to evaluate the impact on learning outcomes. This study employed a descriptive research design to explore the integration of digital technology in early childhood mathematics classes, focusing on Nigerian children with learning difficulties. Data were collected from 250 early year school caregivers through a structured questionnaire and analysed using descriptive statistics. The findings show that digital tools such as educational apps and interactive whiteboards significantly improve children engagement and help bridge the learning gap for children with mathematical difficulties. Despite these benefits, challenges such as limited access to technology and inadequate teacher training remain barriers to effective implementation. The study concludes that while digital technology positively influences learning of Mathematics, more investment in infrastructure and Caregivers' Professional development is needed. The study recommends the provision of affordable digital tools, periodic caregivers training, and collaboration among stakeholders to create inclusive educational environments that accommodate all learners.

Keywords: Digital Technology, Early Childhood Education, Mathematics, Learning Difficulties, Nigeria, Teacher Training, Educational Tools

Introduction

Early Childhood mathematics education lays the foundation for future academic success, yet many Nigerian children struggle with numeracy skills, particularly those with learning

difficulties. The incorporation of digital technology in mathematics education has shown promise in supporting diverse learners.

In Nigeria, where technology penetration is increasing, digital tools offer an opportunity to enhance teaching and learning. Research has also demonstrated that digital technology can improve mathematics outcomes for children with learning difficulties by providing personalized, interactive and engaging learning experiences

Learning disabilities in mathematical skills represent a critical challenge for children, particularly given the essential role these skills play in modern societies (Duncan, 2007; Ritchie & Bates, 2013). Low numeracy skills are associated with far-reaching consequences that affect academic achievement, mental health, and self-esteem in children (Fritz, 2019). Additionally, limited mathematical competency restricts job opportunities and hinders daily independence in adulthood (Arcara, 2017; Benavides-Varela, 2015, 2017, 2020; Semenza, 2014). The severity and classification of mathematics learning difficulties (MD) vary widely in the literature, with different terms and frameworks used to define and categorise them (Mazzocco, 2005; Mazzocco & Räsänen, 2013; Butterworth, 2019). Although attempts have been made to standardise the classification of MD, consensus remains elusive (Karagiannakis, 2014).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) by the American Psychiatric Association identifies dyscalculia as a specific learning disability with impairments in mathematical processing. The term dyscalculia is often reserved for biologically rooted math difficulties, while MD typically encompasses a broader range of challenges, including those influenced by environmental or socioeconomic factors (Mazzocco, 2005; Mazzocco & Räsänen, 2013). Manifesting at different stages in children's educational journeys, MD can impact basic numerical skills such as counting and seriation as well as more complex tasks like recalling multiplication facts (Ginsburg & Baroody, 2003; Jordan et al., 2009). Environmental factors can compound these difficulties, with children in disadvantaged settings at greater risk of poor math outcomes (Mazzocco & Räsänen, 2013). Emotional and behavioural issues often accompany MD, which can intensify negative educational experiences, fostering low self-efficacy, anxiety, and school aversion (Ashcraft & Ridley, 2005; Ramirez et al., 2018).

In response to these challenges, research has increasingly focused on interventions for children with MD, ranging from school-based support to digital tools (Fritz et al., 2019; Jitendra et al., 2018). Early interventions in preschool can significantly aid children in

developing foundational numeracy skills (Aunio, 2019; Bryant et al., 2011). Recent technological advancements have paved the way for digital learning tools specifically designed to support children with MD, although only a limited number of these tools have been formally evaluated (Drigas et al., 2016; Kroeger et al., 2012). Notably, many digital interventions that benefit typically developing children may not yield comparable results among those with MD due to these learners' unique needs (Ginsburg et al., 2013; Brunda & Bhavithra, 2010; Cezarotto&Battaiola, 2016). Effective digital interventions for MDs integrate adaptable difficulty levels, engaging interfaces, and opportunities for private feedback to mitigate the sense of defeat that many children with MDs experience in traditional classroom settings (Butterworth &Laurillard, 2010; Dempsey et al., 1994).

Given the mixed evidence on the effectiveness of digital interventions for MD, this study examines the role of digital technology in supporting Nigerian children with mathematical learning difficulties. This focus is informed by the Individuals with Disabilities Education Act, which designates any device used to enhance the abilities of individuals with disabilities as assistive technology. Through the integration of customised digital interventions, children with learning difficulties can gain access to specialised resources, enhancing their academic participation and achievement (Faragher& Brown, 2005; Spooner et al., 2017). This paper therefore explores how digital tools can address the unique challenges faced by Nigerian children with MD, aiming to enhance their mathematical skills and promote greater inclusion in both academic and social contexts.

Statement of Problem

The integration of digital technology in early childhood mathematics education has the potential to improve learning outcomes for Nigerian children. However, children with learning difficulties in mathematics are often left behind due to inadequate support and resources. The current method of teaching mathematics to children with learning difficulties in Nigeria are often traditional and ineffective, leading to poor academic performance and low self-esteem.

Despite the importance of early childhood mathematics education, there is a scarcity of research on the use of digital technology to support Nigerian children with learning difficulties in mathematics. This knowledge gap has resulted in a lack of understanding of how digital technology can be effectively utilized to support the mathematics learning needs of Nigerian children with learning difficulties.

Therefore, this study aims to investigate the effectiveness of digital technology in supporting Nigerian children with learning difficulties in early childhood mathematics education.

Literature Review and Theoretical Framework

Technology Integration in Education

The integration of technology in education has gained increasing global momentum, driven by the expectation that it can facilitate educational reforms, enhance pedagogical strategies, and improve student learning outcomes (Elstad, 2016; Vegas et al., 2019). However, while technology is heralded as a tool for promoting constructivist teaching and deep learning, its use in classrooms remains inconsistent, particularly in developing countries (Ertmer&Ottenbreit-Leftwich, 2010). Studies have shown that educators face challenges in utilising technology effectively, often due to a lack of adequate support and training (Akar, 2020; Majid &Shamsudin, 2019). Educators are expected to assume the role of facilitators, guiding children in critical thinking and problem-solving through the use of technology (CooperGibson Research, 2021). However, data from global studies, such as the International Computer and Information Literacy Study (ICILS) and the Teaching and Learning International Survey (TALIS), indicate that less than half of educators worldwide use technology frequently in their classrooms (Backfisch et al., 2021). This gap in technology integration highlights the need for research-based solutions to address the barriers that educators face in adopting digital tools effectively (Kihzoza et al., 2016).

The Role of Technology in Early Childhood Mathematics classes

Technology integration in early childhood education is increasingly seen as a catalyst for educational reforms and pedagogical change. According to Ertmer and Ottenbreit-Leftwich (2010), educators are expected to act as facilitators of learning by incorporating technology into the classroom to promote critical thinking, creativity, and problem-solving skills. This approach aligns with constructivist pedagogies that emphasise student-centered learning and active engagement through technology (Alberola-Mulet et al., 2021). For young children, technology can provide interactive, visual, and engaging experiences that help them understand abstract mathematical concepts (Abiatl& Howard, 2019). Research shows that technologies such as interactive whiteboards, educational apps, and virtual learning

environments can enhance mathematical learning by making it more accessible and enjoyable (Akar, 2020; Majid & Shamsudin, 2019).

For children with learning difficulties, technology-aided instruction offers several advantages. Studies have shown that assistive technologies, such as augmented and virtual reality, can help children with cognitive disabilities engage with mathematical content in ways that traditional teaching methods may not allow (Whewell et al., 2021; Roberts, 2020). Such technologies provide real-time feedback, personalised learning paths, and the ability to visualise complex concepts, which can be particularly beneficial for children with attention deficits or processing disorders.

Technology Integration in Nigeria: Challenges and Opportunities

Despite the promise of technology in education, Nigeria faces significant challenges in effectively integrating digital tools in its educational system. The barriers to technology integration in Nigerian primary schools are numerous, including limited access to resources, inadequate teacher training, and infrastructural deficits such as unreliable electricity and internet connectivity (Ajayi & Ekundayo, 2009; Agbetuyi & Oluwatayo, 2012). These challenges are compounded in rural areas, where schools often lack basic technological tools, let alone the advanced devices needed for digital learning (Mogwe & Balotlegi, 2020). Furthermore, educators in Nigeria often lack the necessary training and support to use technology effectively in their classrooms (Kihzoza et al., 2016).

However, research also highlights several opportunities for improving technology integration in Nigerian education. For instance, the Federal Ministry of Communications and Digital Economy (2019) has developed policies aimed at promoting digital literacy and integrating ICT into the education sector. These policies, though ambitious, have yet to be fully implemented across the country. Some studies suggest that focusing on teacher training and providing schools with the necessary technological infrastructure could significantly improve the integration of digital tools in Nigerian classrooms (Buabeng-Andoh, 2012; Kipsoi et al., 2012).

The Impact of Technology on Children with Learning Difficulties in Mathematics

Numerous studies have demonstrated the positive impact of technology on children with learning difficulties. For example, the use of mobile devices in classrooms has been shown to enhance the learning experiences of children with intellectual disabilities by providing them

with consistent, adaptive, and interactive learning environments (Stoessel et al., 2015). Research also suggests that virtual learning environments can increase motivation, improve social interactions, and enhance cognitive development among children with learning difficulties (Jacob & Pillay, 2020). Specifically, for early childhood mathematics, studies have found that educational apps and games can help children develop foundational numeracy skills such as number recognition, counting, and basic arithmetic (Benson & Brack, 2010).

For Nigerian children with learning difficulties, the potential of technology to bridge learning gaps is immense. However, there is a dearth of research on how these technologies are being used in Nigerian classrooms to support children with special educational needs. The limited studies available suggest that many Nigerian schools are not adequately equipped to provide technology-aided learning for children with learning difficulties (Mogwe et al., 2018). This lack of resources, combined with the low levels of teacher preparedness, hinders the effective use of technology in special education.

Effective Strategies for Technology Integration in Early Childhood Mathematics Classes

To maximise the benefits of technology in early childhood mathematics classes, particularly for children with learning difficulties, it is important to adopt evidence-based strategies. Research suggests that explicit and systematic instruction, supported by technology, is one of the most effective approaches for teaching mathematics to children with intellectual disabilities (Spooner et al., 2019). This instructional method involves breaking down mathematical tasks into smaller, manageable steps and providing ongoing feedback and support. Technology can assist in this process by offering interactive tasks that adjust to the learner's pace and provide visual representations of mathematical concepts (Rosenshine, 2008).

Several frameworks have been developed to guide the integration of technology in education, particularly in more developed countries. In the UK, for instance, the Edtech Review Framework (ERF) and the Microsoft Education Transformation Framework provide comprehensive guidelines for the implementation of digital tools in schools (NAACE, 2021; Alenezi, 2021). These frameworks emphasise the importance of iterative processes that involve all stakeholders, including educators, children, and policymakers, to ensure the successful adoption of technology (Toledo, 2016). In contrast, Nigeria lacks such structured

frameworks, resulting in inconsistent technology integration efforts across educational institutions (Mokenela, 2019).

In Nigeria, the integration of technology in early childhood education requires a tailored approach that addresses the unique challenges faced by educators and learners. For instance, it is crucial to provide professional development programs that train educators to use technology effectively in the classroom (Lee et al., 2013). Additionally, schools should be equipped with affordable and reliable technological tools that are accessible to all children, including those with learning difficulties (Sureshramana, 2007).

From literature reviewed thus far, it is evident that while digital technology holds great promise for improving early childhood mathematics education, particularly for children with learning difficulties, its integration in Nigerian classrooms faces significant challenges. There is a need for comprehensive strategies that address the infrastructural, pedagogical, and policy-related barriers to technology integration in Nigeria. By providing adequate training and support for educators, improving access to technological tools, and promoting the use of evidence-based instructional methods, Nigeria can leverage digital technology to enhance the learning experiences of all children, including those with learning difficulties.

Theoretical Framework

This study draws on **Constructivist Theory** and the **Technological Pedagogical Content Knowledge (TPACK) Framework** to explore how digital technology can support Nigerian children with learning difficulties in early childhood mathematics education. Together, these frameworks offer a foundation for understanding how technology can create meaningful, engaging, and accessible learning experiences for young learners facing academic challenges.

1. Constructivist Theory

Constructivist Theory, as developed by Piaget and Vygotsky, emphasises that children construct knowledge through active engagement with their environment, incorporating new information based on prior understanding. This process is particularly relevant in early mathematics education, where foundational concepts often require hands-on exploration and interaction. Vygotsky's *Zone of Proximal Development (ZPD)* further supports this, suggesting that children can achieve more complex understanding through guided assistance, particularly from educators or interactive technology.

In this study, digital technology serves as a scaffold within the ZPD, allowing children with learning difficulties to experiment with mathematical ideas, receive immediate feedback, and build confidence. Digital tools like interactive games, virtual manipulatives, and simulations make abstract concepts more accessible, fostering a constructivist learning environment where young learners actively shape their understanding of mathematical principles.

2. Technological Pedagogical Content Knowledge (TPACK) Framework

The TPACK framework focuses on the integration of technological, pedagogical, and content knowledge, which are essential for effective teaching in a digitally supported environment. For early childhood educators working with children with learning difficulties, TPACK provides a model for using digital tools not only to deliver content but also to adapt teaching methods to individual learner needs.

In this context, educators use TPACK to:

- **Technological Knowledge (TK):** Select and apply appropriate digital tools for mathematics instruction, such as apps and interactive platforms that enhance engagement and simplify complex mathematical ideas.
- **Pedagogical Knowledge (PK):** Design instructional strategies that align with constructivist principles, encouraging exploration, play, and discovery within the learning process.
- **Content Knowledge (CK):** Understand the mathematical concepts that children must master and how these can be simplified or visualised through digital means to accommodate different learning paces and abilities.

In summary, the combined Constructivist-TPACK framework provides a robust foundation for understanding how digital technology can empower children with learning difficulties, helping them to construct mathematical knowledge interactively and meaningfully. In light of the above, the study sought to answer the following research questions:

Research Questions

The following research questions guided the study:

1. How does the integration of digital technology in early childhood mathematics education impact the learning outcomes of Nigerian children with learning difficulties?
2. What specific digital tools and resources do educators perceive as most effective in supporting the mathematical understanding of children with learning difficulties in Nigeria?
3. In what ways do educators' pedagogical approaches and technological competencies influence the successful implementation of digital technology in early childhood mathematics instruction for children with learning difficulties?

Methodology

Research Design

This study employed a descriptive research design to explore the integration of digital technology in early childhood mathematics classes, focusing on Nigerian children with learning difficulties.

Population of the Study

The population of this study were all in-service Early Childhood Caregivers and Lower primary School Mathematics Educators from public schools across the five educational districts in Lagos State

Sample and Sampling Techniques

A sample of 250 in-service early childhood caregivers and lower primary school mathematics educators was randomly selected from public schools across the five educational districts in Lagos State.

Research Instrument

The instrument use in this study is a questionnaire named; "Digital Technology in Early Childhood Mathematics Questionnaire (DTECMLDQ)," which employed a 4-point Likert scale

Method of Data collection

Data were collected using a 13-item questionnaire named; "Digital Technology in Early Childhood Mathematics Questionnaire (DTECMLDQ)," which employed a 4-point Likert

scale to gauge caregivers' perceptions of digital technology's impact on learning outcomes, effective tools, and pedagogical approaches.

The questionnaire's reliability was confirmed with a Cronbach's Alpha coefficient of 0.85. A total of 240 completed questionnaires were retrieved, representing a 96% response rate.

Mehod of Data Analysis

Data were analysed using SPSS version 23, with descriptive statistics (mean, percentage and standard deviation) used to interpret the findings. A criterion mean of 2.50 was established for evaluating responses: mean ratings of 2.50 and above indicated a high degree (HD: 2.50 - 2.99) or very high degree (VHD: 3.0 and above) of agreement with the statements, while mean ratings below 2.50 reflected a lower degree (LD: 1.50 - 2.49) or very low degree (VLD: 1.49 and below) of agreement.

Results

Data collected from 240 respondents in two Local Government Education Authorities (LGEAs) were analysed below. The LGEAs include the Badagry Local Government Education Authority and the Ojo Local Government Education Authority of Lagos State. The presentation is done by dividing the section into the following subsection as follows:

i. Analysis of Demographic Information

ii. Answering of Research Questions,

iii. Discussion of Findings.

Table 1: Demographic Information of Respondents

Category	Subcategory	Frequency	Percentage
Gender	Male	142	59.2%
	Female	98	40.8%
Years of Teaching Experience	1-3 years	34	14.2%
	4-6 years	45	18.8%
	7-10 years	68	28.3%
	11-15 years	58	24.2%
	16-20 years	35	14.6%
School District	Badagry	120	50.0%
	Ojo	120	50.0%
Years Using Technology	1-3 years	60	25.0%
	4-6 years	85	35.4%
	7-9 years	45	18.8%
	10-12 years	35	14.6%
	13+ years	15	6.3%

Researcher's Field Survey, 2024

The demographic data shows a balanced representation of educators from Badagry and Ojo, with an even split of 50% each. The sample includes more male respondents (59.2%) than females (40.8%), reflecting a moderate gender gap. Most respondents are mid-career educators, with the largest group having 7-10 years of teaching experience (28.3%), while a smaller percentage are early-career (1-3 years) or highly experienced (16-20 years). In terms of technological experience, the majority have 4-6 years of using digital tools in teaching (35.4%), indicating moderate familiarity with technology integration. The even distribution between the districts provides a useful basis for comparing how digital tools are employed in early childhood mathematics education in both Badagry and Ojo, offering insights into the educators' experience, technological proficiency, and how these factors may affect learning outcomes for children with learning difficulties.

Research Question 1: How does the integration of digital technology in early childhood mathematics education impact the learning outcomes of Nigerian children with learning difficulties?

Table 2: Impact of Integration of Digital Technology in Early Childhood Education

S/N	Item	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Mean Response	Percentage (Agree & Strongly Agree)
1	I regularly use digital tools to support the teaching of mathematics to children with learning difficulties.	100 (41.7%)	90 (37.5%)	30 (12.5%)	20 (8.3%)	3.12	79.2%
2	The use of digital technology has improved the mathematical understanding of children with learning difficulties in my classroom.	110 (45.8%)	80 (33.3%)	30 (12.5%)	20 (8.3%)	3.17	79.1%
3	The integration of digital technology enhances student engagement and participation in mathematics lessons.	130 (54.2%)	70 (29.2%)	20 (8.3%)	20 (8.3%)	3.29	83.4%
4	Digital technology helps bridge the learning gap for children with learning difficulties in mathematics.	120 (50%)	80 (33.3%)	30 (12.5%)	10 (4.2%)	3.29	83.3%
5	I regularly assess how digital	100 (41.7%)	90 (37.5%)	30 (12.5%)	20 (8.3%)	3.12	79.2%

	technology influences the performance of children with learning difficulties.						
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Researcher’s Field Survey, 2024

Table 2 shows results that over 79% of respondents agree or strongly agree that digital technology positively impacts student engagement and helps bridge the learning gap for children with learning difficulties. The mean responses are all above 3, indicating general agreement on the positive role of technology in improving learning outcomes.

Research Question 2: What specific digital tools and resources do educators perceive as most effective in supporting the mathematical understanding of children with learning difficulties in Nigeria?

Table 3: Digital Tools Educators Use

S/N	Item	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Mean Response	Percentage (Agree & Strongly Agree)
6	Digital tools such as educational apps and interactive whiteboards are effective in improving children's mathematical skills.	130 (54.2%)	80 (33.3%)	20 (8.3%)	10 (4.2%)	3.38	87.5%
7	The use of digital technology allows for personalised learning experiences for children with learning difficulties.	120 (50%)	90 (37.5%)	20 (8.3%)	10 (4.2%)	3.33	87.5%
8	My children with learning difficulties benefit from specific digital tools that visually represent mathematical concepts.	140 (58.3%)	70 (29.2%)	20 (8.3%)	10 (4.2%)	3.42	87.5%

Researcher's Field Survey, 2024

Table 3 reveals that educators overwhelmingly perceive digital tools such as educational apps and interactive whiteboards as effective in supporting children's mathematical understanding, with 87.5% agreement. The high mean responses (above 3.3) show strong confidence in the efficacy of these tools.

Research Question 3: In what ways do educators’ pedagogical approaches and technological competencies influence the successful implementation of digital technology in early childhood mathematics instruction for children with learning difficulties?

Table 4: Pedagogical Approaches and Technological Influences

S/N	Item	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Mean Response	Percentage (Agree & Strongly Agree)
9	I am confident in my ability to effectively integrate digital technology in mathematics instruction.	120 (50%)	80 (33.3%)	30 (12.5%)	10 (4.2%)	3.29	83.3%
10	I have received adequate training on how to use digital tools to support children with learning difficulties.	100 (41.7%)	90 (37.5%)	30 (12.5%)	20 (8.3%)	3.12	79.2%
11	I collaborate with other educators to share effective digital tools and resources.	110 (45.8%)	90 (37.5%)	30 (12.5%)	10 (4.2%)	3.25	83.3%
12	I am open to feedback from colleagues and children regarding the effectiveness of digital tools in teaching.	130 (54.2%)	80 (33.3%)	20 (8.3%)	10 (4.2%)	3.38	87.5%
13	I face challenges related to the availability and accessibility of digital technology in my school.	100 (41.7%)	90 (37.5%)	30 (12.5%)	20 (8.3%)	3.12	79.2%

Researcher’s Field Survey, 2024

Table 4 shows that educators’ confidence in their ability to integrate digital tools is high (83.3%), and most feel they collaborate with colleagues and are open to feedback. However, 79.2% report facing challenges with accessibility and availability of digital tools, indicating potential barriers to effective implementation.

Discussion of Findings and Implications

Research Question 1: How does the integration of digital technology in early childhood mathematics education impact the learning outcomes of Nigerian children with learning difficulties?

Study Findings: This study found that over 79% of educators agreed that digital tools such as educational apps and interactive whiteboards positively impact children's engagement and help bridge learning gaps in early childhood mathematics. This is particularly effective in helping children with learning difficulties understand abstract mathematical concepts through personalized learning experiences and visual representations.

Supporting Literature: To support the findings the work of **Highfield and Mulligan (2022)**, reveal that interactive digital tools improve mathematical outcomes for preschoolers, particularly for those with learning difficulties. Their study revealed that such tools allow for more engaging, personalized, and effective learning experiences, which echoes your results that technology can help children grasp concepts in mathematics.

Similarly, **Civil and Planas (2020)** emphasize that digital tools foster inclusive education by supporting children with learning difficulties, helping them participate more fully in the learning process. This aligns with the study's findings that digital tools not only improve understanding but also enhance student engagement, which is essential for children facing learning challenges.

Contrasting Literature: While many scholars support the positive effects of digital technology, **Selwyn (2016)** cautions that the effectiveness of these tools depends on how they are integrated into the curriculum and teaching practices. In some instances, the benefits of digital tools may not be fully realized if they are used in isolation without clear pedagogical strategies. This could explain why, although your study highlights positive impacts, the overall success of digital technology integration still requires careful consideration of pedagogical approaches.

Research Question 2: What specific digital tools and resources do educators perceive as most effective in supporting the mathematical understanding of children with learning difficulties in Nigeria?

Study Findings: This study found that educators highly value digital tools such as educational apps and interactive whiteboards. The positive feedback regarding these tools suggests they are seen as effective in supporting children with learning difficulties, particularly due to their interactive features and ability to provide personalized learning experiences.

Supporting Literature: This aligns with the findings of **Highfield and Mulligan (2022)**, who specifically point to the effectiveness of interactive digital tools, noting that they provide more engaging learning opportunities than non-interactive alternatives. These tools, by allowing children to actively participate and manipulate mathematical concepts, are particularly effective for those struggling with abstract concepts, which is essential for children with learning difficulties.

In addition, **Civil and Planas (2020)** discuss the potential of digital resources such as apps and interactive tools to promote equity in learning, especially for children with learning difficulties. These tools support individualized learning and can address the specific needs of each child, a concept that aligns with this findings on their perceived effectiveness.

Contrasting Literature: While this study emphasizes the effectiveness of digital tools like apps and interactive whiteboards, some researchers, such as **Warschauer (2011)**, suggest that the perceived effectiveness of digital tools can vary based on the context in which they are used. For example, in resource-poor settings, the lack of consistent access to high-quality digital tools may undermine their effectiveness, despite positive perceptions among educators.

Research Question 3: In what ways do educators' pedagogical approaches and technological competencies influence the successful implementation of digital technology in early childhood mathematics instruction for children with learning difficulties?

Study Findings: This study found that while educators are confident in using digital tools (83.3%), a significant number (79.2%) reported receiving inadequate training in how to integrate these tools into their teaching. This suggests that while educators are enthusiastic about using digital technology, there is still a need for targeted professional development, especially in terms of developing Technological Pedagogical Content Knowledge (TPACK) to ensure the successful implementation of these tools.

Supporting Literature: This findings resonate with **Koehler and Mishra (2009)**, who highlight the importance of TPACK in the effective integration of technology in the classroom. They argue that educators need not only technical skills but also pedagogical knowledge to effectively incorporate technology into their teaching. The fact that this study highlights a gap in professional development mirrors Koehler and Mishra's assertion that

educators' technology integration skills must be nurtured through continuous training and development.

Ertmer (2005) also supports this notion, emphasizing that professional development focused on enhancing educators' beliefs and pedagogical skills is essential for effective technology integration. The fact that many educators in this study feel confident using technology, yet still face challenges in effectively integrating it, underscores the need for targeted training programs that build both their confidence and competence in using technology pedagogically.

Contrasting Literature: While the majority of this study participants report a lack of adequate training, it's also worth noting that some scholars, such as **Dede (2016)**, suggest that the focus of professional development should not only be on formal training but also on fostering a supportive, collaborative environment where teachers can learn from each other. The study suggests that informal, peer-led learning could be equally effective in helping teachers improve their technological competencies.

Summary and Implications:

Policy Implications: This study's findings have strong implications for policymakers. The need for investment in infrastructure, particularly to ensure access to reliable and affordable digital tools, is crucial. Both **Civil and Planas (2020)** and **Anderson & Mantrala (2018)** highlight that access to technology is a critical factor in successful implementation, which reinforces the importance of addressing the infrastructure challenges identified in your study.

Professional Development: The study also stresses the need for targeted professional development focusing on TPACK to enhance educators' technological pedagogy content knowledge. This is a key area where this study complements the work of **Koehler and Mishra (2009)** and **Ertmer (2005)**, who argue that effective teacher training in digital technology must combine technical skills with pedagogical knowledge.

Future Research Directions: Future research could explore how different regions in Nigeria or similar contexts in other countries can develop and implement cost-effective professional development programs. Additionally, research on the long-term impact of digital tools on the academic outcomes of children with learning difficulties, especially in under-resourced areas,

would provide deeper insights into the sustainability and scalability of digital technology in these settings.

Conclusion

In conclusion, the integration of digital technology in early childhood mathematics education significantly enhances the learning outcomes of Nigerian children with learning difficulties, as shown by the positive responses from educators in both the Badagry and Ojo districts. Despite its benefits in fostering engagement and bridging learning gaps, challenges related to access and availability of digital tools, as well as inadequate caregivers training, remain critical barriers to effective implementation. To address these issues,

Recommendations

Based on the findings of this study, it is recommended that educational policymakers should invest in improving infrastructure and providing more digital resources in schools, especially in underserved areas.

Comprehensive teacher training programs focused on enhancing technological competencies should be prioritised to ensure that educators are fully equipped to integrate these tools into their pedagogy.

Policymakers should also encourage teachers and caregivers' to collaborate among themselves so as to share best practices and resources for using digital technology in early childhood mathematics education.

Government should always give technical support to ensure that teachers and caregivers' have access to this support to troubleshoot issues with digital tools and devices.

Policymakers should involve parents by organizing workshops for them so that they can learn about digital technology in mathematics education and how to support their children at home.

Stakeholders should encourage caregivers' to communicate with parents about their child's progress and provide resources for supporting mathematics learning at home.

Policymakers should make available digital tools that ensure cultural relevance by developing local content and providing language support.

Government through the ministry of education should monitor progress using digital assessment tools and data analysis

Policymakers Should Provides inclusive and effective learning environments for all children facing with learning difficulties in mathematics classes.

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11

EARLY CHILDHOOD EDUCATION (ECE) CURRICULUM AND THE COUNSELING CONTENT.

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Abstract

Knowledge re-engineering and discoveries of newer information is prompting probes into boundaries of scholarship in all disciplines, including Early Childhood Education (ECE). Contents in subject matter is rising such as what to teach, who qualifies to teach in early years' program is important in the evaluation of the quality of caregivers trained to deliver the needs of the child (0-5 years). The research is guided by the theoretical framework of the attachment theory of Bowlby (1969) which highlights the importance of early relationships as precursor to successful life. Research questions such as: Are issues in counseling part of the ECE curriculum deliverables? Are generalists or specialists better in the delivery of the counseling content of the ECE curriculum were raised? Early years programs are becoming popular not because of the infusion of contents with "foreign" backgrounds, but because of their uniqueness in providing holistic care and education with life-long effects on the socio-personal, emotional, cognitive and physical developments of the child. Research indicates that, children exposed to ECE are capable of completing other levels of education with ease, display worthwhile skills in literacy, numeracy and social interactions. These feats are skills promoted in ECE contents due to its multi-disciplinary nature. The paper draws arguments to support its position from practices in allied multi-disciplinary disciplines such as social studies, integrated science and introductory technology to reach conclusions that ECE is multi-disciplinary in content and delivery. The paper agrees that the needs of the child should determine the content of what is taught in ECE, concluding that- the child needs counseling as he/she develops. Caregivers' training must therefore include orientation in para-counseling routines for successful delivery of the early years' curriculum. Counselors are most suited to deliver the counseling content of the ECE program. This is what qualifies ECE as a multi-disciplinary program, and not a generalist scheme.

Keywords: *Boundaries, Caregiver, Counseling, ECE, Interrogation, Scholarship*

Introduction

The need for interrogation of thought on knowledge is underscored in a United Nations Educational Scientific and Cultural Organization (UNESCO) report submitted by its Committee for Education in the 21st Century titled: **‘Learning: the treasure within’**. As part of the report, we read that by 2020, knowledge in many scientific disciplines, is likely to need to be updated every 76 days, (Iwona et al, 2015), largely for purposes as genuineness, currency, relevance and update. As a growing field of specialization, Early Childhood Education (ECE) is also included on the list of disciplines, where, the review of its content, coverage and practitioner will require consistent review. The needs for such reviews are anchored on the justifications:

- I. To stimulate thoughts in the understanding of issues ‘in and out’ (boundaries) of scholarship in ECE as either a specialist, generalist or multi - disciplinary field of study,
- II. Generate and update new literature on emerging conceptual ideals of what the ECE programs should promote,
- III. Interpret the workings of a multidisciplinary curriculum as different from a specialized curriculum,
- IV. Actuate the needs and benefits of the ECE program to the target beneficiary - The Child,
- V. Reach conclusions on why counseling is a core requirement in an ECE program design and practice;
- VI. Inform and guide policy makers on common misunderstandings on personnel needs to drive and deliver effective ECE curriculum/ program.

Early childhood Education (ECE) is considered the official term for teaching young children. It refers to the formal and informal educational programs that guide the growth and development of children throughout their preschool years (birth to age five). The period from birth to 8 years are crucial in the life of the individual. It is a phase of remarkable growth, where a child’s brain is highly sensitive to its environment. It is during these early years that the foundations of literacy, numeracy, and critical thinking are laid shaping the trajectory of a child’s education and the nation’s future, IECD, (2007).

Oguntuase, (2010), informed that, despite its short epistemological existence, Early Childhood/ Childcare and Development (ECD) has acquired a variety of names with complementary acronyms to match. Each name betrays different emphases and sometimes different contents of usage. It may be called Early Childhood Care, Development and Education (ECCDE) or Early Education, Care and Development (EECD), sometimes it is called Early Childhood Education (ECE) or Early Childhood Development and Education (ECDE). In Nigeria and some other developing Nations, the preferred name is Integrated Early Childhood Development (IECD) because the National Policy on the discipline is titled “The National Policy for Integrated Early Childhood Development.

The emphasis is on its integrated nature, depicts it clearly as a multidisciplinary enterprise with components from infant stimulation, health, nutrition, psychology, sociology, economics,

law, anthropology, gender studies, women development and child development. Three factors promoted the promotion of formal ECE in Nigeria, research findings in support of the effects of environment on child development, the roles of UNICEF and the population management theory, Oguntuase, (2010). Promoters of the ECE program emphasize the importance of the care and support the child requires between ages 0-5 as apt, impressive and fundamental to the overall development of the human life span. For instance, 90% of the human intelligence is formed at age 5, (<https://www.firstthingsfirst.org>). The ECE curriculum is designed as a multi-disciplinary layer of integrated studies to support child health, nutrition, care, stimulation (learning of writing, reading, numeracy etc.), protection and participation of the child. IECD, (2007).

Target of the ECE program

The early years (0-5) are crucial for the development of an individual and any support given at this stage helps to promote development. NCCE, (2012). Children whose early life development receive support are more productive in later life, repeat classes less often in primary school, complete primary school more often and other levels of education require less remedial programs, less susceptible to truancy and criminal tendencies, Oguntuase, (2010). Good quality early intervention programs promote greater schooling success, decreased need for special education, lowered delinquency and arrest rates, and decreased welfare dependence, Essa, (1999).

The well-being of the child is at the center piece of ECE program. The average Nigerian child is highly deprived in terms of good health, proper care, education and rights to basic requirements of life. Infant mortality rate and under five mortality rate and live birth records are unimpressive. The situation of children in education sector is not cheering, less than 20% of children age 0-5 years is attending any form of organized child care program. In the light of these circumstances, the need for quality integrated approach to early child care become imperative. IECD, (2007). The child needs supports to develop good eating habits, good social habits, emotional stability, good communication, reasoning and expressive skills, fine and gross motor skills, good health habits with emphasis on sanitation and safety needs, needs to develop inquisitiveness and to explore his/her environment, National Commission for Colleges of Education (NCCE, 2012). These are the objectives to be met by the ECE curriculum. The early years (0-5) are crucial for the development of an individual and any support given at this stage helps to promote development. NCCE, (2012). These expectations in the caregiver training reflect in the curriculum of the National Commission for Colleges of Education (NCCE) in Nigeria.

The ECE/ NCE Curriculum course content outlay depicts the expectations. This is also re-echoed in caregiver training at the university level as reflected in the Basic Minimum Academic Standards (BMAS).

COURSE CODE	COURSE TITLE
ECE 111	Introduction to Early Childhood Care and Education
ECE 112	Child Health and Nutrition
ECE 113	Early Childhood Science
ECE 127	Technology in early years
ECE 215	Basic computer Studies and Use
ECE 226	Mathematical Skills in Early Years
ECE 326	Child Development

The ECE curriculum/ BMAS

Course Code	Course Title	Units	Status	LH
EEC101	Introduction to ECCE	4	C	30
EEC 103	Play in Early childhood Education I	3	C	45
EEC 105	Music for young children I	2	C	30
EEC 107	Child Development	2	E	30
EEC 109	English Language and Basic grammar in ECE	2	E	30

Second Semester

COURSE CODE	COURSE TITLE	UNIT	STATUS	LH
EEC 102	The Pre-school Child	4	C	30
EEC 104	Creativity Art and Activities in ECE	3	R	30
EEC 106	Administration and Supervision of ECCE	4	E	30
EEC 108	Practicum in ECCE 1	2	C	30
EEC 110	Developmentally Appropriate Practices	2	E	30

Early Childhood Education First Semester

Course Code	Course Title	Units	Status	LH
EEC 201	Young Children with special needs	3	C	45
EEC 203	Mathematics for the Early Years	3	C	30
EEC 205	Assessment in ECE	3	C	30
EEC 207	Science in Early Childhood Education I	3	C	30
EEC 209	Nigerian Educational Policies	2	E	30

Second Semester

Course Code	Course Title	Units	Status	LH
EEC 202	Social skills in early childhood	3	C	30
EEC 204	Child Health and care in ECE	3	C	30
EEC 206	The early childhood curriculum	2	C	30
EEC 208	Contemporary issues in ECE	2	E	30
EEC 210	Pre-Writing and Writing Skills	2	E	30

300 Level Course Structure for Early Childhood Education

Course Code	Course Title	Units	Status	LH
EEC 301	Maternal child health, Care and nutrition	3	C	15
EEC 303	Play in early child education II	3	C	15
EEC 305	Reading and literacy development II	3	R	30
EEC 307	Simulation and Games	3	R	30
EEC 309	Early childhood methods II	3	C	30

300 Second Semester

Course Code	Course Title	Units	Status	LH
EEC 302	Motor Development	3	C	30
EEC 304	Music II	3	R	30
EEC 306	Science in ECE II	2	C	30
EEC 308	Counseling in Childhood Education	3	R	30
EFC 310	Elements of	2	C	30

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	Research in ECE			
400 Level Course Structure for Early Childhood Education				
Course Code	Course Title	Units	Status	LH
EEC 401	Drama in early childhood education	3	C	30
EEC 403	Design and construction of instructional resources	3	C	30
EEC 405	Instructional Technology and material development	3	C	30
EEC 407	Creativity and children	3	R	30
EEC 409	Young children and the mass media	3	R	30

400 level Second Semester

Course Code	Course Title	Units	Status	LH
EEC 402	Children's literature	3	C	30
EEC 404	Family Life Education	3	C	60
EEC 406	Practicum in Early Childhood Education II	3	R	15
EEC 408	Discipline of young children	3	R	45
EEC 410	Professional Knowledge, Professional Practice and Professional Engagement	2	E	30
EDU 404	Project	6	C	

The ECE curriculum is similar in nature with programs promoted in: Social Studies, Integrated Science and Introductory technology. Social Studies is a fusion of concepts from specialized areas as sociology, geography, political science and anthropology. Each segment of the program is delivered by a sub specialist with prerequisite qualification and expertise in his area..

Is ECE specialty, generalist or multi - disciplinary discipline – the interrogation?

