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CALLFOR PAPERS

The **Journal of the Department of Arts and Science Education, Kwara State University, Malete**, invites submissions of original, scholarly manuscripts for its forthcoming issue. This journal serves as a platform for researchers, educators, and practitioners to share innovative ideas, research findings, and theoretical perspectives that advance the fields of Arts and Sciences Education.

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We welcome manuscripts that explore diverse aspects of Arts and Sciences Education, including but not limited to:

- Innovations in curriculum design and development for Arts and Sciences education.
- Pedagogical strategies for enhancing student engagement in Arts and Sciences.
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- Research on interdisciplinary and transdisciplinary approaches in Arts and Sciences education.
- Educational policies and their impact on Arts and Sciences programs.
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All submitted manuscripts will undergo a rigorous **double-blind peer-review process**. Accepted papers will be published in the upcoming issue of the journal, contributing to the scholarly discourse in Arts and Sciences Education.

EDITORIAL COMMENT

I feel highly honoured to present to our esteemed readers the Maiden edition of our Journal of Arts and Science Education, the brainchild of the Department of Arts and Science Education, Faculty of Education, Kwara State University, Malete, Nigeria.

This edition showcases our unwavering dedication to fostering interdisciplinary and knowledge advancement across the different, yet related fields of Education, Arts, and Sciences.

The scholarly efforts therein bring to bear the dynamism of creativity and critical thinking towards connecting the town and gown by examining issues that are of both academic significance and social relevance through an innovative approach as required by our educational landscape.

From explorations of general education, pedagogical dexterity that leverages technology in the Arts and Sciences by underscoring the 21st century outlook to education in our ever-changing world, this edition offers renewed insights and empirical-based perspectives.

I extend my heartfelt gratitude to our esteemed authors, whose commitment to scholarship has spurred the uniqueness of this publication. To all our peer reviewers, who objectively and rigorously ensured the quality of every article, I appreciate you.
I especially appreciate the ever-dynamic editorial team for their assiduity in bringing this publication into the limelight.

As you interact with the articles captured here, I hope you find inspiration to reimagine the possibilities of education at the intersection of Arts and Science.
The chapters were carefully arranged in parts to whet the scholarly appetite of our readers to breed a healthy dialogue among educators, researchers, and policymakers globally.

Thank you for being part of these scholarly efforts, and I extend a hand of partnership in advancing the future of education through collaboration and technological innovation.

Sincerely yours,
SAFI, Lawal, Ph.D.
Editor-in-Chief

CONTENTS

THE PARENTAL INVOLVEMENT IN UNDERGRADUATE STUDENTS' CAREER CHOICES IN THE UNIVERSITY OF IBADAN, OYO CAMPUS
ABIOYE, Kehinde David, UJULU, Phillip Janet & ABIOYE, Atinuke Grace……14-27

ASSESSING TEACHER SELF-EFFICACY: A QUANTITATIVE ANALYSIS OF PRIMARY SCHOOL TEACHERS
Siti Buraini bt Majid, ADELEKE Abdulfattah Ejire, AKINTOLA Ismaila Akinbode &Said Rashid Ali Alshuhumi……28-42

TSHWANE GRADE 9 LEARNERS' PERCEPTION OF ATTITUDE AND THEIR MATHEMATICS PERFORMANCE IN SOUTH AFRICA
BAMIDELE Segun Donald, Odeyemi……43-57

BORDER CROSSING OF MIGRANTS, ITS SOCIAL JUSTICE IN ISLAMIC HISTORY: A TRANSNATIONAL AFFAIR.
IBRAHEEM Mikail Abiola……58-66

COMPARATIVE ANALYSIS OF THE USE OF POSSESSIVE PRONOUNS IN ARABIC AND ENGLISH LANGUAGES AS TOOLS FOR TEACHING OF ISLAMIC STUDIES
LAARO-MUSA, Abdurrahma, IMAM Hadiyah, ALFABANNI Tunde Ahmed & SAFI Lawal……67-86

INTEREST AND ATTITUDE OF UNDERGRADUATE BIOLOGY STUDENTS TOWARDS COURSES WITH MATHEMATICAL CONTENTS IN PUBLIC UNIVERSITIES OF OSUN STATE
AKANBI Adekemi O & OSUALA Rita O……87-102

FACTORS AFFECTING THE LEARNING OF ISLAMIC STUDIES AMONG STUDENTS: A CASE STUDY OF SELECTED SECONDARY SCHOOLS IN ILORIN, KWARA STATE.
Asmau Imam ABDULKABIR……103-126

DETECTING DIFFERENTIAL ITEM FUNCTIONING IN 2024 WASSCE ECONOMICS OBJECTIVE TEST ITEMS USING MANTEL-HAENSZEL (MH) STATISTICAL PROCEDURE
LAARO Yahaya Babatunde, SIANO, Sabi Zakari, ISMAIL Aminat Omotola, OLATINWO Taiye Mujidat……127-139

NAVIGATING THE TENSIONS BETWEEN LIBERAL DEMOCRACY, LIBERALISM ANDDEMOCRATIC THEORY: A CRITICAL REVIEW
Olaoye Elijah Olawale, Towoju Kayode Timothy, Ali Ibrahim Lafiagi……140-153

IMPACTS OF MULTIMEDIA INSTRUCTIONAL STRATEGY ON STUDENTS' CONCEPTUAL UNDERSTANDING OF GENETICS IN SECONDARY SCHOOLS IN ILORIN, NIGERIA
Abdulrahim, Basira J*……*154-161

THE SYNTAX OF NEGATION IN THE YORUBA: A CROSS-LINGUISTIC PERSPECTIVE
Raphael Idowu Ibiowot*……*162-181

THE NIGERIAN POLITICAL ADMINISTRATION: STUMBLING BLOCK TO SOCIO-ECONOMIC DEVELOPMENT AND POLITICAL LEADERSHIP IN AFRICA.
BOLAJI, Ibrahim Olanrewaju Akanbi, ADAM, Aishatu Buba*……..*182-196

ASSESSMENT OF INTERDEPARTMENTAL TRANSFER AND ACADEMIC PERFORMANCE OF KWARA STATE UNIVERSITY UNDERGRADUATE STUDENTS
ALI Ibrahim Lafiagi, Sulyman Rasaq,Yunusa Kayode Saadu*……..*197-206

THE INFLUENCE OF HOME VARIABLES ON UPPER BASIC STUDENTS' MOTHER-TONGUE- ENGLISH BILITERACY ACHIEVEMENT IN KWARA STATE, NIGERIA
ABDULRAHMAN, Abdulwaheed Abiodun, RAHEEM Adebayo Lawal*…….....*207-217

INTEGRATING AI INTO OFFICE TECHNOLOGY: A PATHWAY TO SUSTAINABLE BUSINESS PRACTICES

OLUWASINA Boladale Ruth* ……*218-233

CHALLENGES ENCOUNTERED BY THE SOUTH-WEST NIGERIAN PUBLIC UNIVERSITIES IN ACCESSING TETFUND INTERVENTION ASSISTANCE
ALAKE M. Ajibola, ADETUNJI Olayemi Kafayat &SAM-AGUIHE Sarah Adaeze*……....*233-247

ASSESSMENT OF CHALLENGES FACING THE IMPLEMENTATION OF NOMADIC EDUCATION PROGRAMME IN KWARA STATE, NIGERIA
KAYODE, Sadiq Toyin & ABDULWAHAB, R.* ……....*248-262

USE OF CLIMATE SMART AGRICULTURAL (CSA) PRACTICES AMONGST SMALLHOLDER FARMERS: IMPLICATIONS FOR AGRICULTURAL EXTENSION EDUCATION IN NIGERIA.
O. J. Yusuf, O. L. Abdulrahman, I. T. Abiodun & I. I. Adewumi*……*263-271.

ASSESSMENT OF DISCIPLINARY TECHNIQUES IN THE MANAGEMENT OF PUBLIC SECONDARY SCHOOLS IN JIGAWA STATE.
KAILA, Idris, Garba Abdulrahman Ibrahim, Ginsau Abdulkadir Yusuf*…….…..*272-282

ENHANCING CYBERSECURITY AWARENESS AND EDUCATION TO MITIGATE CYBER FRAUD AMONG NIGERIAN UNDERGRADUATES
Muhinat B. BELLO, ODUN-AYO, Daniel Tolulope, Rhamat AHMED, A.D. GBIGBADUA, O. & O. KAYODE……..….283-293

INFLUENCE OF MOBILE LEARNING APPS ON STUDENT ENGAGEMENT AND COMMUNICATION IN TERTIARY INSTITUTIONS IN ANAMBRA STATE
Safi Lawal, Ude-Akpeh C. E, Nnaemeka F. O & Nabayi U. Y……294-310

A DESCRIPTIVE ANALYSIS OF PLURAL FORMATION THROUGH REDUPLICATION PROCESS IN THE WARJI LANGUAGE
Mustapha Ibrahim Garba, Sale Jibir & Ali Modu……...311-324

EFFECTS OF READING SKILLS ON SENIOR SECONDARY SCHOOLS' ARABIC STUDENTS IN LEARNING OF ARABIC READING COMPREHENSION IN KWARA STATE
AlfaBanni, T. AHMED
…….……325-334

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THE PARENTAL INVOLVEMENT IN UNDERGRADUATE STUDENTS' CAREER CHOICES IN THE UNIVERSITY OF IBADAN, OYO CAMPUS

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ABSTRACT

This study investigated the parental involvement and its implications on undergraduate students' career choice at the University of Ibadan, Oyo campus. The study adopted a descriptive survey research design. The study has a total population of 1029 students, and a simple random sampling technique was employed to select 115 students for the study. Data was collected using a self-structured questionnaire. The instrument was validated by two experts from the field of guidance and counselling. Data collected were analysed using frequency count, mean and standard deviation, and Pearson Product-Moment Correlation Coefficient (r) was used to test the null hypothesis at a 0.05 level of significance. The results showed that although students want to have some control over their career choices, parental contribution continues to be a crucial and encouraging factor in undergraduate students' career choices at the University of Ibadan, Oyo campus. It was also discovered that there is a positive relationship between parental involvement and the career choice of undergraduate students. The study recommended, among others, that undergraduate students should be given appropriate orientation on the modalities of choosing career rather than rely on social media, friends, admirers or experiences of others

Introduction

The process of choosing a career is a crucial phase in an individual's life. The precision of career selection significantly influences an individual's success, fulfilment, and happiness (Ugwu, 2021; Tochukwu, 2023). A person's career choice significantly impacts their lifestyle, physical health, mental health, and the well-being of their families. A significant number of students tend to seek parental guidance regarding career-related matters. Parents with limited exposure to information and insignificant experience in higher education may struggle to assist their children

with career-related issues (Tochukwu, Ugwu, &Nwankwo, 2023). Mbagwu and Ajaegbu (2016) found that children of highly educated parents were less likely to encounter challenges in making professional decisions compared to those whose parents had lower educational attainment. Chen (2021) demonstrates that fathers prioritise their sons' professional success over that of their daughters. In the same vein, he also establishes that male students are more inclined to acquire skills associated with their father's profession compared to other professions. Furthermore, Makinde, Bello & Falade (2022) confirmed that mothers are more inclined than fathers to employ supportive communication to influence their daughters' career choices. Zhu, Wen, & Li (2022) found that maternal support for educational and career-related issues had a more significant impact on girls compared to boys. Saleem, Akhtar& Bashir (2014) found that men exhibited a higher likelihood of support.