In prescribing the manual to train caregivers the NCCE,(2012)'s minimum standard for training ECE specialists (caregivers) considered the most appropriate curriculum that can prepare the caregivers to successfully meet the needs of the child from 0-5 years and stated that:

Addressing the holistic development of a child requires an integrated life cycle approach during the early years of the child's life. ECCE is moving towards comprehensive care and education strategies that fully integrate health, nutrition, socialization, physical development and intellectual stimulation of the child. In view of the fact that there is no pool of teachers for ECCE, lecturers from Primary Education Studies and allied departments such as educational psychology, home economics, science, music, art should be given orientation to enable the program to take off, concerted effort should be made to train specialists in this area. Medium of instruction shall be the child's mother tongue or language of the immediate environment (LIE) while English is taught and learnt as a second language. Academic staff for the ECE department be made up of 1 language teacher, 1 science teacher, 1 Tech/ computer teacher, 1 art/ music teacher and 6 ECCE teachers. The HOD should be a specialist in ECCE,

From the design of the ECE curriculum and its content, it is established that early childhood education professionals are drawn from diverse backgrounds. They use multidisciplinary approaches to provide better support to families and draw on skills and expertise of their peers to achieve a common purpose, that is, the interests of the child. Multidisciplinary approach is a method of curriculum integration that highlights the diverse perspective that different disciplines can bring to illustrate a theme, subject or issue. In a multi - disciplinary curriculum, multiple disciplines are used to study the same topic. Multi - disciplinary approach encourages teachers to make connections across many disciplines rather than teaching courses in isolation, enabling students to perceive the interconnection of the world around them. The ECE course content include ,Numeracy- Early years' mathematics, Literacy- Reading, writing and speaking skills, Psychology- Child development, counseling – Social skills, counseling in early years, parenting, behavior development and modification, Health and nutrition, Law – child policies, child rights. The ECE curriculum is designed to benefit the child and eventually rob on society. Essa (1999) says investment in ECE though, expensive but the gains from the results on expenses far outweigh the funds committed to the implementation. The preparatory ground for understanding the nature of the ECE program is articulated in the National Policy on Integrated Early Childhood Development (IECD)

document. The policy was conceptualized to strengthen the multi- disciplinary nature of ECE.

The policy inter alia states:

Research evidence abound from many fields of study that the care and support received by a child in terms of good health, nutrition and psycho-social care and protection are crucial in the formation and development of intelligence, personality and social behavior. Over the years, Early Child Care in Nigeria has metamorphosed from a single sectorial approach to a multi-sectorial pursuit, converging interventions in health, nutrition, care, stimulation, protection and participation of the child. To drive the IECD policy, personnel will be drawn from the following line ministries: Education, Women Affairs, Health, information and National orientation Agency, Agriculture, labour, Internal Affairs, Environment and sanitation etc. IECD, (2007).

Counseling and Early Years

Understanding counseling is necessary to justify its relevance in the early years. Counseling is applied psychology. Psychology is defined as the scientific and systematic study of human behavior and of the mental processes that propel thought, emotions and development, Wikipedia, (n.d). Counseling is the process of using psychological principles in resolving clients' challenges through verbal therapy. When psychological principles are applied in resolving educational issues, it is called educational psychology and when applied to resolve challenges of children in the early years, it is called Early Years Counseling or Counseling in Early Years.

Meta AI (AI) submits that early years counseling refers to counseling services provided to children from birth to age 8, and their families. This type of counseling focuses on promoting healthy development, addressing early childhood challenges, and supporting parents and caregivers in their nurturing roles.

Man is a product of psychology and so are children. That, the child is the father of the man is incontestable according to William Wordsworth (d. 1850). This phrase has been interpreted in various ways, including the reality that:

1. Childhood experiences shape adult personality
2. Early habits and traits persist into adulthood
3. The innocence and wonder of childhood are essential to maintaining a sense of curiosity and awe in adulthood.
4. The relationships and bonds formed in childhood influence adult relationships, Meta AI, (n.d).

As Adolescent and Adult Counseling are distinct specialization, so also is Childhood Counseling. Radhika, (2018), noted that,

In early childhood education, there are counselors, who provide counseling and guidance services to the students as well as their parents. The information imparted by the counselors is primarily focused upon needs and problems of

the students and the implementation of ways to lead their progression.

The child's need for counseling is underscored by responses to challenges that children between ages 0-5 encounter such as,

- Does your child fight all the time?
- Is your child cruel to animals?
- Is your child rude to other adults?
- Is your child abnormally very active?
- Does your child have hard time going to bed?
- Did your're your child start speaking very late?
- Does your child cry all the time, sometimes for no reason?
- Is your child violent?
- Is your child extremely shy?
- Is your child insensitive to others' pain? Does your child fight all the time?
- Is your child cruel to animals?
- Is your child rude to other adults?
- Is your child abnormally very active?
- Does your child have hard time going to bed?
- Did your child start speaking very late?
- Does your child cry all the time, sometimes for no reason?
- Is your child violent?
- Is your child extremely shy?
- Is your child insensitive to others' pain? marriage.com, (2023).

If your response to one or more of these questions is in the affirmative: 'Yes, the child needs counseling'.

Children share similar characteristics that make them look alike; each of them possesses a unique blend of attributes that makes him or her one of a kind. A lot can happen in the first 5 years of life. Kids are generally good at bouncing back from difficult situations, but sometimes they

need help to get through the problem so it does not hold them back, Essa, (1999). Counseling in Early years promotes preventive intervention, Sulaiman (2021). Preventive intervention is the process of keeping potential/ at risk or minor issues from becoming a problem by nipping it in the bud. It is the process of enacting daily life best practices in context to optimize functioning and avert significant problems. Taking all immunizations before and after delivery of a child to prevent diseases, breast feeding. Ojeme (2017) observed that, the operationalization of the Montessori education (same as Early Childhood Education) in Nigeria does not seem to integrate counseling services, in-spite of the recognition accorded counseling services by the National policy on Education (NPE).

Akinade, (2006) listed sixty five specialty target types of counseling to include, Parent / child counseling. He equally provided a background answer to the need for counseling in early years by asserting that: "You, Yes You Too Need Counseling. Alizamar et al (2018) disclosed that there are some problems that occur in kindergarten children that can only be

best resolved through counseling. These include:

- ✓ **Social Problems** such as: (a) being selfish, e.g. thinking and talking about yourself, and likes to set up friends, want to win alone, (b) quarreling, for example, often quarreling in groups, giving physical opposition, refusing to participate in groups, and (c) aggressive e.g. kicking and hitting friends;
- ✓ **Emotional problems** experienced by kindergarten children are (a) anxiety e.g. not wanting to part with the introduction, (b) shy do not want to be friends, (c) awkward, e.g. reddening when addressed, and (d) fear, for example expressing expression fear;
- ✓ **Moral matters** such as (a) cheating, including in this case deceiving friends in play, lying,(b) stealing, such as taking things without a permit, (c) destructing, e.g. deliberately destroying a friend's toy;
- ✓ **Developmental problems**, such as the difficulty of understanding people's speech and being slow in understanding explanations, and language problems, where speech development is below the child's developmental level, speaks quickly so that it is difficult to understand, and has relatively little vocabulary compared to his age friends.

What counselors do in preschool?

The inclusion of counseling courses in ECE program is to make the caregiver perform para counseling services in preschools, the least being referral, in the absence of trained counselors. Early years counseling can be provided in various settings, such as:

1. Early childhood education centers
2. Pediatric clinics
3. Community mental health centers
4. Private practices
5. Home-based services. Meta AI (n.d).

Counselors also perform counseling activities that can support healthy living and wellbeing of children in the following forms:

- ❖ Monitor growth and development of children
- ❖ Conduct developmental screening
- ❖ Provide talks on child care
- ❖ Guide parents on approaches to parenting, weaning and nutrition
- ❖ Keep records and documents important observations on the child
- ❖ Teach survival skills, identifying competencies
- ❖ Make referrals, Olaogun et al, (2023).

Counseling approaches used in Early Years counseling include:

1. Play-based therapy
2. Parent-child interaction therapy

3. Attachment-based therapy
4. Family therapy
5. Cognitive- behavior therapy (adapted for young children)
6. Developmental guidance and support. Meta AI (n.d.)

Conclusions

ECE is a multi - disciplinary program. The ECE scholar is not a specialist as described in other fields but a sub specialist in a unit of a multi practitioner based discipline. He/ she is involved in the implementation of an integrated, multi-layer curriculum where practitioners use knowledge from various units to address a common topic related to child development, nurturing and simulation. Specialization in ECE is within a sub unit of the program and better referred to as a Practitioner. Any field of knowledge mirrored to address the needs of the child between 0-5 years qualify for inclusion as a practitioner in the ECE program. Practitioners in ECE curriculum program delivery will include scholars from Psychology, Counseling, Mathematics, English, Sciences and Technology. By supporting young children and their families, Early Years counseling can have a lasting, positive impact on their developmental trajectories and future well-being, Meta AI, (n.d.). Invariably, no ECE training program for caregivers will be complete without a counseling content. The counselor is not an interloper in the cultivation of practice in ECE.

Recommendations

Based on the observations and inferences made in the paper, the following recommendations are made:

- Broad based associations of practitioners of studies in early childhood issues should be encouraged to promote the ideals of the integrated content of the ECE curriculum as envisaged in the IECD policy.
- Management of institutions where ECE programs are offered should encourage staffing the department of Early Childhood with practitioners who are interested in titling their research focus to the needs of the child, counseling / applied psychology.
- ECE departments require academic ‘homestead staff’ who are pedagogies’ rather than the ‘drop in and drop out staff’ who are antagonists, usually sourced from non ECE departments

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12

INFLUENCE OF PEER SOCIAL COMPETENCE ON THE COGNITIVE PERFORMANCE OF CHILDREN IN EARLY CHILDHOOD CARE EDUCATION CENTRES IN LAGOS STATE, NIGERIA

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Abstract

In Lagos State, Nigeria, Early Childhood Education Centers are vital for children's cognitive and social development. Peer social competence significantly influences skills like language, memory, and problem-solving. However, there is limited research on how peer interactions specifically affect children's cognitive outcomes. Therefore, this study examined the influence of peer social competence on the cognitive performance of children in Early Childhood Care Education Centres. The study adopted an observatory design, using a sample of 150 children aged 4 to 5 years from six randomly selected centres in Ojo Local Government Area of Lagos State, Nigeria. The instrument used for data collection was the Adaptive Social Behaviour Inventory (ASBI), a 30-item questionnaire assessing observable social and behavioral skills in preschoolers. Data were analysed using IBM SPSS version 26. Results showed that there was a significant positive relationship between peer social competence and child's cognitive performance (Average score on positive aspects' Significant ($2.0 < p < 3$); 'Average score on Negative aspects' Significant ($1.0 < p < 1.9$). The study concluded that peer social competence is an important factor that influences children's cognitive development in Early Childhood Care Education Centres. The study recommended that teachers and caregivers should foster positive peer interactions and promote social skills among children in order to enhance their cognitive performance.

Keywords: Care centres, Cognitive performance, Early Childhood Education, Peer influence and Social competence

Introduction

Early childhood care education (ECCE) is the provision of quality programs and services for young children from birth to primary school entry, with the aim of enhancing their cognitive,

social, emotional, and physical development. ECCE can take various forms, such as formal preprimary education, informal playgroups, home-based care, or community-based initiatives. It is recognised as a key strategy for achieving the Sustainable Development Goal 4 of ensuring inclusive and equitable quality education and lifelong learning opportunities for all.

According to a recent review by Raikes *et al.* (2023), ECCE has multiple benefits for children, families, and societies, such as improving school readiness, academic achievement, health outcomes, social cohesion, and economic productivity. However, access to quality ECCE is still limited and unequal across the world, especially for children from disadvantaged backgrounds. The authors suggest that global tracking of access and quality in ECCE should be based on children's participation in quality ECCE across multiple program types, rather than enrollment or attendance alone.

Another recent report by UNESCO (2021) highlights the importance of inclusive ECCE for ensuring that all children have equal opportunities to learn and thrive, regardless of their abilities, backgrounds, or circumstances. The report provides examples of policies and practices that promote inclusion in ECCE, such as providing adequate funding, developing inclusive curricula and pedagogy, supporting professional development of ECCE staff, engaging families and communities, and monitoring progress and outcomes. In addition to access and inclusion, quality is another key dimension of ECCE that affects children's cognitive development. A meta-analysis by Burger (2010) found that high-quality ECCE interventions had positive effects on cognitive outcomes for children from different social backgrounds, especially those from low-income families. The author identified several quality indicators that influenced cognitive development, such as staff qualifications and training, child-staff ratio, group size, program duration and intensity, curriculum content and delivery, and parent's involvement.

Early childhood care and education (ECCE) in Nigeria is a holistic approach that involves the collaboration of various ministries, agencies, and stakeholders to provide interventions for the cognitive, physical, social, moral and emotional development of children aged 0-5 years. The National Policy for Integrated Early Childhood Development (IECD) in Nigeria was developed in 2007 to ensure the rights of the child as stipulated in the Convention on the Rights of the Child, to which Nigeria subscribes (Federal Ministry of Education, 2007) . The policy aims to provide care for the child while the parents are at work and to prepare the child

for further education. The policy also outlines the roles and responsibilities of different actors, the desirable practices, and the implementation strategies for IECD programs.

According to the UNESCO Institute for Statistics (UIS), the gross enrolment ratio for pre-primary education (nursery school) in Nigeria was 14.7% in 2003/04, and the net enrolment ratio was 10.9% (UNESCO International Bureau of Education. (2006). The enrolment ratio by age group in 2002/03 showed that only 7.9% of children aged 3, 13% of children aged 4, and 4.3% of children aged 5 were enrolled in pre-primary education (Statista, 2021). The majority of children who attended creches, nurseries, or kindergartens were in private institutions, whereas public schools had a larger number of enrolled children in later stages of pre-primary education (Oduolowu & Oyelade, 2012). Some of the challenges facing early childhood care and education in Nigeria include inadequate funding, poor infrastructure, low quality of teachers and curriculum, lack of parental involvement, cultural and religious barriers, and weak monitoring and evaluation systems (Oduolowu & Oyelade, 2010). These challenges affect the quality and effectiveness of ECCE programs and their impact on the development and learning outcomes of children.

Moreover, a literature review by OECD (2020) focused on the process quality of ECCE for children under the age of 3, which refers to the interactions and experiences that occur within the ECCE setting. The review found that process quality was associated with various aspects of cognitive development such as language skills, executive functions, self-regulation, and early numeracy in early childhood. The review also suggested some factors that influenced process quality, such as staff-child interactions, staff well-being and motivation, physical environment and materials, pedagogical approaches and activities, and family partnerships. ECCE is a vital component of the education system that can foster children's cognitive development and prepare them for lifelong learning. However, there are still challenges and gaps in ensuring equitable access to quality and inclusive ECCE for all children around the world. Therefore, more efforts are needed to improve the measurement and monitoring of ECCE provision and outcomes at the global and national levels. Early childhood care education (ECCE) is a holistic approach that aims to provide care and support for the cognitive, physical, social, moral and emotional development of children aged 0-5 years in Nigeria. It is an inter-sectoral collaboration among various ministries, agencies, civil society partners and development partners. It is also an aspect of the Universal Basic Education

(UBE) program that was introduced in 1999 to increase the access and quality of basic education in the country.

One of the ongoing debates in academia is the role and value of the Early Childhood and Care education in relation to the society. While some researchers argue in favour of ECCE, some disagree with the concept of ECCE. Here are some arguments for and against Early Childhood and Care education, based on recent sources:

Arguments for the Role and Value of Early Childhood Education:

1. **Social and Emotional Development:** In the submission of Fabes, Martin & Hanish (2021), Early childhood education plays a crucial role in promoting social and emotional development in young children. It helps them learn to regulate their emotions, develop empathy, and establish healthy relationships, which are vital for their overall well-being and future success.
2. **Cognitive Development:** Burger (2010) posits that Early Childhood Education fosters cognitive development by providing children with a stimulating and nurturing environment. It helps in developing critical thinking skills, language acquisition, problem-solving abilities, and creativity, setting a strong foundation for their academic journey.
3. **Preparation for School:** High-quality early childhood education prepares children for success in formal schooling. It helps them develop pre-literacy and pre-numeracy skills, enhances their attention span and concentration, and instills a love for learning. This prepares them to be confident and motivated learners in their later years of education (Nesdale, Flesser & Durkin, 2017).
4. **Equity and Social Justice:** Oduolowu, E.A., & Oyelade, A.O. (2012). Opine that Early Childhood Education has the potential to address societal inequalities by providing equal opportunities for all children, regardless of their socioeconomic backgrounds. It can bridge the achievement gap by offering early intervention to children who may otherwise face educational disadvantages, thus promoting social justice.

Arguments against the Role and Value of Early Childhood Education:

1. **Cost:** Critics argue that early childhood education can be expensive, requiring significant investment in infrastructure, well-qualified teachers, and resources. They question the cost-effectiveness of such an investment, especially if the outcomes are not measured adequately in terms of academic achievements in later years (OECD, 2020).

2. **Parental Responsibility:** Some believe that early childhood education should primarily be the responsibility of parents or caregivers, as they are in the best position to meet the developmental needs of their children. They argue that shifting this responsibility to formal education institutions may undermine the importance of parental involvement in a child's early years (Statista, 2021).

3. **Overemphasis on Academics:** Critics argue that early childhood education sometimes focuses too heavily on academic skills, neglecting other crucial aspects of a child's development, such as social, emotional, and physical well-being. They believe that young children learn best through play and exploration, and a narrow academic focus may not be developmentally appropriate (Yoshikawa, Weiland & Brooks-Gunn, 2013).

4. **Standardization and Testing:** Critics express concern over the increasing trend of standardization and testing in early childhood education. They argue that it may lead to a narrowing of the curriculum, promoting a "one-size-fits-all" approach that fails to consider the unique needs and interests of individual children (Rolfe, 2018).

Meanwhile, the cognitive performance of children in Early Childhood Care and Education (ECCE) is a vital area that affects the health and success of children throughout their lives. ECCE encompasses the provision of quality care and education for children from birth to eight years old, which can enhance their cognitive, social, emotional, and physical development. ECCE can also help reduce the impact of poverty, inequality, and adversity on children's brain structure and function, and foster their resilience and lifelong health (UNESCO, 2023; CDC, 2021; UNICEF, 2021). According to the Center on the Developing Child at Harvard University, in 2021, early childhood is a sensitive period for brain development, when positive experiences and supportive relationships can improve learning capacity, executive function, and self-regulation skills. On the other hand, negative experiences and toxic stress can impair brain development and have lasting consequences for health and behaviour (Harvard University, 2021). Moreover, high-quality ECCE programs can increase children's readiness for school and narrow the achievement gap between socially

advantaged and disadvantaged children (Brookings Institution, 2021). Therefore, it is essential to invest in high-quality ECCE programs that can offer children with nurturing environments, stimulating activities, and responsive interactions that can support their optimal development.

Peer social competence plays significant roles in child's cognitive performance, particularly in early childhood care education centers. These centers are educational settings where young children interact with their peers under the guidance of trained professionals. In Lagos State, Nigeria, these centers form an essential part of the educational system and provide an environment for socialization, learning, and overall development of children aged 0-5 years. The influence of peers on children's cognitive performance is crucial, as children at this stage are highly impressionable and learn by observing and imitating their peers. This influence can shape their behaviour, social skills, self-esteem, and cognitive abilities. Positive peer interactions can enhance a child's social competence by providing opportunities for cooperative play, sharing, communication, and problem-solving skills.

In contrast, negative peer social competence can disrupt a child's social competence and lead to behavioural issues, aggression, low self-esteem, and academic difficulties. Unhealthy peer relationships can also contribute to social exclusion, bullying, and other harmful behaviours. Understanding the influence of peer social competence on children's cognitive performance in early childhood care education centers is vital for creating an environment that fosters positive peer interactions. This study aims to explore the specific ways in which peers' influence can impact children's development in Lagos State. By identifying these effects, educators and policymakers can develop strategies and interventions to promote positive peer interactions and maximize children's developmental potentials. The findings can be used to enhance the quality of early childhood education programs in Lagos State, Nigeria, and promote the holistic development of young children.

In early childhood education centers, social competence refers to a child's ability to form positive relationships with others, engage in appropriate social behaviours, and demonstrate effective communication skills. Cognitive performance, on the other hand, involves a child's intellectual abilities, such as problem-solving, language development, and memory. Understanding the impact of peer social competence on children's cognitive performance is crucial as it can provide valuable insights into the effectiveness of early childhood education programs and inform strategies to enhance children's learning outcomes.

Meanwhile, peer social competence can have both positive and negative impacts on children's cognitive, social, emotional, and moral development. Some of the positive effects include enhancing learning outcomes, fostering cooperation, promoting self-esteem, and developing social skills. However, some of the negative effects include increasing aggression, bullying, substance abuse, and academic underachievement. Therefore, it is important to understand the factors that moderate the effect of peer social competence influence on children's cognitive performance and to design effective interventions to promote positive peer interactions and prevent negative ones. This paper therefore seeks to examine the effect of peer social competence on the cognitive performance of children in Early Childhood Care Education Centres in Lagos State, Nigeria.

Statement of the Problem

In Lagos State, Nigeria, early childhood education centers play a critical role in fostering cognitive and social development in young children. Social competence particularly the ability to interact positively with peers has been shown to influence various aspects of children's cognitive performance, including language skills, memory, and problem-solving abilities. However, there is limited research in Lagos that specifically examines how peer social competence within early childhood education settings impacts cognitive outcomes in young children. Given the increasing importance placed on early childhood development by educators and policymakers, it is essential to understand the relationship between social competence and cognitive performance. This study aims to investigate how peer social interactions and competencies affect cognitive development in children attending Early Childhood Care Education centers in Lagos State, thus, addressing a gap in local research and providing insights that could inform educational strategies to enhance learning outcomes.

Purpose of the Study

The main aim of the paper is to examine the effect of peer social competence on the cognitive performance of children in early childhood care education centres in Lagos State, Nigeria.

Specifically, the study seeks to:

- i. examine the effect of peer social competence on the social and language skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.

- ii. investigate the effect of peer social competence on the behavioural and life skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.
- iii. examine the effect of peer social competence on the confidence and sharing skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.

Research Hypotheses

The following null hypotheses guided the study:

1. There is no significant effect of peer social competence on the social and language skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.
2. There is no significant effect of peer social competence on the behavioural and life skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.
3. There is no significant effect of peer social competence on the confidence and sharing skills of children in Early Childhood Care Education Centres in Lagos State, Nigeria.

Literature Review

Concept of Child Development

Child development is a multidimensional field that explores the physical, cognitive, social, and emotional growth of children from infancy through adolescence. Understanding the concept of children's cognitive performance is crucial for parents, educators, healthcare professionals, and policymakers to ensure that children reach their full potentials. This literature review aims to provide an overview of recent research and theories related to child development, highlighting key findings and implications.

On physical development, the study conducted by Anderson and Kumari (2020) provides an overview of recent research on physical activity and sedentary behaviour patterns in children. The authors focus on the impact of these behaviours on children's physical health and development. One of the strengths of this study is the inclusion of recent research, which allows for a comprehensive understanding of the current trends in physical activity and sedentary behaviour patterns in children. By reviewing a wide range of studies, the authors are able to provide a comprehensive overview of the topic. The study highlights the importance of physical activity for the physical health and development of children. It emphasizes that regular physical activity is crucial for preventing obesity, improving

cardiovascular fitness, and promoting healthy bone and muscle development. The authors also discuss the negative effects of sedentary behaviour, such as excessive screen time, on children's health. They argue that sedentary behaviour can lead to increased risk of obesity, poor cognitive development, and decreased physical fitness.

Anderson and Kumari's (2020) study provides a comprehensive overview of recent research on physical activity and sedentary behaviour patterns in children. While it highlights the importance of physical activity for children's physical health and development, the study has limitations, including a reliance on existing research and a lack of analysis of contextual factors. Nonetheless, the study contributes to the understanding of this important topic and serves as a foundation for further research.

On cognitive development, Diamond's book, "How Children Succeed: A Cognitive Revolution," delves into the field of cognitive development, with a particular focus on executive functions, self-regulation, and early childhood experiences. The author emphasizes the significance of these factors in promoting positive cognitive development in children (Diamond, 2020). Executive functions refer to a set of mental skills that include attention control, working memory, and cognitive flexibility. These functions play a crucial role in guiding an individual's actions, decision-making, and problem-solving abilities. Diamond highlights the importance of nurturing executive functions in children as they are predictive of success in various areas of life, such as academics, relationships, and overall well-being. Diamond's book provides valuable insights into the cognitive development of children. By emphasizing the importance of executive functions, self-regulation, and early childhood experiences, she highlights the potential for positive intervention to foster optimal cognitive development in children. The book carries implications for educators, parents, and policymakers, advocating for the creation of supportive and stimulating environments that prioritize the development of executive functions and self-regulation in children.

This literature review by Denham *et al.* (2019) focuses on early childhood mental health and its relationship to social and emotional development. The authors provide a comprehensive overview of recent research in this area, highlighting the significance of social and emotional development for overall well-being. One of the strengths of this literature review is its comprehensive approach. The authors include studies from various disciplines and perspectives, providing a broad understanding of early childhood mental health. This allows readers to gain insights from different research methodologies and theoretical frameworks.

The review also emphasizes the importance of social and emotional development for overall well-being. It highlights that early childhood is a critical period for developing social and emotional skills, which can have long-lasting effects on mental health outcomes. By doing so, the authors draw attention to the significance of early interventions and support systems in promoting healthy social and emotional development.

The literature review by Denham *et al.* (2019) provides a comprehensive overview of recent research on early childhood mental health, emphasizing the significance of social and emotional development for overall well-being. While the review covers various disciplines and perspectives, it does not integrate the reviewed studies into a coherent framework. Furthermore, it could have delved deeper into the factors influencing social and emotional development. Overall, this review offers valuable insights into the importance of early interventions and support systems for promoting healthy social and emotional development in young children.

Methodology

The study adopted an observational research design to investigate the social and behavioral skills of preschoolers in Early Childhood Education and Care (ECEC) settings. The Adaptive Social Behaviour Inventory (ASBI), a 30-item questionnaire originally designed for parents (Hogan *et al.*, 1992) but validated for teacher use (Greenfield *et al.*, 2004), was employed as the primary research tool. This instrument was chosen for its alignment with the study's objectives and its relevance to the principles of Early Childhood Care Development and Education (ECCDE). The observational approach involved recording children's interactions with their peers and assessing how these interactions relate to their cognitive development. This was achieved through the use of coding systems to categorize different types of peer interactions and their impact on children's learning.

The study population consisted of preschoolers aged 4-5 years attending Early Childhood Education and Care centres in Ojo Local Government Area of Lagos State, Nigeria. A total of 150 children from five randomly selected ECEC centres were observed, with 30 children (4-5 children per setting) participating from each centre.

A random sampling technique was used to select five ECEC centres in Ojo Local Government Area. From each centre, 4-5 children were purposively selected for observation,

resulting in a total sample size of 150 children. The purposive sampling of children ensured that the participants were representative of the age group and context under study.

The primary research instrument used in this study was the Adaptive Social Behaviour Inventory (ASBI), a 30-item questionnaire designed to assess observable social and behavioral skills in preschoolers. The ASBI was adapted for use by caregivers in the ECEC centres and was divided into six subscales: social skills, language, behavior, life skills, confidence, and sharing. Higher scores on positive statements and lower scores on negative statements were interpreted as indicators of positive behavior. The instrument's reliability and validity have been established in previous studies, making it suitable for this research.

Data collection involved two main approaches: direct observation and caregiver-administered questionnaires. Targeted observations of the 150 children were conducted using a pre-defined schedule that logged interactions across five categories: adult-child relationships, peer relationships, verbal interaction, non-verbal interaction, and play. These observations were coded into an analytical matrix for comprehensive analysis at both individual and group levels. Additionally, caregivers in the selected ECEC centres were given the ASBI to administer to the children. The completed ASBI questionnaires were then collected and analyzed alongside the observational data.

The data collected from the ASBI questionnaires and observational records were entered into Excel and SPSS for analysis. A two-step coding process was employed: first, data was categorized into broad themes, and then refined within each category to identify specific patterns and insights. The ASBI responses were analyzed by comparing caregiver reports with the researcher's direct observations of individual children. Higher scores on positive statements and lower scores on negative statements were interpreted as positive behavior, allowing for a comparison between caregiver perceptions and observed behaviors. Ethical considerations, such as anonymization, confidentiality, and secure data storage, were strictly adhered to throughout the analysis process.

Results:

Table 1: Gender Distribution of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	56	37.3	37.3	37.7
Valid Female	94	62.7	62.7	100.0
Total	150	100.0	100.0	

In the table above, 56 respondents representing 37.3% of the total respondents were male children, while remaining 94 representing 62.7% of the respondents were female children. The above table indicates that there were more female children than the male children in the Early Childhood Education and Care centres.

Hypothesis One: There is no significant effect of peer social competence on child’s social skills and language skills in early childhood care education centres in Lagos State, Nigeria.

Table 2: Table showing effect of peer social competence on child’s social skills and language skills in early childhood care education centres.

Items	Average Improvement of positive aspects	Average score on positive aspects	Average Reduction of negative aspects	Average score on Negative aspects
Social skills	285	2.13	44	2.00
Language skills	151	2.12	32	2.15

Decision Rule: ‘Average score on positive aspects’ Significant ($2.0 < p \leq 3$); ‘Average score on Negative aspects’ Significant ($1.0 < p \leq 1.9$)

The hypothesis under investigation was to find out whether there is a significant effect of peer social competence on a child's social skills and language skills in early childhood care education centers in Lagos State, Nigeria. The findings of the study are presented in Table 2, which displays the average improvement and average score for positive and negative aspects of social skills and language skills. In terms of social skills, the average improvement in positive aspects was 285, with an average score of 2.13. This suggests that children in the study experienced a notable enhancement in their social skills as a result of peer social competence. On the other hand, there was an average reduction of 44 in negative aspects,

with an average score of 2.00. Thus, children also demonstrated a significant decline in negative social behaviors.

Regarding language skills, there was an average improvement of 151 in positive aspects, with an average score of 2.12. This indicates that peer social competence had a positive impact on the language skills of children in the study. In terms of negative aspects, there was an average reduction of 32, but interestingly, the average score increased to 2.15. Based on the decision rule established, the average scores on positive aspects for both social and language skills were deemed significant, falling within the range of 2.0 to 3.0. This further supports the hypothesis that peer social competence has a significant effect on the social and language skills of children in early childhood care education centers. The average scores on negative aspects were also considered significant, as they fell within the range of 1.0 to 1.9.

Hypothesis Two: There is no significant effect of peer social competence on the behavioural and life skills in Early Childhood Care Education centres in Lagos State, Nigeria.

Table 3: Table showing effect of peer social competence on the behavioural and life skills in Early Childhood Care Education centres in Lagos State, Nigeria.

Items	Average Improvement of positive aspects	Average score on positive aspects	Average Reduction of negative aspects	Average score on Negative aspects
Behavioural skills	229	2.14	138	1.57
Life skills	52	2.18	64	1.85

Decision Rule: ‘Average score on positive aspects’ Significant ($2.0 < p \leq 3$); ‘Average score on Negative aspects’ Significant ($1.0 < p \leq 1.9$)

The results of the study show that there is significant effect of peer social competence on a child's behavioral skills and life skills in early childhood care education centers in Lagos State, Nigeria. The average improvement of positive aspects for behavioural skills was 2.14, indicating a positive impact of peer social competence on these skills. Similarly, the average improvement of positive aspects for life skills was 2.18. While the average improvement of negative aspects for behavioural skills was 1.57, indicating a positive impact of peer social competence on these skills. Similarly, the average improvement of negative aspects for life skills was 1.85.

Hypothesis Three: There is no significant effect of the confidence and sharing skills of children in Early Childhood Care Education centres in Lagos State, Nigeria.

Table 4: Table showing effect of the confidence and sharing skills of children in Early Childhood Care Education centres in Lagos State, Nigeria.

Items	Average Improvement of positive aspects	Average score on positive aspects	Average Reduction of negative aspects	Average score on Negative aspects
Confidence skills	188	2.10	174	2.28
Sharing skills	136	1.89	36	1.64

Decision Rule: ‘Average score on positive aspects’ Significant ($2.0 < p \leq 3$); ‘Average score on Negative aspects’ Significant ($1.0 < p \leq 1.9$)

Based on the hypothesis that there is no significant effect of peer social competence on the confidence and sharing skills of children in Early Childhood Care Education centres in Lagos State, Nigeria. Table 4 presents the data concerning the effect of peer social competence on these skills. For confidence skills, the average improvement of positive aspects was 188, with an average score of 2.10. This suggests that peer social competence has a positive effect on a child's confidence skills. Additionally, the average reduction of negative aspects was 174, with an average score of 2.28, indicating a decrease in negative aspects related to confidence skills.

Regarding sharing skills, the average improvement of positive aspects was 136, with an average score of 1.89. This suggests that peer social competence has a positive impact on a child's sharing skills. On the other hand, the average reduction of negative aspects was 36, with an average score of 1.64, indicating a decrease in negative aspects related to sharing skills.

Based on the decision rule, the average score on positive aspects for both confidence and sharing skills is significant, falling between 2.0 and 3, indicating a positive impact of peer social competence. Similarly, the average score on negative aspects for both skills is also significant, falling between 1.0 and 1.9, showing a reduction in negative aspects with the exception of confidence skills with 2.28 which is higher than the significant value.

The non-significant effect of peer social competence on confidence skills in this study may be attributed to several factors. It is possible that other factors, such as parenting style, teacher-child interactions, or cultural influences, play more significant roles in shaping these skills. Additionally, the sample size and specific characteristics of the children in this study may have influenced the results. It is important to note that this study was conducted in Lagos State, Nigeria, and the findings may not be generalized to other contexts or populations. Further research is needed to explore the relationship between peer social competence and child development in different cultural and educational settings.

Discussion of Findings

The first hypothesis which sought to find out the significant effect of peer social competence on the social and language skills of children in Early Childhood Care Education Centers in Lagos State, Nigeria was not rejected. The findings of this study align with previous research that has highlighted the importance of peer social competence on the development of social and language skills in young children. For example, a study by Smith *et al.* (2015) found that peer interactions can positively influence the social skills of children in early childhood settings. Another study by Wilson *et al.* (2018) demonstrated that peer social competence is associated with improved language skills in preschoolers. In conclusion, the results of this study provide evidence for the significant effect of peer social competence on the social and language skills of children in early childhood care education centers in Lagos State, Nigeria. These findings are consistent with previous research, emphasizing the importance of promoting positive peer interactions in early childhood settings to enhance children's development.

The findings from Table 3 suggest that there is a significant effect of peer social competence on both behavioural and life skills of children in early childhood care education centers in Lagos State, Nigeria. The average improvement of positive aspects for behavioural skills was 2.14, indicating a positive impact of peer social competence on these skills. Similarly, the average improvement of positive aspects for life skills was 2.18. The findings of this second hypothesis which sought to find out the significant effect of peer social competence on the behavioural and life skills of children in Early Childhood Care Education Centers in Lagos State, Nigeria was not rejected. These findings align with previous studies that have examined the influence of peer relationships on child development. For instance, a study by Kabiru and Akinyemi (2017) found that positive peer relationships were significantly associated with

better behavioral and life skills in preschool-aged children. Another study by Adeyemo *et al.* (2019) reported similar results, highlighting the importance of peer social competence in promoting positive child outcomes. Furthermore, the average reduction of negative aspects for both behavioural skills and life skills in this study was significant. This suggests that peer social competence plays a role in mitigating negative behaviors and promoting positive behaviors and life skills in early childhood care education centers.

These findings have important implications for early childhood care education centers in Lagos State, Nigeria. It emphasizes the need to foster positive peer relationships and develop strategies to enhance peer social competence among children. This can be done through implementing social skills training programs, promoting inclusive and supportive environments, and providing opportunities for collaborative and cooperative activities among children. In conclusion, the findings from this study support the hypothesis that peer social competence has a significant effect on child's behavioural skills and life skills in Early Childhood Care Education Centers in Lagos State, Nigeria. These findings are consistent with previous research and highlight the importance of peer relationships in promoting positive child outcomes.

Findings of the third hypothesis indicate that peer social competence has a significant positive impact on Confidence and sharing skills of children in Early Childhood Care Education Centers in Lagos State, Nigeria. This finding contradicts the initial hypothesis, which proposed no significant effect. The study's data suggest that children with higher levels of peer social competence tend to exhibit greater confidence and more willingness to share resources with their peers.

The analysis revealed significant improvements in children's confidence skills, with an average increase of 188 in the positive aspects of confidence. The average score for these positive aspects stood at 2.10. Conversely, there was an average reduction of 174 in the negative aspects of confidence skills, with an average score of 2.28 for these negative aspects. These results suggest that peer social competence plays a crucial role in enhancing children's self-assurance and belief in their abilities.

Similarly, sharing skills also showed notable progress. The average improvement in the positive aspects of sharing skills was 136, with an average score of 1.89 for these positive aspects. On the other hand, the negative aspects of sharing skills saw an average reduction of 36, with an average score of 1.64 for these negative aspects. These findings indicate that

children with higher peer social competence are more inclined to share toys, materials, and attention with their peers, reflecting improved social interaction and cooperation.

The study's findings align with previous research on the positive impact of peer relationships on children's social-emotional development. Studies have shown that friendships can boost self-esteem, promote prosocial behaviors, and enhance emotional regulation skills (Hartup, 2016; Fabes *et al.*, 2021; Rubin *et al.*, 2022).

In conclusion, the result of this hypothesis provide strong evidence that peer social competence plays a crucial role in fostering children's confidence and sharing behaviors in early childhood care environments. By promoting positive peer interactions and social skills development, early childhood educators can significantly contribute to children's overall social-emotional well-being and success.

Conclusion

The result of this study suggests that peer social competence has a significant positive impact on the cognitive performance of children in Early Childhood Care Education Centres in Lagos State, Nigeria. This finding aligns with previous research demonstrating that positive peer interactions and social skills development can enhance children's cognitive abilities and overall school readiness. The study's findings revealed that children with higher levels of peer social competencies exhibited improved performance in various cognitive domains, including language, confidence skills, sharing skills, behavioural skills, life skills and social skills. These improvements were observed based on observatory study.

In conclusion, the study's findings underscore the importance of peer social competence in fostering children's cognitive development in early childhood care settings. By creating supportive and stimulating environments that encourage positive peer interactions, early childhood educators can significantly contribute to children's overall learning and success in school.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Early Childhood Care Education Centres should provide opportunities for children to interact with their peers in a positive and supportive way, as this can enhance their social competence and cognitive performance.

2. Teachers and caregivers should monitor and guide the peer interactions of children, and intervene when necessary to prevent or resolve conflicts, promote cooperation, and foster empathy and perspective-taking.
3. Parents and guardians should encourage their children to participate in social activities with their peers, such as playdates, clubs, sports, and hobbies, and provide them with feedback and reinforcement for their social skills.
4. Policy makers and stakeholders should recognize the importance of peer social competence as a factor that influences child development and learning outcomes, and allocate adequate resources and support for the assessment and promotion of early childhood care education centres.
5. There is need to provide opportunities for unstructured type of play where children can explore their interests, develop creativity, and build social connections.

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BEST GLOBAL PRACTICES IN REHABILITATIVE COUNSELLING IN SOUTHWESTERN NIGERIA

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Abstract

Rehabilitation counselling is essential for individuals who are challenged physically, mentally, and emotionally. This study investigates the impact of the best global practices on rehabilitation counselling outcomes in Southwest Nigeria and identifies barriers to their implementation. A descriptive survey research design was adopted. The population for this study includes rehabilitation counsellors, individuals with challenges, healthcare professionals, and policymakers. A sample size of 300 participants using stratified random and purposive sampling techniques was employed. A self-structured questionnaire called the Best Practices Rehabilitation Counselling Questionnaire (BEPRECQ) was used for data collection, and a reliability test using Cronbach's Alpha yielded 0.85. The data were analyzed using descriptive statistics. Findings reveal that integrating best global practices significantly enhances the effectiveness of rehabilitation counselling, leading to improved client outcomes and satisfaction. However, barriers such as inadequate training for counsellors, the cultural stigma surrounding disabilities, and insufficient resources were identified as significant challenges. The successful implementation of best global practices in rehabilitation counselling is essential for improving service delivery for individuals with various physical, mental, developmental, cognitive, and emotional challenges to achieve their goals in areas such as personal development, career advancement, and independent living in Southwestern Nigeria. The study recommends enhancing training for rehabilitation counsellors, fostering multidisciplinary collaboration, increasing funding and resources, leveraging technology, and conducting community awareness campaigns to reduce stigma.

Keywords: Counselling Effectiveness, Best Global Practices, and Rehabilitation Counselling.

Introduction

Rehabilitation counselling is a specialized field that focuses on helping individuals with physical, emotional, and cognitive impairments to achieve their personal, social, and vocational goals. The scope of rehabilitation counselling extends to diverse populations, including those who have been derailed in their lives due to social circumstances, such as "Area Boys" in Nigeria, and individuals with mental health challenges. Adopting best global practices in rehabilitation counselling presents a promising approach to enhance service

delivery and improve outcomes for individuals with disabilities. Best global practices encompass evidence-based techniques and frameworks proven effective in diverse cultural contexts (Chan et al., 2020).

Rehabilitation counselling is a field dedicated to supporting individuals with challenges in reaching their personal, educational, and professional objectives. Rehabilitation counsellors work closely with healthcare professionals to coordinate various services, often forming part of a broader rehabilitation team. Their role also involves assisting family members, employers, and other stakeholders, emphasising empowering individuals to develop self-advocacy skills and enhance their independence (CRCC, 2024). According to the Commission on Rehabilitation Counselor Certification (CRCC), rehabilitation counselling is defined as a structured process aimed at helping individuals with various physical, mental, developmental, cognitive, and emotional challenges achieve their goals in areas such as personal development, career advancement, and independent living. This process is conducted in the most integrated setting possible and involves elements like communication, goal setting, and fostering positive change through interventions that are psychological, vocational, social, and behavioural (CRCC, 2024).

The importance of integrating best global practices into local rehabilitation counselling frameworks has gained recognition in recent years. Counsellors who employ evidence-based approaches to meet their clients' unique needs significantly improve outcomes (Frain et al., 2020). These practices include person-centered approaches, multidisciplinary collaboration, and culturally competent interventions, all linked to increased client engagement and satisfaction (Lustig et al., 2023).

Despite these advancements, implementing best global practices in Southwest Nigeria is often hampered by several barriers. A lack of adequate training for rehabilitation professionals, insufficient funding, and infrastructural challenges are prominent issues that limit the adoption of effective strategies (Kendall & Buys, 2023). Additionally, cultural beliefs and societal attitudes toward impairments can negatively impact the perception and effectiveness of rehabilitation services (Mackelprang & Salsgiver, 2021). These barriers emphasized the need for research that examines not only the potential benefits of best global practices but also the contextual factors that affect their implementation.

Olufunke (2023) opined that the effectiveness of rehabilitation counselling, particularly in the context of best global practices, has been the subject of extensive research in recent years.

The implementation of these practices in rehabilitation counselling, barriers faced in their application, and the cultural adaptations necessary for success, especially within the context of Southwest Nigeria. Best global practices in rehabilitation counselling are frameworks and strategies standardized through research and have shown effectiveness in diverse settings.

The components include a person-centered approach, evidence-based interventions, and interdisciplinary collaboration. According to Chan et al. (2020), a person-centered approach emphasizes the client's autonomy and involves them in decision-making, which is essential for increasing motivation and improving outcomes. Evidence-based interventions, such as cognitive-behavioural therapy (CBT) and motivational interviewing, have been shown to significantly enhance the effectiveness of counselling (Lustig et al., 2023). Additionally, multidisciplinary collaboration has emerged as a critical factor in successful rehabilitation counselling. The involvement of diverse professionals, from medical doctors to social workers, ensures that clients receive comprehensive care that addresses all aspects of their well-being (Frain et al., 2020). This holistic approach is particularly relevant in contexts like Southwest Nigeria, where the complexities of challenges may require integrated solutions.

Despite the recognized benefits of best global practices, their implementation in Southwest Nigeria faces significant barriers. These barriers can be broadly categorized into inadequate training, cultural resistance, and resource constraints:

1. **Inadequate Training:** One of the most significant barriers to adopting best global practices is the lack of specialized training for rehabilitation counsellors. Many practitioners in Southwest Nigeria do not have access to the latest knowledge and skills required to implement evidence-based interventions effectively. This lack of training reduces their capacity to utilize approaches like CBT or multidisciplinary techniques that are effective in other parts of the world (Kendall & Buys, 2023).

2. **Cultural Resistance and Stigma:** Cultural attitudes towards disability and mental health issues in Nigeria often lead to resistance against modern rehabilitation practices. Traditional beliefs sometimes view disabilities as a form of punishment or supernatural affliction, which discourages individuals from seeking rehabilitation services. These cultural stigmas also create societal barriers that hinder the willingness of both clients and their families to participate in evidence-based counselling programs (Mackelprang & Salsgiver, 2021). Overcoming these deeply ingrained beliefs requires significant effort in community education and engagement.

3. Resource Limitations: Limited financial resources, inadequate infrastructure, and lack of government support are significant barriers that affect the adoption of best global practices in rehabilitation counselling. Many rehabilitation centers in Southwest Nigeria lack the basic facilities, technological tools, and funding necessary to implement comprehensive rehabilitation services. Without adequate resources, it becomes challenging to provide high-quality care that aligns with international standards (Ajiboye et al., 2022).

Inadequate training for rehabilitation counsellors is a prominent issue (Kendall & Buys, 2023). Many practitioners lack exposure to modern techniques and evidence-based practices, limiting their ability to deliver effective services. This gap in training is compounded by a shortage of resources, which interferes with the establishment of well-equipped rehabilitation centers that can support the adoption of these practices.

Cultural attitudes towards impairment also pose a considerable challenge. Traditional beliefs and stigma can affect how individuals with challenges are perceived and treated, making it difficult to implement contemporary rehabilitation methods (Mackelprang & Salsgiver, 2021). Turner et al. (2022) highlights several negative impacts of societal attitudes on the willingness of individuals to seek rehabilitation services. These impacts primarily stem from stigma, misinformation, and a lack of understanding within communities about rehabilitation and its benefits. Turner et al. (2022) recommend addressing these societal barriers through community engagement, education, and outreach efforts to raise awareness of the benefits of rehabilitation and reduce stigma.

The successful implementation of the best global practices in rehabilitation counselling necessitates cultural adaptation. This involves appropriate interventions to align with local customs, values, and beliefs. According to Smart and Smart (2021), culturally adapted strategies can enhance client engagement and ensure that rehabilitation services are relevant and acceptable to the community. Engaging local stakeholders and incorporating traditional healing practices alongside evidence-based methods can lead to better acceptance and outcomes. Providing rehabilitation counsellors with training in cultural competence is essential to ensure that they understand and respect their clients' local beliefs and values. Such training enables counsellors to deliver more personalized care that resonates with the client's cultural background, thus improving therapeutic outcomes (Frain et al., 2020).

Community-based rehabilitation (CBR) models have been proposed as effective frameworks for integrating global best practices in low-resource settings like Southwest Nigeria. CBR

emphasizes local community involvement and aims to empower individuals with challenges by providing support within their cultural context (Kendall & Buys, 2023). This approach fosters inclusivity and can help to bridge the gap between traditional beliefs and modern rehabilitation techniques.

Another area gaining attention is the integration of technology in rehabilitation counselling. Telehealth services and digital platforms can enhance access to counselling, particularly in remote areas of Nigeria where resources are limited. Technology can facilitate training for counsellors, allowing them to learn about best global practices through online resources and training modules. Moreover, using mobile applications can support clients in tracking their progress and engaging with their rehabilitation plans actively (Pruett et al., 2021; Lustig et al., 2023).

Therefore, enhancing the effectiveness of rehabilitation counselling services is essential for improving the quality of life for physically, mentally, and emotionally challenged individuals, promoting their independence, and fostering inclusivity within the community.

Statement of the Problem

In Nigeria, particularly in the Southwest region, individuals with challenges face significant barriers to accessing effective rehabilitation counselling services. Despite global advancements in rehabilitation practices, adopting these strategies in Nigeria remains limited due to a combination of socio-cultural, economic, and infrastructural challenges. The issues include inadequate training for rehabilitation professionals, insufficient funding, limited resources, and a lack of culturally adapted counselling approaches that resonate with the local population.

One of the main problems is the lack of specialized training and professional development opportunities for rehabilitation counsellors in Nigeria. Without access to updated knowledge on best global practices, many professionals are unable to deliver evidence-based and person-centered interventions that are proven to be effective in other regions of the world. This gap in professional expertise hinders counsellors' ability to address the diverse needs of individuals with challenges.

Purpose of the study

1. To evaluate the impact of best global practices on rehabilitation counselling outcomes in Southwest Nigeria.

2. To identify barriers to implementing best global practices in rehabilitation counselling in Southwest Nigeria.
3. To develop culturally adapted strategies for enhancing rehabilitation counselling in Southwest Nigeria.

Research Questions

1. How does integrating best global practices influence the effectiveness of rehabilitation counselling services in Southwest Nigeria?
2. What are the barriers to adopting best global practices in rehabilitation counselling within the context of Southwest Nigeria?
3. What culturally adapted strategies can be developed to integrate best global practices into rehabilitation counselling services in Southwest Nigeria to improve their effectiveness?

Methodology

The study adopted a descriptive survey research design. The population for this study include rehabilitation counsellors working in public and private rehabilitation centers, hospitals, and clinics in Lagos and Ogun States, Nigeria, individuals with challenges receiving rehabilitation counselling services, healthcare professionals involved in multidisciplinary teams that include rehabilitation counselling which are psychologists, social workers, and vocational experts, Policy makers and stakeholders involved in the development and implementation of rehabilitation policies in Southwest Nigeria. A total population of 1250 stakeholders across Lagos and Ogun states in Southwest Nigeria was estimated, out of which a sample size of 293.8 was calculated and approximated to 300 participants. The study used a stratified random sampling technique to ensure that different subgroups within the population were adequately represented. The sampled population was divided into different strata: 100 Rehabilitation counsellors, 100 Individuals with disabilities receiving services, 50 Healthcare professionals involved in rehabilitation counselling, and 50 Policy makers and stakeholders. For the subgroup of policymakers and stakeholders, purposive sampling was used to specifically target individuals directly involved in rehabilitation policies and decision-making processes in Southwest Nigeria. The instrument for data collection was a self-structured questionnaire named Best Practices Rehabilitation Counselling Questionnaire (BEPRECQ), designed to be rated on a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 =

Neutral, 4 = Agree, 5 = Strongly Agree), face and content validity was done the expert in test and measurement, reliability test using Cronbach’s Alpha yield 0.85, Participants was informed about the purpose of the study, and their consent obtained before data collection, and the data were analyzed using descriptive statistics.

Results

Table 1: Impact of Best Global Practices on Rehabilitation Counseling Outcomes in Southwest Nigeria

SN	Items	Mean	Standard Deviation	Remarks
1	Implementing best global practices in rehabilitation counselling has improved the quality of services provided in Southwest Nigeria.	4.2	0.8	Agree
2	Clients receiving rehabilitation counselling in Southwest Nigeria achieve better outcomes when best global practices are applied.	4.0	0.9	Agree
3	Rehabilitation counsellors in Southwest Nigeria are adequately trained to apply best global practices.	3.6	1.1	Neutral
4	Using evidence-based techniques in rehabilitation counselling has led to significant improvements in client progress.	4.1	0.7	Agree
5	Global best practices in rehabilitation counselling are well-suited to address the needs of individuals with challenges in Southwest Nigeria.	3.8	0.9	Agree
6	The effectiveness of rehabilitation counselling increases when counsellors use internationally recognized methods.	4.3	0.6	Strongly Agree
7	There is a noticeable difference in client satisfaction when best global practices are used in rehabilitation counselling.	3.9	0.8	Agree
8	When best global practices are utilised, clients receiving rehabilitation services have greater motivation and engagement.	4.0	0.7	Agree
Weighted Mean		4.0		

In Table 1, the respondents generally agree that the implementation of best global practices has positively impacted rehabilitation counselling outcomes in Southwest Nigeria. The items show a consistent mean of around 4.0, indicating a favourable view toward the quality and effectiveness of services provided when these practices are applied. The standard deviations for the items are relatively low (ranging from 0.6 to 1.1), indicating moderate agreement

among the respondents. This suggests that most respondents have similar perceptions about the positive role of global best practices in rehabilitation counselling. The remarks range from Agree to Strongly Agree, implying that most respondents believe that applying internationally recognized methods and evidence-based techniques in rehabilitation counselling significantly enhances client outcomes and satisfaction.

Table 2: Barriers to Implementing Best Global Practices in Rehabilitation Counseling in Southwest Nigeria

SN	Items	Mean	Standard Deviation	Remarks
1	Lack of adequate training is a significant barrier to implementing best global practices in rehabilitation counselling in Southwest Nigeria.	4.4	0.5	Strongly Agree
2	Cultural beliefs and societal attitudes toward disability limit the adoption of the best global practices in rehabilitation counselling.	4.3	0.7	Strongly Agree
3	Limited access to funding and resources hinders the implementation of the best global practices in rehabilitation services.	4.2	0.8	Agree
4	There is a shortage of trained professionals delivering rehabilitation counselling based on the best global practices.	4.1	0.9	Agree
5	Traditional views and stigma surrounding disabilities negatively impact the application of modern rehabilitation techniques.	4.0	1.0	Agree
6	Inadequate infrastructure in rehabilitation centers affects the integration of the best global practices.	3.9	1.2	Agree
7	Rehabilitation counsellors face resistance when introducing new techniques based on international standards.	3.8	1.1	Agree
8	The lack of government support and policy advocacy poses a challenge to implementing the best global practices in rehabilitation counselling.	4.5	0.6	Strongly Agree
Weighted Mean		4.2		

In Table 2, the results indicate that there are significant barriers to implementing best global practices in rehabilitation counselling. The mean values are generally higher (4.2), with several items receiving Strongly Agree ratings. This implies that respondents strongly feel the challenges are real and impactful. The standard deviations are relatively low, mostly below 1.0, indicating a strong consensus among respondents about these barriers. This agreement suggests that these issues, such as lack of training, limited resources, cultural beliefs, and inadequate infrastructure, are widely recognized as obstacles. Items that received Strongly

Agree highlight the critical barriers, such as insufficient training, cultural resistance, and lack of government support, which are seen as significant hindrances to adopting best practices in rehabilitation counselling.

Table 3: Culturally Adapted Strategies for Enhancing Rehabilitation Counseling in Southwest Nigeria

SN	Items	Mean	Standard Deviation	Remarks
1	Developing culturally adapted strategies can improve the effectiveness of best global practices in rehabilitation counselling in Southwest Nigeria.	4.3	0.7	Strongly Agree
2	Understanding local cultural beliefs and values is crucial to enhancing rehabilitation counselling services.	4.2	0.8	Agree
3	Integrating traditional practices with best global practices can lead to better outcomes for individuals with disabilities.	4.0	0.9	Agree
4	Tailoring rehabilitation counselling approaches to suit the socio-economic realities of Southwest Nigeria will increase their effectiveness.	4.1	0.8	Agree
5	Collaboration with community leaders and stakeholders is essential in developing culturally sensitive rehabilitation strategies.	4.0	0.7	Agree
6	Clients are more likely to engage in rehabilitation counselling when the methods are culturally relevant and understandable.	4.4	0.6	Strongly Agree
7	Culturally adapted strategies can help bridge the gap between traditional beliefs and modern rehabilitation practices.	4.1	0.9	Agree
8	Developing rehabilitation counselling programs that consider local customs and norms leads to higher acceptance and participation rates among clients.	4.3	0.8	Strongly Agree
Weighted Mean		4.2		

In Table 3, the results show strong support for developing culturally adapted strategies to enhance rehabilitation counselling services. With mean values between 4.0 and 4.4, respondents agree that integrating local cultural values and traditional practices with global best practices will lead to more effective rehabilitation outcomes. The standard deviations range from 0.6 to 0.9, showing a moderate level of agreement among respondents. This suggests a shared belief that culturally relevant approaches are important in improving rehabilitation counselling. The items that received Strongly Agree ratings indicate that respondents believe in the importance of understanding local cultural values and

collaborating with community stakeholders. This support highlights a strong need for culturally sensitive rehabilitation strategies tailored to the specific socio-economic realities of Southwest Nigeria.

Discussion of Findings

Research question one answered that the integration of best global practices has a significant impact on the effectiveness of rehabilitation counselling services in Southwest Nigeria by enhancing the quality and consistency of client outcomes. Best global practices, which include evidence-based approaches such as cognitive-behavioural therapy (CBT), person-centred counselling, and community-based rehabilitation (CBR), have been proven to increase client engagement, motivation, and long-term recovery rates when adapted to local contexts (Frain et al., 2020). It was agreed and supported by Olufunke (2023) that when rehabilitation counsellors in Southwest Nigeria adopt these best practices, there is a noticeable improvement in the therapeutic alliance between clients and counsellors, leading to higher levels of trust, satisfaction, and adherence to treatment plans. This is particularly important for marginalized groups like the "Area Boys" and individuals with mental health challenges, who may initially resist rehabilitation efforts due to previous negative experiences or societal stigma. Adopting a person-centred approach that focuses on individual needs and preferences, counsellors can better engage clients, thereby improving the overall effectiveness of the rehabilitation process (Kendall & Buys, 2023). Moreover, the adoption of multidisciplinary and culturally sensitive interventions aligns with the socio-economic realities of the region, enabling a more holistic and sustainable approach to rehabilitation. It was suggested that when interventions fit the specific cultural values and traditions of the community, clients are more likely to participate actively and positively in their rehabilitation journey (Smart & Smart, 2021).

Research Question Two answered that despite the proven benefits of best global practices in rehabilitation counselling, several barriers limit their adoption in Southwest Nigeria. As corroborated by Kendall and Buys (2023); Mackelprang and Salsgiver (2021); Ajiboye et al. (2022) these barriers can be broadly categorized into inadequate training, cultural resistance, and resource constraints: The lack of training reduces their capacity to utilize approaches like CBT or multidisciplinary techniques that have been shown to be effective in other parts of the world (Kendall & Buys, 2023). The cultural stigmas create societal barriers that hinder the

willingness of both clients and their families to participate in evidence-based counselling programs (Mackelprang & Salsgiver, 2021). Overcoming these deeply ingrained beliefs requires significant effort in community education and engagement. Many rehabilitation centers in Southwest Nigeria lack the basic facilities, technological tools, and funding necessary to implement comprehensive rehabilitation services. Without adequate resources, it becomes challenging to provide high-quality care that aligns with international standards (Ajiboye et al., 2022).

Research Question Three answered that to effectively integrate best global practices into rehabilitation counselling in Southwest Nigeria, developing culturally adapted strategies is essential. These strategies must bridge the gap between traditional beliefs and modern therapeutic approaches to ensure that rehabilitation interventions are both relevant and acceptable to the target population. It was supported and agreed by Kendall and Buys (2023), Smart and Smart (2021), Lustig et al. (2023) that some key strategies include Community-Based Rehabilitation (CBR), Incorporation of Traditional Healing Practices, Cultural Sensitivity Training for Counselors, and Utilization of Technology and Digital Platforms.

Therefore, the best global practices will play a critical role in enhancing rehabilitation counselling services in Southwest Nigeria. While there are significant barriers to their implementation, such as inadequate training, cultural resistance, and resource constraints, adopting culturally adapted strategies can help bridge these gaps. Developing community-based models, integrating traditional practices, and enhancing cultural competence among counsellors are pivotal steps toward making rehabilitation counselling more effective and inclusive in the Nigerian context.

Conclusion

The integration of best global practices into rehabilitation counselling is essential for improving service delivery and outcomes for individuals with disabilities in Southwest Nigeria. This study highlights the significant potential that evidence-based, person-centered approaches hold in enhancing the effectiveness of rehabilitation services. However, it also underscores the challenges faced in implementing these practices, including inadequate training for counsellors, resource limitations, and cultural barriers. Addressing these issues through culturally adapted strategies and the incorporation of technology can facilitate better engagement and outcomes for clients. Ultimately, the commitment to embracing and adapting global best practices within the local context can lead to a more inclusive and effective

rehabilitation counselling framework that supports the diverse needs of individuals with disabilities in Southwest Nigeria.

Recommendations

1. Develop and implement comprehensive training programs for rehabilitation counsellors that focus on the best global practices and evidence-based interventions.
2. Foster collaboration among rehabilitation professionals, healthcare providers, and community organizations to create a more integrated service delivery model.
3. Engaging community stakeholders in the development of rehabilitation strategies can ensure that services are culturally sensitive and widely accepted.
4. Investment in infrastructure, equipment, and resources is essential for establishing effective rehabilitation centers that can implement the best global practices.
5. Implement telehealth solutions and digital platforms to facilitate counsellor training and provide clients with resources and support.
6. Conduct community awareness campaigns to educate the public about rehabilitation services for physically, mentally, and emotionally challenged people.

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14

THE ROLE OF DEVELOPMENTALLY APPROPRIATE COMPUTER APPLICATIONS IN ENHANCING TEACHING EFFECTIVENESS IN EARLY CHILDHOOD EDUCATION

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Abstract

This paper explores the role of developmentally appropriate computer applications in enhancing teaching effectiveness in early childhood education. The impacts of Computer applications on teaching methods, its challenges and strategies for effective implementation was also explored. It underscores three computer applications such as Seesaw, ABCmouse and ClassDojo that can significantly enhance teaching effectiveness in early childhood education. Each application addresses different aspects of the learning experience such as interactivity, foundational skills, classroom management and social-emotional development. Together, they present a holistic approach to modernizing early childhood education and improving educational outcomes. The paper also presents an alignment of the three computer applications with early childhood educational goals, their benefits to early childhood education, the challenges inherent in implementing computer applications to early childhood education, best practices to be adopted by caregivers to ensure successful implementation of computer applications and concludes that integrating technology in early childhood education through tools like Seesaw, ABCmouse and ClassDojo not only enhances academic learning but also supports social-emotional growth, family involvement and digital literacy. Suggestions were also made for policy and practice.

Keywords: Computer Applications; Developmentally Appropriate; Early Childhood Education; Implementation; Teaching Effectiveness.

Introduction

The rapid advancement of technology has transformed various aspects of life, including education. Early Childhood Education (ECE), which is the foundational phase in a child's learning journey, has also seen significant benefits from the integration of computer applications. These computer applications not only enhance teaching effectiveness but also enrich learning experiences, ensuring that preschool children acquire essential skills requisite for the digital age. As technology continues to transform early childhood education, innovative tools that enhances teaching practices are emerging. This has made learning more interactive, engaging and tailored to each preschool child's needs.

Developmentally appropriate computer applications, also referred to as software applications, are programmes or sets of programmes designed to perform specific tasks for preschool children. These applications can range from productivity tools to educational and entertainment software and are typically categorized based on their purpose and functionality. Developmentally appropriate computer applications have the potentials to enhance teaching effectiveness in the field of early childhood education and are particularly useful for early childhood caregivers, as they offer flexible, dynamic solutions that encourage creativity and interactive play, which are essential components of early childhood education (Shelly & Vermaat, 2011).

Early Childhood Education (ECE) is a critical period for developing cognitive, social, emotional and physical foundations in children. It lays the foundation for lifelong learning and development. Effective teaching strategies in these formative years are essential to foster cognitive, social and emotional growth in preschool children. Recent advances in technology have introduced innovative ways to enhance teaching effectiveness and various computer applications now play a pivotal role in early childhood education. The strategies caregivers employ in teaching preschool children during these formative years can have a lasting impact on their learning experiences and outcomes (American Academy of Pediatrics, 2016).

In early childhood education, teaching effectiveness refers to the extent to which caregivers successfully promotes learning and achieves early childhood educational goals. It involves a combination of skills, strategies and behaviours that support preschool children engagement, understanding and overall academic development. Effective teaching is often assessed by observing the outcomes of preschool children's learning, teacher practices and the educational environment they create (Stronge, 2018). Some key elements of teaching

effectiveness include: Content knowledge, mastery of the subject matter is fundamental. Caregivers with deep understanding can explain concepts clearly, answer questions accurately and inspire preschool children's interest in the topic. Instructional strategies, effective caregivers can use diverse teaching methods that cater to different learning styles, including play and learn, group activities, discussions and technology-enhanced lessons. They can adapt these strategies to ensure all preschool children understand the topic.

Classroom management involves creating a structured, positive learning environment. Effective caregivers establish clear rules, manage time well, handle disruptions smoothly, and create an atmosphere conducive for preschool children to focused learning. Preschool children engagement, caregivers who are effective actively engage preschool children, making learning interactive and relevant. They motivate preschool children through encouragement, interesting materials and practical applications of concepts. Assessment and feedback, effective caregivers use both formative and summative assessments to gauge preschool children's understanding. They provide timely, constructive feedback that helps preschool children improve and understand their progress (Weinstein, 2011).

Reflection and adaptation teaching involves constantly evaluating and adjusting teaching practices to better meet preschool children's needs. Effective caregivers gather feedback, assess outcomes and adapt their teaching methods accordingly. Preschool children's learning outcomes, eventually, in early childhood education, teaching effectiveness is partly measured by preschool children's academic achievement. Caregivers whose preschool children show growth in knowledge, skills and confidence are generally considered effective.

Improving Teaching Methods in Early Childhood Education with Computer Applications

Gamification in early childhood education is an instructional approach that integrates computer game components, such as competition, time constraints, badges, points and rewards, into the educational activities to provide engaging and stimulating learning environments (Mafikuyomi & Adikuru, 2024; Turan et al., 2016). The goal of gamification is to enhance the motivation, engagement and participation of preschool children into classroom activities by using the natural attraction of computer games for preschool children (Mafikuyomi & Adikuru, 2024). Therefore, computer applications like Kahoot and Quizlet introduce gamified elements into early childhood education lesson plans, transforming traditional teaching into an immersive and enjoyable experience. Research highlights that

gamified learning boosts motivation and knowledge retention among preschool children (Hamari et al., 2016). Support for multisensory learning, developmentally appropriate computer applications integrate audio, visual and tactile elements, aligning with the multisensory approach in early childhood education. For instance, apps such as Toca Boca and Montessori Crosswords provide opportunities for preschool children to see, hear and manipulate objects virtually, reinforcing their understanding of concepts (Palaigeorgiou et al., 2010).

Immediate assessment and feedback. Traditional assessment methods can be time-consuming and less effective in providing immediate insights. Computer applications streamline this process through instant feedback mechanisms. According to Fujimoto (2019), tools like Google Classroom and Edmodo enable caregivers to assess preschool children's performance in actual-time, allowing timely interventions. There are many computer applications that can enhance teaching effectiveness, especially in early childhood education, however, in this context, the focus is on three (3) major developmentally appropriate computer applications that are suitable for preschool children in early childhood education. These three computer applications include: Seesaw, ABCmouse and ClassDojo.

Seesaw is a digital learning platform that facilitates preschool children's engagement and family involvement. Seesaw promotes interactive and reflective learning. Caregivers can create and assign activities and preschool children can respond through various media, including photos, videos, drawings and voice recordings. This multimodal platform helps preschool children communicate their ideas and progress, catering to diverse learning styles (Levine & Guerra, 2019). In enhancing teaching effectiveness, seesaw enables caregivers to monitor each preschool child progress in real-time, providing insights into individual learning courses. Also, with the ability to differentiate tasks, Garrison and Vaughan (2018), asserted that caregivers can adapt lessons to each child's needs, thereby supporting diverse learning abilities in a classroom setting.

Seesaw also encourages family engagement, which is crucial in early childhood education, as families can view their child's learning journey and support learning at home (Schweinhart et al., 2013). Research findings show that educational platforms like Seesaw support reflective learning, which is essential for preschool children as they develop self-awareness and confidence in their abilities (Bers et al., 2010). The Seesaw platform's visual and audio

capabilities also enhance literacy and language skills, making it suitable for early childhood education.

ABCmouse is an educational app designed for preschool children aged 2–8, offering a comprehensive curriculum that covers literacy, math, science and social studies through interactive games, songs and animations. ABCmouse is highly visual and interactive, making it an engaging tool for preschool children to building foundational skills through gamification. (Kang et al., 2017). In enhancing teaching effectiveness, the gamified approach in ABCmouse motivates preschool children to participate in learning activities while maintaining focus on educational goals. Caregivers can use ABCmouse to introduce fundamental concepts in an engaging format, facilitating better retention and understanding.

Furthermore, Hirsh-Pasek et al (2015), found that ABCmouse allows for tracking progress and adapting content, which can help caregivers identify and address areas where preschool children may need additional support. They suggested that game-based learning in apps like ABCmouse can improve early literacy and numeracy skills. Preschool children, in particular, benefit from the rewards and interactive feedback that reinforce learning outcomes. Furthermore, ABCmouse supports self-paced learning, allowing preschool children to progress according to their individual abilities and interests.

ClassDojo is a classroom management app that allows caregivers to create a positive classroom culture by rewarding positive behaviours, encouraging social-emotional development and enhancing classroom management and social-emotional learning. It supports communication between caregivers, preschoolers and parents, making it a versatile tool for early childhood education (Schindler et al., 2017). In enhancing teaching effectiveness, with ClassDojo, caregivers can foster a sense of community and respect within the classroom. ClassDojo promotes positive reinforcement and rewards specific behaviours, which is especially beneficial in early childhood education where social skills are developing.

Weinstein et al. (2011), also asserted that caregivers can customize behaviours to suit classroom goals and track improvements, supporting behaviour management and enhancing the overall learning environment. Research by Durlak et al., (2011), also asserted that positive reinforcement tools like ClassDojo can improve classroom behaviour and contribute to a supportive learning atmosphere. The application also aligns with Social-Emotional Learning (SEL) frameworks, which emphasize empathy, cooperation and resilience, which are all critical components in early childhood education (Durlak et al., 2011). ClassDojo's

emphasis on rewarding positive behaviours aligns with principles of positive reinforcement, which have been shown to promote self-regulation, empathy and resilience in preschool children. Additionally, by incorporating Social-Emotional Learning into daily classroom activities, caregivers can help preschool children build essential skills that will serve as a foundation for lifelong success.

These applications are increasingly playing important roles in early childhood education. Applications like Seesaw, ABCmouse and ClassDojo offer unique tools for enhancing teaching effectiveness. Seesaw fosters reflective and interactive learning, ABCmouse builds foundational skills through gamification and ClassDojo promotes a positive classroom culture and Social-Emotional Learning. Incorporating these developmentally appropriate computer applications will enable caregivers to better support preschool children's development and improve educational outcomes.

Aligning the Computer Applications with Early Childhood Educational Goals

As Seesaw, ABCmouse and ClassDojo each have specific functionalities, their effectiveness increases when they're strategically aligned with the broader goals of early childhood education. These goals often include promoting holistic development, fostering lifelong learning habits and establishing foundational skills across cognitive, social, emotional and physical domains. When these applications are used to support these goals rather than as separate tools, they transform the learning experience of preschool children (Donohue & Schomburg, 2017). For example, ABCmouse can be aligned with early literacy goals by helping preschool children recognize letters, sounds and early vocabulary in a playful format; which aligns with preschool curricula focused on language acquisition.

Seesaw enhances documentation and self-expression, which is aligned with reflective practices in early childhood education, encouraging students to think about what they've learned and helping caregivers assess their comprehension in a personalized way. ClassDojo's focus on Social-Emotional Learning (SEL) directly supports the goal of developing positive behavioral patterns, empathy, and cooperative play, essential aspects of early childhood education (Donohue & Schomburg, 2017). When caregivers plan lessons and activities that incorporate these computer applications purposefully, they can ensure that technology is integrated seamlessly into the curriculum. This alignment between digital resources and curriculum objectives helps to maximize both the educational and developmental benefits for preschool children.

In addition, the integration of technology through computer applications like Seesaw, ABCmouse and ClassDojo offers a multifaceted approach to supporting early childhood development. These tools empower caregivers to create a responsive, engaging and inclusive classroom environment that promotes academic, social and emotional growth. As technology continues to evolve, caregivers have the opportunity to redefine what learning can look like in early childhood education. When used intentionally and balanced with traditional teaching methods, these computer applications can help preschool children build foundational skills, self-confidence and a love of learning that will serve them well throughout their lives (Lynch & Redpath, 2014).

Benefits of Computer Applications in Early Childhood Education

In supporting diverse learning needs, developmentally appropriate computer applications like Seesaw, ABCmouse and ClassDojo are beneficial in early childhood classrooms with diverse learning needs, in the following ways:

1. Strategically developed computer applications requisite for educational games, provides preschool children with the opportunity to develop and enhance their own knowledge and abilities while learning through play (Mafikuyomi & Adikuru, 2024; Yu, 2019).
2. Seesaw allows preschool children who may struggle with traditional assessments to demonstrate knowledge through various multimedia forms, catering to different strengths and helping every child succeed (Hirsh-Pasek et al, 2015).
3. ABCmouse's leveled activities offer a scaffold approach that can accommodate preschool children at different stages of readiness, ensuring that each child is appropriately challenged (Schindler et al., 2017).
4. ClassDojo's behavioural tracking also allows caregivers to quickly spot patterns and adjust their strategies to support individual social-emotional growth (Wartella, Richert, Robb & Lauricella, 2013).
5. Using developmentally appropriate computer applications in a balanced way helps preschool children become familiar with digital interfaces, basic navigation skills and essential concepts like logging in and out or completing simple tasks on a device (Donohue & Schomburg, 2017).
6. Wartella, Richert, Robb & Lauricella, (2013). Stressed that applications like Seesaw can facilitate collaborative projects, allowing preschool children to work together

digitally on group activities. For example, preschool children can contribute individual pieces to a collective digital art gallery or participate in a group storytelling exercise, with each child recording a segment of the story. These collaborative experiences teaches preschool children how to work together and communicate effectively, essential skills that benefit both social and academic development.

7. Seesaw's digital portfolios can serve as a record of a preschool child's progress throughout their early childhood school years. These portfolios allow caregivers, preschool children and families to see growth over time, celebrating milestones and reflecting on areas of improvement. This long-term perspective not only boosts preschool children's self-esteem by showcasing their progress but also provides caregivers and families with valuable insights for supporting the child's future learning (Schweinhart et al., 2013).
8. With computer applications like ClassDojo, caregivers can manage classroom behaviour and communicate with parents more efficiently, reducing the need for paper-based systems. ClassDojo allows caregivers to send updates, share class news and even provide reminders for upcoming events directly to parents' phones. This streamlined communication benefits both caregivers and families, making it easier to stay engaged and informed about preschool children's development without the administrative burden of traditional paper notes and newsletters (Wartella, Richert, Robb & Lauricella, 2013).
9. Developmentally appropriate computer applications captivate preschool children through interactive and visually appealing content. Applications like ABCmouse and Starfall provide engaging platforms where preschool children can learn letters, numbers and basic concepts through games, songs and animations. Such interactivity encourages active participation, a critical element in early childhood education (Kirkorian et al., 2016).
10. Li & Ma, (2021), stated that early childhood education classrooms often consist of preschool children (learners) with varying abilities and learning paces. Computer applications offer personalized learning experiences, enabling caregivers to cater to individual needs. For instance, applications like Seesaw and ClassDojo allow caregivers to assign tailored activities and monitor progress, ensuring inclusivity and equitable learning opportunities.
11. Incorporating computer applications in early childhood education lays the groundwork for digital literacy. Preschool children gain familiarity with basic

computer applications, fostering skills such as typing, navigating interfaces and critical thinking. This early exposure prepares preschool children for future academic and professional demands (Plowman & Stephen, 2013).

Challenges/Strategies in Implementing Computer Applications in Early Childhood Education

The challenges inherent in implementing computer applications in early childhood education include:

1. Van Dijk, (2020), revealed that access to technology remains unequal, particularly in underprivileged areas. Limited availability of devices and internet connectivity can hinder the adoption of computer applications in ECE, widening the educational gap.
2. Ertmer & Ottenbreit-Leftwich, (2010), stated that the effectiveness of computer applications depends on the caregivers' ability to integrate them into lesson plans. Therefore, a lack of training and confidence among caregivers can reduce the potential benefits of these tools.
3. American Academy of Pediatrics (2016), revealed that excessive use of computer applications may lead to health issues such as eye strain and reduced physical activity. Balancing screen time with other learning methods is crucial to ensure holistic development.

However, the strategies for effective implementation of computer applications in early childhood education include:

1. Professional development for caregivers, regular training programmes should be conducted to enhance caregivers' technological competencies. Workshops, webinars and peer-learning sessions can equip caregivers with the skills needed to integrate computer applications effectively.
2. Adopting age-appropriate applications, the selection of computer applications should align with the developmental needs of preschool children. Apps that promote creativity, problem-solving, and social interaction should be prioritized (Papadakis et al., 2018).
3. Plowman et al., (2012), stated that involving parents in the learning process plays a pivotal role in reinforcing learning at home. Providing them with guidelines on using

educational apps can create a cohesive learning environment, bridging the gap between school and home.