The career aspirations of young individuals, especially undergraduates, can be influenced from an early age by the support and direction of engaged parents. Active parental engagement in a child's educational experience, including participation in school activities, support with assignments, and discussions about future careers, can markedly enhance the probability that the student will seriously consider and ultimately pursue a career in science, technology, engineering, or mathematics (Nwani, Oladipo, &Sanni, 2022) Selecting a profession is frequently regarded as a significant milestone in a young adult's life. This decision can either facilitate achievement or obstruct opportunity. Although sometimes regarded as a personal decision, research indicates that numerous variables, including families, educational, communal, and socio-economic aspects, are likely to shape an individual's final profession choice (James, Prayer, &Saleh, 2024).

A student's career choice is a hard decision that sets the kind of job the person plans to follow. Possibly the most significant choice a person will ever make, it strongly determines their status, compensation, lifestyle, and level of job happiness. Career decisions are also influenced by ideals and personality variables. Chance circumstances can change a person's best-laid plans, and environmental limits can limit the job that one aspires to. An attempt to fit one's attributes with those of a given occupational sector can also be classified as job job-seeking activity. The paramount concern confronting young school dropouts is determining the appropriate vocation or occupation to pursue. Making a career decision is exceedingly difficult, especially when one's life depends on it. Career plays a very important and significant part in the life of an individual and society. Not only because they impact the pattern of income distribution among individuals, but also because they affect the individual personality and concepts in life. Career, consequently is a choice of life goal, life job or success in one’s career occupied by a person throughout his or her

lifetime. A career is a person's chosen pursuit, life's job, or achievement in the profession they have pursued throughout their lives.

University age is in the exploration period, when students should already be concentrating on developing a more detailed diversity of career possibilities, but not making a final decision. For instance, the majority of students at this age choose majors and institutions in order to concentrate on particular careers. Students' major goal is to have a successful career that matches their skills (Hoth, Adekunle, & Yusuf, 2017). Choosing a career is a complicated decision for students because it determines the specific job they choose to pursue for the rest of their lives.

The emergence of distinct career opportunities, societal changes, and increased awareness of global trends has led to a transformation in parental involvement in career decision-making. Parents are required to manage the complex relationship between encouraging their children's aspirations and supporting their independence in an increasingly competitive and evolving job market (Chaturvedi&Saimons, 2022). Parental encouragement is a critical determinant in children's career choices (Egbo, 2017). Many parents appear unaware of this influence and assert that their involvement in their children's career choices is minimal (Ezeani, Ogu, &Sabboh, 2023). Parents aim for their children to excel, as parenting involves numerous decisions, and the quest for perfection often places considerable pressure on their children to attain success (Adikwu &Ereka, 2023).

Parental involvement in career decision-making is fundamentally grounded in diverse theoretical frameworks. The Theory of Reasoned Action (TRA) elucidates how behaviours, such as career decision-making, are shaped by attitudes and subjective norms, including parental expectations (Zhang, Zhao, & Liu, 2014). Parental involvement encompasses the proactive participation and active engagement of parents or guardians in their children's education, development, career decisions, and overall well-being. Modern children and adolescents encounter significant and intricate challenges, especially concerning parental influence on their career decisions, which drives this research. Thus, in the absence of adequate guidance, young children may fail to recognise their life aspirations. Most young individuals encounter difficulties in selecting a vocation that corresponds with their capabilities, interests, and abilities, as well as viable career paths (Tochukwu, Ugwu, & Nwankwo, 2023). Selecting the optimal degree can be a daunting task for any student, as it necessitates meticulous contemplation of their prospective profession. Certain pupils possess a comprehensive comprehension of their chosen topic, whereas others do not have this proficiency. Parents ought to be incorporated into the professional decision-making process, as students often encounter difficulties in choosing an appropriate

career route. For this to occur, the parents and their children must maintain proximity. Researchers have demonstrated a positive association between career exploration and parental attachment, defined as the proximity of parents to their children (Onoshakpokaiye, 2023). Parental attachment refers to the extent of a child's emotional connection and support from their parents.

Parent-child interactions represent a distinct form of relationship in which all individuals are deeply engaged. Kolyukh and Oragwuncha (2024) noted that the degree of intimacy in a parent-child relationship distinguishes it from other types of interactions, including those with friends, relatives, and partners. Studies on parent-child relationships have examined various dimensions. Several researchers investigated the impact of parent-child relationships on children's decision-making and communication (Chung, Lanier, & Wong, 2022). Research demonstrates that a parent who is attentive, supportive, and nurturing fosters a strong bond with their child, thereby sustaining the reciprocal dynamics of their relationship (Yang, Zhao, Zhou, & Gong, 2024).

Empirical research has consistently shown the beneficial effect of parental involvement on students' professional goals and decision-making processes. Khatri and Periwal (2020) emphasised the pivotal influence of familial supervision in determining professional trajectories, especially within collectivist cultures. Koçak, Yildiz, & Demir (2021) recognized the crucial influence of parental encouragement on improving students' professional decision-making.

In the contemporary landscape, selecting a career necessitates confidence in one's ability to fulfil the responsibilities of the position. Students often have difficulties in selecting the optimal degree, as it requires a thorough assessment of their future career aspirations. Some pupils lack this competency, while others possess a comprehensive comprehension of their chosen subject. Consequently, parents have a significant role in facilitating their children's development. In comparison to previous eras, contemporary technological improvements have rendered the decision-making process for career choices with educational degrees more intricate (Joel, Peter,& Samuel, 2017).

The issue of career selection has prompted numerous enquiries and responses among researchers. The issue is complicated and has generated significant controversy, remaining unresolved and requiring careful consideration. A definitive process for students in making career choices is lacking. Many students depend on their parents, guardians, mentors, or role models to make career decisions, which are significantly influenced by these figures. Many students are often influenced by their parents in selecting a career path that may ultimately fail to align with their expectations, resulting in unfulfilled ambitions or aspirations. Consequently, numerous

parents may seek what they believe to be beneficial and optimal for their children. However, they frequently neglect to consider their wards' natural abilities and potential before imposing and selecting a career for them. A majority of children subjected to this form of career indoctrination frequently do not attain their objectives, with only a small number succeeding in fulfilling their parents' career aspirations. The issues related to this encompass an increase in examination failures, diminished concentration in selected careers, school dropouts, teenage pregnancies, elopement, cult activities, rising crime rates, political thuggery, armed robbery, occultism, and various other societal problems. This research aimed to examine the impact of parental involvement on the career choices of undergraduate students at the University of Ibadan, Oyo Campus.

Statement of the Problem

The decision to pursue a career is vital for undergraduate students since it has a substantial impact on their future performance as well as job satisfaction. At the University of Ibadan, Oyo campus, there is growing concern over the role of parental influence in students' career decisions. Although parents want to help their children have a successful future, their expectations may not always match their children's specific interests and abilities. The shift from secondary to university education complicates matters further. While previous literature recognises parental influence, there is a scarcity of empirical research that precisely investigates how various forms of parental involvement, such as emotional, financial, and occupational support, influence undergraduate students' career selections in this setting. This study aims to fill this vacuum by investigating the nature and intensity of parental involvement in students' career pathways at the University of Ibadan, Oyo campus.

Objectives of the study

1. To identify career decisions of undergraduate students in University of Ibadan, Oyo campus;
2. To ascertain the parental-child relationship of undergraduate studentsin university of Ibadan, Oyo campus;
3. To determine the parental involvement on the career choice of undergraduate students in University of Ibadan, Oyo campus;
4. To examine the relationship between parental involvement andcareer choice of undergraduate students in the university of Ibadan, Oyo campus.

Research questions

1. What is the career decision of undergraduate students in university of Ibadan, Oyo campus?
2. What is the parental-child relationship of undergraduate studentsin university of Ibadan, FCE (Sp.), Oyo campus?
3. How does parental involvement impacts career choice of undergraduate students in university of Ibadan, Oyo campus?

Hypothesis

1. There is no significant relationship between parental involvement andcareer choice of undergraduate students in university of Ibadan, FCE (Sp.), Oyo campus.

Methodology

Research design

The descriptive research design was adopted for this study.The population of the study comprised one thousandand twenty-nine (1029) undergraduate students of university of Ibadan, Federal College of Education (Special), Oyo, Campus. This comprises of 100Level – 400Level students from different discipline. The study adopted simple random sampling technique to select one hundred and fifteen (115) respondents. Self-structured questionnaire was used for this study. 115 questionnaires were produced and administered to the respondents. The questionnaire was given to the department of guidance and counsellingthree experts in measurement and evaluation for face validation. Based on their opinion, important modifications were made, and the final instrument was obtained.Data were analyzed using both descriptive and inferential statistics. Frequency count, percentage (%), mean distribution and standard deviation were used to answer research question one to three while Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the null hypothesis at 0.05 level of significance. A decision rule of 2.5 was made to determine agreed or disagreed item.

RESULTS

Answers to research questions

Research question one: What is the career decision of undergraduate students in university of Ibadan, FCE (Sp.), Oyo campus?