To ensure successful integration of developmentally appropriate computer applications, caregivers can adopt the following practices:

1. Create structured routines for technology use, caregivers can establish specific times during the week for using each application, which helps preschool children understand that technology is a valuable, purposeful tool rather than a passive activity. For instance, ABCmouse might be used during a dedicated “math and literacy” session, while Seesaw could be used at the end of each day for reflection time.
2. Introduce technology gradually, it is helpful to introduce one application at a time. This gradual approach allows preschool children to become familiar with the application’s functions before moving on to another. Caregivers can first model how to use Seesaw to document their learning, then gradually introduce ABCmouse and ClassDojo as preschool children become more comfortable.
3. Engage parents with weekly updates and resources, caregivers can use ClassDojo’s messaging and update features to send weekly summaries to parents, along with suggestions for reinforcing learning at home. This strategy not only enhances communication but also empowers parents to support their child’s education more effectively. Parents can receive tips on using Seesaw at home to track activities or on accessing additional resources in ABCmouse that align with classroom themes.
4. Encourage peer sharing and collaborative projects, for example, using Seesaw, preschool children could collaborate on a “class garden” project where each child is responsible for documenting their assigned plant’s growth. This type of activity teaches collaboration, accountability and observational skills, while also integrating technology in a meaningful way. Similarly, ClassDojo can facilitate group challenges or reward systems where preschool children work together toward collective goals, reinforcing teamwork and shared responsibility.
5. Each application provides insights that caregivers can use to inform their instructional strategies. For instance, a caregiver may notice from ABCmouse’s progress reports that certain preschool children are struggling with number recognition. The caregiver can then create small group activities to support these preschool children, using the data from the application to guide instruction. ClassDojo’s behaviour tracking can

also highlight areas where specific preschool children may need additional support with SEL, enabling the caregiver to adapt interventions.

Prospect of Computer Applications in Early Childhood Education

1. According to Luckin et al. (2016), integration of Artificial Intelligence that is the AI-powered applications, are transforming early childhood education by providing adaptive learning experiences. Tools like DreamBox and Smart Sparrow analyze user behaviour and tailor content to individual needs, ensuring optimal learning outcomes.
2. Radu, (2014), asserted that the use of Augmented Reality (AR) and Virtual Reality (VR), technologies are creating immersive learning experiences that were previously unimaginable. For example, AR-based apps like Quiver enable children to visualize three-dimensional objects, enhancing their spatial understanding.
3. Bers, (2018), opined that computer applications are increasingly incorporating Science Technology Engineering Arts and Mathematics (STEAM) education. Applications like LEGO Education and ScratchJr introduce coding and engineering principles to preschool children in a playful and engaging manner.

Conclusion

Above all, integrating technology into early childhood education through computer applications like Seesaw, ABCmouse and ClassDojo not only enhances academic learning but also supports social-emotional growth, family involvement and digital literacy. By using these applications in meaningful and age-appropriate ways, caregivers can create rich, dynamic learning environments that cater to preschool children's needs and developmental stages. Each application brings unique advantages to the early childhood classroom, promoting creativity, collaboration and personalized learning. The future of early childhood education will likely see even more innovative uses of computer applications, with AI-driven personalization.

The following points are suggested for policy and practice:

1. Formulating Technology-Inclusive Policies: Governments and educational authorities must prioritize the integration of computer applications in early childhood education curricula. Policies should address infrastructure development, ensuring equitable access to technology in urban and rural settings. Initiatives like the "One Laptop per Child" programme can be

adapted to early childhood contexts, providing age-appropriate devices for preschool children.

2. Establishing Public-Private Partnerships: Collaborations between educational institutions, technological companies and non-profit organizations can enhance the availability of quality computer applications. Partnerships with organizations such as UNESCO and UNICEF can further extend technological benefits to underserved regions, bridging the digital divide and promoting inclusivity.

3. Continuous Monitoring and Evaluation: To ensure the efficacy of computer applications in early childhood education, ongoing monitoring and evaluation are essential. Metrics such as learner engagement, caregiver satisfaction and learning outcomes should be tracked, with feedback mechanisms to guide improvements. Research partnerships with universities can support evidence-based practices.

4. Balancing Traditional and Technological Methods: While computer applications provide innovative learning opportunities, traditional teaching methods remain indispensable in early childhood education. Activities such as storytelling, outdoor play, and hands-on crafts promote physical, emotional and social development. Caregivers should adopt a blended approach, integrating technology as a complementary tool rather than a replacement for conventional methods.

5. Cultivating Digital Ethics and Responsibility: Introducing young learners to technology necessitates fostering digital ethics early on. Educators and parents should emphasize safe and responsible use of computer applications, ensuring that children understand concepts like privacy and appropriate online behavior. Applications designed with robust privacy protections and child-friendly interfaces are critical in this regard.

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THE ROLE OF ARTIFICIAL INTELLIGENCE IN GUIDANCE AND COUNSELLING PRACTICES IN LAGOS STATE, NIGERIA

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Abstract

The transformative role of technology in all facets of life is unprecedented, and has influenced Guidance and Counselling practices globally. However, the use of artificial intelligence (AI) in counselling practice has not been well established. Therefore, this study titled "Role of Artificial Intelligence in Guidance and Counselling Practices in Nigeria" was carried out to investigate the perceptions and attitudes of counsellors to the use of AI in Guidance & Counselling practices in Lagos state. Two research questions and two corresponding hypotheses guided the study. The study was conducted in two universities in Lagos state. The quantitative research design and descriptive strategy was used. The population of the study consisted of all student counsellors in the Department of Educational foundations university of Lagos (UNILAG) and Lagos State University of Education (LASU). The simple random sampling technique was used to select 162 respondents selected from both the full-time undergraduate and postgraduate programme. A 22-item semi-structured 5-point Likert researcher developed questionnaire titled "Role of AI in Guidance and Counselling Practices" was used to gather data from respondents. Data collected was analyzed using descriptive statistics for research questions while hypotheses were tested using t-test. Based on the findings of the study, some recommendations were made which include: Collaborative implementation: Counsellors, educators, and AI developers should work together to design and implement AI-powered guidance and counseling tools that complement human services, continuous training and evaluation: AI systems should be regularly updated and evaluated to ensure they remain effective, unbiased, and aligned with human values among others.

Keywords; *AI, counselling practice, AI, 21st century, Guidance and counselling.*

INTRODUCTION

Artificial Intelligence (AI) has become an integral part of various professional fields, revolutionizing how tasks are performed and enhancing efficiency. In the field of guidance and counseling, AI is gradually transforming traditional practices by providing innovative tools for career counselling, mental health support, and educational guidance (Fitzpatrick,

Darcy, & Vierhile, 2017). Similarly, the integration of Artificial Intelligence (AI) into Guidance and Counselling practices has the potential to revolutionize the field by enhancing service delivery, personalizing interventions, and improving accessibility (Kaplan & Haenlein, 2019 & Koehler & Mishra, 2009). Some AI tools and applications are: Chatbots and Virtual Counselors (Fitzpatrick et al., 2017), Predictive Analytics (Laranjo et al., 2018), Virtual Reality (VR) Therapy (Luxton et al., 2016) and Automated Administrative Support (Okonkwo & Umeano, 2022).

In United States and the United Kingdom, AI-driven psychological interventions have demonstrated effectiveness in treating anxiety and depression (Fitzpatrick et al., 2017). In Nigeria, the use of AI in counseling is still emerging. Some researches (Okonkwo and Umeano 2022 & Adeoye & Odukoya, 2023) found that while AI tools could enhance counseling efficiency, Equally, AI is transforming guidance and counselling practices in Lagos State. These AI tools help bridge the gap in counsellor-to-student ratios, ensuring that more individuals receive timely support. Furthermore, AI enhances data-driven decision-making by analyzing students' behavioral patterns, academic performance, and psychological assessments to provide personalized interventions (Eze et al., 2022). This proactive approach enables counsellors to identify at-risk students and implement early interventions, improving overall well-being.

Perception and attitude are fundamental psychological concepts that shape how individuals interpret and respond to the world around them. In the field of guidance and counseling, understanding these concepts is crucial for effective intervention and support. Perception influences how individuals see their problems, while attitude determines their willingness to seek help and change. This paper explores the meaning of perception and attitude, their interrelationship, and their implications for guidance and counseling practices.

Additionally, AI improves career guidance by using machine learning algorithms to match students' skills and interests with suitable career paths (Okonkwo & Balogun, 2021). This enhances students' career readiness and aligns with Lagos State's workforce needs. AI-powered platforms also facilitate remote counselling, allowing individuals in underserved areas to access professional support without geographical barriers (Ogunleye & Adeniran, 2023). Despite these benefits, ethical considerations such as data privacy and the need for

human oversight remain critical (Akinpelu, 2022 & Bickmore et al. 2021) and biases in AI algorithms remain critical concerns (Laranjo et al., 2018).

A study by Adepoju and Oyeleke (2021) in Lagos State revealed that only 30% of school counsellors had any form of exposure to AI-assisted counseling tools, and among them, only 10% actively used these technologies. A study by Okeke (2015) found that some counsellors in Lagos State were resistant to the idea of using AI-powered tools in guidance and counseling practices. Lagos State is the most populous state in Nigeria, with a population of over 21 million people (National Population Commission, 2016). The state has a large number of educational institutions, including primary, secondary, and tertiary institutions. There are mixed views on the perception and attitudes of counsellors toward AI remain crucial in determining its successful adoption. In Lagos State. Understanding counselors' attitudes toward AI is necessary because technology can either be a facilitator or a barrier, depending on their level of acceptance (Tang et al., 2021). By investigating the perceptions and attitudes of counsellor to AI stakeholders can develop training programmes and policies that ensure AI enhances, rather than replaces, traditional counseling practices.

Although several studies have been conducted on AI and its uses in guidance and counselling practices. However, to the best of the researchers' knowledge there is a dearth of empirical studies on the role of AI in Guidance and Counselling Practices in Lagos, Nigeria with focus on perception and attitudes of counsellors. Additionally, it is crucial to investigate the perception and attitudes of counsellor to the role of AI to guidance and counselling practice with aim to fill the gap in literature by examining the roles of AI in counseling practices and understanding counselors' perceptions and attitudes towards its adoption. The findings will provide insights into the readiness of counselors to embrace AI, the challenges they face and the supports needed to facilitate this transition.

Statement of the Problem

Artificial Intelligence (AI) is revolutionizing various fields, including education and mental health services, by providing innovative solutions for guidance and counseling. AI-driven tools such as chatbots, predictive analytics, and virtual assistants are increasingly being used to enhance counseling practices worldwide (Fitzpatrick, Darcy, & Vierhile, 2017). These technologies have been shown to improve efficiency, accessibility, and the overall effectiveness of counseling services (Laranjo et al., 2018). However, despite the global

advancements in AI-driven counseling, its adoption and utilization in Nigeria, particularly in Lagos State, remain limited (Okonkwo & Umeano, 2022).

Lagos State, as Nigeria's economic and technological hub, has the potential to lead AI integration in guidance and counseling. However, the perception and attitude of professional counselors toward AI remain unclear. Many counselors in Lagos State still rely on traditional face-to-face counseling methods and may be resistant to integrating AI into their practice (Makinde & Eze, 2023). There is also concern that AI might lack the human touch necessary for effective counseling, raising ethical and professional questions about its suitability for psychological support (Bickmore et al., 2021).

A major challenge in the adoption of AI in counseling is the lack of awareness and digital literacy among counselors. Studies (Adepoju & Oyeleke, 2021) have shown that many Nigerian counsellors have limited knowledge of AI applications in their field, making them hesitant to embrace these technologies ((Adepoju & Oyeleke, 2021). Without proper understanding and training, AI may be perceived as a threat rather than a tool that can enhance counseling efficiency. This lack of digital literacy, coupled with infrastructural deficits such as erratic electricity and poor internet connectivity, further hinders AI adoption in Lagos State (Okonkwo & Umeano, 2022).

Additionally, ethical concerns surrounding data privacy and confidentiality play a significant role in shaping counselors' attitudes toward AI. Many professionals worry about how AI-powered counseling tools store and process sensitive client information (Laranjo et al., 2018). The fear of data breaches and the potential misuse of personal information deter many counselors from trusting AI-driven solutions. Moreover, the absence of clear regulatory frameworks governing AI in counseling in Nigeria exacerbates these concerns, leading to reluctance in AI adoption (Bickmore et al., 2021). Financial constraints also contribute to the slow adoption of AI in counseling practices. Many public schools and counseling centers in Lagos operate on limited budgets, making it difficult to invest in AI-driven solutions (Adepoju & Oyeleke, 2021). Unlike in developed countries where governments and private institutions support AI integration in counseling, Lagos State lacks the necessary funding and policy support to encourage AI adoption in guidance and counseling services.

Furthermore, there is a gap in empirical research on how Lagos State counselors perceive AI and its role in their profession. While studies have explored AI's potential in counseling

globally, few have examined how Nigerian counselors understand, accept, or reject AI in their daily practice (Makinde & Eze, 2023). Without empirical data on counselors' perceptions and attitudes, it is difficult to develop policies, training programs, and strategies that would facilitate AI adoption in counseling. Given these challenges, this study aims to investigate the perception and attitude of professional counselors in Lagos State toward AI in guidance and counseling. Understanding these perceptions is crucial for designing interventions that can bridge the knowledge gap, address ethical concerns, and promote the effective integration of AI in Nigerian counseling practices. By exploring counselors' readiness, fears, and expectations regarding AI, this research will provide insights into the challenges and opportunities for AI in guidance and counseling in Lagos State.

Purpose of the study

The focus of this study is to investigate the perception and attitudes of counsellors to the use of AI technologies in guidance and counselling practice in Lagos state, Nigeria and to specifically:

1. Determine the perception of counsellors to the use of AI technologies in Guidance and Counselling services in Nigeria
2. Assess the attitudes of counsellors to the use of AI tools in Guidance and Counselling service.

Research Questions

The following research questions were answered in the study:

3. What are the perception of counsellors to the use of AI technologies in Guidance and Counselling services in Nigeria?
2. What are the attitudes of counsellors to the use of AI tools in Guidance and Counselling service?

Research Hypotheses

Ho 1: There is no significant gender difference in the perception of counsellors to AI technologies in Guidance and Counselling services in Nigeria

Ho 2: There is no significant difference in the attitudes of counsellors to the use of AI-driven Guidance and Counselling tools in Nigeria based on the level of education.

LITERATURE REVIEW

The Concept of Perception

Perception is the process by which individuals interpret sensory information to understand their environment. It involves the selection, organization, and interpretation of stimuli from the external world (Goldstein, 2019). Perception is not merely a passive reception of sensory data but an active process influenced by cognitive functions, experiences, and cultural background (Eysenck & Keane, 2020).

One key aspect of perception is sensation, which refers to the initial detection of stimuli through the senses. However, perception goes beyond sensation by incorporating prior knowledge and expectations to make sense of these stimuli (Gregory, 1997). For example, the Gestalt theory emphasizes that people perceive objects as whole structures rather than isolated parts, demonstrating the role of organization in perception (Wertheimer, 1923). Another important factor in perception is selective attention, which determines what information is processed while ignoring other stimuli (Broadbent, 1958). This is crucial in daily life, as individuals constantly filter out irrelevant sensory input to focus on what is important. Additionally, perception is shaped by past experiences, emotions, and cultural differences, leading to variations in how individuals interpret the same stimuli (Bruner & Postman, 1949).

Perception also plays a vital role in decision-making and behavior. According to Gibson's (1979) theory of direct perception, individuals interact with their environment based on perceived affordances, or action possibilities. This idea is significant in fields such as psychology, marketing, and education, where understanding how people perceive information can influence strategies for communication and engagement. In conclusion, perception is a complex cognitive process shaped by biological, psychological, and social factors. It influences how individuals interpret the world and respond to various situations (Eysenck & Keane, 2020). Understanding perception is essential in multiple disciplines, including psychology, neuroscience, and human-computer interaction.

Conceptual Review

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The Concept of Attitude

Attitude is a psychological construct that refers to an individual's evaluative judgment about people, objects, or ideas. It is a learned predisposition to respond in a favorable or unfavorable manner toward a particular stimulus (Ajzen, 2001). Attitudes are important in social psychology because they influence behavior, decision-making, and interpersonal relationships (Eagly & Chaiken, 1993).

Attitudes are composed of three key components: the cognitive, affective, and behavioral aspects (Rosenberg & Hovland, 1960). The cognitive component involves beliefs and knowledge about an object, the affective component includes emotions and feelings, and the behavioral component reflects the tendency to act in a certain way based on attitude (Breckler, 1984). For example, a person who believes that exercise improves health

(cognitive) and feels good about working out (affective) is more likely to engage in regular physical activity (behavioral).

Attitudes can be formed through various processes, including direct experience, social learning, and persuasion. The theory of classical conditioning suggests that attitudes can develop through repeated associations, while observational learning emphasizes the role of modeling and imitation (Bandura, 1986). Additionally, persuasion techniques, such as the elaboration likelihood model (ELM), explain how attitudes change based on the depth of cognitive processing (Petty & Cacioppo, 1986). Attitudes are also significant predictors of behavior, as suggested by the theory of planned behavior (Ajzen, 1991). However, external factors such as social norms and situational constraints can influence the extent to which attitudes predict actions (Fishbein & Ajzen, 1975).

Therefore, attitudes are fundamental in shaping human thoughts, emotions, and behaviors. Understanding attitudes helps in various fields, including marketing, education, and organizational behavior (Eagly & Chaiken, 1993).

Empirical Studies

A study by Susskind and Susskind (2015) found that professionals in the mental health sector generally acknowledge AI's potential to streamline counseling processes. Many counselors see AI as a supportive tool for routine tasks, allowing them to focus on complex human interactions (Smith et al., 2021). Many counsellors in Lagos State have expressed a positive perception and attitude towards the role of AI in guidance and counseling practices. (Makinde & Eze, 2023).

However, resistance to change has been reported (Bickmore et al., 2021 and Okeke, 2015). Infrastructure Deficits (Adepoju & Oyeleke, 2021) and financial constraints (Okonkwo & Umeano, 2022). According to Rahman et al. (2023), some counsellors expressed skepticism about AI's ability to establish genuine therapeutic relationships. While AI can analyze behavioral patterns, its inability to exhibit true empathy limits its role to that of an assistant rather than a primary counsellor.

In Nigeria, AI adoption in counseling is still in its early stages. Limited digital literacy among some professionals and inadequate infrastructure have slowed AI integration (Odukoya & Adebayo, 2022). Nigerian counselors generally hold mixed attitudes toward AI in guidance

and counseling. While some professionals acknowledge AI's potential to bridge gaps in counseling services, particularly in underserved areas, others fear it may compromise the profession's ethical standards. One of the major concerns counselors have globally and in Nigeria is data privacy. AI-powered counseling systems collect sensitive personal information, raising concerns about confidentiality and security (Lustgarten et al., 2020). Nigerian counselors also worry about AI's potential to replace human professionals rather than support them. Given the country's high unemployment rate, the fear of job displacement further influences negative perceptions (Oladimeji & Adetunji, 2023).

Another ethical issue is bias in AI counseling tools. If AI algorithms are trained on non-diverse data, they may offer biased or inappropriate guidance, potentially harming clients (Rahman et al., 2023). Nigerian counselors emphasize the need for culturally adaptive AI models that consider local beliefs, values, and languages to ensure relevance in practice.

METHODOLOGY

Area of the Study

The study was conducted in two (2) randomly universities selected in Lagos state, the University of Lagos (UNILAG) and Lagos State University (LASU).

Research Design

The research design adopted for this study was a quantitative design. The strategy was descriptive survey method. The survey method is describing, records, analyses and interprets existing conditions or phenomenon as they naturally exist. The design was considered appropriate because it enabled the researcher to describe the view of respondents of this study on the role of artificial intelligence in Guidance & Counselling in selected universities in Lagos state Nigeria.

Participants / sampling

The population comprised of all the registered counsellor-trainees in the Departments of Educational Foundations with Child Psychology and Educational Foundations and Psychology, Faculty of Education, University of Lagos state and Lagos State University.

The sample consisted of 162 counsellor-trainees who are enrolled for both undergraduate and postgraduate in the selected universities. The purposive sampling technique was used to select counsellor trainees who are on full time postgraduate programme and undergraduates

who are in the final year. This is because the final year undergraduate and the postgraduates in the department would have had experiences of different uses of AI over the years of their stay as students.

Data Collection Instrument

A structured questionnaire titled “*Role of AI in Guidance and Counselling Practice*”. The questionnaire consists of two sections, A and B. Section A contained the demographic data of the respondents (gender, age and level of study). Section B contains 19 items on respondents’ perception of relevance of AI in guidance & counselling practices. The instrument was patterned after a four-point Likert-type rating scale of: SA-*Strongly Agree*, A-*Agree*, D-*Disagree*, and SD-*Strongly Disagree*. The respondents were expected to rate the items as applicable to them in each section. The instrument was validated by two lecturers in the Department of Educational Foundations, University of Lagos. The corrections of the experts were used to modify the questionnaire items before administering the final draft. The instrument was further subjected to reliability test using the test-retest statistics.

The scores of the two administrations was correlated using Pearson’s r and the result yielded a reliability coefficient of 0.71 and 0.69. This magnitude was considered high enough for the instrument to be reliable. The questionnaire forms were administered to the respondents by the researcher. The respondents filled forms immediately and collection was made on the spot to ensure 100% return rate.

The highest possible score any respondent could obtain was 95 (5 x 19), while the lowest obtainable score is 19 (1 x 19). Therefore, the range is 76 (95-19). Thus, the midpoint of the range was $76/2$ (38). The cut-off point was $95-38$ or $19+38$, which in either case were 57. Thus, respondents who obtained score ranging from 76-57 would be considered as having high perception of the role of AI in guidance and counselling practices whose scores fall between 57 and below would be considered as having poor perception and attitudes.

Data Analysis

The data generated in section A (demographic data) were displayed using percentages.

Hypotheses were analyzed using t tests. All hypotheses in the study were tested at 0.05 level of significance.

RESULTS

The section presents the findings and discussion on the study. The main purpose of the study was to examine *the role of AI in guidance and counselling practices*. 162 questionnaires were administered. However, only 150 were found useful for the purpose of analysis.

Descriptive Analysis

Table 1: Demographic Data Analysis

Variable	Frequency	Percentage
Frequency		
Male	64	42.66
Female	86	57.33
Total	150	100.00
Age		
25-35years	8	5.33
35-45years	30	20.00
46-55years	96	64.00
60 & above	16	10.66
Total	150	100.00
Levels of Education		
Undergraduates	96	64.00
Postgraduates	54	36.00
Total	150	100.00

Source: Field Survey Data Analysis Result, 2024

Table 1 reveals the gender distribution of the respondents. The analysis reveals that majority of the respondents were female. Table 1 also shows age distribution of the respondents. The analysis revealed that majority of the respondents were between the ages of 46-55years. Table 1 also shows the level of respondents' educational programme, 64.00% were running undergraduates programme while 36.00% were postgraduate students.

Table 2: Analysis of Respondents Views on Perceptions of AI in guidance and Counselling practices perception of AI in G& C practice in Lagos state, Nigeria

Perception level	Frequency count	Percentage
High	57	38.00
Low	93	62.00
Total	150	100.00

Source: Data from Field Survey, 2024

The result on table 2 revealed that majority (62%) of respondents have low perception of the role of AI integration. This means that majority of the counsellor trainees have low perception of AI Guidance & counselling practices in Lagos state.

Research 2: What are the attitudes of counsellors to the use of AI tools in Guidance and

Counselling service?

Table 3: Attitude to AI in G & C Practice In Lagos State, Nigeria

Attitude Level	Frequency count	Percentage
Negative	53	35.33
Positive	81	54.00
Neutral	16	10.67
Total	150	100.00

Source: Data from Field Survey, 2024

The result on table 3 revealed that majority (54%) of respondents have positive attitudes to the role of AI technologies in guidance & counselling practices. This means that most counsellor trainees have positive perception of AI Guidance & counselling practices in Lagos state.

Test of Hypotheses

Ho 1: The t-test result showing There is no significant gender difference in the perception of counsellors to AI technologies in Guidance and Counselling services in Lagos state

Table 4: The t-test result showing There is no significant gender difference in the perception of counsellors to AI technologies in Guidance and Counselling services in Nigeria

	N	Mean	STD	Df	T-cal	T-tab	P-
Male	64	3.65	9.99	149	1.76	1.96	.828
Female	86	5.87	11.98		.		

The results revealed a non-significant *t*-value of 1.76 and *t*-cal value of 1.96 greater than the alpha value .828. This means that there was no significant gender difference in respondent’s perception of trainees on the use of AI technologies in counselling practices. Therefore, trainees of different gender have similar perceptions on this basis, the null hypothesis was not disconfirmed

Ho 2: There is no significant difference in the attitudes of counsellors to the use of AI-driven Guidance and Counselling tools in Nigeria based on the educational levels.

Table 5: t-of respondents’ attitudes on the use of AI in guidance and counselling by level of education

	N	Mean	STD	df	T-Value	P-value
undergraduates	96	5,87	11.98	149	248*	.730
Postgraduate	54	3.65	9.99		.	

The results revealed a non-significant *t*-value of 149 and *t*-value of 248* is greater than the alpha value .730. The result on table 5 showed a significant *t*-value of 2.48 and a P-value of 0.01 less than the alpha value. This means that there is a significant difference in respondent’s attitude to the role of AI in guidance and counselling practices on level of study. Therefore, trainees of different level of study have divergent attitudes. On this basis, the null hypothesis was rejected.

Discussion of Findings

This study investigated the role of artificial intelligence (AI) in guidance and counselling practice in Lagos state with focus on the perception and attitudes of counsellors. Two

research questions and two hypotheses guided the study, and findings were based on the results of the descriptive statistics, t-test analyses as presented in the previous section. The results of the research question 1 revealed that there is no gender difference in the respondents' perception as male and female respondents shared similar perspective to the question. Also, the result of research question 2 revealed that majority (54%) of respondents have positive attitudes to the role of AI technologies in guidance & counselling practices. This means that most counsellor trainees have positive attitude to AI Guidance & counselling practices in Lagos state.

The similarity noted in the perception of the respondents may be due to fact that the 21st century is the information communication technology is done on and with internet. Most of the respondents belong to the Gen Z generation. The finding of this study aligns with that of Susskind and Susskind (2015) found that professionals in the mental health sector generally acknowledge AI's potential to streamline counseling processes. Many counselors see AI as a supportive tool for routine tasks, allowing them to focus on complex human interactions (Smith et al., 2021). Many counsellors in Lagos State have expressed a positive perception and attitude towards the role of AI in guidance and counseling practices. (Makinde & Eze, 2023).

The study established that there was a significant difference in respondent's attitude to the role of AI in guidance and counselling practices on level of study. Therefore, trainees of different level of study have divergent attitudes. This could be due to variations in the level of maturity of the respondents as compared to their undergraduate counterpart. The attitudes of postgraduate student counsellors (some of who are already practicing counsellors) on the role AI to guidance and counselling practice may be more informed by their work experience and experience on ethical and cultural sensitivity required in counselling relationship as compared to undergraduate student counsellors. This aligns with the findings of Bickmore et al., 2021 & Okeke, 2015) Infrastructure Deficits (Adepoju & Oyeleke,2021) and financial constraints (Okonkwo & Umeano, 2022). According to Rahman et al. (2023), some counsellors expressed skepticism about AI's ability to establish genuine therapeutic relationships. While AI can analyze behavioral patterns, its inability to exhibit true empathy limits its role to that of an assistant rather than a primary counsellor. Also, Odukoya & Adebayo, (2022) reported limited digital literacy among some professionals and inadequate infrastructure have slowed AI integration in Nigeria.

Conclusion

Perception and attitude play crucial roles in shaping individuals' willingness to engage in guidance and counseling. Since perception is influenced by experiences, culture, emotions, and social factors, it determines how people interpret counseling services. Attitudes, in turn, affect behavior towards counseling. Counsellors must recognize the interplay between these two concepts and use strategies to address negative perceptions and attitudes. While some counselors are optimistic about the potential of AI to enhance the delivery of guidance and counseling services, others are concerned about job displacement, lack of emotional intelligence, and bias. By addressing these concerns and leveraging the benefits of AI, it is possible to create a more effective, efficient, and personalized guidance and counseling system that supports the needs of all students.

Recommendations

To address the concerns and leverage the benefits of AI in guidance and counseling practices, we recommend:

1. **Collaborative implementation:** Counsellors, educators, and AI developers should work together to design and implement AI-powered guidance and counseling tools that complement human services
2. **Continuous training and evaluation:** AI systems should be regularly updated and evaluated to ensure they remain effective, unbiased, and aligned with human values
3. **Transparent communication:** Stakeholders should be informed about the capabilities, limitations, and potential biases of AI-powered guidance and counseling tools.
4. **infrastructural development:** government and private individual should make concerted efforts at improving infrastructure to aid the accessibility of AI technologies in the state and the country

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REPOSITIONING GUIDANCE AND COUNSELLING EDUCATION IN HIGHER EDUCATION IN NIGERIA

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Abstract

In the 21st century, Guidance and Counselling (G&C) education plays crucial role in students' development, equipping them to address academic, career, and personal challenges. helping individuals navigate academic, career, and personal challenges. However, this is not so in Nigeria as G&C education struggles to align with global standards global standards due to such inadequate counsellor training, outdated practices, insufficient infrastructure, and limited government support, in order to address these inadequacies this study examined the current state of G & C curriculum in Nigeria with the aim of addressing its deficiencies so as to meet with global best practices. to highlight and find ways of tackling the key deficiencies in its curriculum as way of positioning the Nigerian G & C education with best global practice. Guided by three specific research objectives and three corresponding research questions, the study was conducted at the National Open University of Nigeria (NOUN, University of Lagos (Akoka) and Lagos State University of Education (Epe Campus) both in Lagos state. Employing a qualitative research design and in-depth interviews were conducted as well as policy analysis of the National Policy on Education (NPE). The 37 respondents participated in the study, and data collected was analyzed using thematic analysis. Meta-analysis of findings was done with the NPE. The study found that most of the lecturers still use traditional approach to teaching, most lecturers and ICT literate, G and C education does not focus much on teaching students about mental health among other problems. Based on the findings of the study, recommendations included: incorporating on Nigeria mental health programmes in the curriculum, students going for practicum in non-school settings and enhancing ICT training for lecturers. Overall, the study contributed to development of a dynamic and 21st century compliant G and C curriculum, and successfully met its objectives.

Keywords: AI, 21st century, Guidance- Counselling Education, mental health. Technology

INTRODUCTION

Guidance and counselling (G&C) is a vital component of the educational systems, especially in higher education, where it ought to help students navigate academic, emotional, and career-related challenges. Effective G&C services contribute to students' personal development and academic success, and their importance have only grown as many students'

face increasing pressures related to career uncertainty, mental health, and social dynamics (Makinde, 2018). In Nigeria, the significance of Guidance and Counseling has been acknowledged by educational policymakers, yet the development of effective G & C education programs remains a challenge due to curriculum-related issues.

Historically, G&C education in Nigeria has focused on imparting theoretical knowledge rather than practical skills. This emphasis on theory reflects a broader issue in Nigeria's higher education system, where limited resources, outdated curricula, and inconsistent standards often hinder the quality of education (Omoniyi, 2016). While many Nigerian universities offer G&C programmes, these programmes frequently lack practical components, such as supervised internships and experiential learning opportunities. Such gaps in training leave future counsellors underprepared for the demands of the profession, as they have minimal exposure to real-life counseling scenarios and limited experience in applying theoretical knowledge to practical situations (Agi, 2015).

In addition, the lack of standardized curricula across Nigerian institutions further complicates the effectiveness of G&C education. Different universities have varied approaches to G&C training, leading to disparities in the quality and consistency of education provided to trainees. For instance, some institutions may offer specialized courses in areas such as trauma counseling, while others may lack any practical training components. This inconsistency is a significant concern, as it produces graduates with varying levels of readiness for professional counselling roles (Oluwature, 2018). Moreover, the absence of standardized assessment criteria means that the competencies of G&C graduates are often inconsistent, further impacting the quality of G&C services available to students.

Compounding these issues is the lack of adequate resources for G&C training. Many institutions lack Counselling labs, assessment tools, and sufficient access to recent literature and research on best practices in counseling. This scarcity limits the ability of G&C trainees to develop hands-on skills and knowledge of current methodologies, making it challenging for them to address contemporary student issues effectively (Oluwature, 2018). Consequently, G&C graduates often enter the workforce unprepared to manage the multifaceted needs of students, particularly in the areas of mental health and crisis intervention, which require a strong practical skill set.

Some studies (Abiodun and Oyekunle 2021 & Makinde, 2018) conducted a comprehensive curriculum reform, aimed at addressing the curriculum challenges of Guidance and Counselling Education in order to significantly improve the quality of Guidance and Counselling Education in Nigeria. This present study becomes imperative because of the importance of Guidance and Counselling for students' success and the need to address curriculum-related challenges in G&C education in higher education curriculum in Nigeria. Moreover, to the best of the researchers' knowledge there is a dearth of empirical studies on the topic under consideration study aims to explore curriculum challenges in depth, with the goal of identifying strategies to improve it. By focusing on the curriculum gaps that hinder G&C training, the study seeks to offer solutions that can help institutions produce more competent, effective counsellors who are prepared are competent and effective.

Statement of the Research Problem

The primary issue addressed by this study is the inadequacy of Guidance and Counselling curricula in Nigeria higher education. Although the need for qualified guidance counsellors has increased, but existing curricula in many institutions are outdated, overly theoretical, and lack the practical components necessary for effective training (Oluwature, 2018). Many G&C programmes in Nigerian universities do not equip students with the hands-on experience required to work with diverse student populations in a variety of contexts. Moreover, there are few opportunities for supervised practice, which is essential for developing practical counseling skills. The lack of standardized curricula for G&C education across Nigerian institutions further complicates the problem.

Differences in course structure, contents, and delivery leading to disparities in training quality, thereby leaving some graduates better prepared than others. Additionally, limited access to resources, such as counselling laboratories, psychological assessment tools, and qualified faculty, constrains the ability of institutions to offer comprehensive G&C education. These curriculum-related issues result in graduates who are underprepared to handle the demands of the counseling profession, which ultimately impacts the effectiveness of G&C services in schools and other institutions (Omoniyi, 2016).

This study seeks to investigate the specific curriculum challenges facing G&C education at the higher level in Nigeria and to identify potential solutions for enhancing the quality and consistency of these programs. By exploring these issues, the study aims to provide insights

into how G&C curricula can be improved to better prepare students for successful careers in Counselling.

Objectives of the Study

The main objective of this study is how to reposition *Guidance and Counselling education in Nigerian higher education*. The specific objectives are to:

- ❖ identify the primary curriculum challenges facing guidance and counseling education programmes in Nigerian higher education
- ❖ investigate how challenges in Guidance and Counselling impact the practical skills and preparedness of Guidance and Counseling graduates,
- ❖ Identify strategies can be used to enhance the Guidance and Counseling curriculum in Nigerian higher institutions.

Research Questions

The following research questions guided this study:

1. What are the primary curriculum challenges facing guidance and counseling education programmes in Nigerian higher education?
2. How do curriculum challenges impact the practical skills and preparedness of guidance and counseling graduates?
3. What strategies can be implemented to enhance the curriculum for guidance and counseling education in Nigerian higher institutions?

LITERATURE REVIEW

Empirical studies on curriculum challenges in guidance and counselling education at the higher education

Guidance and counselling (G&C) education is essential for developing qualified professionals who can support students' academic, social, and psychological well-being. However, empirical research has shown that higher education institutions face several curriculum-related challenges in delivering effective G &C training. This literature review explores various empirical studies that examine these curriculum challenges, including inadequate practical training, outdated course content, resource limitations, and the lack of standardized curricula, particularly in Nigeria and similar contexts.

Inadequate Practical Training in G & C Programmes

One major challenge highlighted in the literature is the lack of practical training opportunities within G&C programs. Studies show that many G&C curricula emphasize theoretical knowledge over practical skills which are essential for effective counselling. In a study of Nigerian G&C programs, Oladeji and Afolabi (2018) found that more than 60% of the programmes reviewed had minimal opportunities for hands-on practice, such as internships or supervised Counselling sessions. The researchers noted that practical experience is critical in Counselling Education as it enables trainees to apply theoretical knowledge in real-life settings, develop their counseling styles, and improve their interpersonal skills. Without sufficient practical training, graduates are likely to feel unprepared and may struggle to build rapport with clients, which is a key aspect of effective counselling (Oladeji & Afolabi, 2018).

Similarly, Ezeokoli and Ofole (2019) conducted a study that assessed the impact of limited practicum opportunities on G&C students in Nigerian universities. They found that students who lacked practical exposure were more likely to report low self-efficacy in their ability to counsel effectively, particularly in handling complex cases involving mental health issues or family dynamics. These findings suggest that without adequate practical training, G&C graduates are less likely to develop the confidence and competence required for the profession. Moreover, research has consistently shown that the curriculum challenges discussed above negatively impact the preparedness of G&C graduates. A survey conducted by Afolabi and Oladipo (2020) among recent G&C graduates in Nigeria revealed that a significant portion felt inadequately prepared for the counselling profession. Many respondents cited the lack of practical training and exposure to modern counseling techniques as factors that limited their ability to meet the demands of the field. According to the survey, graduates who had more hands-on training experiences reported greater confidence in their skills and were better able to handle real-life counseling scenarios.

A related study by Anyanwu and Adejumo (2018) examined the relationship between curriculum quality and job performance among newly graduated G&C counsellors. They found that graduates from programmes with stronger practical components were more effective in addressing students' academic, social, and psychological needs than those from programmes focused mainly on theory. The study concluded that curriculum quality directly influences graduate performance and recommended that institutions prioritize practical skills development to improve graduates' readiness for the profession (Anyanwu & Adejumo,

2018). The study recommended integrating more fieldwork and supervised counselling sessions into the curriculum to address this gap (Ezeokoli & Ofole, 2019).

Outdated and Irrelevant Course Content

Outdated course content is another curriculum-related issue in G&C education that empirical research has documented. Many programs still teach traditional counseling theories and techniques that may not align with current best practices or address contemporary student issues. For example, Makinde and Olaoye (2016) observed that the G&C curriculum in several Nigerian universities still primarily focuses on classical theories of counseling, with limited content on modern approaches such as solution-focused brief therapy, cognitive-behavioral therapy (CBT), or trauma-informed counseling. These modern techniques are essential in addressing current student needs, especially given the increasing prevalence of mental health concerns among young people (Makinde & Olaoye, 2016).

A comparative study by Chukwuemeka et al. (2017) analyzed G&C curricula across multiple African countries and found similar trends. They reported that many G&C programmes in Africa lack updated course content relevant to contemporary challenges, such as mental health crises, social media influence, and career uncertainties. The study highlighted that outdated curricula not only limit students' preparedness but also hinder the development of counseling practices that are responsive to evolving student needs. The authors recommended regular curriculum updates to incorporate modern theories and techniques, as well as topics addressing emerging social and psychological issues among students (Chukwuemeka et al., 2017).

Limited Resources and Infrastructure for G&C Education

Resource limitations is another significant barrier to effective G&C education. Many institutions lack the resources necessary to provide a comprehensive, experiential learning environment for trainees. In a study on Nigerian higher education, Oluwatelure (2018) found that G&C programmes are frequently underfunded, resulting in a shortage of essential resources such as counseling laboratories, psychological assessment tools, and up-to-date textbooks. These limitations hinder the quality of training by preventing students from accessing the materials needed for skill development and practice. In an extensive survey of counseling educators, Agi (2015) found that inadequate infrastructure is a common issue in G&C programmes across Nigeria. The study revealed that only a few universities have

designated spaces for practical counselling training, such as labs where students can practice role-playing or administer mock counseling sessions. In addition, most institutions lacked access to psychological assessment tools, which are crucial for training counselors to diagnose and address students' mental health issues accurately. Agi's study emphasized the need for improved funding and institutional support to ensure that G&C programs have the resources required to provide a well-rounded education for future counselors (Agi, 2015).

Similarly, research by Omoniyi and Omotayo (2016) pointed out that many Nigerian G&C programmes struggle to secure subscriptions to counselling journals and databases, which limits students' exposure to current research and best practices. According to the study, students who had access to recent literature and research were better prepared for professional roles, as they could apply evidence-based practices in their work. The lack of access to updated resources thus hampers students' ability to stay informed about developments in the field and apply new insights in their practice (Omoniyi & Omotayo, 2016).

Lack of Standardized Curriculum in G&C Education

The lack of a standardized curriculum for G&C programs is another issue that affects the consistency and quality of training across institutions. Empirical studies indicate that without standardization, there are wide discrepancies in the quality of education that G&C students receive. A study by Nwoye (2019) found that G&C curricula across Nigerian institutions varied significantly in terms of course content, duration, and assessment criteria. Some programs included specialized training in areas like career counseling or addiction counseling, while others did not, resulting in unequal preparation among graduates.

The issue of standardization was also explored in a cross-sectional study by Odigie and Salami (2017), which compared G&C programs in several Nigerian universities. The study found that students in programs with more comprehensive curricula—including courses on contemporary counselling techniques, cultural competency, and ethical practice were generally better equipped to handle counselling challenges. However, in institutions where such courses were absent, students expressed concerns about their readiness for professional practice. The authors suggested that a standardized curriculum with core competencies in specific areas could help ensure that all G&C graduates possess a minimum level of knowledge and skills necessary for effective practice (Odigie & Salami, 2017).

A recurring issue in the quality of G&C education is the shortage of well-trained faculty with practical experience in modern counseling techniques. Faculty members often play a central role in shaping the curriculum and mentoring future counselors; thus, their expertise is crucial. A study by Adediran and Adekeye (2020) found that in many Nigerian universities, faculty members responsible for teaching G&C courses lacked adequate training in contemporary counselling methods, such as cognitive-behavioral therapy (CBT) and trauma-informed care. Instead, faculty often relied on traditional approaches that are increasingly out of touch with current practices. According to Adediran and Adekeye, these knowledge gaps not only hinder the professional development of students but also reduce the institution's ability to update the curriculum with relevant and evidence-based practices (Adediran & Adekeye, 2020).

Similarly, Okeke and Ugwuegbulam (2021) emphasized that a shortage of skilled faculty restricts the range of courses and practical experiences offered in G&C programs. In their study, they found that many institutions struggled to offer specialized courses in areas such as family counselling, addiction counseling, and crisis intervention due to a lack of faculty qualified to teach these subjects. This limits students' exposure to critical areas within the field and reduces their preparedness for real-world counseling roles, which increasingly require specialization and adaptability to diverse client needs (Okeke & Ugwuegbulam, 2021).

Limited Access to Technology and Digital Resources

Technology integration into G&C Education is increasingly seen as vital for preparing students to engage with modern counselling methods and tools. However, many Nigerian G&C programmes lack access to basic technological resources, hindering the development of digital competencies among students. According to a study by Omotayo and Lawal (2019), most Nigerian G&C programmes do not incorporate technology-enhanced learning tools, such as online simulations, video counselling tutorials, or digital assessment software. The authors found that over 70% of G&C students in Nigerian universities had minimal or no exposure to digital counselling platforms, which are becoming standard in contemporary practice. The absence of technological resources, they argue, leaves graduates at a disadvantage, as they are unprepared to navigate telecounseling, online assessment tools, and other digital innovations in the field (Omotayo & Lawal, 2019).

In another study, Ibrahim and Olawale (2022) examined the barriers to technology integration in G&C programmes and found that funding constraints were a primary factor. Many universities are unable to invest in essential technological infrastructure, which not only affects G&C programmes but also broader educational initiatives within the institutions. The researchers noted that universities that had secured grants or partnerships to fund technology integration showed marked improvements in the preparedness of their G&C graduates, particularly in areas like telecounseling and online case management (Ibrahim & Olawale, 2022).

Insufficient Student Support Structures

The presence of robust student support structures, such as mentorship, career guidance, and mental health services is integral to G&C education. However, empirical studies reveal that many Nigerian G&C programmes lack these support systems, affecting both student well-being and learning outcomes. In a study on counseling education and student satisfaction, Falaye and Akinbobola (2021) found that students in G&C programmes with access to mentorship and support services reported higher levels of satisfaction and engagement in their training. Mentorship opportunities were especially beneficial for developing practical counseling skills, as students could seek guidance from experienced counsellors to better understand complex concepts and real-life applications (Falaye & Akinbobola, 2021). The study emphasized that mentorship from faculty or professional counsellors can be instrumental in helping students navigate academic challenges and gain confidence in their skills, and recommended that institutions develop more students support initiatives to enhance student retention and improve outcomes in G&C education (Falaye & Akinbobola, 2021).

Effects of Curriculum Challenges on Ethical Competency

Ethics is a critical component of G&C training as counsellors must navigate complex issues related to confidentiality, cultural sensitivity, and client autonomy. However, empirical research suggests that current G&C curricula in Nigerian universities may not provide sufficient training on ethics, particularly in culturally diverse contexts like Nigeria. A study by Bello and Adeoti (2020) found that ethical training was often limited to a single course in many G&C programmes, with minimal coverage of real-world ethical dilemmas and the legal framework surrounding counselling practices. This lack of depth in ethical training, the authors argue, leaves graduates unprepared to handle ethical challenges, which can compromise the quality of care provided to clients (Bello & Adeoti, 2020). In a related study,

Adekola and Falade (2019) highlighted that G&C students who received more comprehensive training in ethics demonstrated greater competency in culturally responsive counselling. Their study found that students with a strong foundation in ethics were more likely to adopt practices that respected clients' cultural values and personal boundaries. The authors emphasized that an enhanced focus on ethics within G&C curricula not only improve professional standards but also foster a more culturally sensitive approach to counselling, which is essential in a diverse country like Nigeria (Adekola & Falade, 2019).

Theoretical Framework

To examine the curriculum challenges in Guidance and Counselling (G&C) education in Nigeria, this study draws on two main theoretical perspectives: Curriculum Theory and Social Cognitive Theory.

Curriculum Theory (CT)

Curriculum Theory provides a framework for understanding how educational content, teaching methods, and learning outcomes are organized and delivered within an academic programme. Posner (2004) argues that effective curriculum design must consider not only subject content but also the social context, resources, and institutional constraints that affect educational delivery. In Nigerian G&C programs, curriculum theory helps to highlight issues such as outdated content, limited practical training, and gaps in ethical education. The theory suggests that a curriculum aligned with contemporary counseling practices and professional standards would better equip students with the necessary competencies. Curriculum Theory also emphasizes the importance of faculty expertise, practical experiences, and updated resources, which are all critical components currently challenged in Nigeria's G&C education framework (Ofole & Awodun, 2020). CT often lacks consideration for cultural and environmental factors that influence cognitive processes, which may limit its applicability across diverse populations.

Social Cognitive Theory (SCT)

Social Cognitive Theory (SCT), developed by Albert Bandura (1986), posits that learning occurs in a social context and that both personal and environmental factors shape behavior. In the context of G&C education, SCT underscores the importance of mentorship, role models, and practical training opportunities that provide students with real-world experience and confidence. With limited practical components and insufficient mentorship, students may lack the social learning experiences SCT describes as essential for developing self-efficacy

and professional competencies. Thus, SCT explains how inadequate exposure to applied counseling scenarios and lack of role models within Nigerian G&C programs impact students' readiness for practice. Although, SLT is effective in explaining how behaviors are initially learned but does not fully address how these behaviors are maintained or modified over time

Together, these theories provide a comprehensive framework for analyzing curriculum challenges in G&C education in Nigeria, emphasizing the need for curriculum reform that aligns with contemporary professional demands and integrates supportive learning environments.

METHODOLOGY

Area of the Study

The study was conducted in Lagos state. Three (3) universities were selected out of the ten (10) universities in the state.

Research Design

The research design used in this study was qualitative. It is appropriate for exploring curriculum challenges in Guidance and Counselling (G&C) Education in Nigerian higher education, as it allows for in-depth understanding of participants' experiences, perceptions, and contexts (Creswell & Poth, 2018).

Population of the study

The population of this study was all Guidance and Counselling lecturers in Lagos state. The target population for this study were all Guidance and Counselling lecturers in Lagos State Public Universities.

Sampling and Participant Selection

Purposeful sampling techniques was used to select 37 participants who have direct experiences relevant to the research questions for the study (Merriam & Tisdell, 2016). Thus, only lecturers teaching Guidance and Counselling were involved in the study. Selection of samples was done in: University of Lagos, Lagos State University of Education and National Open University of Nigeria.

Data Collection Methods

Semi-structured interviews and document analysis were used to collect the data for the study. Each method provided rich, descriptive data on the curriculum challenges in G&C programmes and are highlighted below:

Interviews: Semi-structured interviews with lecturers allowed for in-depth exploration of individual experiences and perspectives on curriculum effectiveness, challenges, and potential improvements (Kvale and Brinkmann, 2015).

Validity and Trustworthiness

To enhance the trustworthiness of the findings, this qualitative study incorporated several strategies. Additionally, member checking was done to confirm the accuracy of the data with participants, ensuring their responses are understood as intended (Lincoln & Guba, 1985). These practices enhance credibility and help ensure that the findings genuinely represent participants’ perspectives on curriculum challenges in G&C Education.

Ethical Considerations

Ensuring ethical rigor is essential in qualitative research. Participants were informed of the study’s purpose, and informed consents were obtained to respect their autonomy and confidentiality. To address potential biases, researchers ensured reflexivity, maintaining awareness of their perspectives and how these may influence the research process (Berger, 2015). Given the potential for sensitive issues to arise when discussing educational challenges, participants’ privacy and anonymity was strictly protected throughout the study.

Data Analysis

The researcher systematically coded interviews and documented data to identify recurring themes and patterns related to curriculum challenges. Deductive approach was useful to explore specific issues such as faculty expertise, practical training opportunities, and ethical training in G&C Education (Nowell et al., 2017; Braun & Clarke, 2006).

Document Analysis: Review of National Policy on Education policy guidelines provides contextual data on the structure, content, and intended learning outcomes of G&C programmes. (Bowen, 2009).

RESULTS

39 participants were selected from three universities in Lagos state. However, 37 (94.87%) participants concluded the study, which is good and valid enough to be used for the analysis.

Descriptive Analysis

Table 1: Demographic Data Analysis

Gender	Frequency	Percentage
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Male	14	37.83
Female	23	62.16
Total	37	100

Age of the Respondents	Frequency	Percentage
35-45years	13	35.13
46-55years	19	51.35
60 & above	5	13.51
Total	37	100

Years of Service		
Less than 5years	5	13.51
5-10years	3	8.1
11-15years	11	29.72
16 & ABOVE	18	48.64
Total	37	100

Educational qualifications		
BSc.	17	11.33
M.Ed.	96	64
PhD	37	24.66
Total	37	100

University type		
Federal institution	2	33.33
State University	1	66.66
Total	3	100

Rank of Respondents		
Lecturer 11	8	21.62
Lecturer 1	11	29,72
Senior Lecturers	15	40.54
Professors	3	8.10
Total	37	100.0

Source: Field Survey Data Analysis Result, 2024

Table 1 reveals the gender distribution of the respondents 37.83% were male and 62.16% were female. The analysis revealed that majority of the study's respondents were female. Table 1 also revealed the age distribution of the respondents, 35.13% were between the ages of 35-45, 51.35% were between the ages of 46-55 while 13,51% were 60 years and above. The analysis shows that majority of the respondents were between 46-55years. Table 1

further presents the years of experience of the participants, 13.51%, had less than 4years experience as lecturers, 8.10% has 5-10years, 29.72% have 11-15years experience while 48.64% have more than 16years experience. Analysis revealed that majority of the participants have more than 16years experience. Table 1 also shows that 66.66% of the respondents work in federal universities while 33,33% work in a state-owned university. The analysis shows that majority work in Federal Universities. Also. Table 1 in addition shows the ranks of the respondents. Majority of the respondents were senior Lecturers.

Question 1: What are the primary curriculum challenges facing Guidance and Counselling Education programmes Nigeria Higher Education?

The 37 participants gave similar responses to the question even though they have different years of experiences, educational qualifications and are from different universities. The common themes identified were:

Common Themes

Key words represented in word cloud on Curriculum challenge in G & C Education

OUTDATED CURRICULUM LACK of ICT TRAINING Inadequate Funding Lack of Counselling Laboratory POOR ICT SKILLS Gaps in Faculty Expertise, Poor practical training, Lack of **mentorship**, **limited physical training**, Unstandardized Content, use of traditional counselling approach.

Analysis of the themes

One of the respondents, female, senior lecturer with over ten years of lecturing experience, while, speaking on the challenges of Guidance and Counselling Education lamented that most lecturers of Guidance and Counselling Education are not well -grounded in relevant and modern contents of the course because some universities now admit PhD students who do not have background education in G&C such as B.A (G& C) or MEd in G & C forgetting it is impossible to give what you do not have.

Speaking to the question, another respondent, a male professor with over 20 years of experience in teaching Guidance and Counselling Education lamented that poor funding and unstandardized curriculum are the major problems of the G& C Education in Nigeria. He stressed further that outdated curriculum is the mother of all these challenges.

Also, a lecturer 11 female with less than 5 years of experience lamented that many G & C lecturers lack practical training, and are digitally illiterate. Also, the content is too outdated to meet the needs of the present generation. She also mentioned the inadequacy of the **National** Policy on Education on G & C Education. All the respondents mentioned different challenges, however gaps in faculty expertise, outdated curriculum, poor training and resource constraints were key themes.

2. How do these curriculum challenges impact the practical skills and preparedness of guidance and counselling graduates?

Common Themes in Word cloud

Poor adaptability to technology, **Low ethical & CULTURAL SENSITIVITY SKILLS**
Inadequate practical skill. **Low Employability Low job readiness**
Low mental HEALTH MANAGEMENT SKILLS

Analysis of Themes

100% of the respondents lamented that most G&C lecturers are half-baked, lacking appropriate and relevant skills in modern counselling skills and mental health counselling which make them ineffective in the discharge of their duties as Guidance-Counsellors. A senior female lecturer with over 20years of teaching experience said she is perturbed by the poor performance of many G and C graduates as most of them have limited practical skills. However, many of them improve on their skills with on-job-training and experience.

Another respondent, a male senior lecturer with 8years experience said that most of the G and C graduates have low employability and have low readiness to work. This view was shared by another respondent, a female lecturer 11 with less than 5years who said this is why many counsellors end-up as teachers and not as counsellors. Another lamentable remark was the fact that even in the 21st century most counselling graduates are digitally illiterates making it difficult for them to negotiate counselling on e-platform and handle many challenges of the 21st century youths. In sum, all the respondents to different degrees lamented the low and inadequate skills of most graduate of G and C.

3. What strategies can be implemented to enhance the curriculum for guidance and counseling education in Nigerian higher institutions?

Key Themes to implement curriculum reform and enhance Guidance and Counselling Education in Nigeria

INCREASED PRACTICAL TRAINING IMPROVE faculty SUPPORT, ENHANCED DIGITAL LITERACY, curriculum reform, Increased Ethical training and stakeholders' INVOLVEMENT, IMPROVE CURRICULUM FRAMEWORK INCREASED mentorship COLLABORATION and faculty support

Analysis of themes

Responding to what strategies can be employed to improve Guidance and Counselling Education. A participant who is a professor with 30 years of experience said mentoring, more funding, collaboration and digital literacy are crucial to achieving improved G and C Education in Nigeria. In the same manner, a female lecturer 11 said training and retraining of faculty is necessary as well as collaboration between universities offering G and C Education is necessary. She went further to say trainees should be given on-hand practical training in all setting hospitals, prison, school, rehabilitation centres and the likes. In addition, a female professor emphasized the need for a policy review. she reiterated that it is very important to unify teaching contents and ensure that only persons that are adequately equipped with relevant knowledge in G & C Education is employed to teach courses 62.16% of the participants emphasized content overhaul and faculty expertise and mentorship for trainees to ensure they are well-equipped with skills in managing cultural diversity and ethics. On the whole, the participants mentioned and emphasized the need for faculty expertise, content overhaul and better funding to afford the schools getting well equipped counselling laboratories.

Discussion of Findings

The study established that the challenges of Guidance and Counselling Education in Nigeria is deeply rooted and varied ranging from inadequate practical training in G&C Programmes, to gap in faculty expertise, to outdated and unstandardized contents, shortage of well-trained staff, poor funding, digital illiteracy to mention, insufficient students support system among others were the challenges facing G& C Education in Nigeria. This is a true situation of the G & C Education in most universities in Nigeria. Practicum that ought to provide the trainees with hands-on experience has not received the desired attention required due to factors ranging from problems of achieving legal professionalism, limitations to school practices, poor attitude of practitioners towards professionalism, lack of conducive environment for

practice, lack of awareness of the importance of practicum, poor supervision, and lack of zeal by counsellor educators in emphasizing the importance of practicum to trainees' professional development among others (Yahaya, 2016). This infers that since the trainees do not have adequate practical experience due to inadequate practical counselling experience, the trainees would be deficient in some key counselling skills. Omoegun (2001). Equally, current G&C curricula in Nigerian universities may not provide sufficient training on ethics, particularly in culturally diverse contexts like Nigeria. A study by Bello and Adeoti (2020) found that ethical training was often limited to a single course in many G&C programmes, with minimal coverage of real-world ethical dilemmas and the legal framework surrounding counselling practices. The findings of this study aligns with the findings of Oladeji and Afolabi (2018) and the report of Makinde & Olaoye, (2016) and Oluwatelure (2018) that reported that resource constraints of G & C Education. A contrary view by Muhammed, Olayinka & Olamilekan, (2019) that some universities are equipping their students with much needed practicum experience

The study found that many G& C graduates have low and inadequate counselling skills which reduces their employability and is responsible for the low job readiness. A study by Bello and Adeoti (2020) found that ethical training was often limited to a single course in many G&C programmes, with minimal coverage of real-world ethical dilemmas and the legal framework surrounding counselling practices. This lack of depth in ethical training, the authors argue, leaves graduates unprepared to handle ethical challenges, which can compromise the quality of care provided to clients (Bello & Adeoti, 2020). In a related study, Adekola and Falade (2019) highlighted that G&C students who received more comprehensive training in ethics demonstrated greater competency in culturally responsive counselling. Their study found that students with a strong foundation in ethics were more likely to adopt practices that respected clients' cultural values and personal boundaries. The authors emphasized that an enhanced focus on ethics within G&C curricula not only improve professional standards but also foster a more culturally sensitive approach to counselling, which is essential in a diverse country like Nigeria (Adekola & Falade, 2019).

The finding of this study emphasized that due to the poor relationship between curriculum quality and job performance among newly graduated G&C counsellors. The study also emphasized the inability of G& C graduates to use modern counselling tools most of which requires digital literacy. Also, most of them lack mental health management skill and inability to operate in cultural diverse environment and lack ethical skills.

Similarly, Ezeokoli and Ofole (2019) found that students who lacked practical exposure lack confidence in their ability to counsel effectively, particularly in handling complex cases involving mental health issues or family dynamics. Afolabi and Oladipo (2020) also reported that significant portion of G & C graduates felt inadequately prepared for the counselling profession. The finding of this study aligns with Afolabi and Oladipo (2020) that reported the inadequate preparedness of many graduates of the counselling profession and poor job performance by Anyanwu and Adejumo (2018).

On the strategies to improve G and C Education, the study established that funding is crucial in improving G and C Education. This is because resource constraint is the main reason why most institutions cannot drive digital literacy among their students. Funding is also crucial to establishing students support and training faculty to bridge the identified gaps in their skills. This aligns with the findings Falaye & Akinbobola, (2021). It further established that collaboration among universities is highly needed and mentorships should be established to fine-tune the skills of trainees. The presence of robust student support structures, such as mentorship, career guidance, and mental health services is integral to G&C education. However, empirical studies reveal that many Nigerian G&C programmes lack these support systems, affecting both student well-being and learning outcomes. In a study on counseling education and student satisfaction, Falaye and Akinbobola (2021) found that students in G&C programmes with access to mentorship and support services reported higher levels of satisfaction and engagement in their training. Mentorship opportunities were especially beneficial for developing practical counseling skills, as students could seek guidance from experienced counsellors to better understand complex concepts and real-life applications (Falaye & Akinbobola, 2021). The study emphasized that mentorship from faculty or professional counsellors can be instrumental in helping students navigate academic challenges and gain confidence in their skills, and recommended that institutions develop more students support initiatives to enhance student retention and improve outcomes in G&C education (Falaye & Akinbobola, 2021).

Conclusion

This study highlighted significant challenges impacting Guidance and Counselling Education in Nigeria. Key issue identified were resource constraints gaps in faculty expertise, lack

digital literacy among trainees. This therefore, underscores the need for urgent curriculum improvement to better equip graduates and the likes.

Recommendations

To improve Guidance and Counseling Education in Nigeria the following recommendations were made:

1. Expanded Practical Training and Supervised Field Experience: One of the major challenges in Nigerian Counselling Education is limited practical training. Therefore, universities and training institutions should integrate more hands-on field experience and practicum opportunities into the curriculum to ensure that students gain real-world counselling skills. Partnerships with schools, hospitals, and community centers could provide students with a range of supervised field experiences, enhancing their ability to address diverse counselling needs.

2. Introduction of Specialized Courses in Mental Health and Crisis Intervention: Given the increasing mental health concerns among Nigerian youths, the curriculum should include specialized courses on mental health issues, crisis intervention, and trauma-informed counselling.

3. Enhancing Digital Literacy and Incorporate AI Tools: Training students on using virtual counselling platforms, AI assessment tools, and digital data management systems can equip them to reach and support a wider population, particularly in remote areas where face-to-face counseling may not be feasible (Adebayo & Olorunfemi, 2023).

4. Emphasis on Ethical Training and Cultural Competency: Nigerian counselling programmes should place a stronger emphasis on ethics and cultural sensitivity to help future counsellors handle issues related to confidentiality, data privacy, and cultural differences.

5. Increase Funding and Resources for Counselling Education: There should be increase budget allocations to support the development of counselling centers, purchase of necessary tools, and training programs.

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AN EVALUATION OF THE IMPACT OF TECHNOLOGY IN TRANSFORMING ADULT EDUCATION IN EDO STATE, NIGERIA.

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Abstract

Adult education refers to any form of learning or instruction designed specifically for adults. It includes a wide range of formal, non-formal, and informal educational activities aimed at helping adults acquire new knowledge, skills, or qualifications. Technology is the application of scientific knowledge to create tools, systems, and solutions that improve human life and solve real-world problems. Section 4 sub-section 68e of the National Policy on Education (2014) provides that information technology shall be provided in every community to facilitate adult education. Education sector in Edo State has witnessed innovative changes in recent years with the introduction of the Edo BEST initiative. This study evaluates the impact of technology in transforming adult education in Edo State and how it boosts competitiveness internationally. In order for adult education programs in Nigeria to remain competitive, they must adjust to the technological advancements that are being incorporated into educational processes globally. The degree of technological integration in Edo State adult education system is assessed in this work, along with its implications for learning results, accessibility, and general educational quality. The evaluation ends with policy suggestions for improving technology-driven adult education for competitiveness and relevance on a global scale.

Keywords: Adult Education, Technology, Impact, Transforming.

INTRODUCTION

Adult education is often seen as a second chance for individuals seeking to improve their socioeconomic standing. Nigeria is a country wrought with high level illiteracy and high rate of school dropout. This is corroborated by UNICEF (2022) which states that Nigeria's out of

School population accounts for 15% of the world's total population of out of school children. In furtherance to this, only one in three adolescence of senior secondary school going age are attending school. (Cambridge Education 2021) the implication of these findings is that Nigeria will have to resort to Adult education in other to achieve the aims of education as stated in the National Policy of Education. In addition to the above UIL (2022) declares that Lifelong learning under which Adult Education is part is not only a right, but also a crucial asset in facing the socio economic uncertainty, environmental and digital disruption to which societies must adapt on an ongoing basis. It is a culture that must develop if we are to strengthen social cohesion, equal opportunities, gender equality and the economic vitality of our societies.

In the other side of the divide are adult learners who maybe professionals which seeks continuous education to enhance their skills and improve their socioeconomic status. What then is Adult Education? UNESCO (1976) cited in Obayuwana (2011:29) defines the Adult Education as the entire body of organized educational processes, whatever the content, level and method whether formal or otherwise, whether they prolong or replace initial education in schools, colleges or universities as well as apprenticeship, whereby a person regarded as adults by the society where they belong seek to develop their skills, abilities, knowledge, improve their technical or professional qualifications so as to bring about changes in their behaviour as regards their personal development and participation in a balanced independent, social, economic and cultural development.

The above is a comprehensive definition of adult education which defines the term both in scope and content. Kapur (2020) suggests that adult education involves equipping adults with the skills and knowledge required to meet various aspects of modern life. In a more related and recent definition, UNESCO (2022) views adult education as a right and emphasizes its role in sustainable development. This definition expands adult education to include personal and professional growth, social transformation and active citizenship.

Technology has fundamentally altered how education is delivered globally, including adult education. As digital platforms, e-learning tools, and mobile technology become more integrated into educational practices, there is a growing demand for technologically literate learners who can compete in the global workforce (Olaniyi, 2021). In Nigeria, adult education has historically been an avenue for individuals who missed out on formal education to gain essential skills. However, with the rapid development of technology, the need to re-

envison adult education for global competitiveness is increasingly important. Integrating technology into this education model can provide unprecedented access to information and learning opportunities that transcend geographical and financial barriers (Afolabi, 2022). In Edo State, the introduction of technology into education has yielded positive results which includes improved learning outcomes, improved school attendance by both teachers and students, access to learning materials etc (Asemota et el 2023) in its bid to replicate the above gains in the adult education space, the state government established in 2022 the Edo State Agency for Mass Education (ESAME) which has the charge for adult education amongst others in the State. The agency report shows that a portal has been developed that reflects records of all adult education centres in the state. One of the top goals of ESAME in the state is that of delivering second chance education to all those that missed out of formal school irrespective of location, gender or age and this has led to the Edo Sabi Initiatives. Edo State MoE (2024).

Incorporating technology into modern education has transformed traditional learning environments, enabling innovative pedagogical approaches and enhancing student engagement. The integration of digital tools such as learning management systems, multimedia resources, and online collaboration platforms has provided educators with dynamic mechanisms for delivering content and assessing student progress. For instance, regional disparities in educational resources can be alleviated through online courses that provide access to quality instruction, thereby fostering equity in learning opportunities. Furthermore, technology facilitates personalized learning experiences, allowing students to progress at their own pace and according to their unique learning styles. This adaptive approach not only encourages mastery of content but also cultivates critical thinking and problem-solving skills essential for success in the present day workforce. Thus, the role of technology in adult education is indispensable, as it not only enhances instructional efficacy but also prepares learners for an increasingly digital world (Wang et al.).

Leveraging technology for adult education advancement has a lot of opportunities which can effectively meet the goals of ESAME but also poses challenges, including inadequate infrastructure and insufficient digital literacy training, disparities in access to technology including, hardware, software and internet provision (Onyechi, 2023). This paper aims to evaluate the impact of technology on transforming adult education in Edo State and its potential to enhance global competitiveness.

THEORETICAL FRAMEWORK

The Technology Acceptance Model (TAM) (Davis 1989) serves as a guided theoretical framework for this research study, TAM explains how users come to accept and use technology. It posits two primary factors of the perceived usefulness and the perceived ease of use as influencers of technology adoption. These two factors are assumed to be foundational to technology integration in adult education. An extended version of this model considers components that evaluate how adult educators and learners perceive and adopts technological tools. (Venkatesh, V., & Davis, F. D. 2000) By leveraging TAM, this research can provide valuable insights into the dynamics of technology adoption in adult education, facilitating the development of strategies to enhance educational outcomes in Edo State

IMPLICATIONS OF ADULT EDUCATION IN EDO STATE

The implications of adult education in Edo State are substantial, as it plays a vital role in fostering personal, economic, and social development. Adult education programs equip individuals with essential literacy, numeracy, and vocational skills, which can significantly impact their employability and income potential. As adults gain practical skills, they contribute to the local economy by enhancing workforce competencies, which is particularly beneficial for sectors such as agriculture, trade, and small-scale industries prevalent in Edo State (Okon & Ene, 2020).

Furthermore, adult education fosters social and community development by enabling informed decision-making and active citizenship. Through educational programs, individuals become more knowledgeable about their rights and civic responsibilities, which helps promote civic participation and community leadership. Adult education also plays a role in improving health outcomes, as individuals who can read and understand health information are better able to make healthy choices, contributing to community well-being (Adamu & Augustine, 2019).

Another implication is the reduction in inequality, as adult education often targets marginalized groups, including women and rural residents who may have missed out on formal education in their youth. By providing these individuals with a second chance at education, adult programs in Edo State help bridge educational and economic disparities,

contributing to social cohesion and stability (Ekundayo & Ogunyemi, 2018). Moreover, the integration of technology in adult education, as seen in Edo State initiatives, highlights the need for digital literacy skills, which are crucial in today's knowledge-driven economy.

TECHNOLOGY AND ADULT EDUCATION

The role of technology in education, particularly adult education, has been widely studied. According to Ajayi (2020), technology enhances the learning experience by providing flexible learning options, enabling self-paced study, and improving access to educational materials. Digital tools such as Learning Management Systems (LMS), online courses, and virtual classrooms have revolutionized adult education in many parts of the world, especially where traditional modes of education may be inaccessible or insufficient (Dike, 2022). In the United States of America as far back as 2009, the National Commission on Adult Literacy recognized that the nation must reach millions of adults with effective college and job readiness skills programs in the next decade else they risk losing the nation's economic viability, standard of living and core democratic principles. The much needed tool for the required reform was the deployment of technology in an unprecedented scale. National Commission on Adult Literacy as cited in McCain (2009)

In Europe, The European Union has recognized the role of technology in addressing skill gaps, digital literacy, and lifelong learning, particularly through the Digital Education Action Plan 2021–2027. This initiative focuses on promoting digital skills, fostering inclusive online learning environments, and supporting European Union (EU) member states in creating policies that support technology-enhanced adult education (European Commission, 2021). National Education Policies in many European countries have aligned with the EU's vision of a digitally inclusive education system. Countries like Denmark, Finland, and the Netherlands have implemented national digital learning strategies to enhance digital literacy and encourage lifelong learning (OECD, 2019). The European Association for the Education of Adults (EAEA) has also noted that digital inclusion in adult education reduces educational disparities, especially for older adults and underserved communities who may benefit from flexible learning formats (EAEA, 2022).

In Africa, the use of technology in adult education is still in its nascent stages, particularly in rural and underserved areas (Okoro 2019) The COVID 19 pandemic caught the nation unprepared as regards the deployment of technology in teaching and learning processes. This unpreparedness may not be unconnected to challenges highlighted by Oyedemi (2015) which

includes limited access to internet connectivity, high data cost and digital skill gaps. However, Countries like Nigeria have taken steps to expand infrastructure and provide more affordable internet solutions to mitigate these issues.

TECHNOLOGY AND ADULT EDUCATION IN EDO STATE

Technology and adult education within Edo State has emerged as a key tool in expanding access to learning and improving educational outcomes for adult learners, ESAME (2024) reports that four mobile schools have been established in the past year with over 350 adult citizens graduating from basic literacy and vocational training programs. Furthermore, a total of 227 (two hundred and twenty-seven adults) took the State's Middle Basic Assessment (MBA) an examination that has replaced the traditional Primary School Leaving Certificate Examination. The integration of digital tools and online resources enables educational institutions and community programs to reach a broader audience, particularly those who may have been excluded from traditional learning pathways due to time constraints, financial limitations, or geographic barriers. Furthermore, online platforms and mobile technologies have become increasingly important for adult education programs in Edo State, offering flexible and accessible learning opportunities. For example, mobile-based educational programs and SMS learning modules allow adult learners, particularly in rural areas, to engage in continuous learning without needing high-speed internet or sophisticated devices (Okonkwo, 2019)

From 2017 till date, Edo State has witnessed initiatives that prioritize the digitalization of education, with support from both governmental and non-governmental organizations from within and outside Nigeria. The EdoBEST (Edo Basic Education Sector Transformation) initiative, although primarily aimed at basic education students, also emphasizes digital literacy and lays a foundation for tech-oriented adult education programs in the state. Through various educational partnerships with institutions like the Universal Basic Education Commission (UBEC), the Bill and Melinda Gates Foundation, the Worldbank etc, EdoBEST is able to provide digital learning materials and training for teachers and education managers. This initiative indirectly supports adult learning by equipping educators with the skills to incorporate technology into broader educational practices (World Bank, 2021).

The state's government has also invested in expanding internet access and digital infrastructure, working with internet providers and educational stakeholders to create a more inclusive digital environment. EDONET which is the State's open internet service is provided

in key centres across the state libraries, secretariats, parks and transportation hubs including rural communities, this initiative according to the state government aims to bridge the digital divide, empower communities, and unlock a world of opportunities for everyone, adults inclusive. (EDSG 2024) This internet provision is huge break in the education sector, Adult educators can leverage on the opportunity to provide education to all without leaving anyone behind. However, a major hindrance to the seemingly golden opportunity is that of awareness, the government needs to do a lot in creating awareness about its activities so as to get those that the programs are intended for to take full advantage of them.

Another technological advancement in Edo State Adult education sector is the establishment of the Edo Innovates in 2018. Edo Innovate is an innovative initiative launched by the Edo State government to foster technology-driven skill acquisition and entrepreneurship among youth, thereby advancing Edo State's role in Nigeria's digital economy. The hub serves as a state-owned technology and innovation center focused on bridging the digital divide by offering free or low-cost training in digital skills such as web development, graphic design, data science, and computer programming. The hub has become central to the state's goal of empowering youth for the digital workforce, enhancing local employment opportunities, and reducing reliance on non-digital jobs in the State (Ewah, 2021).

Edo Innovates collaborates with several tech and educational partners, such as the GIG Innovations Hub and the Tech4Dev initiative, to deliver practical training to individuals with varying levels of prior knowledge, including beginners. Programs within Edo Innovates, such as EdoBits, offer extended courses where participants can specialize in areas like UI/UX design or digital marketing, equipping them with essential skills for independent income generation and remote work. Many success stories, like that of trainee Kelvin Edionwe, illustrate the hub's impact, as participants acquire skills that enable them to work for companies globally while based in Nigeria. This makes Edo Innovates a key player in developing a tech-competent workforce within Edo State and across Nigeria.

Additionally, the hub has contributed to the local economy by supporting startups and offering mentorship and funding opportunities, thus fostering an environment where innovation can thrive. With Edo Innovates, the state has seen growth in youth entrepreneurship and digital skill proficiency, positioning Edo as a budding tech hub within Nigeria's broader technological ecosystem. The goals of the Hub are as follows

1. Equip youth with high demand ICT trainings and connect them to jobs in the ICT sector
2. Provide trainings and business expansions opportunities for startups through incubation and acceleration programs
3. Provide co-working spaces, training halls, fully equipped ICT labs with fast internet access for trainings, seminars and boot camps
4. Provide new and existing businesses with Admin support, Accommodation and Tech support services
5. Grow the Tech community in Edo state.(EDSG Edo Innovates 2024)

ADULT EDUCATION AND GLOBAL COMPETITIVENESS

Global competitiveness in education refers to the ability of learners and educational systems to meet the demands of a globalized economy. For adult learners, this means acquiring skills that are relevant to the modern workforce, including digital literacy, critical thinking, and problem-solving (World Economic Forum, 2020). In developing nations like Nigeria, adult education must be aligned with global standards to ensure that learners are equipped with these essential skills. Technology is seen as a crucial tool for bridging the gap between local educational practices and global demands (Olaniyi, 2021) Adult education contributes directly to economic development by increasing the workforce skills and knowledge making it easier for countries to compete internationally. Investments in adult education often yield higher productivity, innovation, and economic resilience. To an extent, these gains have been brought to bear in Edo State as the state boast of a high tech civil service and several technological opportunities for its young adult citizens who effectively compete with their counterparts in the developed world by taking up international tech jobs even while based in Edo state, Nigeria.

CONCLUSION

The integration of technology into adult education in Edo State has shown a level of promise but requires a more robust and comprehensive approach to achieve its full potential. Majority of adults who live in the riverine, rocky and generally hard to reach areas of the State have to be reached if the State is to achieve its goal of reaching all with education. As lofty as the Edo Innovates Initiative, its reach is limited to Benin City, the State capital. The global competitiveness of Edo State's adult education system can only be achieved through a concerted effort to align local educational practices with global standards. This requires not

only technological integration but also a shift in pedagogical approaches that prioritize skills relevant to the global economy, such as problem-solving, critical thinking, and digital literacy (Afolabi, 2022). Technology has the potential to revolutionize adult education in Edo State, providing learners with the tools they need to compete globally. However, the challenges identified in this study must be addressed to fully realize this potential. With the right investments in infrastructure, digital literacy, and manpower training, technology can transform adult education in Edo State, making it globally competitive and sustainable for future generations.

SUGGESTIONS

To effectively enhance the technological competencies of adult learners in Edo State and to provide education to all adults irrespective of age, gender or location, the following suggestions have been reached:

1. The Innovative Hub and the EDONET initiative should be replicated in all 18 Local Government Areas of the State in order to increase access to digital skills and literacy and provision has to be made for radio and whatsapp classes in order to reach those adults located in the hard to reach areas of the State. The whatsapp classes has been found to be very effective in the State as it was used as a major means of educating basic education learners during the COVID 19 pandemic.
2. There should be effective collaboration between the Edo State Agency for Mass Education (ESAME) and the Edo Innovative Hub in order to bridge the digital divide in the state. The Mobile schools by ESAME should be spread across the State and just located in Local Government Areas within the State capital.
3. As stated by Okojie (2021) government and relevant stakeholders must ensure that adult educators receive adequate training and resources to effectively integrate technology into their teaching methods

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RETHINKING NIGERIAN EDUCATION POLICY AND CURRICULUM: A SOCIOLOGICAL PERSPECTIVE FOR GLOBAL RELEVANCE AND EQUITY

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Abstract

This paper examines the urgent need to rethink Nigerian education policy and curriculum to align with global best practices while addressing local socio-cultural realities. It explores the sociological foundations of education, highlighting how societal structures and cultural values shape educational outcomes. The paper emphasizes the role of education policy in reinforcing or challenging social inequalities, focusing on issues such as gender, class, ethnicity, and disability. Key challenges within the Nigerian education system, including outdated curricula, inadequate infrastructure, and a lack of teacher training, are discussed in relation to the social inequalities and cultural attitudes that impact educational outcomes. The paper draws on successful global examples, such as Finland, Singapore, and Kenya, to demonstrate the potential benefits of incorporating inclusivity, critical thinking, and adaptability into the Nigerian education system. It advocates for the integration of ICT to foster creativity, digital literacy, and global citizenship. Recommendations for reform include curriculum frameworks that balance global best practices with local realities, policies prioritizing equity and accessibility, and strategies for continuous teacher professional development and curriculum review. The paper concludes by stressing the importance of sociological insights in reshaping education and calls for a collective approach among policymakers, educators, and communities to ensure the future success of Nigeria's education system. This comprehensive approach is vital to promoting an equitable, accessible, and quality education for all Nigerian students, preparing them for the challenges of the 21st century.