Table 1: Career choice of undergraduate students

S/N	ITEM	Mean	S.D	Remark
1	I believe in my ability	3.77	.427	Agreed
2	I adjust my career choices to my abilities	3.24	.823	Agreed
3	I believe my career will be successful through effort, not because of my talents	3.54	.501	Agreed
4	I have the posture that supports the career I want	3.15	.619	Agreed
5	I have prepared several career options for the future	3.13	.864	Agreed
6	I need other people to help me get a successful career	2.94	1.095	Agreed
7	I didn't have enough courage to choose a career	2.15	.891	Disagreed
8	I chose a career based on the successful experiences of others	2.49	1.135	Disagreed
9	I thought about the good and the bad before choosing a career	2.89	.944	Agreed
10	I associate the future with my past, that I have experienced in choosing my career	3.11	.781	Agreed
11	I have goals that I will adapt to my career choices	3.30	.910	Agreed
12	I search for information from various sources about the further education that I want	3.11	.868	Agreed
13	My achievements make me more confident in choosing a career	3.45	..679	Agreed
14	I have many achievements that support my future career	3.33	.722	Agreed
15	I am looking for specific information about the career choice I am interested in	2.94	.679	Agreed
16	My current education makes me even more prepared to choose a career	3.34	.771	Agreed

Table 1 represents the career choice of undergraduate students in university of Ibadan, Oyo campus. The table revealed that most of the respondents agreed that they believe in their ability when it comes to their career choice (mean = 3.77). The respondents also believe that the success of their career is dependant of their efforts rather than talent (mean = 3.54). Other respondents also believe that their achievements make them feel confident on their career choice

(mean=3.45). However, some respondents felt that they do not have enough courage to make their career choice by themselves (x = 2.15) while another respondents admitted that they make their career choice based on the successful experience of others (mean=2.49). It can be deduced that most of the respondents in the studied area make the choice of their career by them based on their perceived abilities, efforts and experiences of other people.

Research question two: What is the parental-child relationship of undergraduate studentsin university of Ibadan, FCE (Sp.), Oyo campus?

Table 2: Parent-child relationship of undergraduate students

S/N	ITEM	Mean	S.D	Remark
1	I consider my parents' opinion in choosing a career	3.03	.843	Agreed
2	My parents have their own opinion about the career that I will choose	2.76	.952	Agreed
3	My parents have prepared a good career for me	3.15	.891	Agreed
4	Social media is the only source I use to find information	2.45	1.011	Disagreed
5	I am looking for specific information about the career choice I am interested in	2.98	.918	Agreed
6	I am looking for further education information from the counselling teacher	3.17	.920	Agreed
7	I chose a career without considering anyone's opinion	2.63	1.104	Agreed
8	I chose a career based on the choice of my friends	1.82	1.113	Disagreed
9	I lack confidence in showing my career choices to my parents	2.07	1.160	Disagreed
10	Other people's opinions will make me more confused in choosing a career except my parent’s	2.23	1.110	Disagreed
11	I consider teacher input on my career choice	2.42	1.034	Disagreed
12	I chose a career based on the input of friends	1.90	1.139	Disagreed
13	My career choice is based on the careers of people I admire	2.03	.950	Disagreed
14	I love my parents that I cannot resist their opinion on my career choice	3.94	.665	Agreed
15	My father is the determinant to whatsoever everybody becomes in our family	2.71	1.074	Agreed
16	My mother is the determinant to whatsoever everybody	2.70	1.043	Agreed

becomes in our family

Table 2 reveals the parent-child relationship of undergraduate students in university of Ibadan, Oyo campus. The table showed that more than 90% of the respondents agreed that they love their parents that they cannot resist their opinion on their career choice (Mean= 3.94), while others seek for education information from counselling teachers rather than their parents (Mean= 3.17), while some respondents affirmed that their parents already prepared good careers for them. On the same vein, large percentage of the respondents considers their parents opinion in choosing their career (Mean = 3.03). However, the respondents disagreed that their choice of career is based on their friend's opinion rather than parent's (Mean = 1.90). Also, the respondents disagreed that their career choice is based on their admirers (Mean= 2.03). It can therefore be deduced from the table that the respondents have more confident on their parents and relay on their opinions and guide in choosing their careers than following the opinions of their friends and admirers. Some respondents also believe on their school counsellors and follow their guide in choosing careers.

Research question three: What is the parental involvement on career choice of undergraduate students in university of Ibadan, FCE (Sp.), Oyo campus?

Table 3: Parental involvement in career choice of undergraduate students

S/N	ITEM	Mean	S.D	Remark
1	My career choices are influenced by my parents' career	2.67	1.090	Agreed
2	I will accept the career that choice by my parents	2.38	.980	Disagreed
3	My parents facilitated my career choice	2.92	.919	Agreed
4	I ask other people about further education information	3.16	.914	Agreed
5	I will continue my education based on my abilities	3.63	.582	Agreed
6	My family imposes its career choices on me	2.42	1.116	Disagreed
7	The ability to choose one's career is not influenced by the educational background	2.63	1.002	Agreed
8	My family supports all my choices in a career	3.36	.850	Agreed
9	My parents want me to continue the family business instead of my desire career choice	2.07	1.114	Disagreed

10	The success of my parents inspired me to choose the same career	2.66	1.107	Agreed
11	I choose to be an employee with a definite income compared to continuing my parents' business	2.77	1.046	Agreed
12	My career choice is adjusted to the circumstances in my family	3.73	.940	Agreed
13	A certain work culture influences my career choices	3.80	.664	Agreed
14	My culture influences my career choices	2.63	.921	Agreed
15	My culture limits my career choices	2.30	1.094	Disagreed

Table 3 shows the parental influence on the career choice of undergraduate students in university of Ibadan, FCES, Oyo. The table indicated that the culture and believe of their parents influences their choice of career (x = 3.80). Likewise, some respondents agreed that their career choices are controlled by the circumstances of their families (x = 3.73). Some respondents opted to continue their education and career based on their abilities and not the status of their parents (x = 3.63). On the other hand, some respondents disagreed that their parents want them to continue the family business instead of their chosen career (x = 2.07), while some students disagreed that their parents' culture limits their career choices (x = 2.30). Also, some respondents disagreed that their parents impose their career on them. From the table,it can be observed that parents, rather than imposing their desired careers on their children, guide them rightly to make their choices of career. To a great degree, the parents do not impose their obligations, businesses or jobs on their children, which gives their students under opportunity to make their career choice by themselves.

Test of hypothesis: There is no significant relationship between parental involvement and career choice of undergraduate students in the University of Ibadan, FCE (Sp.), Oyo campus.

Table 4: Relationship of career choice and parental involvement in the career choice of studentsCorrelations

Variables	Mean	Std. Deviation	N	R	Sig. (P)	Remark
Career Choice	49.88	4.798				
Parental Involvement	42.14	8.249	115	0.72**	0.003	Sig.

** Correlation is significantat the 0.05 level (2-tailed).

Table 4 revealed the correlation between career choice and parental involvement of undergraduate students in the University of Ibadan, Oyo campus. The tests were significant at P<0.05. The p-value is 0.003 while the correlation coefficient between career choice and parental involvement is 0.72. This shows that there is a strong positive correlation between career choice and parental involvement of undergraduate students in the University of Ibadan, Oyo campus. In other words, there is a positive relationship between the two variables and a tendency that the career choice of undergraduate students will increase parental involvement positively and vice versa.

Discussion of Findings

This section discusses the findings as they relate to the stated research questions and hypothesis of the study on Parental Involvement and Its Implications on Undergraduate Students' Career Choices at the University of Ibadan, Oyo Campus. Findings from the study revealed that the majority of students demonstrated a strong sense of self-awareness and confidence in their career decisions. They believed in their abilities (Mean = 3.77) and efforts (Mean = 3.54) as key drivers of career success. Many had considered multiple career options and reported that their academic achievements boosted their confidence in selecting a suitable career. However, some respondents expressed uncertainty and reliance on others, indicating a lack of courage in making independent career decisions (Mean = 2.15). This suggests that while most students engage in autonomous decision-making, a notable portion may be vulnerable to external influence due to indecision or lack of exposure. This finding aligns with Hoth, Adekunle, & Yusuf, (2017), that career decision-making in youth, is a complex, evolving process influenced by personal and contextual factors.

The data analysedshowed that a strong emotional bond exists between parents and students, significantly shaping the latter's career-related decisions. Respondents agreed that they value and often consider their parents' opinions (Mean = 3.03), with many acknowledging that they "love their parents so much that they cannot resist their opinions" (Mean = 3.94). However, they were also open to gathering information from school counselors and other educational sources. Interestingly, the influence of peers, friends, and admirers was largely disregarded, reinforcing the unique position of parents in shaping career outcomes. This supports the work of Sleed, Slade, &Fonagy (2020), which highlighted the role of secure parent-child relationships in building confidence and effective decision-making capabilities.

Findings revealed that parental involvement is present and largely supportive, rather than coercive. Students reported that their parents facilitated their career choices (Mean = 2.92) and

supported their decisions (Mean = 3.36). Some parents' career paths or success stories were seen as inspirational (Mean = 2.66), yet most students still preferred to pursue careers that align with their own abilities and interests (Mean = 3.63).A small proportion of students reported family-imposed expectations or pressure to continue family businesses, but these instances were not prevalent. Cultural and family values did influence choices (Mean = 3.80), showing that contextual factors still play a significant role in shaping student aspirations. These findings align with Olaosebikan and Olusakin (2014), who emphasised the significant but often indirect role of parents in career development.

Hypothesis

The null hypothesis was rejected, as the statistical analysis showed a significant and strong positive correlation between parental involvement and career choices ($r = 0.72$, $p = 0.003$). This indicates that as parental involvement increases, students are more likely to make confident and informed career decisions. The correlation suggests that emotional support, encouragement, and constructive communication from parents enhance students' clarity and confidence in career planning. This supports findings by Khatri&Periwal (2020) who found that parental influence is a decisive factor in students' career development, especially in collectivist societies.

Conclusion

Overall, the results highlight that although students want to have some control over their profession choices, parental participation continues to be a crucial and encouraging factor in undergraduate students' career choices at the University of Ibadan, Oyo campus. Career planning becomes more deliberate and self-assured when parental guidance and student self-awareness are balanced. According to the statistics, undergraduate students' career choices at the University of Ibadan, Oyo campus are significantly and favourably impacted by positive parent-child connections and non-imposition involvement.

Recommendations

The subsequent recommendations were derived from the findings:

1. In situations where students lack the courage or confidence to make personal career choices, parents guide their children by identifying their strengths, skills, and talents to recommend suitable career paths.
2. Parents who are not well-informed should consult with guidance counsellors to ensure they make educated choices about their children's career trajectories.