Keywords: Nigerian Education, Education Policy, Sociological Insights, Global Best Practices

Introduction

The Nigerian education system, like many others across the globe, faces significant challenges in aligning its policies and curriculum with the rapidly evolving demands of the global landscape. Education in Nigeria is often described as a reflection of the country's diverse social, cultural, and economic realities. According to Olaniyan and Okemakinde (2019), despite ongoing reforms aimed at fostering an inclusive and equitable system, the sector continues to face persistent challenges such as inadequate funding, poor infrastructure, and a shortage of qualified educators. Education in Nigeria is often perceived as a reflection of the country's diverse socio-cultural and economic realities. However, Fafunwa (2018) contends that while the National Policy on Education (NPE) has undergone multiple revisions since its inception in 1977, it still falls short in addressing key concerns related to quality, access, and relevance to national development. A major critique of the current curriculum is its overemphasis on theoretical knowledge, which remains disconnected from vocational, practical, and skills-based training—critical components for empowering students, particularly those from rural and economically disadvantaged backgrounds. Consequently, the gap between educational outcomes and societal expectations remains pronounced, affecting key national goals such as economic growth, social mobility, and national cohesion.

At the heart of the Nigerian education system lies the dynamic interplay between policy, curriculum, and societal needs. As Ogunyemi and Okebukola (2020) assert, education policies are often shaped by prevailing social, economic, and cultural factors. However, there exists a disconnect between what the system offers and what the society demands, particularly in terms of producing graduates equipped with relevant skills, values, and critical thinking capabilities. For example, while national policies emphasize science and technology, the predominant reliance on rote memorization within the curriculum undermines the development of creativity, problem-solving abilities, and global competencies. In the opinion of Sule and Adefolaju (2021), socio-economic disparities further exacerbate the situation, as children from affluent urban backgrounds have significantly greater access to quality education compared to their counterparts from rural or impoverished communities. This widening gap in educational opportunities continues to reinforce systemic inequalities in learning outcomes and career prospects.

The intersection between societal structures and educational outcomes can be analyzed through the lens of sociological theories. Pierre Bourdieu's theory of cultural reproduction suggests that education systems tend to sustain existing social hierarchies by privileging the cultural and economic capital of the elite. In the Nigerian context, this is evident in how curriculum content, teaching strategies, and assessment practices disproportionately reflect the interests of dominant social groups. Additionally, from a functionalist perspective, Emile Durkheim emphasized the role of education in fostering social cohesion and order. However, a critical view of Nigeria's education system reveals that disparities in educational access and experiences contradict this ideal, as different social groups receive unequal benefits from the system. Given the country's ethnic, linguistic, and religious diversity, the challenge lies in developing an education framework that is both inclusive and capable of fostering national unity.

In light of these challenges, global best practices in education offer valuable insights that Nigeria can adapt to enhance its system. Perraton and Creed (2019) note that successful education models worldwide prioritize inclusivity, equity, and the development of competencies essential for global citizenship. A curriculum that fosters critical thinking, digital literacy, and lifelong learning—alongside learner-centered teaching methodologies—has been shown to yield positive outcomes in various educational settings. Also, the integration of technology, as exemplified by Finland and Singapore, provides a roadmap for leveraging digital tools to drive educational innovation in Nigeria. Through aligning with international trends that emphasize sustainability, digital proficiency, and social-emotional learning, Nigeria has the opportunity to reform its educational priorities to better prepare students not only for the local job market but also for participation in an increasingly interconnected world.

To fully leverage the potential of global educational practices, Nigeria must carefully evaluate how these models can be tailored to its unique socio-cultural and economic landscape. This paper will explore the role of sociology in education policy, highlighting how existing policies can reinforce or challenge social inequality. It will examine the intersections of gender, class, ethnicity, and disability in shaping educational access and outcomes. Also, the discussion will address key challenges in the Nigerian education system, drawing insights from global best practices that promote inclusivity, equity, and skill development. Finally, the paper will offer recommendations for rethinking Nigerian education policy and curriculum to

create a system that is both globally competitive and locally relevant, ultimately fostering national development and social cohesion.

The Role of Sociology in Education Policy

Sociology plays a crucial role in understanding and shaping education systems, particularly in how policies and curricula are developed, implemented, and evaluated. Sociological theories provide frameworks for analysing the relationship between education and society, offering insights into how education systems function, who benefits from them, and the ways in which they reflect and reinforce societal values, norms, and power structures. The three dominant sociological perspectives—functionalism, conflict theory, and symbolic interactionism offer distinct yet complementary views on the role of education and the implications for policy and curriculum design.

Functionalism: Education as a Social Institution for Stability and Cohesion

Functionalist theories, particularly those developed by Emile Durkheim, view education as a means of maintaining social order and cohesion by transmitting shared values and norms. According to functionalism, education serves as a tool for social integration, ensuring that members of society are prepared to participate in economic and social activities. The functionalist perspective on education is often associated with the idea of "socialization," where education instils societal norms, cultural values, and societal expectations necessary for individuals to function effectively within society (Giddens, Duneier, Appelbaum, & Carr, 2017).

From a policy perspective, functionalism suggests that education should be designed to support societal stability by ensuring that all individuals, regardless of their social background, are equipped with the skills and knowledge necessary to fulfil their roles in society. Regarding Nigerian education, functionalist theories have influenced the development of policies aimed at achieving national unity and social cohesion, particularly in a country with a complex ethnic and cultural landscape (Fafunwa, 2018). For instance, the Nigerian National Policy on Education (NPE) emphasizes the role of education in fostering national integration and preparing citizens for participation in democratic governance, as well as in ensuring equitable access to quality education for all, regardless of gender, ethnicity, or socio-economic status.

While the functionalist view provides a framework for understanding the role of education in promoting social stability and cohesion, it has been critiqued for its tendency to overlook social inequalities and the ways in which education can perpetuate disparities in power and access. Critics argue that functionalism fails to account for the fact that not all students are equally socialized into society's values and norms, and that certain groups may be marginalized or excluded from the benefits of the education system (Giddens et al., 2017). This critique highlights the need for policies that not only foster social cohesion but also address issues of inequality and social justice.

Conflict Theory: Education as a Tool for Reproducing Social Inequality

In contrast to the functionalist view, conflict theory, as articulated by thinkers like Karl Marx and later Pierre Bourdieu, posits that education serves as a mechanism for maintaining and reproducing social inequality. Conflict theorists argue that education systems do not equally serve all social groups, but instead perpetuate existing power structures and class divisions. According to this perspective, education serves the interests of the dominant social classes by transmitting their cultural values, knowledge, and ideologies while marginalizing the perspectives and needs of subordinate groups (Bowles & Gintis, 1976).

Conflict theory has important implications for education policy, particularly in addressing the ways in which educational systems can reinforce social stratification. In a country like Nigeria, where socio-economic disparities are pronounced, conflict theory would highlight how the education system often privileges urban, middle-class students over their rural, working-class counterparts, thereby reproducing patterns of inequality (Olaniyan & Okemakinde, 2019). This view calls for policy reforms that challenge these entrenched power dynamics by advocating for greater equality of access to education, the decolonization of curricula, and the inclusion of marginalized voices in the educational discourse.

For example, conflict theory would support policies that seek to deconstruct traditional hierarchies within the education system, such as those based on ethnicity, class, and gender. It would advocate for curricula that reflect the diverse cultures, histories, and experiences of Nigeria's various ethnic groups and for reforms that provide equitable opportunities for disadvantaged groups to succeed in the educational system. In this way, conflict theory encourages an approach to education that not only addresses social inequality but actively works to dismantle structures of power that contribute to exclusion and oppression.

Symbolic Interactionism: Education as a Site of Social Meaning and Identity Formation

Symbolic interactionism, a sociological perspective associated with scholars like George Herbert Mead and Erving Goffman, focuses on the micro-level interactions between individuals and the meanings that emerge from these interactions. Regarding education, symbolic interactionists examine how students, teachers, and other educational stakeholders engage with one another in the classroom, and how these interactions shape students' identities, self-concept, and educational outcomes (Blumer, 1969).

From a policy perspective, symbolic interactionism highlights the importance of creating positive, supportive learning environments where students can develop a sense of self-worth and agency. This approach emphasizes the role of teachers in shaping students' experiences and identities, and how the labels and expectations placed on students can influence their academic performance. For example, the phenomenon of "teacher expectations" is central to symbolic interactionism, where teachers' perceptions of their students, based on factors such as class, ethnicity, or gender, can have a profound impact on student outcomes. If teachers have lower expectations of students from marginalized communities, this can lead to self-fulfilling prophecies that limit those students' educational success (Rosenthal & Jacobson, 1968).

Education policies informed by symbolic interactionism would emphasize the importance of fostering positive teacher-student relationships, promoting inclusive classroom environments, and addressing the ways in which institutional and interpersonal dynamics shape students' experiences of education. In the Nigerian context, this perspective calls for policies that not only address structural inequalities but also focus on the quality of interactions within the classroom and the emotional and psychological needs of students. Policies that promote cultural sensitivity, teacher training in interpersonal skills, and strategies for building students' self-esteem would align with the principles of symbolic interactionism, ensuring that all students feel valued and capable of achieving their full potential.

The Role of Sociology in Education Policy: Social Inequality and Intersectionality

Educational policy plays a fundamental role in either reinforcing or challenging existing social inequalities by shaping the structure and content of education systems. The design and implementation of education policies directly affect how resources, opportunities, and

outcomes are distributed among different social groups. In societies marked by social hierarchies, education often mirrors and perpetuates these inequalities. At the same time, thoughtful and inclusive policy reforms have the potential to disrupt these structures by promoting equal access to quality education, reducing barriers to participation, and ensuring that marginalized groups receive the support they need to succeed.

Reinforcing Social Inequality through Education Policy

Educational policies can contribute to social inequality when they are designed in ways that favour certain groups while marginalizing others. One of the primary ways this occurs is through unequal access to educational resources and opportunities. In many countries, including Nigeria, policies often disproportionately benefit wealthier, urban, and more privileged populations, leaving students from lower socio-economic backgrounds with fewer opportunities for educational advancement. For example, schools in urban areas may receive better funding, have more qualified teachers, and offer a wider range of learning resources than schools in rural areas. Policies that do not adequately address these disparities further entrench the advantages of the privileged while perpetuating cycles of poverty and inequality for marginalized communities (Ogunyemi & Okebukola, 2020).

Also, curricula and educational practices can reinforce existing power structures. For instance, a curriculum that predominantly reflects the perspectives and histories of the dominant ethnic or cultural groups in a society can alienate students from minority communities and perpetuate cultural hegemony. In Nigeria, where there is immense cultural diversity, the national curriculum has been criticized for emphasizing the values and histories of certain ethnic groups, while downplaying or ignoring others. This exclusionary curriculum reinforces social divisions by making certain students feel marginalized and less likely to engage meaningfully with their education (Fafunwa, 2018). Also, standardized testing practices, which are common in many education systems, can disproportionately disadvantage students from underprivileged backgrounds by failing to account for cultural and contextual differences in students' learning experiences.

Educational policies that reinforce social inequalities often reflect broader societal structures of power, class, and privilege. Policies that maintain the status quo, rather than challenging systemic inequities, tend to reproduce existing social hierarchies, ensuring that the rich and

powerful continue to have greater access to high-quality education, while the poor remain disadvantaged.

Challenging Social Inequality through Education Policy

According to Olaniyan and Okemakinde (2019), education policy serves as a crucial mechanism for addressing social inequality. Reforms centered on inclusivity, equitable access, and diversity can significantly enhance educational outcomes, particularly for marginalized groups. In this regard, policies promoting universal access to quality education, irrespective of socio-economic status, play a key role in bridging educational disparities. For instance, Nigeria's Universal Basic Education (UBE) program, which provides free and compulsory education for children aged 6 to 15, has been instrumental in reducing gaps in educational access. Prioritizing education for all, such initiatives work toward creating equal opportunities for every child, regardless of their socio-economic background. Adebayo (2019) asserts that integrating anti-discriminatory practices within education policies can help dismantle inequalities linked to gender, class, ethnicity, and disability.

Specifically, gender-sensitive policies challenge traditional norms that often restrict girls' access to education, especially in societies where cultural expectations limit their participation in formal schooling. In the opinion of Fajobi and Akintunde (2020), inclusive education policies that accommodate children with disabilities further contribute to reducing barriers in the educational system. Many countries, including Nigeria, have increasingly adopted inclusive education frameworks to ensure that students with special needs receive adequate support and that learning environments remain accessible to all.

Educational policies that challenge social inequalities also seek to diversify curricula and incorporate the voices and perspectives of marginalized communities. This may involve revising the curriculum to include the histories, values, and contributions of ethnic minorities, as well as integrating issues of social justice, equity, and human rights into the broader educational discourse. By doing so, education can become a means of promoting social change, encouraging students to question existing power structures and to envision a more inclusive society.

Intersectionality: Gender, Class, Ethnicity, and Disability in Education

The concept of intersectionality, as developed by Kimberlé Crenshaw (1989), provides a valuable framework for analysing how multiple social identities—such as gender, class, ethnicity, and disability—interact and contribute to experiences of privilege or marginalization. Education policies that fail to account for intersectionality may overlook the compounded disadvantages faced by individuals who belong to more than one marginalized group. For example, a policy aimed at increasing girls' participation in education may not fully address the challenges faced by girls from lower socio-economic backgrounds, rural areas, or ethnic minorities. These girls may face additional barriers to education, such as poverty, cultural biases, or lack of infrastructure, which are not addressed by a one-size-fits all policy (Crenshaw, 1989).

In Nigeria, where issues of gender, class, ethnicity, and disability intersect, education policies need to recognize and respond to the complex ways in which these factors shape educational experiences. For instance, girls in rural areas often face not only gender-based barriers, such as early marriage or cultural norms that prioritize boys' education, but also the economic constraints of living in poverty, which may prevent them from attending school regularly (Sule & Adefolaju, 2021). Similarly, students with disabilities, particularly those from low income backgrounds, may face double discrimination in the education system, being excluded both due to their disabilities and their socio-economic status (Fajobi & Akintunde, 2020).

Thus, to address the needs of these students, education policies must be designed with an awareness of the intersectional nature of social inequalities. This means that policies should not only focus on individual categories, such as gender or class, but should also recognize how these identities overlap and compound the disadvantages that certain students face. For example, inclusive education policies should take into account the specific needs of girls with disabilities, ensuring that they receive the support they need to overcome both gender and disability-related barriers. Similarly, policies aimed at reducing educational disparities in rural areas must consider not only the economic challenges of rural communities but also the cultural and ethnic dynamics that shape educational access and outcomes.

Challenges in the Nigerian Education System

The Nigerian education system faces numerous challenges that hinder its ability to provide quality education to all citizens. These challenges stem from both systemic issues, such as

outdated curricula and inadequate infrastructure, and broader socio-cultural factors, including social inequality and cultural attitudes toward education. Also, there is a significant mismatch between education policy and the actual needs of society, particularly in rural and marginalized communities. These challenges limit the effectiveness of education in promoting national development and social cohesion.

1. Outdated Curricula

One of the most significant challenges in the Nigerian education system is the outdated nature of the curriculum, which often fails to equip students with the skills needed to thrive in an increasingly globalized and technological world. The curriculum in many schools, especially at the primary and secondary levels, is heavily focused on rote learning, memorization, and theoretical knowledge, rather than fostering critical thinking, creativity, and practical skills. This approach does not align with global best practices in education, where emphasis is placed on problem-solving, innovation, and digital literacy.

Also, the Nigerian curriculum tends to be overly rigid and centralized, with little room for flexibility or adaptation to local contexts. This results in a lack of relevance for many students, particularly in rural areas, where cultural and community-specific knowledge is undervalued. The curriculum does not often incorporate the practical skills that would empower students to engage with the local economy or address community-specific challenges. For example, vocational training and entrepreneurship skills, which could provide students with alternatives to the formal job market, are often neglected (Ogunyemi & Okebukola, 2020).

The outdated curriculum also contributes to high rates of school dropouts and poor educational outcomes. Students often struggle to see the practical application of what they are learning, leading to disengagement and lack of motivation. Also, the lack of alignment between the curriculum and the needs of the labour market means that even graduates who complete their education may not have the skills needed for employment, further contributing to the country's high youth unemployment rate.

2. Inadequate Infrastructure

Another systemic challenge in Nigeria's education system is inadequate infrastructure. Many schools, especially those in rural and underserved areas, suffer from poor facilities, lack of

basic amenities like clean water and electricity, and overcrowded classrooms. These conditions create a suboptimal learning environment that affects students' ability to learn effectively. For example, schools with overcrowded classrooms and insufficient teaching materials struggle to maintain the quality of instruction, and students in such environments often experience lower academic achievement (Adebayo, 2019).

The lack of sufficient infrastructure also extends to the availability of technology. In an era where digital literacy is crucial for success, many schools, particularly in rural areas, lack the technological resources necessary to provide students with access to modern educational tools and e-learning opportunities. Without access to computers, the internet, and other digital resources, students are at a disadvantage compared to their counterparts in more developed countries, or even urban areas in Nigeria, where such resources are more readily available.

Also, inadequate school buildings and poorly maintained facilities also pose safety risks for students. The lack of proper sanitation facilities, for example, can lead to health problems that further disrupt learning. This problem is particularly acute for girls, who may face additional challenges in accessing education in schools that do not have adequate menstrual hygiene facilities (Sule & Adefolaju, 2021).

3. Inadequacy of Teacher Training and Professional Development

The quality of education in Nigeria is also hindered by the lack of proper teacher training and professional development. Many teachers, especially in rural and underserved areas, are underqualified, with inadequate subject knowledge and poor pedagogical skills. Teacher preparation programs in Nigeria often fail to equip educators with the practical skills needed to foster effective learning in diverse classrooms. Also, there is a lack of continuous professional development opportunities for teachers once they are in the field, which means that many are not exposed to new teaching methods, curriculum updates, or technological tools that could enhance their teaching (Fafunwa, 2018).

The shortage of trained teachers is particularly severe in rural areas, where schools often struggle to attract qualified professionals. This disparity in teacher quality contributes to unequal educational outcomes, with students in rural and marginalized areas receiving an inferior education compared to those in more urbanized and resource-rich regions.

4. Social Inequality and Cultural Attitudes Impacting Educational Outcomes

The intersection of social inequality and cultural attitudes toward education exacerbates the challenges faced by the Nigerian education system. Social inequality, including disparities based on class, ethnicity, gender, and disability, creates significant barriers to education. For example, children from low-income families are less likely to attend school regularly due to financial constraints, and those in rural areas often face additional obstacles such as long distances to school and a lack of transportation. Gender disparities also persist, with girls, especially in Northern Nigeria, facing significant cultural and economic barriers to education, such as early marriage, gender-based violence, and the prioritization of boys' education (Sule & Adefolaju, 2021).

Cultural attitudes also play a critical role in shaping educational outcomes. In some parts of Nigeria, particularly in rural areas, education may not be viewed as a priority, especially for girls or children from disadvantaged communities. Traditional beliefs about gender roles may discourage families from investing in girls' education, particularly in regions where early marriage is common. These cultural barriers can have long-lasting effects on students' access to education, limiting their opportunities and perpetuating cycles of poverty and inequality.

The lack of social support for education in some communities means that students may not receive the encouragement or resources needed to succeed. In such environments, education may be seen as secondary to economic activities, such as farming or trade, and children may be expected to contribute to household income rather than attend school. As a result, policies aimed at increasing educational access may not be effective if they do not take into account these cultural attitudes and social norms.

5. Mismatch Between Education Policy and Societal Needs

A key challenge facing the Nigerian education system is the mismatch between education policy and the actual needs of society, particularly in rural and marginalized communities. While education policies in Nigeria often emphasize the importance of access to education, the actual content and delivery of education may not meet the specific needs of these communities. For example, many rural communities may benefit more from vocational and technical education that equips students with skills for local economic activities, such as agriculture, carpentry, or tailoring, rather than the traditional academic focus that is prevalent in the national curriculum (Ogunyemi & Okebukola, 2020).

Also, the education system is often out of sync with the labour market. While there is a high demand for skilled workers in areas such as information technology, healthcare, and technical trades, the education system continues to focus on academic degrees that do not directly align with these needs. This mismatch between education and employment opportunities contributes to high rates of youth unemployment, as many graduates struggle to find work in a job market that does not value their qualifications (Fafunwa, 2018).

To address these challenges, education policies must be more responsive to the needs of local communities and the broader economy. This includes integrating vocational and technical education into the curriculum, promoting the use of indigenous knowledge systems, and ensuring that education is aligned with the skills required by the labour market. Policies must also be designed to address the cultural and social barriers that prevent marginalized groups from accessing and benefiting from education.

Global Best Practices in Education

In an increasingly interconnected world, education systems globally are evolving to promote inclusivity, critical thinking, adaptability, and creativity. Countries around the world have developed successful education policies and curricula that serve as models for other nations, including Nigeria. By learning from these examples, Nigeria can reshape its education system to better meet the needs of its diverse population and align with the demands of the 21st century.

Successful Global Education Models

Several countries have implemented innovative education policies that promote inclusivity and critical thinking. Finland, for example, is often cited as a global leader in education, with its focus on equity and student-centred learning. The Finnish education system emphasizes a broad curriculum that includes not only academic subjects but also social and emotional skills, creativity, and physical education. This holistic approach helps students become well rounded individuals, capable of critical thinking and problem-solving. Teachers in Finland are highly trained and given significant autonomy to tailor their teaching to the needs of individual students, ensuring that each child receives the attention and support necessary to succeed (Sahlberg, 2011).

Similarly, Singapore's education system is renowned for its emphasis on academic excellence combined with a strong focus on adaptability and creativity. Singapore has successfully integrated 21st-century skills such as collaboration, communication, and creativity into its national curriculum. The curriculum is designed to foster critical thinking and problem solving from an early age, with students encouraged to engage in collaborative learning and real-world problem solving (Tan & Chua, 2020). Also, Singapore's focus on lifelong learning ensures that education is not confined to the classroom but is viewed as an ongoing process that prepares students for an ever-changing global job market.

Other examples include South Korea, which has built one of the world's top-performing education systems by prioritizing equity and quality. The country's emphasis on teacher professional development, data-driven decision-making, and public investment in education has led to significant improvements in student performance across diverse socio-economic groups (Kim & Park, 2020). The United Kingdom has focused on integrating Information and Communication Technology (ICT) into its education system to equip students with the digital literacy needed to thrive in the modern world.

These countries demonstrate that successful education systems must be flexible, inclusive, and responsive to the needs of all students. They also show that education should not merely focus on academic content but also on developing skills that will help students succeed in life, such as critical thinking, adaptability, and creativity.

Learning from Similar Socio-Cultural Contexts

While the examples above come from diverse socio-cultural contexts, there are lessons to be learned from countries with similar challenges to Nigeria. In particular, countries in Africa, such as Kenya and Ghana, have implemented education reforms that focus on inclusivity and equity. For example, Kenya's free primary education policy, introduced in 2003, led to a dramatic increase in school enrolment, particularly for girls and students from disadvantaged communities. However, the country also faced challenges in ensuring that the increased enrolment was accompanied by improved learning outcomes. In response, Kenya has worked to integrate technology and improve teacher training, making the education system more adaptable and relevant to the needs of its students (GOK, 2020).

Ghana, which shares many socio-economic and cultural characteristics with Nigeria, has made strides in integrating ICT into education, especially in rural areas. The country's One Laptop Per Child initiative aims to provide every child with access to digital resources, enhancing their learning experience and preparing them for the digital economy. These initiatives highlight the importance of adapting global best practices to the local context, particularly by considering the unique challenges faced by students in rural and marginalized areas.

Integration of ICT in Education and Fostering Global Citizenship

The integration of Information and Communication Technology (ICT) into education is a key global best practice that Nigeria can adopt to enhance learning outcomes and prepare students for global citizenship. ICT provides students with access to a wealth of information, fosters digital literacy, and promotes creativity through the use of multimedia tools. Also, ICT enables more personalized learning experiences, where students can progress at their own pace and access resources tailored to their individual needs.

Incorporating ICT into the curriculum is essential for preparing students to participate in a globalized world. It equips them with the skills necessary to thrive in the digital economy, where technological proficiency is increasingly a prerequisite for employment. Also, ICT helps students engage with global issues, fostering critical thinking and global awareness. ICT thus promotes cross-cultural communication and collaboration, essential components of global citizenship by connecting students with peers and educators worldwide (UNESCO, 2018).

For Nigeria, the effective integration of ICT into education can help bridge the gap between urban and rural schools, providing equitable access to digital learning resources. This would not only improve academic outcomes but also foster creativity and adaptability, preparing Nigerian students for the challenges and opportunities of the globalized world.

Recommendations for Rethinking Nigerian Education Policy and Curriculum Curriculum Reform Frameworks

To ensure that Nigeria's education system is aligned with global best practices while addressing local realities, curriculum reforms must focus on flexibility, inclusivity, and

critical thinking. A revised curriculum should prioritize skills that are essential for the modern world, such as digital literacy, problem-solving, and collaboration, while also valuing indigenous knowledge systems. The inclusion of vocational education, entrepreneurship, and environmental sustainability within the curriculum would ensure that students are equipped to address local challenges and contribute to national development.

Also, curricula should be adaptable to regional needs, taking into account the diverse socio-cultural contexts across Nigeria. This approach would ensure that students in rural areas, for example, receive an education that is relevant to their local economy and culture, while also preparing them for the global workforce.

Policy Changes for Equity, Accessibility, and Quality

Educational policies must prioritize equity, accessibility, and quality education for all students, regardless of socio-economic status, gender, or disability. This can be achieved by investing in infrastructure, ensuring that schools in rural and marginalized areas receive the resources they need, and implementing policies that promote inclusive education. For example, gender-sensitive policies can be introduced to address the specific barriers faced by girls, particularly in Northern Nigeria, where cultural attitudes often limit girls' access to education.

Policies should focus on improving teacher quality through professional development programs, ensuring that educators are equipped with the skills and knowledge necessary to teach 21st-century skills and manage diverse classrooms. This could involve the integration of ICT training for teachers to ensure that they are proficient in using technology to enhance learning.

Teacher Professional Development and Continuous Curriculum Review

Teacher professional development should be a central component of any education reform. Continuous training and support for teachers would ensure that they remain up-to-date with new teaching methodologies, technological tools, and curricular changes. This would enhance their ability to deliver quality education and respond to the diverse needs of students. A continuous curriculum review process is equally necessary to ensure that the curriculum

remains relevant in a rapidly changing global environment. This review should be data-driven and involve input from a wide range of stakeholders, including teachers, parents, students, and policymakers.

Conclusion

Sociological insights are essential in reshaping education policies and curricula to ensure that they are equitable, inclusive, and relevant to the needs of both local communities and the global economy. The challenges facing Nigeria's education system, including outdated curricula, inadequate infrastructure, and teacher training, must be addressed through comprehensive reforms that prioritize social equity, digital literacy, and 21st-century skills. The country can therefore build an education system that promotes critical thinking, creativity, and global citizenship, preparing students to thrive in a rapidly evolving world.

A collective approach among policymakers, educators, and communities is crucial in rethinking education for the future. Only through a shared commitment to educational equity, accessibility, and quality can Nigeria ensure that all students, regardless of background or location, have the opportunity to succeed and contribute to national development.

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INFLUENCE OF PICTORIAL LEARNING AIDS ON TEACHING JOLLY PHONICS IN PRESCHOOLS OF LAGOS STATE, NIGERIA

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Abstract

The study examined the effect of pictorial learning aids on Teaching Jolly Phonics in preschools of Lagos State. The study was guided by five objectives using survey method of descriptive research design. Population of the study comprises five primary schools in Badagry Local Government Area of Lagos State. The samples comprise 125 respondents drawn from the study population using a random sampling technique. The instrument was questionnaire and was designed by the researchers with Four Likert Scale responses option – Strongly Agree, Agree, Disagree and Strongly Disagree. The reliability of this study was estimated at 0.87 for questionnaire using Pearson Product Moment Correlation coefficient. A Questionnaire was administered and the findings showed that pictorial aids have a great impact on the teaching of pupils, alongside the competence of the teachers. The research questions one to five were answered using mean and standard deviation with grand mean value of 3.24, 3.21, 3.30, 3.16 and 3.24 respectively. The study therefore recommends that teachers should as well be certified and competent at using pictorial learning aids in

teaching Jolly Phonics before their engagement in teaching of pupils; The use of pictorial aids in teaching Jolly Phonics in preschool should be made compulsory in every school syllabus and Government and school owners should organize training and retraining programme in order to train teachers on the use of pictorial aids for better outcomes.

Introduction

In preschool (ages 3-6), pictorial learning aids are used because they are flexible teaching and learning, and aid in the comprehension of challenging topics by preschool pupils. Pictorial information can be presented in a diversity of ways, such as images, flowcharts, diagrams, and videos. Few teachers have the skills necessary to effectively teach jolly phonics with Pictorial aids in Lagos State preschools. Jolly Phonics is a playful, systematic curriculum made for young or inexperienced learners to improve their literacy and reading skills. The 42 English sounds are taught to pupils initially, followed by blending and reading abilities. They are also taught to write by identifying the sounds in words, according to Lloyd, who claims that Jolly Phonics teaches the 5 main skills. They are: Learning letter sound, learning letter formation, blending for reading, identifying sounds in words, tricky words through varieties of enjoyable techniques. There are 42 English sounds and 7 groups and they are: group 1 letter sounds -s,a,t,l,p,n , group-2 letter sound c/k,e,h,r,m,d, group 3-letter sounds q,o,u,l,f,b, group 4 ai,I,oa,ie,ee , or, group5- letter sounds- z,w,ng,v,oo,oo, group 6-letter sounds y,x,ch,sh,th,th,group7 letter sound qu,ou,oi,ue,er,ar. It wont be out of place to state that Jolly Phonics uses a multimodal approach that suite the needs of young children. Information is conveyed by sight, sound, and kinesthetic means.

The multi-sensory approach, which includes actions for each of the 42 letter sounds, is particularly motivating for pupils and teachers since they can witness their pupils succeed. Jolly phonics is Synthetic literacy instruction that helps pupils in reading and writing, is engaging and is child-centered. The multi-sensory approach, which includes actions for each of the 42 letter sounds, is particularly motivating for pupils and teachers since they can witness their pupils succeed. According to Heisig (2007) the use of kanji pictorial learning aids are resources that help to promote learning, present a unit of knowledge using pictures, they help in making learning more real, active, and crucial. A study by Singh, (2005) observed that the foundation of all learning lies in accurately describing to the senses and visible objects so they may be easily understood. Rapid development occurs during the preschool years along a number of developmental milestones. A child's brain develops throughout the first three years of life, and the first five years of

school are crucial for cognitive growth, because of a child's developing brain structure. Over the course of the first three years, structure develops, and sensory development benefits children. The foundation for learning should have been set for children. Numerous studies have shown that the brain processes 75% of all information in visual formats. Additionally, according to Williams (2009), students' brains better map pictorial information. Information consumption from graphical formats is the definition of pictorial learning.

Heisig (2007) maintained that kanji pictorial learning aids are tools that display a unit of knowledge through pictorial and auditory stimuli in order to facilitate learning. They help learning to be more real, active, and essential by making the knowledge more concretely accessible. Pictorial learning aids are media materials use to expedite teaching task and serve as a source input, and/or when they help you to individualize instruction and appeal to the variety of cognitive styles in the classroom such as models, charts, film strips, projectors, radios, televisions, and maps. The cornerstone of all learning consists in clearly representing to the senses and perceptible objects so they can be readily appreciated, as the great educator Comenius has well noted (Singh, 2005). Preschool pupils learn through the use of symbols which is a skill essential for language development and self-expression. Children at this age display mental concentration, which shows that their focus is restricted to one aspect of the circumstance or object. Pupils start to apply their memory abilities and show off their distinct method of categorizing, solving problems, and thinking. Preschoolers compare and encode knowledge through language for later retrieval. Because they serve as both knowledge sources and teaching tools, a range of teaching tools can be used by pre-school teachers to improve the effectiveness of their lessons. Hence the study is out tpo investigate the influence of pictorial learning aids on teaching Jolly phonics in preschools in Lagos State, Nigeria.

Statement of the Problem

The teaching of Jolly Phonics, a widely adopted phonics program, is integral to the development of literacy skills in preschool-aged children. However, while traditional teaching methods are commonly used in the delivery of Jolly Phonics lessons, there is a growing interest in exploring how visual aids, specifically pictorial learning tools, can enhance the learning process. Pictorial learning aids, which include images, illustrations, and visual cues, are believed to aid in the retention and understanding of phonetic sounds, helping children associate letters with corresponding sounds more effectively. Despite their potential benefits, there is limited empirical research on the actual influence of pictorial learning aids

on the teaching of Jolly Phonics in preschool settings. This lack of research creates a gap in understanding how visual aids can improve learning outcomes, engagement, and retention of phonetic concepts. Therefore, this study seeks to examine the influence of pictorial learning aids on the effectiveness of Jolly Phonics instruction in preschools in Lagos State, Nigeria

Purpose of the Study

The purpose of the study is to examine the impact of pictorial learning aids on the learning abilities of preschoolers. Specifically, the study seeks to:

1. examine the availability of pictorial learning aids in Teaching Jolly Phonics in preschool;
2. establish teachers appropriate use of pictorial learning aids in fostering the learning availability of pictorial learning aids in Teaching Jolly Phonics in preschool abilities of preschoolers in Jolly Phonics;
3. investigate the correlation of pictorial learning aids and the learning abilities of preschoolers in Jolly Phonics;
4. ascertain pupil's perception of pictorial learning aid in teaching Jolly Phonics in preschool classroom; and
5. ascertain from teachers, whether pictorial learning aids in teaching Jolly Phonics indeed has a significant effect in fostering the learning abilities of preschoolers.

Research Questions

The research was guided by the following questions:

1. What is the availability of pictorial learning aids in teaching Jolly Phonics in preschool classroom?
2. What is teacher's appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers in Jolly Phonics?
3. What is the correlation between pictorial learning aids and the learning abilities of preschoolers in Jolly Phonics?
4. What is pupil's perception of pictorial learning aid in teaching Jolly Phonics in preschool classroom?
5. Do teachers perceive whether pictorial learning aids in teaching Jolly Phonics, indeed has a significant effect in fostering the learning abilities of preschoolers?

Methodology

Descriptive research design was adopted for this study. The design is appropriate for this study because it gives detailed information from the respondent and also helps the researcher to gather large data within shortest period of time. The population of this study comprises all preschools in Local Government Educational Authority of Lagos State. The study's sample is the segment of the population that was picked for in-depth analysis. To choose the appropriate samples for this study, the researchers used a total of 125 instructors from five chosen Local Government Educational Authority Lagos State which equivalent 25 respondents from each school. The 125 respondents which constituted the sample were selected using random sampling technique to gather the data. The instrument used was questionnaire which was designed by the researchers for the purpose of getting information on the impact of pictorial learning aids on the learning abilities of preschoolers. The questionnaire sought for personal information of the respondent in terms of gender, age, educational level and number of years of teaching experience with list of twenty questions. Four Likert Scale was used with option of – Strongly Agree, Agree, Disagree and Strongly Disagree. In order to ensure the study's face validity, the questionnaire was face-validated by some experts in the field of research. Pearson Product Moment Correlation (PPMC) method was used to determine the reliability of the items and a reliability coefficient of 0.87 was obtained. The data collected were analysed in the consideration of the research questions of the study. In analyzing the data, descriptive statistics (mean and standard deviation) was used.

Result presentation and Interpretation

Research 1: Descriptive analysis showing the availability of pictorial learning aids in teaching Jolly Phonics in Preschool

Table 1: Descriptive analysis showing the availability of pictorial learning aids in teaching Jolly Phonics in Preschool

S/n	Items	SA	A	D	SD	Mean	Remarks
1	Audio Visual Aids, pictures, chart, types of pictorial learning aids are commonly available in preschool classrooms.	208	120	20	6	3.27	Agreed
2	At least ten (10) to fifteen (15) pictorial learning aids in teaching jolly phonics are typically available in a preschool classroom.	14	150	172	8	3.20	Disagree
3	There are differences in the availability of pictorial learning aids in teaching Jolly Phonics in preschool	28	135	168	7	3.12	Disagree

Public School.

4	Classroom size contributes to the availability and effectiveness of pictorial learning aids in teaching Jolly Phonics in preschool classrooms.	244	96	20	5	3.37	Agreed
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Grand Mean **3.24** **Agreed**

Source: Field Survey 2023

Table 1 on examining the availability of pictorial learning aids in teaching Jolly Phonics in preschool, shows that Audio Pictorial Aids, pictures, chart, types of pictorial learning aids are commonly available in preschool classrooms with the mean score of 3.27; It was disagreed that at least ten (10) to fifteen (15) pictorial learning aids are typically available in a preschool classroom with the mean value of 3.20; It was also disagreed that there are differences in the availability of pictorial learning aids in teaching Jolly Phonics in public preschools with the mean value of 3.12 and Classroom size contributes to the availability and effectiveness of pictorial learning aids in teaching Jolly Phonics in preschool classrooms with the mean value of 3.37. The grand mean 3.24 denote that majority of the respondent agreed the overall statement.

Research Question 2: Establish teachers' appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers in Jolly Phonics

Table 2: Descriptive analysis showing teachers' appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers in Jolly Phonics

S/n	Items	SA	A	D	SD	Mean	Remarks
1	Teachers understand the key principles and guidelines for using pictorial learning aids in teaching Jolly Phonics, effectively in the classroom.	156	147	28	6	3.12	Disagreed
2	Teachers ensure that pictorial learning aids in teaching Jolly Phonics are age-appropriate and tailored to the needs of their students.	236	90	14	12	3.25	Agreed
3	Teachers adopt different strategies in engage children and promote active learning when using pictorial aids in teaching Jolly Phonics.	16	129	200	7	3.12	Disagreed
4	Teachers constantly evaluate the effectiveness of	244	96	20	5	3.37	Agreed

pictorial learning aids in supporting children's learning outcomes.

Grand Mean

3.21 Agreed

Source: Field Survey 2023

Table 2 on establishing teacher’s appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers in Jolly Phonics, shows that, majority of the respondents disagree that teachers understand the key principles and guidelines for using pictorial learning aids effectively in the classroom with mean value of 3.12; Teachers ensure that pictorial learning aids in teaching jolly phonics are age-appropriate and tailored to the needs of their pupils with mean value of 3.25; Again majority of the respondents disagreed that teachers adopt different strategies in engage children and promote active learning when using pictorial aids with mean value of 3.12 and Teachers constantly evaluate the effectiveness of pictorial learning aids in teaching jolly phonics and to support children's learning outcomes with mean value of 3.37. The grand mean was 3.21 which indicated the generality of the respondents agreed with the assertion.

Research Question 3: Investigate the correlation between pictorial learning aids and the learning abilities of preschoolers in Jolly Phonics

Table 3: Descriptive analysis showing pictorial learning aids and the learning abilities of preschoolers in Jolly Phonics

S/n	Items	SA	A	D	SD	Mean	Remarks
1	Real life situations are among the specific learning outcomes or skills that are most strongly associated with the use of pictorial learning aid in teaching Jolly Phonics.	188	147	16	4	3.29	Agreed
2	There are differences in the effectiveness of pictorial learning aids in teaching Jolly Phonics for children with different learning styles or abilities.	160	165	10	8	3.17	Agreed
3	Teachers measure the impact of pictorial learning aids in teaching Jolly Phonics on children's academic performance and progress through constant assessment & evaluation.	268	117	2	1	3.59	Disagreed
4	There are potential long-term benefits of using pictorial learning aids in teaching Jolly Phonics in preschool, and how do these outcomes compare to other teaching methods.	176	147	10	10	3.17	Agreed
Grand Mean						3.30	Agreed

Source: Field Survey 2023

Table 3 on investigating the correlation between pictorial learning aids and the learning abilities of preschoolers in teaching Jolly Phonics shows that real life situations are among the specific learning outcomes or skills that are most strongly associated with the use of pictorial learning aids in teaching Jolly Phonics with mean of 3.29;. There are differences in the effectiveness of pictorial learning aids for children with different learning styles or abilities with mean of 3.17. Majority of the respondents disagree that teachers measure the impact of pictorial learning aids in teaching Jolly Phonics on children's academic performance and progress through constant assessment & evaluation with mean of 3.59; and there are potential long-term benefits of using pictorial learning aids in teaching Jolly Phonics in preschool, and how do these outcomes compare to other teaching methods with mean of 3.17. the grand mean is 3.30 which falls within accepted region.

Research Question 4: Ascertain pupils' perception of pictorial learning aid in teaching Jolly Phonics in preschool's classroom

Table 4: Descriptive analysis showing pupils' perception of pictorial learning aid in teaching Jolly Phonics in preschool's classroom

S/n	Items	SA	A	D	SD	Mean	Remarks
1	Objects, Chart, Pictures are among children's favorite types of pictorial learning aids in teaching Jolly Phonics.	156	171	8	8	3.18	Disagreed
2	Children feel excited when using pictorial learning aids with Jolly Phonics in the classroom.	256	99	14	4	3.45	Disagreed
3	There are no differences in preschool children's perceptions of pictorial learning aids in teaching Jolly Phonics based on age, gender, or other demographic factors.	196	117	24	8	3.19	Disagreed
4	Children feel happy always about using pictorial aids learning with Jolly Phonics in comparison to other types of teaching methods.	196	93	10	3	2.80	Agreed
Grand Mean						3.16	Agreed

Source: Field Survey 2023

Table 4, on ascertaining pupils' perception of pictorial learning aid in preschool classroom shows that most respondents disagree that Objects, Chart, Pictures are among children's favorite types of pictorial learning aids in teaching Jolly Phonics with mean of 3.18; Again they also disagree that Children feel excited when using pictorial learning aids in the classroom with mean of 3.45. Also they disagree that there are no differences in preschool children's perceptions of pictorial learning aids in teaching Jolly Phonics based on age,

gender, or other demographic factors with mean of 3.19; and Children feel happy always about using pictorial learning aids with Jolly Phonics in comparison to other types of teaching methods with mean of 2.80. 3.16 grand mean is within the acceptable region.

Research Question 5: Ascertain from teachers whether pictorial learning aids in teaching Jolly Phonics indeed has a significance effect in fostering the learning abilities of preschoolers

Table 5: Descriptive analysis showing certainty of teachers whether pictorial learning aids in teaching Jolly Phonics indeed has a significance effect in fostering the learning abilities of preschoolers

S/n	Items	SA	A	D	SD	Mean	Remarks
1	Teachers support the effectiveness of pictorial learning aids in teaching Jolly Phonics in the classroom.	208	120	20	6	3.27	Agreed
2	Teachers measure the impact of pictorial learning aids in teaching Jolly Phonics on children's learning outcomes through assessment.	172	150	18	6	3.20	Agreed
3	There are some situations or contexts in which pictorial learning aids in teaching Jolly Phonics may be less effective or inappropriate to use.	168	135	28	7	3.12	Agreed
4	Using pictorial learning aids in teaching Jolly Phonics are the best way to maximize their impact on children's learning and development.	244	96	20	5	3.37	Disagreed
Grand Mean						3.24	Agreed

Source: Field Survey 2023

Table 5, findings on ascertaining from teachers whether pictorial learning aids in teaching Jolly Phonics indeed has a significance effect in fostering the learning abilities of preschoolers, shows that teachers support the effectiveness of pictorial learning aids in teaching Jolly Phonics in the classroom with mean of 3.27. Teachers measure the impact of pictorial learning aids in teaching Jolly Phonics on children's learning outcomes through assessment with mean value of 3.20; There are some situations or contexts in which pictorial learning aids in teaching Jolly Phonics may be less effective or inappropriate to use with mean value of 3.12; however most of the respondents disagrees that using pictorial learning aids in teaching Jolly Phonics are the best way to maximize their impact on children's learning and development with mean value of 3.37. The grand mean was 3.24 which is above the 2.50 benchmark. The findings showed pictorial aids has a significant impact on the teaching of pupils, alongside with teacher's competency.

Discussion of Findings

Findings to examine the availability of pictorial learning aids in teaching Jolly Phonics in the classroom revealed that pictorial aids were available averagely in the classroom but there is need for all public schools to be stocked with adequate pictorial aids both in quantity and quality. This is backed up with the research conducted by Aremu and Olojede (2015) which examined the availability of pictorial learning aids in the classroom. They found that while most classrooms had some form of pictorial learning aids, they were not sufficient in quantity or quality to effectively support the learning of preschoolers.

Also, the finding on determining teachers' perception of the relevance of pictorial learning aids in teaching Jolly Phonics in fostering the learning abilities of preschoolers showed that pictorial learning aids is very import to teaching preschoolers. This is in accordance with the work by Osa-Edoh and Aluede (2017) which aimed at determining teachers' perception of the relevance of pictorial learning aids in fostering the learning abilities of preschoolers. The study found that teachers believed pictorial learning aids enhanced children's understanding and retention of concepts, and helped to keep them engaged and motivated during lessons. Dyatmika Jolly Phonics was then utilized in kindergarten to assist pupils in mastering the English reading skill. In this instance, the teachers imaginatively and appealingly teach the Jolly Phonics abilities based on the needs and circumstances of their pupils, allowing the pupils to readily engage with it. Additionally, it was taught and introduced methodically using the suggested letter groups and skills, working from the simplest to the most difficult.

Establishing teachers appropriateness in the use of pictorial learning aids Jolly Phonics and foster learning abilities of preschoolers. In a study by Okeke and Eke (2017) they sought to establish teachers' appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers. They found that teachers who used pictorial learning aids appropriately were more likely to create a positive learning environment and enhance the learning outcomes of their students. The findings on investigating the correlation between pictorial learning aids and the learning abilities of preschoolers in teaching Jolly Phonics also revealed a positive relation between pictorial learning and the learning abilities of preschooler, this corroborate with the study of Oyekan and Fakokunde (2018) who researched on The correlation between pictorial learning aids and the learning abilities of preschoolers. They found a significant positive correlation between the use of pictorial learning aids and pupil's academic performance in preschool.

Findings on the preschool pupil's interest in the use of pictorial aids in teaching Jolly Phonics showed that pictorial aids always make pupils happy and learning interesting and lively. This is supported by the work of Okebukola et.al. (2017) that investigated the interest of primary school pupils in the use of pictorial learning aids in Nigeria. The study found that the pupils showed a high level of interest in the use of pictorial learning aids and perceived them as useful in enhancing their learning. Findings on ascertaining pupils' perception of pictorial learning aid in teaching Jolly Phonics in preschool classroom showed that preschoolers were always happy and enjoy pictorial learning. This corroborates with the study by Adeyemi and Adedoyin (2015) aimed to ascertain pupils' perception of pictorial learning aids in the preschool classroom. The authors found that children enjoyed lessons that incorporated pictorial aids, and felt that they helped them understand concepts better. Lastly, research from educators reveals whether or not using visual aids to teach Jolly Phonics has a meaningful impact on preschoolers' learning capacities. Study revealed that pictorial learning has a huge significance in preschoolers learning ability. This is in line with the study by Olayinka and Adeniyi (2016) which sought to ascertain from teachers whether pictorial learning aids indeed had a significant effect in fostering the learning abilities of preschoolers. The authors found that teachers believed pictorial learning aids were effective in enhancing children's learning outcomes, and recommended their use in the classroom.

Conclusion

The study investigated the influence of pictorial learning aids on teaching Jolly Phonics in Preschools In Lagos State, Nigeria. Emphasis was placed on availability of pictorial learning aids in Teaching Jolly Phonics in preschool and establish the correlation between pictorial learning aids and the learning abilities of preschoolers in Jolly Phonics. The findings of this study was quite similar to what is obtained in the literature. However, the study indicated that there was a strong interest in using visual learning aids and thought they were beneficial for improving their education. Thus, in general term, the study revealed that that there is a significant relationship between pictorial learning aids in teaching jolly Phonics and preschool pupils especially in Badagry Local Government Area of the state. There is, therefore strong correlation between availability of pictorial learning aids in teaching Jolly Phonics in the classroom and the relevance of pictorial learning aids in fostering the learning abilities of preschoolers, appropriate use of pictorial learning aids in fostering the learning abilities of preschoolers, pictorial learning aids in teaching Jolly Phonics and the learning abilities of preschoolers, pupil's perception of pictorial learning aid in teaching Jolly Phonics

in preschool classroom and learning outcomes and the pictorial learning aids indeed has a significant effect in fostering the learning abilities of preschoolers. This implies that the pictorial learning aids on teaching jolly phonics in preschools rather need to be channeled appropriately.

Recommendations

The following recommendations are made based on the findings:

- In all preschool learning categories, the government should promote and mandate the use of visual aids.
- Prior to instructing students, teachers should also be certified in the use of visual aids for teaching Jolly phonics.
- To make teaching and learning for preschoolers easier, schools should include adequate visual aids.
- Every school curriculum should adopt the use of visual aids when teaching Jolly Phonics.

For improved results, the government and school owners should set up training and retraining programs to teach instructors how to employ visual aids when teaching Jolly phonics.

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ETHICAL BEHAVIOURS AMONG UNDERGRADUATES IN LAGOS STATE TERTIARY INSTITUTIONS: IMPLICATIONS FOR BEST GLOBAL PRACTICES

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Abstract

The paper focuses on best global practices of ethical behavior among undergraduate students of tertiary institutions in Lagos state. Discipline and ethics are twin issues that tend to undermine the provision of quality education in Nigerian tertiary institutions. This is because the overall goals of tertiary institutions as enunciated in the National Policy of Education can hardly be achieved by all the stakeholders without strict conformity and adherence to the rules and regulations and the ideals of the entire society. The adherence is essential for the general welfare of the society. This paper critically x-rayed the causes of indiscipline in tertiary institutions in Nigeria. Such courses include laxity in home control and parental supervision, school, teacher and societal factors as well as government influence. The paper recommended among others such strategies as enculturation, acculturation as well as acquisition of a certain number of generic skills for dealing with discipline and ethical issues in tertiary institutions in Nigeria.

Keywords: Best Global Practices, Ethical Behaviours, Tertiary Institutions and Undergraduate.

Introduction

Teachers play an important role in shaping students' ethical behaviour and maintaining discipline within educational institutions. Effective management of students' ethical behaviour is essential in public tertiary institutions, In every nation especially Nigeria as it directly impacts the overall learning environment and student outcomes. Ethics is a set of principles which prescribes behavioural codes that explains what is good or bad (Ibraheem & Okedeyi, 2024).According to Tiedemann (2021), ethics can be described as moral duty and obligations. Today, organizations are driven with code of ethics which guides the action of employees in their dealings with customers and their colleagues, good business is a function of good ethical practices. Unethical behavior are the actions that go against commonly accepted moral principles, or values, this include lying, examination malpractice, stealing, fraud, harassment, and other actions that harm others or violate ethical codes. This behaviors can hinder the academic progress of the students and jeopardise both academic and moral standard of the school. In order to reduce this menace many school authorities have set up mechanism and committee to curb the crimes. There are countries that we can emulate, like Denmark, Sweden, Norway, Finland etc. all these practice best ethical behaviors in their institutions of learning.

Ethical Issues is one of the most serious problems tending to undermine the provision of quality education in our tertiary institutions most especially in the area of indiscipline. Because of the great concern shown both by the individual in particular and the society in general about ethics, it becomes very necessary to ask why discipline is so much needed in any established organization, institution or group (Tiedemann, 2021). Realistically, it should be borne in mind that for organizational objectives to be achieved, the members must have a common purpose. It is this purpose that binds them together as a group to work towards the achievement of the stated organizational purposes. These purposes cannot be achieved without conformity among the members of this group (Onyike, 2019).

In the process of conforming to the standard ethical behaviour in Tertiary Institutions in Nigeria students need to submit or repress some of their natural behaviours or thinking, not because they are afraid of being reprimanded or condemned but because they feel committed to the fellowship and ideals of the school. In tertiary institutions, the purpose of ethics is to produce graduates who will be well behaved in the society by differentiating what is good

from what is bad and striving to do well for the general welfare of the society. Most educated elites, government, parents and even all stakeholders in education recognize the fact that educating youths to conform with rules and regulations of the society is not an easy task and as such, it must be the joint efforts of parents, church, mosque, the school and the government (Wajim & Ukpata, 2023).

It is pertinent to note that as the society becomes increasingly more complex, and as the progress of the nation solely depends upon the ability of its citizens to control themselves in a positive manner, it becomes necessary that future citizens be enlightened on how to develop behaviour that is from within rather than those imposed from without (Taylor & Noë, 2021). This was why Milyavskaya et al. (2019) opined that problems of discipline and self-control assume a new significance and realism in today's world. In a complex civilization, the individual often has to subjugate his personal inclinations, whims, and comforts, even some of his liberties to bigger goals than personal ones. In the uncertainty of a divided world where peaceful coexistence of conflicting philosophies of life may at any time be terminated by armed conflict, the individual must be ready to renounce for the good of the group even his wish to survive (Berger, 2018). If the democratic philosophy is to flourish, our ways of living and believing, the ideals of generations must be preserved. However, for this to happen we need children and young people who cherish these ideals above all and who are ready to endure discipline, and to exercise the utmost self-control, it could be said emphatically that Nigeria is where it is today because of the quality of education that is being dispensed in its tertiary institutions and even in the society at large (Hove et al., 2021).

Over the last two decades, the Transparency International is a non-governmental organization that dedicated to fighting corruption on a global scale, has consistently ranked Nigeria as one of the most corrupt countries in the world. Unethical behaviour is commonplace in Nigeria, and it manifest not only in business organisations and public institutions, but also in tertiary institutions of learning. From all interrogations in symposia, lectures, workshops, conferences, submissions of policy makers and independent opinions of parents and parent teachers associations, Nigeria is in dire need of quality education characterised by duty, moral obligation and moral commitment different from the status-quo (Aluko, 2024). In view of Soliu (2021), who defines quality education as formal learning in schools, polytechnics and universities squarely related to individual well-being, competence, rights, duties, obligation, aspirations and national goals, a kind of integrated and holistic development of the individual and the society. He asserts that absence of quality education makes nonsense the

ideal of individuals and society's developments leading most often than not to violence, poverty, unemployment, corruption, graft, unaccountability and political instability

Causes of Indiscipline

Nwokoji (2024), opined that the causes of indiscipline in our tertiary institutions can be attributed to several factors. Notable among these factors are Laxity in home control and parental supervision, School factor, Teacher factor, societal factor and Government Influence.

1. Laxity in Home Control and Parental Supervision: It has always been said that "charity begins at home". Thus, it is the peoples' beliefs that good home training is a everyday affairs for overall child's development. This is because the home has been perceived as the first teacher to any child. Although, as the child grows, other people around get involved in the training of the child. Consequently, it is assumed that proper supervision becomes very necessary at the tender age of any child. In the past, it would be recalled that children were trained to be well disciplined simply because parents were particular about the behaviour of their children and they regarded such training as their primary responsibility (Nwokoji, 2024).

But today's parents have abandoned their primary responsibilities of raising their children in the way they themselves have been raised. Instead, they run after material wealth and fame leaving the responsibility of child discipline entirely in the hands of the school. This is more apparent in the tertiary system where students are regarded as adults who need little or no supervision. Another way in which the home contributes to student's indiscipline is the unlimited or unguided liberty or freedom granted by the parents to their pursuing discipline and ethical Issues in Tertiary Institutions in Nigeria (Onyike, 2019).

Most children are over-protected and over pampered at home and thus become problematic in the school and society. Some parents usually allow their wealth to be the pride of their children. They provide their children with all kinds of material needs to the extent that such children consider themselves better than other people around them including their teachers. Most times, you find such students riding in exotic cars, and wearing very expensive dresses. They drive recklessly all over the place, causing avoidable accidents. They throw parties every now and then and one will hardly find them attending classes. Many of them engage in armed robbery, certificate forgery/racketeering, and a parental negligence is a source of problem of indiscipline in school (Baber & Nauman, 2020).

2. School Factor: Tertiary institutions in Nigeria today are confronted with massive increase in students' enrolment with no corresponding increase in both human and material resources. Thus, most institutions are now faced with the problem of coping with the massive welfare responsibilities expected by the general public. The physical conditions of most tertiary institutions promote indiscipline. For instance, there are inadequate recreational and welfare facilities, inadequate library and laboratory facilities, and shortage of classrooms for learning, inadequate exposure of students to reading materials (compulsory & required) as well as supplementary readings. Certainly, all these will promote indiscipline (Atunde & Aliyu, 2019). To expect that there will be discipline in all those ill equipped institutions, where accommodation is poor, where there are no tables, where children sit eating in a bare floor, where there is no playground, good lighting facilities and water supply will be to expect a miracle to happen. These institutions have found themselves in such a situation because the financial allocation from government is grossly inadequate to meet their needs (Francis & Imiete, 2018).

3. Teacher Factor: The attitude of lecturers in our tertiary institutions can either stamp out or promote indiscipline among students. Such attitudes as exploitation of students by lecturers such as compulsory sale of handouts, textbooks as well as sexual harassment in addition to receiving gratification of all kinds from the students can promote indiscipline. Moreover, inadequate commitment to duty by lecturers, as well as inadequate incentives and staff welfare policies are also factors that promote indiscipline in our tertiary institutions (Pomaah, 2020)

4. Societal Factor: The society in which the students develop and operate also have tremendous influence on their behaviours. Such things as inadequate transportation, water, accommodation and electricity in host communities as well as massive poverty in the land can engender indiscipline in the tertiary institutions. The concept of crisis-culture may be another root cause of indiscipline in the tertiary institutions, culture crisis as the manifestation of critical imbalance in one or more essentials of a culture structure in an environmental setting (Chen & Liu, 2023).

Trompenaars & Hampden-Turner (2021), defines culture-crisis as a state of emergency brought about by the suspension of normal or previously prevailing, technological, social or ideological conditions. Andrews et al. (2023) has explained that in a state of cultural-crisis, a familiar universe of associations and sanctions has been distorted or destroyed, and must be

reorganized. The wrenching away of any control mechanism requires a reorientation. Unsettlement for any cause creates a fluid condition in which the old values are no longer operative. With the old sanctions and compulsives gone or of doubtful validity, the way is open for the creation and the acceptance of new interpretations, it is clear that the contemporary Nigerian society is an epitome of cultural-crisis.

Clearly in the recent past there have been imbalances in some of the essentials of the culture such as in the ethical values. We have also had the suspension of some norms in regard to vital ideological conditions. Bribery has transformed into settlement, examination malpractices have been tagged assistance, cooperation and so on. Mails are no longer assured to arrive their destinations promptly intact, or even at all, 419 syndicates have mushroomed. Indeed the periods we have been going through within the past two decades can be defined as periods of unmitigated confusion and near disintegration, periods of paralyzing economic depression or unrestrained corruption and human misery, of global insecurity and nightmares or apathy, of wanton destruction of public utilities, kidnapping and assassination and of ill-gotten wealth and unbridled affluence. Indeed, a period of culture-crisis. Thus, the Nigerian society can aptly be described as a crisis-culture. In general, in crisis-culture, the tertiary institutions habits, symbols, beliefs and faiths are almost all infested and infected by chronic instability, confusions, bifurcations and uncertainties (Andrews et al., 2023).

Various tertiary institutions and the generality of the masses tend to build in their members and in themselves, habits of acquiescence in, rather than a feeling of concern about, the current circumstances, and at times habits of disloyalty and unpatriotic. The disequilibrium in our present circumstances have reverberated in the tertiary institutions in the form of bleak future for the graduates massive unemployment as there is no employment after studies or after National Youth Service Corps (NYSC), epileptic school years which was as a result of frequent disruption of academic activities by staff and students alike. This may lead to prolongation of the school sessions to about 6-7 sessions as against the required 4 sessions. In most cases, the baton of strike is passed from one union to the other. When lecturers or non-teaching staff are not on strike over one thing or one other, the students are on their own rampage (Wells, 2022).

5. Government Influence is another important factor contributing to students' indiscipline is the influence of government on education. Free education policy introduced in the Western Region of Nigeria in 1955 as well as the Universal Primary Education (Nwokoji, 2024),

Best Global Practices of Ethical Behaviour among undergraduates

Today the best global practice of ethical behavior among undergraduate students refers to moral principles that guides students' behavior and academic experiences. These principles include integrity, honesty, respect and responsibility. The Social learning theory, is one of the ethical behavior theory that is relevant to tertiary institutions, the theory agree that role modelling is important in promoting ethical behavior in universities

Best Practices for Counselling:

1. Integrative approach: Incorporate ethics into academic curriculum and counseling. This method combines elements from different counselling theories and techniques in order to create a personalized and effective counselling experience for the client. This approach recognizes that every individual is unique and may benefit from a variety of therapeutic strategies. In an integrative approach, the counsellor may draw upon various theories, such as cognitive-behavioural therapy, psychodynamic therapy, humanistic therapy to create a tailored treatment plan for the client. By utilizing different techniques and, the counselor is able to address the client specific needs and goals, taking into account their background, preference, and circumstances.
2. Trained counselors: Ensure counselors are knowledgeable about global ethical best practices.
3. Student-centered: Tailor counseling to students' needs and concerns.
4. Collaborative efforts: Involve faculty, staff, and peers in promoting ethical behavior.
5. Continuous assessment: Regularly evaluate counseling effectiveness.

Counselling Implications

Positive Implications:

1. Enhanced moral awareness: Counseling helps students recognize and internalize ethical principles.
2. Improved decision-making: Students develop critical thinking skills to make informed, ethical choices.

3. Empathy and compassion: Counseling fosters empathy, encouraging students to consider others' perspectives.
4. Responsible behavior: Students are more likely to take responsibility for their actions.
5. Cultural sensitivity: Counseling promotes appreciation for diversity, reducing cultural insensitivity.
6. Academic integrity: Students understand the importance of honesty and originality in academic work.
7. Professional ethics: Counseling prepares students for ethical dilemmas in their future careers.

Long-term Implications:

1. Character development: Counseling shapes students' values, influencing their long-term behavior.
2. Leadership development: Ethically aware students become responsible leaders.
3. Social change: Students equipped with ethical principles can drive positive social change.
4. Global citizenship: Counseling fosters a sense of global responsibility and citizenship.
5. Reduced misconduct: Institutions experience decreased incidents of plagiarism, cheating, and harassment.

Conclusion

The counselling professional have vital roles to play in achieving best ethical behavior in the university environment and beyond. The desired results in the educational system in Nigeria cannot be attained without input from professional counsellors in the system. Consideration of core values of counselling, moral qualities of counsellors and ethical standard in counselling profession in Nigeria, and is a means of equipping individual counsellors to works effectively for welfare of all students and staff, and that of the society at large. Emphasis must therefore be placed on ethical considerations for quality development which will propel positive change in behaviours.

Recommendations.

Based on the research, the following recommendations were drawn:

1. Institutional commitment: Prioritize ethical education and counseling.
2. Curriculum development: Incorporate ethics and moral education.
3. Faculty training: Provide ongoing training for faculty on ethical issues.
4. Student engagement: Encourage student participation in ethics-related activities.
5. Community involvement: Foster partnerships with organizations promoting ethical behavior.

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21ST CENTURY CAREER COUSELLING TECHNIQUES FOR PRACTITIONERS IN LAGOS STATE

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Abstract

The current global society emphasizes the need for dexterity in Information and Communication Technology (ICT) for effective job delivery. Failure in this aspect places workers behind their counterparts in the world of work. This study aims at finding out the extent at which career counsellors practicing in Lagos State, make use of opportunities of Information Communication Technology (ICT) in their professional practice. It focuses on the use of communication gadgets for service delivery by career counsellors in Lagos State. The participants for the study were One Hundred and Thirty-Five (135) practicing Career Counsellors selected through simple random sampling procedure. The instrument for data collection was a structured questionnaire tagged “21st Century Career Counselling Questionnaire”. Frequency count and percentage was used to analyse the data in the study. Results showed that the counsellors took maximum use of Information Communication

Technology in their counselling relationship with the clients, most especially in booking appointments and provision of guidance services.

Keywords: Career Counsellors, Information Communication Technology, Techniques

INTRODUCTION

This research aims to look into the innovations and approach that can work in the delivery of career counselling in the 21st century with the current acceptance of Information Community Technology (ICT) in a global world. The job market need personalized, faster and holistic techniques to prepare the youths for the profession of career counselling has witness a lot of transformation in the century, Olumuyiwa et al (2023) quoted Tshabela and Neuba opines that inadequate method in any teaching activity will affect the performance of the learner. Career counselling effort may not yield desire result if the counsellor failed to adopt appropriate technique. Career guidance helps youths planning their education, their careers and preparing to become employable. Career guidance is more than giving information. It is a blend of self-development and of the learning and assimilation of career, providing education and labour market information. It also includes development of self-confidence as a prerequisite for taken an informed decision for one's career (Uchendu et al 2021).

The goal of career guidance can be achieved via individual counselling, self-preparation, career development training, computer-assisted guidance and internet base guidance system (Olagunju 2002). An effective career guidance that work in the 21st century must include among others identification of clients' talents, strengths and weakness, family expectations and national requirements to sort out the personal relevance of the educational and vocational options available. Making the clients understand education and training options and requirements for entry and success, and select an appropriate field of study, source of information about self-educational opportunities and the world of work in short-range and long range career goals. How to overcome self-defeating behaviors, gain self-confidence and learning life skills, and opening with the reactions to job loss of anger, depression, frustration and apathy and learn to take continuing positive action to become employed again and again, lastly how to identify alternative occupation when current employment is lost or retired when you are tired.

The 21st century is here with its challenges for career counsellors and vocational psychologist, they include changing nature of jobs. Jobs are not the same again, people now work for distance from their home, work for people and companies not located in the same

country, working from home and for people you may not know, the changing nature have prompted vocational psychologist and career counsellors to look for new ways and premises in career counselling (Mareg 2010, 2013, 2015 and Seyed et al 2022). In addition, adaptability as a pivotal survival skill re-emerging in 21st Century underscore the importance of incorporating life construction and the development of a perspective that emphasizes prevention in addition to remediation into career counselling contexts as opines by Marcein Seyed et al 2022.

The 21st century is also characterized by the introduction of information communication technology which affected all areas of human endeavor, career guidance and counselling is not spheres. The practitioners have to keep into the influence of information communication technology and globalization of the profession which lead to the growing of online counselling activities and the integration of multiculturalism in career counselling (Amos et al 2020).

The popularity of skill like critical thinking problem-solving and prevention, collaboration with others come with the century. These skills are germane in preparing would be workers for the dynamics and uncertain nature of the contemporary job market according to Negota (2020) and Corbeil et al (2017).

There is challenges related to the demographics on work force in Nigeria where largest population of Nigerian are in less city which denied them the proper access to Information Community Technology (ICT) unlike people in urban area.

In view of the above listed challenges and others, it is clear that career guidance and counselling in the 21st century requires a paradigm shift towards more personalized, narrative-based and adaptable approaches opines Seyed et al 2023. With this approaches professionals will be able to prepare job seekers for the 21st Century labour market. It is in the light of the challenges possess that this research is investigating the extent to which career counsellors in Lagos state, are online compliance in discharging their career guidance and counselling.

The security condition in Nigeria have made accessibility and face to face counselling near difficulty for clients and private practice counsellors. This may be one of the reasons that made Adeyemi et al (2021) concluded in their research that there is the need for counselling activities to be digitized in Nigeria and that cyber-counselling is the new adjustment Nigeria counselling. Ahmad and Yusop (2020) also agreed and called for redesigning counselling

model and technique to fit in with globalization trend. Providing career counselling through information communication technology gadgets such as the Ipad, Phones, Laptop, Video and others will reduce cost, time, inconveniences and risk associate with face to face counselling Ellison et al (2007).

So many research have work on therapy and it merits, one of such is a research reported by Kelvin Glavin et al (2009) where some students of career and lifestyle assessment were asked to identify YouTube three top videos using career construction theory as a guide. The subjects were able to extract their career interests, values and reasons why they made their career chooses. In their research work on career development intervention in the 21st Century Herath et al (2024) suggested that university career center should encourage diversification of counselling service format to include online and offline channels to make undergraduate assess career counselling services. This method would cater for the student's personalized needs and improve the overall quality of career guidance and counselling services. Adeyemi and Olagunju (2021) in analysis of counsellors preference for in-person, cyber and blended counselling, the result showed that majority of the counsellors prefer in-person counselling technique, while few use blended technique only to book appointment with clients. This is far from the reality of modern days where communication technology rule the world. In their research to proof the efficacy of E-therapy and mobile phone technologies for teaching and guidance purposes Odeniyi and Yahaya (2022) revealed that mobile phone technologies had great potential as an instructional tool and can influence both guidance and instruction processes.

Adeyemi (2021) reported a study conducted to review telephone-delivered psychotherapy where it was found that high number of client accepted it's of mobile phone for deliverance of all forms of counselling. However, psychotherapist using information technologies for psychotherapy purpose are facing a number of challenges such as lack of control over the environment, potential compromises of privacy and confidentiality which is a fundamental principle in counselling relationship, developing therapeutic alliance etc. (Brenes, Ingram & Danhaver, 2011).

Benn, Hoeft & Lee (2019) reported in their research work that implementation of online more than face to face counselling allows herders to be more flexible and well-adjusted to new situation they found themselves.

This research on 21st century career technique for practitioners is aimed at finding out the extent to which career counsellors in Lagos State utilize information technology most especially mobile phone in conducting their work. It is out to answer the following questions:

1. To what extent do practicing counsellors in Lagos State make use of mobile technology in their counselling activities?
2. Is there any gender difference in the use of mobile technology in career counselling activities of Lagos based career counsellor in Lagos State?
3. Is there age difference in Lagos State career guidance counsellor in usage of technology in their counselling activities?

SAMPLE/POPULATION FOR THE STUDY

Total population of the study was based on practicing guidance counsellor working in Lagos State. Lagos State based career counsellors were purposively selected for the study excluding practitioners from other forms of counselling. However, to give members equal chance of being selected, a simple random sampling technique (Using hat method) was employed to select One hundred and thirty five (135) participants.

Research instrument: The main instrument for data collection was a structured questionnaire tagged: “21st Century Career Counselling Questionnaire”, self-designed by the researcher. The questionnaire was administered to Lagos based career counsellors and counsellors after their bio-monthly CASSON meeting at Akoka. The items were designed to find out the extent to which career counsellors are making use of mobile technologies in providing career counselling services to their clients

The questionnaire was validated and trial tested on 40 guidance counselling students from Tai Solarin University of Education and University of Ibadan, who were on their counselling practicum in schools in Ibadan and Ijebu-Ode. Result from them indicated that the questionnaire was reliable and appropriate for the study.

Result and Discussion

Table 1: Demographic information of respondents.

Gender	Frequency	Percentage
Male	63	47%
Female	72	53%
Total	135	100%

The above table shows that one hundred and thirty five (135) respondent are used for the study, sixty three (63) are male that is 47% while seventy two (72) are female, that is 53% of the whole population.

Table 2: To what extent are the counsellors making use of information communication technologies in carry out their counselling activities.

Gender	Total	User	Percentage	Non Users	Percentage
Male	63	62	98%	01	02%
Female	72	60	83%	12	17%
	135	122			

The above table 2, shows that only one hundred and twenty two (122), representing 90.1% respondents are using information communication technology techniques in carry out their career counselling service. That is to say that the majority of respondents are making use of information communication technology techniques in carry out their career counselling activities with their clients.

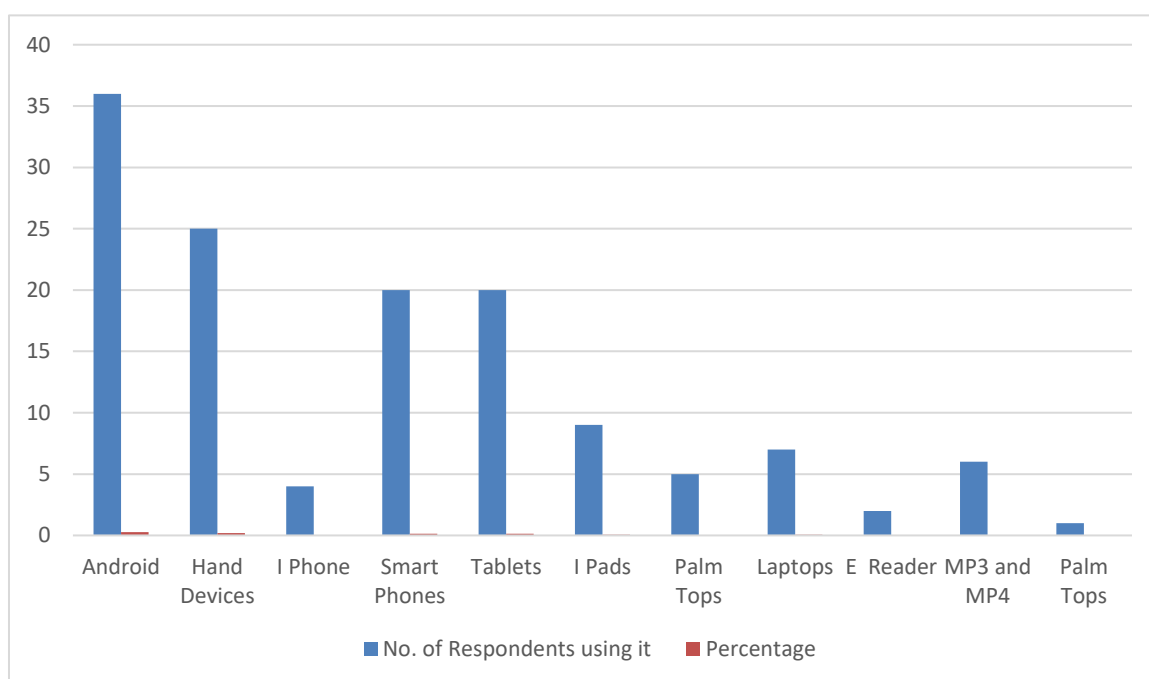
Table 3: Is there any gender difference in the usage of information communication technology by the respondents.

Gender	Total	User	Percentage	Non Users	Percentage
Male	62	61	98%	01	2%
Female	72	60	83%	12	17%
Total	135	122			

The above table 3 shows that out of male respondents only sixty two (62), that is 98% are using information communication technology techniques in carry out their career counselling activities while one (1) respondent, that is 2% is not using information communication technology techniques in carry out is career counselling activities. Sixty (60) female respondents, representing 83% of the female are using information communication technology techniques in carryout their career counselling activities, while the reaming twelve (12) respondents representing 17% are non-users of information communication technology techniques in carryout their career counselling activities.

Table 4: Information Communication Technology Gadgets used in career counselling

S/N	ITEM	NO. OF RESPONDENTS	PERCENTAGE
1	Android	36	27%
2	Hand Devices	2	19%
3	iPhones	04	3%
4	Smart Phones	20	15%
5	Tablets	20	15%
6	I – Pads	09	7%
7	Palm Tops	05	4%
8	Laptops	07	5%
9	E – Readers	02	1%
10	MP3 and MP4	06	4%
11	Palm Tops	01	0.7%
		135	100%



The above Table 4 shows that Android is the most used by respondents, thirty-six (36) of them which is twenty-seven percent (27%) of the respondents make use of android for their career counselling activities with their clients. In personal interview with the researcher, they claimed the Android is the most common Information Communication Technology they can afford in terms of price. They however complained about power supply and service providers hindering their ability to reach their clients often.

CONCLUSION AND SUGGESTIONS:

As observed by Adeyemi and Olagunju (2021) in a related work, the trend in counselling practice is more cyber related, that gives practicing counsellors the opportunity to advertise,

do online testing and operating a mobile and open access office. Career counsellors should be able to take opportunity of Information Communication Technology to push the frontier of their practice. They need to reach more willing clients near and far. The easiest means is through ICT. By making use of ICT, counselling practice services and the assistance it offers will be more popular, available and affordable to those who are in need of it. As being practiced today, the counsellor have not been able to meet the business scope of counselling operation. They should be encouraged to incorporate ICT into their operations most especially these days when movement is increasingly difficult, number of jobs to choose from keeps increasing, increasing social mobility and harsh social-economic conditions that force people in and outside their natural environments to mention but career counselling technique that work today must incorporate ICT and the opportunity it offered for successful counselling relationship.