3. Students ought to receive proper guidance on the methods of selecting a career instead of relying on social media, peers, admirers, or the experiences of others. The abilities and strengths of others did not align with their own.

4. Parents of undergraduate students ought to invest considerable effort in comprehending their children's capacities and capabilities before imposing any career, business, or job upon them.

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ASSESSING TEACHER SELF-EFFICACY: A QUANTITATIVE ANALYSIS OF PRIMARY SCHOOL TEACHERS

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ABTRACT

Teacher self-efficacy is one of the critical factors determining teacher effectiveness and student outcomes. It refers to teachers' belief in their ability to plan, organise, and deliver instruction. This study aims to investigate the level of teacher self-efficacy and examine the relationship between gender and teacher self-efficacy among 233 primary school teachers in the Gombak district. The results of the study showed that teachers exhibit high self-efficacy, and significant differences were found between male and female teachers, while female teachers showed higher self-efficacy. The implication of the findings, therefore, is that teacher education programs should enhance teacher self-efficacy, particularly among male teachers. School leaders should organise up-to-date professional development courses to support teachers' development for overall school effectiveness.

Introduction

Education is the foundation determining the survival of every sector in a country. It shapes the future of individuals and communities. Thus, educational development should be the top priority of every nation. Different factors have been highlighted as driving factors of educational success. However, teacher self-efficacy stands out due to its effect on school

effectiveness, students' academic achievements, and instructional practices (Lazarides & Richardson, 2020).

Teacher self-efficacy refers to teachers' belief in their ability to successfully cope with tasks, obligations, and challenges related to their professional role (e.g., didactical tasks, managing discipline problems in the class, etc.) This belief is determined by several factors, including personality characteristics such as openness to experience and conscientiousness, openness to change values (i.e., self-direction, stimulation, and hedonism), and self-enhancement values (i.e., power and achievement)(Ulas & Senel,2020).

Research has also shown a relationship between teacher self-efficacy and demographic factors such as gender and academic qualifications (Papa, 2015). Poulou et al (2018) found that female teachers exhibit greater efficacy than their male counterparts. Additionally, teachers with higher academic qualifications tend to exhibit greater self-efficacy and leadership potential (Shahzad & Naureen, 2017).

Ulas and Senel's (2020) study showed that teachers with high levels of self-efficacy experience higher levels of job satisfaction, lower levels of burnout, and excel in dealing with students' misbehaviours. Therefore, understanding the main antecedents of self-efficacy is crucial for improving teachers' well-being and enhancing school effectiveness.

Teacher self-efficacy has also been found to be positively correlated with student achievement, teacher motivation, and job satisfaction (Papa, 2015). Similarly, teachers with high self-efficacy exhibit greater confidence and resilience in the teaching-learning process (Zee & Koomen, 2016; Ulas & Senel, 2020; Papa, 2015; Shahzad & Naureen, 2017; Lazarides & Richardson, 2020)

Teacher self-efficacy is, therefore, a critical factor that can hinder or improve educational outcomes in both primary and secondary level public education. Despite its importance, there is a paucity of research on teacher self-efficacy atthe primary school level. The reason may be due to the little concern for the primary level of education. However, it is the basis of all levels of education, and teachers' effectiveness therein determines students' later academic achievements.

This study examines the level of self-efficacy exhibited by teachers in selected primary schools, with a particular focus on the influence of gender on this construct. By investigating the complex interplay between teacher self-efficacy and gender, this research will showcase the factors that shape teacher self-efficacy in primary education.

This study will provide insights into the factors that promote or hinder teacher self-efficacy in primary education and provide recommendations on strategies to support teacher development and improve student outcomes at the primary level of education.

Research Objectives

1. To examine the level of teacher self-efficacy exhibited in the school as perceived by the teachers.
2. To investigate the relationship between teachers' perceptions of teacher leadership and gender.

Research Questions

1. What is the level of teacher self-efficacy exhibited in the school as perceived by the teachers?
2. Is there a significant relationship between teachers' perceptions of teacher self-efficacy and gender?

Statement of Problem

Recently, in January 2025, a disturbing incident sparked widespread outrage after a video emerged showing a teacher physically assaulting a three-year-old pupil for failing to write as instructed. The teacher continuously slapped the innocent three-year-old pupil for failing to write as instructed. The child was later hospitalised as a result of the physical assault. The child was dehumanised in totality through several slaps on the right ear, which may damage the child's eardrum and potentially lead to deafness. This unprofessional act was committed by the teacher, who was expected to care for the innocent children (Salami & Oyewo, 2025).

This incident highlights the alarming reality that some teachers in primary education suffer from self-efficacy issues, which can lead them to unleash burnout on their students whenever they have the opportunity. Many such ugly incidents have occurred across the globe, underscoring the need for a comprehensive investigation into the concept of teacher self-efficacy. Therefore, there is a need to examine the concept of teacher self-efficacy, which determines teachers' self-knowledge and professionalism. It is the factor that influences teachers' ability to handle the challenges of teaching healthily and prevent work-related stress and burnout.

Teacher self-efficacy significantly influences teacher performance and student outcomes, and despite its significance, it remains understudied and poorly explored atthe primary school level. This gap affects academic progress not only at the primary level but also at the higher levels. Therefore, investigating the factors that influence teacher self-efficacy, particularly in primary education, is crucial.

This study aims to explore this area, with a special focus on the influence of demographic factors such as gender on teacher self-efficacy. By examining the relationship between these

factors, this study seeks to provide valuable insights into the development of effective strategies for enhancing teacher self-efficacy and improving student outcomes.

Conceptual Review

Understanding Self-Efficacy

The concept of self-efficacy emanates from Bandura's social-cognitive theory of behavioural change (Bandura, 1977). It is defined as teachers' beliefs in their ability to successfully cope with tasks, duties and obligations in the school. According to Bandura's theory, there are four sources of self-efficacy: enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

Enactive Mastery Experiences

Enactive mastery experiences refer to experiences that a person has regarding success or failure. Successful performances or experiences will enhance efficacy beliefs, while repeated failures will lead to loss of confidence in one's ability.

Vicarious Experiences

Individuals develop vicarious experiences when they observe someone succeeding through sustained effort. This observation can boost their confidence and motivation to engage in similar endeavours.

Verbal Persuasion

Self-efficacy improves with encouragement and positive feedback. Verbal persuasion enhances an individual's self-efficacy, boosting their belief in their abilities and helping them overcome self-doubt.

Physiological and Affective States

Self-efficacy is shaped by physiological and affective states of an individual. This includes stress levels and emotional well-being. Improving both physical and emotional states can enhance self-efficacy (Bandura, 1997).

Factors Influencing Teacher Self-Efficacy

Teacher self-efficacy is influenced by various factors, including personality traits and personal values. Research has shown that teachers who are open to new experiences and

conscientious tend to have stronger self-efficacy beliefs (Djigie et al., 2014). Additionally, personal values, such as those identified by Shahzad and Naureen (2017), play a significant role in shaping teacher self-efficacy. Poulou et al (2018) found that personal values are significant predictors of workers' self-efficacy.

Impact of teacher self-efficacy on teachers' performance

Teacher self-efficacy is a vital component of effective teaching and school development. It has a direct impact on teaching effectiveness, instructional practices, and student academic achievement (Lei et al, 2018). Teachers with high levels of self-efficacy experience greater job satisfaction, reduced job-related stress, and fewer problems in dealing with student misbehaviours (Zee & Koomen, 2016). Consequently, teacher self-efficacy significantly influences teachers' well-being and overall school effectiveness.

The Impact of Teacher Self-Efficacy on Student Performance

Research indicates that teachers' self-efficacy beliefs significantly impact student learning outcomes, motivation, and academic achievement (Ulas & Senel, 2020). According to Papa (2015), teachers with high self-efficacy are more effective in promoting student learning, engaging students, and fostering a positive classroom environment.

Teacher Self-Efficacy and Student Motivation

Teacher self-efficacy is linked to student motivation and satisfaction (Lazarides & Richardson, 2020). Teachers with high self-efficacy are more likely to create a supportive learning environment, provide individualised attention, and promote student autonomy.

Research Methodology

This study adopted a quantitative research methodology and design, which involves a systematic plan for collecting, analysing, and interpreting numerical data (Creswell, 2012). This approach was chosen to gather statistical evidence and numerical facts necessary to address the research questions, allowing for objective measurement, statistical analysis, and generalizability of findings.

Population and Sampling Techniques

The population for this study comprised 700 teachers from primary schools in Gombak. Due to the large size of the population, a sample of 233 teachers was randomly selected to participate in the study. This sample included both male and female teachers, representing a subset of the larger population (Creswell, 2007).

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Instrument of the Study

A questionnaire was used as the research instrument to collect data, specifically the Teacher Belief Scale-short form (TBS) developed by Tschannen-Moran and Woolfolk Hoy (1998). The questionnaire consisted of two sections: Section A gathered demographic data, while Section B measured teacher efficacy through 12 items assessing three factors: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. The items used a five-pointLikert scale ranging from 1 (Nothing) to 5 (A Great Deal).

Reliability of the Instrument

The reliability of the research instrument was evaluated using Cronbach's Alpha coefficient, which measures the consistency of multiple measurements (Hair et al., 2013). The results showed a Cronbach's Alpha range of .65 to .95, indicating sufficient reliability (Chua, 2013). This suggests that the instrument yielded consistent results over repeated measurements, supporting its reliability.

Data Analysis

The collected data were analysed using Statistical Package for Social Science (SPSS) software, employing descriptive statistics (mean and standard deviation) to describe the level of teacher efficacy in three factors, and an independent t-test to examine significant differences in teacher self-efficacy between male and female teachers.

Results

Research question 1: What is the level of teacher self-efficacy exhibited among teachers of the selected schools?

Table 1

No	Dimension	Mean	Standard Deviation	Decision
1	Student Engagement	4.13	.722	High
2	Efficacy in Instructional Practices	4.21	.660	High
3	Efficacy in Classroom Management	4.21	.692	High
	Average, Mean and St.D	**4.18**	**.691**	**High**

Source: Research survey

Table 1 shows the overall analysis based on the means and standard deviations of the three factors of teacher self-efficacy. The mean score for Student Engagement is 4.13, and the Standard Deviation is .722. For the Efficacy in Instructional Practices, the mean is M = 4.21 (SD =.660), while in Efficacy in Classroom Management, the factor has a mean M = 4.21 (SD =.692). Based on this descriptive analysis, both Efficacy in Instructional Practices and Efficacy in Classroom Management have the same mean, though with different SD, M = 4.21 (SD =.660), M = 4.21 (SD =.692), respectively. The lowest score was attained by Student Engagement with M = 4.13 (SD = .722).