It is in light of this, this work is out to investigate the use of ICT in career counselling in Lagos state. Results from respondents show that career counsellors operating in Lagos are making use of ICT in their operation. It was also discovered that the use of ICT varies across gender age and types of ICT used.

It is therefore suggested that, counsellor training institutions should incorporate training in the use of ICT in counselling in their training of would be counsellors, this would prepare them for the 21ST century, client, job seekers and workers.

Counsellors need to sharpen their online listening skill and set time aside for their clients to prevent time wastage and unnecessary interference during counselling period.

Power is a major setback for cyber-career guidance and counselling. Counsellors should look into alternative source of power like solar to charge the ICT equipments to make them stay online every time.

Professional associations should encourage practicing guidance counsellors by organizing, seminars, workshops and conferences on adoption of ICT in their services. Both practicing and student counsellors should be motivated to attend, to update their knowledge.

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EXAMINING THE USE OF E-COUNSELLING TOOLS IN GUIDANCE AND COUNSELLING BY SCHOOL COUNSELLORS IN LAGOS STATE, NIGERIA: A PATHWAY TO GLOBAL BEST PRACTICES

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Abstract

Despite the global adoption of e-counselling tools, their integration into school guidance services in Nigeria remains limited, with gaps in effectiveness, usage, and alignment with global best practices. This study examined the significant effect of E-counselling tools on favourable counselling outcomes in guidance and counselling by school counsellors in Lagos State, Nigeria: A pathway to global best practices. This study adopted a descriptive survey design, was guided by two research questions and two null hypotheses. The study population consisted of all school counsellors in educational district one (1) in Lagos State. Convenient sampling technique, such as probabilistic sampling, were used to select 121 respondents. The researchers used a self-developed 30-item structured questionnaire to evaluate the extent of E-counselling tool usage and the overall impacts on counselling outcomes by the school counsellors in Lagos State, Nigeria. Experts in psychometrics validated the instruments, and Cronbach's alpha reliability coefficient, obtained through a pilot study was 0.89. The data obtained was analysed using descriptive and ANOVA statistical instruments. The results show the extent of usage of e-counselling tools and the significant effect of e-counselling tools on favourable counselling outcomes. The study concluded by recommending targeted training programmes, rapid technology integration into counselling services in schools, enhancing improved infrastructure, aligning Nigeria's counselling services with global standards and policy reforms to promote greater utilisation of e-counselling tools in Nigerian schools.

Keywords: E-counselling tools, school counsellors, guidance and counselling, global best practices.

Introduction

Guidance and counselling in Nigeria's educational system are crucial for promoting students' mental, emotional, and social development. Nigerian students face numerous personal, academic, and career challenges that influence their well-being and performance in a rapidly evolving society. Therefore, school counsellors' role has become increasingly important in providing students with adequate support to overcome these challenges. This research explores the roles and challenges of guidance and counselling and the impact of school counsellors in Nigeria, emphasising contemporary strategies and technology integration in counselling.

The development of technology has transformed various aspects of human life, bringing about the rapid integration of technology in various spheres, including education and counselling. These technological tools seriously influence the learning and training environment, in particular, creating several prospects for those in the field of guidance and counselling service areas and providing seamless accessibility, effectiveness and efficient services by the school counsellors.

Literature Review

A school counsellor in Nigeria is a trained professional working within the school system to support students' educational, personal, social, and emotional development. School counsellors are responsible for providing guidance, counselling, and resources to help students navigate academic and personal challenges. They play a multifaceted role that covers career guidance, personal development, mental health promotion, and academic advising. Okoli and Oludare (2020) stated that counsellors help students develop positive self-concepts, set academic and career goals, and acquire essential life skills. They provide preventive and remedial services, promoting mental health and helping students navigate personal crises (Alutu, 2016). Some of the other responsibilities of a school counsellor are as follows: guidance and academic, career, personal and social counselling, intervention and support services, and promoting ethical behaviour. They encourage students to develop ethical values, respect, and a positive attitude toward learning and social interaction (Millacci, 2021). School counsellors may work in public or private schools, especially in Nigeria. Usually, they hold qualifications in education, psychology, or guidance and

counselling, with additional training in relevant counselling techniques and skills (Suleiman et al., 2019; Ihuma, 2021).

In the practice of guidance and counselling in Nigerian schools, school counsellors face several significant encounters that limit their effectiveness. These challenges include insufficient funding, which leads to a need for more funding and limits resources and facilities. This financial constraint impacts the ability to offer comprehensive services and employ a sufficient number of qualified counsellors. Some other encounters are a shortage of trained counsellors (Adejumo, 2019), a high number of student-to-counsellor ratios (Hilts et al., 2023; Klein, 2024), and socio-cultural barriers (Lyimo et al., 2023). In some Nigerian communities, there remains a stigma associated with seeking counselling services, particularly for mental health. This cultural perception discourages students from using guidance and counselling services, even when available.

Integrating technology in counselling with technological advancements in E-counselling has appeared as a potential solution to some of the challenges in school counselling. E-counselling involves using digital platforms, such as email, video calls, and chat systems, to provide counselling services, and Nigeria has been making a concerted effort to adopt it. However, it has been slow until the COVID-19 pandemic slightly brought it to reality (Ayodele, 2022).

E-counselling is one of the technological tools defined as digital platforms and appliances used for counselling services, which have been adopted to enhance the accessibility, efficacy, and effectiveness of guidance services (Popoola et al., 2023; Wells, 2021). It is a device that has limited face-to-face sessions by transmitting that session into non-physical interaction, which is possible through online access (Suryawati et al., 2024). It is an online counselling service to reach unreachable clients without fear (Mulungu et al., 2024). The use of such tools by school counsellors can transform how counselling is conducted, particularly in reaching out to clients in remote areas and offering real-time support. It is further understood as a counselling process involving a professional counsellor meeting a client in a virtual space using electronic devices as the primary communication medium and or ongoing, interactive, text-based, electronic communication between a client and professional counsellor to improve or provide counselling service for the client (Zainudin et al., 2022).

Globally, the incorporation of e-counselling tools has turned out to be an emergent trend, especially in other parts of the world (Foon et al., 2020); the benefits of this e-counselling improve accessibility and reducing the stigma associated with face-to-face counselling (Prim et al., 2023). There is growing recognition of the need for technological adoption in education, but implementing e-counselling tools still needs to be improved in Nigeria, particularly Lagos State. Afzal et al. (2023) and Kushwaha et al. (2024) discussed the slow adoption of digital tools in educational counselling and emphasised the need for targeted interventions to boost usage.

Counsellors in the country may use various e-counselling tools in school, depending on circumstances. Some standard tools include Instant Messaging Apps (like WhatsApp), which are widely accessible and user-friendly. WhatsApp has been instrumental in permitting counsellors to conduct one-on-one sessions, provide real-time advice, and share helpful resources (Tarofder et al., 2023). In addition, Video conferencing (like Zoom and Google Meet), some schools with better internet infrastructure video conferencing tools enable counsellors to engage with students and other clients' counselling sessions (Archibald et al., 2019; Inspace. (2021). Social Media Platforms are platforms like Facebook and Instagram, which, more often than not, are used for awareness creation and group counselling purposes (Latha et al., 2020). Some of the other types are:

- Email and Web-based Counselling Platforms (like BetterHelp or Talkspace),
- Telephonic Counselling
- Dedicated Counselling Apps (like, MindEase, CalmHarm) (Jeswani, 2023; Raju, 2024)

Gender as an intervening variable, Onyije et al. (2022) revealed that sex differences affect the adoption and use of technology; therefore, male or female counsellors display varying attitudes, comfort levels, accessibility, and know-how with e-counselling tools in the context of guidance and counselling. Studies have shown that females express more reservations about e-counselling tools than their male counterparts (Ahmad et al., 2021), possibly due to the influence of confidence and willingness to integrate new digital tools into counselling practices (Kiss-Abrokwhah et al., 2021). Also, female counsellors may weigh the usefulness of e-counselling tools differently from male counsellors; this observation can shape their overall adoption and integration of such tools in school settings (Chiu & Tzeng, 2020; Wankasi &

Adekunle, 2023). Male counsellors may be more inclined to experiment with e-counselling technologies, particularly if they view these tools as enhancing efficiency. According to Akhter (2022), this could be a result of gender disparities in access to digital training programmes, which are critical for mastering e-counselling tools, especially in Nigeria, due to possible societal roles and responsibilities where female counsellors, which might face barriers in accessing training opportunities, leading to less frequent or confident use of e-counselling tools. Females may face potential challenges in establishing rapport through digital means. At the same time, male counsellors might adopt more structured, tool-based communication styles that align with e-counselling set-ups (Oyediran & Adeoye, 2022). Female counsellors might be more cautious due to concerns about confidentiality in a digital environment, impacting their frequency and scope of e-counselling use (Abiola & Yusuf, 2021).

Also, years of experience of the counsellors could significantly influence the use of e-counselling tools in guidance and counselling, as experience often shapes familiarity, openness to change, and confidence in technology use. Ogunleye and Ojo (2021) agreed that experienced counsellors may be less adaptable to new technology owing to previous training or practices, while counsellors with fewer years in practice may find it easier to adapt to e-counselling tools because of confidence, current trends (Adeoye & Balogun, 2022; Amadi & Olabisi, 2021; Ogunlade & Bamgbose, 2020) and orientation in learning styles (Okafor & Chidiebere, 2023)

Statement of the problem

Despite the growing availability of e-counselling platforms, there is limited empirical data on the frequency of usage among school counsellors and the factors affecting this adoption. In Nigeria, the growing awareness of e-counselling potential also identifies challenges, such as a need for more reliable internet connectivity and limited training for counsellors about confidentiality (Olanrewaju, 2022). Ibekwe (2023) found that only about one-third of Nigerian school counsellors use e-counselling tools frequently, showing a wide gap in effective guidance practices. Findings reveal that some counsellors use e-counselling tools regularly, and the majority report occasional or minimal use. Video conferencing tools (e.g., Zoom, Google Meet) and messaging apps (such as WhatsApp) are the most commonly used. There is a lack of understanding of the frequency and effectiveness of their application in delivering professional guidance services.

This study aims to fill these gaps by examining the extent of e-counselling tool usage among school counsellors in Lagos State, the factors affecting their adoption, and the alignment of these practices with global standards

Research Questions

1. How often do school counsellors in educational district one (1) in Lagos State use e-counselling tools in their practice?
2. What are the commonest e-counselling tools used by school counsellors in educational district one (1) in Lagos State, Nigeria?

Hypotheses

H₀₁. There is no significant effect of e-counselling usage on the counselling outcomes among school counsellors in educational district one (1) in Lagos State, Nigeria.

H₀₂. There is no significant difference in counselling outcomes based on school counsellor's qualification in educational district one (1) in Lagos State, Nigeria.

Method

This study employed a descriptive survey research design to examine using e-counselling tools among school counsellors in educational district one (1) in Lagos State, Nigeria. The researchers used 121 counsellors as respondents that were selected through purposive sampling techniques to obtain data for the study, using a self-developed 30-item structured questionnaire focusing on seeking the demographic information of respondents, the extent of E-counselling tools and favourable counselling outcomes by the school counsellors. Cronbach's alpha reliability coefficient of 0.89 was obtained after the instrument has passed through content validity by guidance, counselling, and measurement evaluation experts.

Furthermore, the researchers collected data online with the aid of Google Forms. The data was imported to MS Excel for data conversion from text to number. Afterwards, the data was cleansed before being imported to SPSS software version 29 for analysis. Descriptive statistics involving frequency count, percentage and the mean score were used for demographic information analysis and answering the research questions. ANOVA was also used to test the stated hypotheses. In addition, ethical issues relating to this study were observed, and consent was obtained from the respondents. They participated voluntarily and

had the right to withdraw at any study stage. Their anonymity was also observed as none of their identifying information was obtained and disclosed.

Result

Research Question 1. How often do school counsellors in educational district one (1) in Lagos State use e-counselling tools in their practice?

Table 1: Frequency of Usage E-counselling tools

		Frequency	Percent	Cumulative Percent
Valid	Rarely	62	51.2	51.2
	Occasionally	41	33.9	85.1
	Regularly	18	14.9	100.0
	Total	121	100.0	

Table 1 shows the frequency of usage e-counselling tools among school counsellors in Lagos State as follows: rarely – 62 respondents (51.2 %), occasionally – 41 respondents (33.9 %) and regularly – 18 respondents (14.9 %). The findings revealed that more than half of school counsellors in Lagos State rarely use e-counselling tools in their practice. Hence, this is a concern that needs urgent attention by all stakeholders in order to achieve global best practices.

Research Question 2. What are the commonest e-counselling tools used by school counsellors in educational district one (1) in Lagos State Nigeria?

Table 2: Commonest E- Counselling Tools used by school counsellors

		Frequency	Percent	Cumulative Percent
Valid	Chats & Video calls	57	47.1	47.1
	Video Calls	36	29.8	76.9
	Chats	16	13.2	90.1
	E-Mail	12	9.9	100.0

Total	121	100.0
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From Table 2, the commonest e-counselling tools used by school counsellors in educational district one (1) in Lagos State Nigeria are: chats & video calls – 57 respondents (47.1 %), video calls- 36 respondents (29.8 %) chats – 16 respondents (13.2 %) and e-mail - 12 respondents (9.9 %) The findings revealed that the top three e-counselling tools commonly used by school counsellors in educational district one (1) in Lagos State are: chats & video calls, video calls only and chats only.

Hypothesis H₀₁: There is no significant effect of e-counselling usage on the counselling outcomes among school counsellors in educational district one (1) in Lagos State, Nigeria.

Table 3: Descriptive statistics of effect of e-counselling usage on counselling outcomes

	N	Mean	Std. Deviation	Std. Error	95% Confid. Interval for Mean	
					Lower Bound	Upper Bound
Rarely	62	24.37	5.984	.760	22.85	25.89
Occasionally	41	41.98	3.320	.519	40.93	43.02
Regularly	18	51.78	4.453	1.050	49.56	53.99
Total	121	34.41	11.898	1.082	32.27	36.55

Table 3 shows the mean and standard deviation of effect of e-counselling usage on the counselling outcomes among school counsellors in educational district one (1) in Lagos State as follows: rarely- (mean=24.37, SD=5.984); occasionally- (mean=41.98, SD=3.320) and regularly- (mean=51.78, SD=4.453). The findings revealed that there are differences in their means.

Table 4: ANOVA of effect of e-counselling usage on the counselling outcomes

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	14024.784	2	7012.392	279.307	.000
Within Groups	2962.554	118	25.106		
Total	16987.339	120			

Table 4 reveals that $F(2, 118) = 279.207$ and that $p = 0.000$. Since the p-value of the F-ratio is less than 0.05, this then showed that there is statistically significant difference between the variables. Hence, the null hypothesis was rejected. In other words, there is significant effect of e-counselling usage on the counselling outcomes among school counsellors in educational district one (1) in Lagos State. That is counsellors who used e-counselling tools in their

professional practice do have greater and effective counselling outcome, while those who do not used e-counselling tools have low counselling outcomes.

Hypothesis H₀₂. There is no significant difference in counselling outcomes based on school counsellor’s qualification in educational district one (1) in Lagos State, Nigeria.

Table 5: Descriptive statistics of effect of counsellor’s qualification on counselling outcomes

	N	Mean	Std. Deviation	Std. Error	95% Confid. Interval for Mean	
					Lower Bound	Upper Bound
No Qualification	19	35.84	11.403	2.616	30.35	41.34
NCE	30	34.60	12.645	2.309	29.88	39.32
Degree	56	33.88	11.961	1.598	30.67	37.08
Post Graduate	16	34.25	11.790	2.947	27.97	40.53
Total	121	34.41	11.898	1.082	32.27	36.55

Table 5 shows the mean and standard deviation of effect of counsellor’s qualification on counselling outcomes as follows: no qualification- (mean=35.84, SD=11.403); NCE- (mean=34.60, SD=12.645); degree- (mean=33.88, SD=11.961) and post graduate- (mean=34.25, SD=11.790). The findings revealed that there are no differences in their means.

Table 6: ANOVA of effect of counsellor’s qualification on the counselling outcomes

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	56.488	3	18.829	.130	.942
Within Groups	16930.851	117	144.708		
Total	16987.339	120			

Table 6 reveals that $F(2, 117) = 0.130$ and that $p = 0.942$, since the p-value of the F-ratio is greater than 0.05, this then showed that there is no statistically significant difference between the variables. Hence, the null hypothesis was not rejected. In other words, there is no significant difference in counselling outcomes based on school counsellor’s qualification.

Discussion findings

The study's findings revealed the rare usage of e-counselling tools in practice by school counsellors in Lagos State, Nigeria. The result recorded the low level of frequency usage of e-counselling tools among school counsellors in Lagos State is indeed in tandem with Afzal et al. (2023) and Kushwaha et al. (2024) that slow adoption of digital tools in educational counselling. Also, females express reservations about e-counselling tools than their male counterparts (Ahmad et al., 2021), and counsellors might be more cautious due to concerns about confidentiality in a digital environment, impacting their frequency and scope of e-counselling use (Abiola & Yusuf, 2021). Finally, there could be a growing awareness of e-counselling potential in Nigeria, which identifies many challenges, such as a need for more reliable internet connectivity and limited training for counsellors about confidentiality (Olanrewaju, 2022) and that only about one-third of Nigerian school counsellors use e-counselling tools frequently, showing a wide gap in effective guidance practices (Ibekwe, 2023).

It was also revealed that the top three e-counselling tools commonly used by school counsellors in Lagos State are chats & video calls, video calls only and chats only, which is in line with the statement made by Latha et al. (2020) that social media platforms like Facebook and Instagram, which, more often than not, are used for awareness creation and group counselling purposes and same with e-mail, Web-based counselling platforms (like BetterHelp or Talkspace), telephonic Counselling, and dedicated Counselling Apps (like, MindEase, CalmHarm) (Jeswani, 2023; Raju, 2024). Also, Archibald et al., 2019; Inspace. (2021) supported that Video conferencing (like Zoom and Google Meet), some schools with better internet infrastructure video conferencing tools enable counsellors to engage with students and other clients' counselling sessions; messaging Apps (like WhatsApp), which are widely accessible and user-friendly. WhatsApp has been instrumental in permitting counsellors to conduct one-on-one sessions, provide real-time advice, and share helpful resources (Tarofder et al., 2023).

The result from hypothesis one indicated a significant effect of e-counselling usage on the counselling outcomes among school counsellors in Lagos State. This implies that counsellors using e-counselling tools in their professional practice have more significant and effective counselling outcomes. In contrast, those not using e-counselling tools have low counselling outcomes. This finding supports the work of Prim et al. (2023) that E-counselling improves

accessibility and reduces the stigma associated with face-to-face counselling (Prim et al., 2023).

The second hypothesis revealed no statistically significant difference between the variables. Hence, the null hypothesis was not rejected, and it was stated that there is no significant difference in counselling outcomes based on school counsellors' qualifications in Lagos State, Nigeria. This result agreed with the submission of Ogunleye & Ojo (2021) agreed that experienced counsellors may be less adaptable to new technology owing to previous training or practices, while counsellors with fewer years in practice may find it easier to adapt to e-counselling tools because of confidence, current trends (Adeoye & Balogun, 2022; Amadi & Olabisi, 2021; Ogunlade & Bamgbose, 2020) and orientation in learning styles (Okafor & Chidiebere, 2023). Also, digital platforms and appliances used for counselling services have been adopted to enhance the accessibility, efficacy, and effectiveness of guidance services (Popoola et al., 2023; Wells, 2021).

Conclusion

The study could be concluded by stating the following;

- a. The use of e-counselling tools has a significant positive effect on the outcomes of Counselling sessions conducted by school counsellors.
- b. Incorporating technology into counselling practices could enhance the effectiveness of the process.
- c. school counsellors' qualifications may be necessary because they do not significantly influence the outcomes of counselling sessions.
- d. Counsellors should engage more in practical training that will meet up with technological usage trends

Recommendations

Based on the findings, here are some recommendations for school counsellors:

- Invest in technology by allocating resources to acquire and maintain effective school e-counselling tools.

- By training school counsellors on how to effectively utilise technological tools in counselling practice.

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THE USE OF DIGITAL TECHNOLOGY IN THE TEACHING AND LEARNING OF STUDENTS WITH HEARING IMPAIRMENT IN MAINSTREAM SCHOOLS

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Abstract

This paper discussed the use of digital technology in the teaching and learning of learners with hearing impairment in mainstream schools as major supportive aids to facilitate teaching and learning for earners. While looking at the concept of hearing impairment, meaning of mainstream schools as related to learning challenges being faced by learners with hearing impairment in that environment. The paper discussed various communication options available for learners. Limitations of conventional communication options that perhaps have posed significant threats to learning were also discussed. At the tail end of the paper, it highlighted various interventions of digital technologies as instructional materials in addressing specific academic needs of learners. While concluding this paper, the importance of using digital technologies to enhance effective teaching in mainstream schools was emphasized.

Key words: *digital technology, hearing impairment, intervention, mainstream*

Introduction

In today's world, digital technologies have become ubiquitous across all aspects of human activity. They play a crucial role in mass communication, media, and education, where they are increasingly used for teaching and learning. These advancements drive human transformation processes, necessitating a reevaluation of traditional concepts of digitalization,

communication, and education. As the educational system undergoes digital transformation, communication—particularly through visual cues—becomes central to how learning takes place (Portugal, C., de Souza Couto, R.M. 2012)

Digital technology serves visual purposes and many others for learners with disabilities whose learning needs may differ significantly from the regular students. Information and Media Literacy involves the use of digital services to creating tasks (exercises) and methods of assessment that encourage students to formulate information needs; to find data and resources in the digital learning environment; to organize, process, analyze and interpret data; to Advance in Social Science, Education and Humanities Research, compare and critically evaluate the reliability of information data and the reliability of their sources (Ruth H. Miller, 2000)

Students with hearing impairment as a group of learners with hearing disability depend solely on visual information to learn. Therefore, they are referred to as visual learners. That explains why an attractive classroom with interesting notice boards and posters around the room assists the student to learn. Visual teaching methods, using pictures, diagrams and word maps, for example, also assist the student with hearing impairment (Deaf children Australia, 2012). The demands for visual learning materials that support teaching learning process for students with hearing impairment necessitates the use of digital technology to enhance understanding among the students.

More importantly, because there is no doubt that the society will be controlled by artificial intelligence (AI), advanced technology and automation in the near future, requiring the next generation of students entering the workforce to be technologically inclined in order to survive in their world. Achieving this goal requires ensuring high quality integration of digital technology into mainstream school systems in order to specifically help shape and build the digital society the world envisages among the students with hearing impairment and to meet their learning needs (Krishnamurthy, M 2002)

This objective is in consonance with one of the main aims of education which is to prepare future generations for digital future, and to equip them to deal with the rapid development of technologies, cope with the continuous access to vast amounts of new knowledge and information, and foster critical thinking, sense-making, creativity and collaboration skills to excel in digital contexts through continuous learning (UNESCO (2021).

Drawing from the foregoing, education in this digital era relies heavily on multidimensional communication, networking and information exchange with the internal and external knowledge of ecosystem. Mainstream educational institutions must have necessary tools, appropriate infrastructure, technical know-how, support systems for learning that goes beyond the institutional walls to meet the learning needs of students with hearing impairment.

Concept of learning

Driscoll (2000) defines learning as “a persisting change in human performance or performance potential which must come about as a result of the learner’s experience and interaction with the world” Learning begins when human five senses are infused into gathering information around the world. Using these senses through the sensory organs makes learning experiences effective, meaningful and unforgettable. Learning by the use of the senses is the most natural method of learning ever. Students learn each detail in their environment with their senses and by so doing connect the outer world to perceive the environment around them and make interactions (Ranu, 2022). Katai (2011) and Sheyesteh et al. (2019) opined that when these senses are combined, individual learner is able to connect with the outer world and it offers them the opportunity for inclusive and extensive learning experiences.

Learning as related to hearing impairment

Sense of hearing in particular is critical to learning and connecting with classroom experiences. The ears play the second important role after the eyes in learning. Any disruption to the sense of hearing can limit students’ interactions with the world around them or make it harder to perform certain activities as in the case of hearing impairment which poses difficulties in following conversations and learning in the regular way. (Okeke, 2001).

Hearing impairment has been described as the inability to hear below 25 decibels of sound and is categorized as fluctuating or permanent (Agyire-Tettey et al., 2017). Kodiango and Syomwene (2016) refer to hearing impairment as the total loss or slight loss of hearing ability while Nordheimer and Brandl (2015) describe it as the deafness, dysfunction of the auditory system and hardness of hearing (Hardman, Drew, & Egan, 2005). Factors such as disease, accidents, tinnitus condition, heredity, ageing and noise from factories are among the common causes of hearing impairment (Kodiango&Syomwene, 2016; Mporfu &Chimhenga, 2013). It covers the entire range of auditory impairments, encompassing both deaf person and the individual with a very mild impairment.

Learning challenges of learners with hearing impairment

In the existing social context, it has been observed that students with hearing impairment are likely to encounter many learning challenges in their academic pathways. In fact, students with even minimal hearing impairment are at risk academically compared to their normal hearing peers (Costello, R., Lambert, M., & Kern, F. (2019). Untreated, reduced hearing can lead to social, emotional and learning difficulties for students with hearing impairment in the long term (Carrington and Robinson, 2006; Asrat, 2013). Hear-it, (2012) has it that obviously, in all mainstream schools, students with hearing impairment had a lower grade point average than their school mates and they were found to have lower average grades than children with normal hearing, indicating a significant disparity between the two groups which calls for urgent attention of the stakeholders in deaf education to take action.

In addition, the consequences of a hearing impairment manifest themselves in a broad spectrum of the students' life. These may occur at home, in the workplace, in the community and school. Hearing impairment can negatively affect interpersonal communication, intimate relationships, access to education, employment opportunities and economic independence. The emotional impacts of hearing impairment can be far reaching. They can cause feelings of distress, frustration, anger, embarrassment, inferiority, shame, loss of identity, rejection, and loneliness (Bennett et al., 2021). The students tend to develop both helpful and unhelpful social behaviours in an attempt to "cope" with the hearing impairment and associated emotional distress in social situations like school. These may include avoiding situations such as not attending social events, or staying silent in group conversations in class (often referred to as "tuning out") and ultimately reduce learning.

Also, students with hearing impairment may have difficulty with all areas of academic achievement, especially reading and mathematical concepts as a result of learning difficulty posed by traditional method of teaching and learning adopted in mainstream schools for the students. The gap in academic achievement between students without hearing impairment and those with hearing impairment usually widens as they progress through school. Students with hearing impairment significantly delayed language development, in sign or speech, leads to poor reading achievement; on average it is lower than literate levels. Incomplete language development also delays their ability to understand the motivations and actions of other people (Carrington and Robinson, 2006).

The impact of hearing impairment is clear in respect of time. Students who need information transcribed from tape must sometimes wait for a significant period of time for this to happen. This means that they may fall behind other students in the class, and confidence and self-esteem may suffer as a result. Students with hearing impairment may appear isolated in the learning environment. The possibility for social contacts and for interaction with other students is often limited, and this isolation or separateness may have an impact on teaching and learning process.

Also, Students with hearing impairment coming straight from the high school system will have been used to a structured, controlled, supportive environment, and may feel uncomfortable taking some of the learning risks associated with the relatively unstructured and unsupportive environment of the University. Participation and interaction in tutorials may be limited. The flow and nuances of rapid verbal exchange will be at a disadvantage. These students frequently carry emotional 'baggage' as a result of past learning failures and other 'put-downs', and this can have a long-term effect on confidence, self-esteem, and on their approach to learning. Anxiety about performing in front of others may affect participation in tutorials, particularly for students who have associated speech impairment.

Communication options and challenges for learners with hearing impairment

The use of hearing for ordinary purpose of life including regular classroom learning in schools necessitate an alternative communication option apart from verbal for students with defective hearing. Indeed, sign language demonstrates that the human capacity for learning is not bound by physical impairment and suggest that language is in the brain and may be expressed by humans than one modality. Further, it is believed that students with hearing impairment whose learning context is mediated by sign language will have the same access as hearing learners whose context is mediated by spoken language. A number of researchers have given credence to sign language claiming that it is entirely capable of being used as a medium of instruction from birth to tertiary-level (Petitto 1994; Klima & Bellugi 1979; Stokoe 1974). The concept of Sign Language in the educational sense refers to the use of Sign Language in the education system as a medium of instruction to facilitate teaching and learning (MoE, 1977)

However, Chifinda and Mandyata (2017) explained that most teachers of the hearing impaired did not have sufficient skills in Sign Language to use it as a medium of instruction. Hence, the dependence on total communication. Bowe, (1998) reported that most teachers of

students with hearing impairment used as a result, oral language and pointing as modes of instruction because of limited sign language knowledge. These raise concerns about appropriateness of language of instructions available in schools as well as the low achievement levels of the deaf in comparison with that of the hearing learners (Starczewska, et al., 2010).

Also, most mainstream classrooms sign language is not an option, even though lessons rely on verbal information and student–teacher communication. This means that the teachers and other student–peers not only have problems communicating with students with hearing impairment, but cannot understand them either (DeWitt, D., Alias, N., Ibrahim, Z., Shing, N.K., Rashid, S.M.M., Ditcharoen, N., Naruedomkul, K., Cercone, N.: SignMT) On the other hand, when a sign language professional is available in the mainstream classroom, the interpreter is often not the teacher and, therefore, may not be able to interpret the teacher’s lessons properly for the students, resulting again in poor communication leading to poor learning (Hyde, M., Punch, R., Power, D., Hartley, J., Neale, J., Brennan, L.,Prakasha, S. S, 2012)

Intervention of digital technology as instructional aids for learners with hearing impairment

By and large, even though Sign Language bridges the communication gap and creates an emotionally secured social and learning environment, it has been shown to have some existing gaps in instructional communication and has the potential of showing specific areas of weaknesses that can be addressed early enough through not only some specific instructional materials but digital technology. It was on this ground that Andrews et al., (2002) argues that sign language alone was limiting as a medium of instruction in the teaching and learning of students with hearing impairment. Fitzgerald (2000), also maintained that services in schools do not work effectively for all students with hearing impairment. They argued that there is a need for learning environments that make effective use of visual learning material, adaptive technology such as FM systems, and speech-to-text captioning, to accommodate hearing impairment in teaching and learning.

In the schooling of students with hearing impairment, technology plays a critical part. Teachers must respond to each student in their class and dealing with this type of students necessitates certain changes to standard teaching methods. E-learning tools can be used to create a distance and life-long training environment for students with hearing impairment in

the e-commerce and new technologies industry. Thereby, e-learning tools can encourage students' equal rights to access and participation in professional training. They can also provide them with a pathway into the new professional domains through their training in specific knowledge and skill sets related to the usage of the rapidly evolving e-learning and ecommerce industries (Drigas et al.,2004). E-learning also enables the “anytime-anyplace” learning environment for the students as they can access tutorials, notes, slides, and other materials at their own pace (Zaharudin et al., 2011)

With the use of digital technology, the gaps in fields where the traditional approaches for teaching and learning of students with hearing impairment is inadequate are being filled. Students with hearing impairment would be assisted to learn in a more relaxed environment when digital technology is employed. Shortening the length of training, maintaining interest, encapsulating abstract ideas, providing practical interactions, and generating further learning needs are all benefits of digital technology. Digital technology can be used as educational tools to teach students with hearing impairment general problem-solving techniques such as algebra and reading to improve academic knowledge, vocabulary, arithmetic, reading, and intelligence as well as sustaining attention span and learning efficiency. Students with hearing impairments may interpret documents produced on computers using computer programs and modified equipment (R, Power 2012)

The use of digital technology for students with hearing impairment involves computer-assisted training as a teaching and learning approach that consists of a learning system in which students study in a computer environment, which increases the teaching process and students engagement, and which learners may use at their own pace. Individualization in schooling is made possible through computer-assisted teaching. A machine is used as a medium in computer aided training to teach a lesson. Students who study how to use computers with instructional software do so at their own speed and skill. Individualization and self-improvement, immediate guidance, reliable corrective mechanism, repetition without coercion, immediate reinforcement, step-by-step instruction, repeated reaction by children, inspiration, psychological satisfaction, and constructive learning in education are all advantages of utilizing software for computer-aided training in special education, according to Ari and Bayhan (Ari, M. and Bayhan, P.1999).

Tablet computers are one form of digital technology and one of the most prominent technological advancements in recent years. Mobile computing devices, such as mobile

phones, laptops, and tablets, as well as the usage of Personal Digital Assistants, are all accessible (PDA). Tablets have the ability to link to wireless networks as well as most devices Kenar, I. (2012). Tablets were found to be favoured as instructional instruments in education as a result of research undertaken with them for students with hearing impairment. Tablets are preferred because they offer rich educational and training experiences for students and instructors, which makes students enhance their curiosity and desire in the class, as well as aids their learning. It can be used when demonstrating aim skills, teaching self-care skills, acquiring freedom skills, and applying for prizes in visual applications, according to teachers' opinions Haksiz, M. (2014).

In the twenty-first century classrooms, games and game-based learning have developed quickly and widely. Digital games are enticing a sizable portion of the public especially with the combination of the two categories of intense games and casual games (Juul, 2012). The incorporation of written text and sign language translation into the game design are two potential options that may be helpful to overcome language and communication obstacles. They can both be experienced through an intact sensory modality, namely sight, and do not rely on the audio modality, making them both accessible to students with hearing impairment (Westin et al., 2022).

Moreso, there is some work on computer games that are aimed at language learning for students with hearing impairment [25, 33]. For example, Portugal and de Souza Couto described the design of a multi-track game to support the development of a language for students with hearing impairment [25]. Also, a study by Zafrulla et al. employed the use of special coloured gloves in the so-called CopyCat game to help teach ASL. The study tested the recognition of phrases by the students and demonstrated benefits in terms of real-time ASL phrase recognition [33].

Also, digital technology in educational settings comes with various sign languages learning for students with hearing impairment, augmented reality (AR) games offer chances for developing happy learning. Particularly, the technology known as augmented reality (AR) overlays virtual items on realworld things (Akçayır, 2017). Real-time connection, 3D registration, and the blending of the physical and digital world are its three key characteristics (Azuma, 1997). The application of augmented reality in education might increase students engagement and learning effectiveness (Lee, 2008). The term augmented reality (AR) games describe digital games which can be played in a real-world setting while also adding a virtual

overlay to it (Squire and Jan, 2007). It is feasible for gamers to engage with both digital things and real-life people, preventing social isolation among students with hearing impairment in mainstream schools (Offermans and Hu, 2013).

In recent time, efforts have been made to digitalize learning for students with hearing impairment part of which include Quintero et al. (2019) proposing a way for co-creating AR material utilizing principles for universal design learning. They also did a systematic review of AR for inclusive education in mainstream schools, containing several papers regarding students with hearing impairment as a target. These papers specifically addressed AR studies for students with hearing impairment. Parton et al. (2010) conducted a pioneering study on mobile AR for students with hearing impairment combining 2D barcodes and teacher-produced YouTube videos to build an accessible and workable AR-based learning environment on early cellphones.

To make digital technology a part of teaching and learning for students with hearing impairment, Zainuddin et al. (2010) created an alternate language AR book for education. The book's content, which was written in Bahasa Malaysia and English, was supplemented by AR videos of sign language and 3D models for illustration. A mobile AR software developed by Al-Megren and Almutairi (2018) that maps written words to associated signs for learning has been demonstrated to be more successful than conventional teaching methods that use sign language, visuals, and fingerspelling alone. Using a cheap pair of AR glasses, Ridha and Shehieb (2021) developed a system with real-time transcription, voice emotion detection, sound indication features, and classroom assistance capabilities. Luo et al. (2022) developed Avatar Interpreter, a real-time sign language interpretation visualization application for head-mounted AR. These were targeted at improving teaching and learning experiences for students with hearing impairment in mainstream schools.

Connectivism Learning Theory for the Digital Age

Connectivism is the integration of principles explored by chaos, network, and complexity and self-organization theories. Learning is a process that occurs within nebulous environments of shifting core elements – not entirely under the control of the individual. Learning (defined as actionable knowledge) can reside outside of ourselves (within an organization or a database), is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing. Connectivism is driven by the understanding that decisions are based on rapidly altering foundations. New information

is continually being acquired. The ability to draw distinctions between important and unimportant information is vital. The ability to recognize when new information alters the landscape based on decisions made yesterday is also critical. Principles of connectivism

Connectivism also addresses the challenges that many corporations face in knowledge management activities. Knowledge that resides in a database needs to be connected with the right people in the right context in order to be classified as learning. Behaviorism, cognitivism, and constructivism do not attempt to address the challenges of organizational knowledge and transference.

Information flow within an organization is an important element in organizational effectiveness. In a knowledge economy, the flow of information is the equivalent of the oil pipe in an industrial economy. Creating, preserving, and utilizing information flow should be a key organizational activity. Knowledge flow can be likened to a river that meanders through the ecology of an organization. In certain areas, the river pools and in other areas it ebbs. The health of the learning ecology of the organization depends on effective nurturing of information flow.

The starting point of connectivism is the individual. Personal knowledge is comprised of a network, which feeds into organizations and institutions, which in turn feed back into the network, and then continue to provide learning to individual. This cycle of knowledge development (personal to network to organization) allows learners to remain current in their field through the connections they have formed.

Landauer and Dumais (1997) explore the phenomenon that “people have much more knowledge than appears to be present in the information to which they have been exposed”. They provide a connectivist focus in stating “the simple notion that some domains of knowledge contain vast numbers of weak interrelations that, if properly exploited, can greatly amplify learning by a process of inference”. The value of pattern recognition and connecting our own “small worlds of knowledge” are apparent in the exponential impact provided to our personal learning.

Conclusion

Loss of hearing makes digital technology as visual display instructional resources a crucial part of teaching-learning experiences for students with hearing impairment so long only visual methods can appeal to and address the students understanding of a particular task

(Nordin et al., 2013). However, some factors as insufficient digital technology devices, fear of using technology devices, lack of interest in learning technology skills, misunderstandings between teachers and sign language interpreters, limited supply of digital tools and computers in the classrooms, Students and teachers avoiding using ICT in their teaching are few barriers to the use of digital technology in mainstream schools. As a result therefore, students with hearing impairment face significant difficulties in the learning process with the inadequate use of digital technology and the integration of ICT into the educational programs of the students.

Even though all students with hearing impairment are entitled to equal educational rights and opportunity as their hearing counterparts for the purpose of future professional training and academic success, accessibility of the students to digital technology, teachers training in the use of ICT in the teaching program and provision of the necessary technological equipment remains the major challenges in mainstream schools while digital technology is underutilized and its potential to support teaching and learning of the students untapped (Costello et al., 2019).

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