The extent of teacher self-efficacy exhibited by teachers in the primary schools was analysed through the interpretation of the mean of each factor, as well as the overall mean of the mean score in each factor. The level of teacher self-efficacy was categorised into three categories, namely high, moderate and low. For ease of interpretation, the following scales were used to indicate the levels. 1.00 - 2.33 = Low level of teacher leadership, 2.34 - 3.66 = Moderate level of teacher leadership, 3.67 - 5.00 = High level of teacher leadership. So the decision is that all three factors of teacher self-efficacy exhibited by the teachers are high.

Table of individual items of teacher self-efficacy

Student Engagement

One of the dimensions of self-efficacy is student engagement. Table 2 below shows how the respondents answered the items under this factor. 51.5% (n = 120) of the respondents answered "quite a bit" can motivate students who show low interest in school work, while 27.9% (n = 65)

of the respondents answered " a great deal" in motivating students who show low interest in school work. 18.9% (n = 44) of respondents can motivate students who show a low interest in school work to "some degree", and 1.3% (n = 3) of respondents "very little", and only 0.4% (n = 1) of respondents cannot motivate students who show low interest in school work.

Furthermore, 48.5% (n = 113) of the respondents answer "quite a bit" and 41.2% (n = 96) of respondents answer "a great deal" in giving help to students value learning, where as 9.4% (n = 22) of the respondents answered "some degree" and only 0.9% (n = 2) of respondents has "very little" ability to help their student value learning. Overall, all teachers can help students value their learning. Meanwhile, 50.6% (n = 118) of respondents marked "quite a bit", and 18.9% (n = 44) of respondents marked "a great deal" in assisting families in helping their children do well in school. There were 26.2% (n = 61) of respondents who answered "some degree," and only 4.3% (n = 10) of respondents answered "very little" in assisting families in helping their children do well in school.

Regarding the results of the work, most respondents have positive results regarding the students' engagement. Overall result shows that all respondents have high student engagement in enhancing students' learning.

In conclusion, after conducting descriptive analysis based on the mean and standard deviation, it was found that the overall mean in student engagement factor, as shown in Table 2, is high (Mean = 4.13, SD = .722).

Table 2: Student Engagement Factor of Self-Efficacy

No	Item	Mean	St. D	Frequency				
				N n (%)	L n (%)	S n (%)	Q n (%)	G n (%)
2	How much can you do to motivate students who show low interest in schoolwork?	4.05	.747	1 0.4	3 1.3	44 18.9	120 51.5	65 27.9
4	How much can you do to help your student value learning?	4.30	.673	0 0.0	2 0.9	22 9.4	113 48.5	96 41.2
7	How much can you do to get students to believe they can do well in schoolwork?	4.31	.694	1 0.4	1 0.4	25 10.7	110 47.2	96 41.2
11	How much can you assist families in helping their children do well in	3.84	.774	0 0.0	10 4.3	61 26.2	118 50.6	44 18.9

school?

Average, Mean and St.D	**4.13**	**.722**

N = None at all, **L** = Very Little, **S** = Some Degree, **Q** = Quite a Bit, **G** = A Great Deal, **St. D** =

Standard Deviation

Instructional practices factor

Table 3 indicates the instructional practices factor of self-efficacy by teachers in Gombak Primary School. The table shows that 35.6% (n =83) of respondents have "a great deal" and 51.9% (n = 121) of respondents have a "quite a bit" in crafting a good question for students (item 5). There was 11.6% (n = 27) of the respondents had "some degree" and 0.9% (n = 2) of respondents had a "very little" ability in crafting good questions for their students. This shows that most of the teachers in this school can create good questions to enhance students' learning.

Moreover, 60.1% (n = 140) of respondents answered "quite a deal" and 24% (n = 56) of respondents said "a great deal" when they were asked about the extent of using a variety of assessment strategies. There were 15.9% (n = 37) of respondents who answered "some degree" when they were asked about the extent of using a variety of assessment strategies. All teachers can use a variety of assessment strategies since there is no "very little" answered by teachers for item 9.

For item 10, "To what extent can you provide an alternative explanation or example when students are confused?", 50.6% (n = 118) of respondents have a "quite a bit" and 40.8% (n = 95) marked "a great deal" in providing an alternative explanation or example when students are confused. 7.3% (n = 17) and 1.3% (n = 3) of respondents marked "some degree" and "very little" in providing an alternative explanation or example when students are confused. All teachers have qualities in providing alternative explanations or examples when students are confused.

There was 56.7% (n = 132) of respondents answered "quite a bit" about the implementation of alternative teaching strategies in their classroom, while 31.8% (n =74) of respondents marked "a great deal" on the implementation of alternative teaching strategies in their classroom. There were 9.4% (n = 22) of the respondents who marked "some degree" and 1.7%(n = 4) marked "very little" when they were asked about "how well can you implement alternative teaching strategies in your classroom?".

In summary, after conducting descriptive analysis based on the mean and standard deviation, it was found that the overall mean efficacy in instructional practices factor, as shown in Table 2, is high (Mean = 4.21, SD = .66).

Table 3: Efficacy in Instructional Practices Factor of Self-Efficacy

No	Item	Mean	St. D	Frequency				
				N	L	S	Q	G
5	To what extent can you craft good questions for your students?	4.22	.677	0 0.0	2 0.9	27 11.6	121 51.9	83 35.6
9	To what extent can you use a variety of assessment strategies?	4.08	.628	0 0.0	0 0.0	37 15.9	140 60.1	56 24.0
10	To what extent can you provide an alternative explanation or example when students are confused?	4.31	.662	0 0.0	3 1.3	17 7.3	118 50.6	95 40.8
12	How well can you implement alternative teaching strategies in your classroom?	4.21	.714	1 0.4	4 1.7	22 9.4	132 56.7	74 31.8
	Average, Mean and St.D	**4.21**	**.660**					

N = None at all, **L** = Very Little, **S** = Some Degree, **Q** = Quite a Bit, **G** = A Great Deal, **St. D** = Standard Deviation

Classroom Management

Table 4 shows that more than half of the respondents indicated that they can do quite a bit to control disruptive behaviour in the classroom?". About 51.5% (n = 120) of the teachers marked "quite good", 32.6% (n = 76) of the teachers has great ability in controlling disruptive behaviour in the classroom, while 14.6% (n = 34) of them replied they have "some degree" and only 1.3% (n = 3) of them has a "very little" ability in controlling disruptive behaviour.

Accordingly, it can be deduced that, based on teachers' perception, most of the teachers in the sampled Islamic Primary Schools are mostly good at classroom management. Furthermore, 48.5% (n = 113) of the respondents marked "quite a bit" on item 3 ", How much can you do to calm a student who is disruptive or noisy?", 41.2% (n = 96) of 233 teachers replied to this item by marking "a great deal", and 9.4% (n = 22) of teachers marked "some degree" option. Based on these two items (items 1 and 3), it can be interpreted that teachers in this school have high capability in handling classroom management and assisting students' behaviour in the class.

For item 6, 48.1% (n = 112) and 40.3% (n = 94) of teachers marked a "quite a bit" and "a great deal" to answer question, "How much can you do to get children to follow classroom

rules?", while 10.3% (n = 24) and only 1.3% (n = 3) of teachers marked "some degree" and "very little" in assisting the children to follow the classroom rules. There are also more than half of the respondents who can establish a classroom management system with each group of students. 55.8% (n = 130) of the teachers and 30% (n = 70) marked "quite a bit" and "a great deal" to item 8, when they were asked about "How well can you establish a classroom management system with each group of students?". By indication, all teachers can manage their classroom well during a learning session.

In summary, data analysis shows that the overall mean of 4.21 (SD = .692) indicates a high level of self-efficacy among teachers teaching at Islamic primary school in Gombak.

Table 4: Efficacy in Classroom Management Factor of Self-Efficacy

No	Item	Mean	St. D	Frequency				
				N	L	S	Q	G
1	How much can you do to control disruptive behaviour in the classroom?	4.15	.708	0 0.0	3 1.3	34 14.6	120 51.5	76 32.6
3	How much can you do to calm a student who is disruptive or noisy?	4.26	.709	0 0.0	2 0.9	22 9.4	113 48.5	96 41.2
6	How much can you do to get children to follow classroom rules?	4.27	.696	0 0.0	3 1.3	24 10.3	112 48.1	94 40.3
8	How well can you establish a classroom management system with each group of students?	4.15	.658	0 0.0	1 0.4	32 13.7	130 55.8	70 30.0
	Average, Mean and St.D	**4.21**	**.692**					

Research Question 2

Is there any significant gender difference in the teacher leadership practices among teachers?

Table 5:

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean	DF	Sig	F

Self-efficacy	Male	39	49.6410	6.23862	.99898	231	0.630	0.233
	Female	194	50.2680	5.87348	42169			

Females have a higher mean score on the teacher leadership (Mean = 50.2680, SD = 5.87348) compared to males (Mean = 49.6410, SD = 6.23862). Based on the result of the independent sample t-test conducted, the difference between males and females regarding teachers ' efficacy exhibited is significant, t(233)= 0.630, p < 0.05.

Discussion of findings

1. Teachers' self-efficacy and student engagement

Discussion on Student Engagement as a Factor of Teachers' Self-Efficacy

The finding that student engagement is high as a factor of teachers' self-efficacy is consistent with existing literature. Teachers' self-efficacy is a critical factor in promoting student engagement, motivation, and academic achievement (Shahzad & Naureen, 2017).

Teachers' Self-Efficacy is significantly related to Student Engagement. Ulas (2020) asserted that teachers with high self-efficacy tend to be more confident in their ability to engage students and promote learning. Lei (2018) opined that teachers with high self-efficacy are more likely to use innovative and effective instructional strategies that promote student engagement. Bandura (1997) found that teachers with high self-efficacy tend to create a supportive and inclusive classroom environment that fosters student engagement and motivation (Bandura, 1997).

High Student Engagement often leads to improved academic achievement (Zee, 2016), increased motivation, and positive teacher-student relationships (Poulou et al, 2018). The implication, therefore, is that schools should prioritise strategies that enhance teachers' self-efficacy, such as professional development opportunities, feedback, and support, so that teachers too can use different strategies to improve student engagement.

2. Instructional Practice as a Factor of Teachers' Self-Efficacy

Instructional practice refers to teachers' confidence in their ability to plan, deliver, and assess instruction effectively. The findings of this study indicate that instructional practice is high. The items of the factor showed that teachers use more effective teaching strategies, such as providing alternative explanations or examples when students are confused, implementing alternative teaching strategies and usage of different strategies to assess students' achievements.

This is in line with the study of Shahzad & Naureen (2017) stated that teachers with high self-efficacy use innovative and effective teaching strategies, create a supportive learning environment and maintain an inclusive learning environment. The resultant effect of this on students' learning is that it improves student motivation and promotes a love of learning (Lazarides & Richardson, 2020).

Different studies also showed that teachers' self-efficacy in instructional practices is linked to teachers' job satisfaction (Klassen & Chiu, 2010). They tend to be more resilient in the face of challenges and setbacks (Poulou et al, 2018). They therefore teach students thoroughly. The finding highlights the importance of teachers' self-efficacy in instructional practices to both teachers and students.

3. Classroom Management

Classroom management refers to the strategies and techniques teachers use to create and maintain a well-organised, respectful, and productive learning environment. Teacher self-efficacy in classroom management showed teachers' confidence in their ability to establish clear rules and expectations. Teachers set clear rules and expectations for student behaviour and academic engagement, manage student behaviour, use effective strategies to manage student behaviour, minimise disruptions, promote positive behaviour, and create a positive learning environment. This dimension of teacher self-efficacy was found to be high.

Hepburn et al (2020) asserted that if teachers ' efficacy is high, especially in terms of classroom management, they will create a supportive, inclusive, and engaging learning environment that promotes student motivation and achievement. They will be willing to do tasks that are not part of their formal role, especially in class. It will be manifested in their actions like getting to school early, helping students beyond the school hour, feeling concern about school progress and development, engaging in extracurricular activities or encouraging all students to perform their tasks expectedly.

Discussion on Teacher Leadership Practices by Gender

The study's findings indicate that female teachers have a higher mean score on teacher self-efficacy exhibited compared to male teachers. The difference between males and females is statistically significant, suggesting that gender plays a role in the teacher self-efficacy exhibited.
The finding is in line with different research studies. Klassen and Chiu (2010) opined that female teachers tend to exhibit stronger leadership skills in the classroom, especially when teaching little kids. Bandura (1997) asserted that female teachers tend to exhibit strong self-efficacy beliefs

because female teachers often have stronger social support networks, which can enhance their self-efficacy. Mojavezi and Tamiz (2012) believed that female teachers may possess higher emotional intelligence, enabling them to better manage their emotions and develop stronger self-efficacy. Li (2023) stressed that female teachers tend to adopt more student-centred and collaborative teaching approaches, which can foster a sense of self-efficacy.

Conclusion

The study's findings indicate that teacher self-efficacy is high across three key factors: instructional practices, student engagement, and classroom management. This suggests that teachers feel confident in their ability to deliver effective instruction. They are confident in their ability to plan, deliver, and assess instruction effectively. They also engage students to promote a love of learning. A conducive and inclusive classroom environment is maintained by the teachers for effective teaching and learning. However, classroom management scored below other factors, which means more efforts should be made in this regard.

Recommendations

1. The school should provide ongoing professional development opportunities to support teachers' continued growth and development.
2. The school should foster a collaborative school culture where teachers share best practices and learn from each other.
3. Teachers should use different strategies to engage students, such as the adoption of personalised learning, the usage of technology tools, tailoring instruction to meet individual students' needs, and incorporating activities that promote active learning and participation.
4. A special training program needs to be provided for male teachers teaching little kids to improve their efficiency.
5. Schools can support teacher professional development by providing access to contemporary resources, enabling internet access, and inviting experts to retrain teachers.
6. Additionally, schools should foster a collaborative community where teachers can reflect, share knowledge, and challenge each other's practices. This collaborative environment will enhance teachers' professional growth, boost their confidence, and promote continuous improvement in teaching practices.

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TSHWANE GRADE 9 LEARNERS' PERCEPTION OF ATTITUDE AND THEIR MATHEMATICS PERFORMANCE IN SOUTH AFRICA

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ABTRACT

Learners' attitude has been a major concern as far as academic performance is concerned, especially in mathematics. It is a common understanding that a winning attitude wins the race, and such a positive attitude will enhance learning at all times, regardless of the subject in question. This has made it necessary to fact-check the effect of the learners' attitude on Tshwane learners' performance in mathematics. The study probed into the Tshwane grade 9 learners' perceptions of their attitude as influencing their mathematics performance in South African public high schools. A mixed-method approach (quantitative and qualitative) was applied in the study, with a descriptive survey design. A sample of four hundred learners was used (Two hundred and eighty females and one hundred and twenty males), using a self-made questionnaire for data collection, incorporating a few open-ended questions. The level of achievement of learners was also ascertained through their termly progress report in mathematics. The quantitative data analysis was done using the 24.0 version of the Statistical Package for the Social Sciences (SPSS), also the qualitative data analysis was achieved in a narrative form. The study tested the null hypothesis was rejected. The study result found that Tshwane grade 9 learners' perceptions of attitude as a predictor of their mathematics performance was a significant factor, hence, the study recommended that parents and teachers should inculcate and model positive attitude unto learners for better understanding and performance in mathematics; learners should love mathematics like every other subject, and shun truancy, absenteeism and boycott of mathematics lessons

Introduction

Every nation across the globe is mainly concerned about growing its economic activities, and these economic activities can be advanced through technology, thus making it a global issue. As a result, applying mathematical skills globally becomes crucial, hence, establishing mathematical sciences as a key to unlocking technological development in every nation (Kaiser, 2020; Odeyemi-Bsd, 2021; Odeyemi-Bsd, 2023). Across the global spectrum, many countries are facing challenges in acquiring the basic mathematical skills required for learners. Studies have portrayed how American learners have repeatedly failed mathematics in global assessments among 56 countries, and American learners did not attain the international benchmark (Mullis & Martins, 2019; OECD, 2020). The European learners also had the same woeful outcome (Lithner, 2011).

West African studies on learners' mathematics performance have also shown a highly unpleasant performance; some of these countries include Nigeria (Odeyemi-Bsd, 2024; Ohanyelu, 2021), Ghana (Abreh et al., 2018; Mensah et al., 2013), Gambia (Tomita & Savrimootoo, 2016), and Liberia (Gbollie & Keamu, 2017).

Many countries have discovered how useful and important mathematics is, and they recognise that their national well-being requires the mathematical acumen of their youth in nation-building (Wright & Ellis, 2019). This has pushed South Africa into action by considering mathematics as a compulsory subject at all levels and for the pursuance of a higher education required for highly skilled positions, for enhancing national development (Naidoo & Ranchod, 2018). The scarcity of mathematical experts in industries has risen immeasurably, and several of those without the knowledge of existing mathematical relationships and mathematical reasoning required for tentative conclusions are in workplaces (Sawatzki & Sullivan, 2018; Budinski & Milinkovic, 2017). Poor mathematics performance has remained a global plague which has been so worrisome to learners for years. This has attracted concerns from many (Arends, Winnaar &Mosimege, 2017; Pisa, 2018; Odeyemi-Bsd, 2020, Odeyemi-Bsd, 2023).

South African learners' poor performance in mathematics has aroused attention from numerous educational sectors, due to the invaluable contribution of mathematics to education, and the drive for attaining the technological feat in South Africa, which is non-negotiable (Department of Education, 2008; Jojo, 2019; Odeyemi-Bsd, 2020, 2023). This makes it necessary for learners to study mathematics literacy or mathematics compulsorily. The Human Sciences Research Council (HSRC) report revealed that Tshwane municipality learners have consistently performed below expectations, starting from Grade 1 to Grade 12. The breakdown of the results were, 68.4%, 61.8%, and 55.4% respectively for the lower grades of 1 to 3, while grade 4 had 37.3%, grade 5, 37.3%, grade 6, 43%, grade 9, 10.8%, grade 12, 14% in 2014 (Department of Education, 2014). In the 2017 Trends in International Maths and Science Study (TIMSS), 39 countries were examined, and South African grade 9 learners ranked 38th position among the 39 nations, which equals to 87% level of failure (Reddy et al.,

2016). Similarly, in the 2018 Programme for International Students Assessment (PISA), South African learners came out as the poorest from the 80 countries involved in the exam (PISA, 2018). In addition, the evaluation of the World Economic Forum (WEF) in 2018 presented that South African learners also failed to achieve a globally acceptable level of mathematics proficiency in comparison to other countries. Grade 9 learners in particular obtained the poorest grade globally in the TIMSS 2019 grade 9 results (Reddy et al., 2022). From this backdrop, the Government and the Department of Basic Education (DBE) made it a priority on their educational agenda to attain quality educational outcomes at all levels. It became imperative for an urgent and enduring solution to be proffered to the general poor mathematics performance of the South African learners (Hajovsky et al., 2020; Odeyemi-Bsd, 2023).

Statement of the problem

The background to the study has clearly shown the value of mathematics in human society; learners have consistently been finding it challenging to understand and pass the subject despite its importance (Odeyemi-Bsd, 2020; Naidoo & Ranchod, 2018). A large number of learners in South Africa are far behind in reaching an acceptable proficiency level in mathematics (Odeyemi-Bsd, 2020; Reddy et al., 2016; DOE, 2014; Tachie & Chireshe, 2013; Mullis et al., 2012). The background to the study gave a highlight of a few studies made on mathematics performance in various South African provinces, but none were done in Tshwane, nor were any done concerning the grade nine learners of Tshwane as well. It is against this information from background information that this present study sought to probe into Tshwane grade 9 learners' perceptions of their attitude as influencing their mathematics performance.

Objectives

i. To establish the Tshwane grade 9 learners' perceptions of their attitude as a predictor of their mathematics performance.

ii. To determine possible strategies for improving Tshwane grade 9 learners' mathematics performance as perceived by learners..

Research question

What is the perception of Tshwane grade 9 learners of their attitude and their mathematics performance?

Hypothesis of the study

The study hypothesis was quantitatively tested at $P<0.05$.

Ho1: There is no significant relationship between Tshwane grade 9 learners' perceptions of attitude as influencing their mathematics performance.

Theoretical Framework

The study was premised on the Social Cognitive Theory as propounded by Bandura (1986). The SCT has a strong link in the network of interactions within the learning environment. This network of interactions comprises the application of self-observation and self-evaluation, role modelling and self-efficacy in the learning process. This posits that the academic performance of learners are directly linked to these interrelated components existing within the environment of learning. Learners' environment has consistently been a major platform required for effective learning and remarkable academic performance. However, the role of self-observation and self-evaluation, role models, and self-efficacy predict learners' attitude in every learning process, and places the learner rightfully (Odeyemi-Bsd, 2023; Redmond, 2010). Consequently, explaining the SCT under the three cardinal interrelated components of the theory underscores that effective learning is a function of learners' ability to cultivate the right attitude towards learning, regardless of the level of cognition. Based on the learner's self-observation and evaluation of himself, he can build a positive attitude to learn; where there are good role models modelling the right attitude needed for learning, and where the learner's self-efficacy projects a willing and winning spirit, learning becomes very easy, and better performances are achieved. This theory was found relevant in order to give a better explanation of the Tshwane grade 9 learners' perceptions of attitude as a predictor of their mathematics performance, also to propose a usable model for improving learners' mathematics performance.

Review of related literature

Mathematics performance in most cases has been attached to cognition; however, it has been established that cognition without learners' interest will not guarantee positive performance (Odeyemi-Bsd, 2020). Many have a misconstrued idea about attitude as being affective only, but attitude consists of cognitive, affective and behavioural identities (Ifamuyiwa et al., 2024; Odeyemi-Bsd, 2020; Prathmesh, 2024). Odeyemi-Bsd (2020) explains attitude as a positive or negative emotional construct or disposition about a situation or phenomenon. Hence, this is linked to how learners perceive their interest and performance in mathematics as a subject. To this end, learners' attitude about mathematics performance has been regarded as significant to school performance and experience (Middleton, Jansen & Goldin, 2017). Various studies posited a high level of relevance of learners' attitudes towards their mathematics performance. Studies across the globe ascertained this position stated above, pointing out that learners' attitude is a determinant key factor to improved academic performance. These studies were done in America (George & Adu, 2018; Jacoby-Senghor, Sinclair & Shelton, 2016; Bowen & McPherson, 2016); Canada (Bandura, 2007); Asia (Radhika, 2019; Mohd, Mahmood & Ismail, 2011); Europe (Bramlett &

Herron, 2009; Manoah et al., 2011; Kogce et al., 2009); Nigeria (Serin & Mohammadzadeh, 2008; Bassey et al., 2008; Oluwatelure & Oloruntegbe, 2010); Ghana (Abreh et al., 2018, Mensah et al., 2013) and South Africa (Buhagiar, 2013; Odeyemi-Bsd, 2020).

Schonfeld (2008) revealed that 10th to 12th-grade American learners perceived mathematics as difficult in comparison to other subjects. A longitudinal study of George (2006) on American learners also revealed that learners' attitude towards science was positive at the elementary stage, but declined over the middle school and high school years. The study posited that the major time-varying predictors of both attitudes were traced to poor self-concept in science, negative peer attitudes and learners' deliberate poor participation in science and mathematics-associated tasks. Likewise, Lukowski et al. (2016) posited that learners in American schools have shown that their poor mathematics performance was not unconnected from their attitude, especially their mathematics anxiety.Learners' negative attitude has been perceived as a major clog to learners' mathematics performance in secondary schools (Gunderson, Sorhagen, Gripshover, Dweck, Goldin-Meadow & Levine, 2017; Park, Gunderson, Tsukayama, Levine &Beilock, 2016). Jankowski (2017) also emphasised on the need for learners to develop a positive attitude for problem solving as a means to mathematical success. Learners without motivation most times come up with a negative attitude, while those who are well-motivated show a more positive attitude towards academic excellence (Uzezi & Deva, 2017). The present study sought to establish the influence of attitude on Tshwane grade 9 learners' Mathematics performance in South Africa.

Studies on mathematics performance from Europe have persistently concentrated on learners' attitudes when it comes to mathematics, and the studies found that attitude was a predictor of learners' performance in mathematics (Wen & Dube, 2022). A comparative study of Hassan (2008) among Australian tertiary students and secondary learners on the influence of attitude on performance in mathematics additionally disclosed that the attitude of learners about mathematics performance changes positively in the course of transition to a tertiary institution, while a few secondary learners exhibit a negative attitude toward mathematics performance. While the motivated learners also display a positive attitude towards class work and aspire for better grades through attentiveness in the classroom and gaining additional information on the subject matter, and possibly overcoming difficulties (Stafford-Brizard, 2016). In the light of the above discussion, the present study sought to establish whether the situation in Europe applies to Tshwane grade 9 learners in their performances in mathematics.

The Asian researchers have also revealed from their findings that attitude is a major barrier to the performance of learners in Mathematics (Radhika, 2019; Tahar et al, 2010). Radhika (2019) further explained that Asian learners who displayed a reasonable level of resilience worked harder to get desirable mathematics results at the end. This is an indication that learners who are always in a hurry may not do well in mathematics, this is because patience is required. Furthermore, students' interest in mathematics, anxiety about mathematics, mathematics self-efficacy, extrinsic motivation and self-concept were the five notable factors responsible for

Asian learners' mathematics attitude (Tahar, Ismail, Zamani & Adnan, 2010). From the above discussion, the present study sought to establish if the situation in Asia is relevant to that of Tshwane grade 9 learners in South Africa.

In West Africa, attitude has also been perceived as a critical factor undermining the mathematics performance of learners from studies in Nigeria (Serin & Mohammadzadeh, 2008; Bassey et al., 2008; Oluwatelure&Oloruntegbe, 2010). Similarly, learners' attitude towards mathematics has also been perceived as hindering learners' performance in Ghana (Abreh, Owusu, &Amedahe, 2018; Mensah, Okyere, &Kuranchie, 2013). The studies above reiterate the position of the SCT that informed the present study that people's perceptions and attitudes are most times associated with their learning experiences through the environment. The personal feelings of individuals about certain things have a major role in determining their actions (Williams & Finnegan, 2003).

In the South African background, learners' attitude towards mathematics performance has been considered detrimental to their mathematics success (Buhagiar, 2013; George & Adu, 2018; Middleton et al., 2016). Many South African learners have been performing badly in mathematics due to their negative attitudes towards the subject (Reddy et al., 2016; Department of Education, 2010).

Learners' attitudes have also been seen as insignificant in affecting academic performance. Instances of such literature are in America (Hwang, Choi, Lee, Culver & Hutchison, 2016; Honicke& Broadbent, 2016), Europe (Ozsoy et al., 2009; Alsop & Watts, 2003), and Asia (Najmi et al., 2018). These studies established that the link between attitude and learners' performance in mathematics was weak and cannot be perceived to be of serious significance. Attitude was also considered as a feeling and a construct of the affective domain that does not necessarily undermine the cognitive domain, regarded as important for academic tasks (Ozsoy et al., 2009; Alsop & Watts, 2003).

Methodology

This present study was carried out within the post-positivist paradigm, which emphasises the concept of unbiased reality. 400 participants (Tshwane grade 9 learners) were selected randomly from the overall population of 143,175, with 10 clusters identified, and the participants, totalling four hundred learners, were selected systematically using gender and classes. The study was descriptively surveyed, with a mixed method approach because of the few open-ended questions integrated in the questionnaire titled: Questionnaire on Student Academic Performance (QSAP). The questionnaire was assimilated from Auzmendi's scale of attitude for mathematics performance, which was used for sourcing data from participants, and the questionnaire was sectioned into two parts, namely, A and B, where part A addressed participants' demographic data, and section B addressed the data on the perceptions of learners on the predictors of their mathematics performance. Learners'

termly mathematics result was used as an achievement test to ascertain the level of performance, and the questionnaire.

A 4-point Likert scale was used to capture responses from the participants, with the choices of: strongly agree, agree, disagree and strongly disagree. These were scored 4, 3, 2 respectively, in tandem with every item of rating positive items, while negative items were rated reversely. To ascertain the validity of the questionnaire, measurement and evaluation, and psychology of education experts were employed; and a pilot test at different schools outside the study sample was done to achieve the reliability of the questionnaire as well. Using the test-retest technique, within the intervals of 28 days, the reliability was empirically achieved at a coefficient value of 0.65. Pearson Product-Moment Correlation was employed to establish the correlation of the variable on learners' performance in mathematics. The questionnaire was administered to participants by the researcher. In the analysis of the quantitative data collected, the Statistical Package for the Social Sciences was applied. In the qualitative data, its trustworthiness, credibility, dependability and transferability were also ascertained. The open-ended questions segment on strategies perceived by learners for the improvement of their performances was also narratively analysed. Using a mixed method approach in this study gave room for impartial and objective descriptions and explanations of information about the learners' perceptions and definitions within a natural context.

Results

Hypothesis Analysis

A null hypothesis was developed for this study, and it was statistically tested to enable accepting or rejecting the hypothesis. The hypothesis was tested at a significance level of 0.05, with the use of Pearson Product-Moment Correlation.

Hypothesis 1: There is no significant relationship between Tshwane grade 9 learners' attitude and their mathematics performance

Data Analysis

Table 1: Relationship between Tshwane grade 9 learners' attitude and academic performance in mathematics (N=400)

Variable	mean	sd	n	df	r-cal	r-crit	Sig. Level
Attitude (motivation, confidence, fear, anxiety)	15.71	3.93	400	398	0.81	0.20	0.05
Performance	54.96	13.51					

Significant

Tab 1 gave us evidence showing a calculated r-value of 0.81 as the relationship between grade 9 learners' attitude and their performance in mathematics. Due to the greater value of the calculated r-value against the critical r-value of .20 given 398 degrees of freedom at .05 level of significance, this made the calculated r-value significant. This has strongly indicated a significant relationship between Tshwane grade 9 learners' attitude and mathematics performance.

The study made it known that learners perceived an existing relationship between their attitude and their mathematics performance. Additionally, Tshwane grade 9 learners had a positive rating of their satisfaction with the relationship between their attitude and their performance in mathematics.The study findings also established that learners portray a negative attitude towards learning mathematics as a subject. Learners' negative attitude has been considered a major setback confronting learners in learning mathematics. Where learners lack self-confidence, they would not perform well in any mathematical task, irrespective of teachers' teaching efforts. Therefore, the inability to perform well is centred on a negatively conceived opinion about the subject and themselves not being capable of doing well in the subject. The findings of the present study on learners' attitude and performance are in tandem with the views of George (2006), who posited that the overall trend for learners' attitude about the benefits of science was positive; however, as time goes on in their middle classes, their interest declines.

It was further revealed that learners believed that the most critical time-varying predictors of positive and negative attitudes were poor science self-concept, peer attitudes, and learners' poor participation in mathematics and science-related activities. Learners have at this time cultivated a negative attitude about mathematics, thereby having a fixed personal opinion, coupled with a lack of interest. This is also in line with the SCT, which mentioned that personal thoughts and beliefs of individuals have a strong influence on learning and understanding contextual events. With poor self-concept, learners may also be performing poorly in mathematics.

It was also discovered from the study that most learners perceived that mathematics is difficult, and cannot be easily comprehended like other subjects; hence, they felt that learning mathematics may not be necessary for them in the future, based on their opinion that mathematics is a very difficult subject that cannot be easily learnt or understood. Therefore, learners felt that they may not need the subject shortly. This finding is in tandem with Hassan (2008), who maintained that learners' desire to learn mathematics can be influenced by the joy and value derived from the subject. Lukowski et al. (2016) also shared the same view above about the European learners, while some Asian studies, such as (Radhika, 2019), Yilmaz et al., 2010), Tahar et al., 2010) were of the same views with the position of Lukowski et al. (2016) about the European learners' perceptions.

Further findings revealed that Tshwane grade 9 learners' perceptions of mathematics teaching methodology were ambiguous, rigorous, confusing, complex, and too boring; hence, learners lost desire for learning mathematics. This finding was consistent with some studies in Ghana (Abreh et al., 2018; Mensah et al., 2013), which reveal that mathematics involves the use of several rules, thereby preventing learners from exploring the beauty of mathematics and the several means required for developing competence, thereby contributing to learners' negative attitude towards mathematics. This finding is in line with Bandura's SCT, which informed the study, which states that individual perceptions and attitudes are often attached to learning experiences through individual feelings and attitudes within an environment. Ab initio, learners who do not have a positive attitude towards their studies have been found not to perform well in mathematics due to their negative attitude and perceptions of mathematics as a subject. In addition, the findings of the present study on learners' attitude concurs with Buhagiar (2013), who confirmed that most South African learners have tagged mathematics as difficult, unexciting, abstract and vague. Reddy et al. (2016) and Department of Education (2010) also confirmed that many South African learners in the 9th grade have been consistently backwards in mathematics as a result of their negative attitude formed for the subject, and this has prevented them from gaining admission into higher institutions of learning. The findings of the study further established the provision of a reward mechanism as a form of motivation; this may be a source of encouragement to learners in striving for excellence. This result was consistent with Stafford-Brizard (2016) in America, who posited that motivated learners exhibit more acceptable classroom behaviour, by becoming more attentive, working for higher grades and seeking additional information in order to overcome learning difficulties.

In contrast, some studies have revealed that attitude was not perceived as having a significant relationship with performance in mathematics; some of these studies were done in America (Hwang et al., 2016; Honicke& Broadbent, 2016); Europe (Ozsoy et al., 2009; Alsop & Watts, 2003); and Asia (Najmi et al., 2018). This study established that there is a weak correlation between attitude and performance in mathematics. The possible reason for the contrast in the previous literature, which states that attitude does not increase learners' performance, and the present study finding stating that attitude increases learners' performance was that attitude has been perceived as a construct of the affective domain without impacting human and learner cognition. The affective domain in science and mathematics has been identified as important to cognition in recent times, but it has not attracted much attention from scholars in the cognitive field of study. Attitude was also taken for a mere feeling, and feelings cannot be equated with reasoning (Alsop & Watts, 2003).

Possible strategies perceived for the improvement of Tshwane grade 9 learners' attitude and their performance in mathematics

The negative attitude of Tshwane grade 9 learners negative attitude has been observed as detrimental to their mathematics performance. Hence, the learners have perceived that obtaining good grades in mathematics requires a positive attitude and an undivided interest in solving mathematical problems if anyone wants to excel academically. Learners identified further that learners who have a hatred for mathematics have been perceived as unable to perform adequately in the subject. It is imperative for learners to love mathematics like every other subject. It has also been discovered that most times, learners who don't perform well in mathematics are often absent from mathematics class; hence, truancy and skipping classes were discouraged. It was also perceived that fearful learners lack confidence in themselves, hence, fail to perform well in mathematics. Learners displaying poor self-confidence are most times at the mercy of other learners. It was further perceived by the learners that every learner should summon courage within themselves and whatever they do, as far as academics are concerned. In doing this, such learners will be capable of becoming resilient and developing a winning attitude in themselves for pursuing academic excellence in mathematics.

The following extracts from the open-ended items confirmed the statements made above

I believe that having a positive attitude will promote success in Mathematics performance **(Grade 9 learner 301).**

I believe that learners must learn not to hate but love Mathematics as a subject **(Grade 9 learner 324).**

I believe that learners who don't succeed in Mathematics do not attend Mathematics classes **(Grade 9 learners 111).**

I believe that most learners are always afraid of Mathematics, and that is why they fail **(Grade 9 learner 400).**

From the Tshwane grade 9 learners' responses, the likely possible suggestions below were perceived to have an improvement on their performance in mathematics: 1. Cultivating a positive attitude for mathematics performance; 2. A need for loving mathematics like every other subject; 3. Developing an interest in mathematics at all costs; 4. Learners must have dogged determination to succeed.

The study further revealed the essence and need for improving the Tshwane grade 9 learners' mathematics performance in South Africa, which is in tandem with Hajovsky et al. (2020), for immediate remedy, and they are stated below. The grade 9 learners further posited that learners deserve to be motivated extrinsically with a reward for every positive attitude displayed in the classroom, which will further sustain the behaviour. Most learners who dislike mathematics have failed to perform well, possibly due to a lack of motivation. When learners are well motivated, they will strive for better performance through positive attitudes. Motivation has also been seen as a means for forestalling regular attendance in school and

mathematics classes; besides, learners can strive for success at all costs despite all odds (Stafford-Brizard, 2016; Lukowski et al., 2016).

Conclusion

The goal of the study was to figure out the Tshwane grade 9 learners' perceptions of their attitude and their performance in mathematics in South Africa, drawing inferences from the outcome of the study, a conclusion can be reached that the Tshwane grade 9 learners' perceptions of the relationship between their attitude and their mathematics performance were of significance.

Recommendations

A few recommendations were reached based on policy, these were: stakeholders should make learners understand the essence and reality of mathematics as a discipline of global relevance needed for South African growth, economically and nationally, as against the lazy choice of maths literacy.

It was also recommended that parents and schools should inculcate and model acceptable and positive attitudes in the learners via regular school programmes for proper academic orientations towards better mathematics performance. Parents should also make it a point of duty to instil the right mathematical attitude into the learners by creating time to assist and encourage them to learn mathematics. Furthermore, parents and teachers should adequately motivate learners; this would help learners cultivate an attitude of making regular school and mathematics class attendance a habit, thereby loving mathematics.

Contribution of the study

This study on the investigation of Tshwane Grade 9 learners' perceptions of factors influencing their performance in mathematics in South Africa, from the grade 9 learners' knowledge and views in a natural context, has not been previously investigated. Thereby making it uniquely the first of its kind. The study was able to depict and explore the influence of attitude on Tshwane grade 9 learners' mathematics performance with a sound approach, in contrast to the positions of literature not in support of attitude as influencing learners' performance in mathematics. The knowledge base on the Tshwane grade 9 learners' perceptions of factors influencing their performance in mathematics in South Africa is additionally refined and expanded. The study will further expose learners and the school community to the mathematical challenges of Tshwane grade 9 learners in South Africa.

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BORDER CROSSING OF MIGRANTS, ITS SOCIAL JUSTICE IN ISLAMIC HISTORY: A TRANSNATIONAL AFFAIR

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ABTRACT

Since the September 11 terrorist attack in the United States of America in the year 2001, there has been increasing interest in Islam, Islamic history and civilisation, the Islamic scholarship and heritage, and inter-faith dialogue. Many researchers and philosophers have concentrated on the large number of Muslim migrants and refugees in Western countries (particularly in Europe), the process of assimilation, and the effect an increased Muslim population has had on countries. The migration of Muslims to Europe has been a very popular topic, and hundreds of books, research and articles have been written regarding that. In contrast, there is minimal writing on the social justice of migrants in transnational affairs in Islam. There is a considerable amount of literature on social justice in Christianity and the relationship between social justice and migration. For instance, there are numerous studies available about the response of Christian faith-based organisations, missionaries and crusaders in response to refugee and migration crises. But this research explores borders, migration and social justice in Islamic civilisation history. Firstly, the research will look into the significant migration that occurred in Islamic history and also examine the foundation of social justice in Islam; also, this research will look at ideas of transnational affairs in assisting Muslim migrants and refugees. It is designed that this research is going to adopt the qualitative style of research in all it approaches.

Introduction

The most significant and dynamic period of migration in Islam is known as *Hijrah*, the time when the Prophet and his companions travelled from Mecca to Medina in 622 C.E. The Prophet Muhammad publicly preached Islam for over a decade. In response, the Prophet Muhammad and his followers received numerous amounts of threats from protestors and pagans. Some of his followers were significantly abused, oppressed, tortured and even killed. Eventually, the amount of violence and prosecutions reached a peak, and the Prophet Muhammad instructed his companions to travel from the city of Mecca to Medina. When he learnt there was an attempt to kill him, he contacted his close ally, Abu Bakr and planned a religious journey to Medina. As the persecutors searched for him, the Prophet and Abu Bakr found refuge in a cave near Makkah. The proposed Hijra signifies a new beginning in Islam; the year of the Hijra was designated the first year of the Islamic calendar, symbolically the "beginning" of a new Islamic time. When the Prophet travelled from Mecca to Medina, it was not a last-minute decision to flee in desperation; rather, it was a carefully thought-out plan by the Prophet, designed so that he and his followers could start a new and fresh life. Earlier, the leaders of powerful tribes in Medina had invited the Prophet to settle down there and informed him of the opportunities that existed in Medina. Those who travelled with the Prophet among his followers during the migration were called *Muhajirun*, and those who were the hosts in Medina were called *Ansar* (Helpers).

Migration and Transnational

A researcher and a philosopher who is an anthropologist, John R. Bowen researches the comparative social studies of Islam across the world and offers a unique analysis of the relationship between Islam and migration. In Beyond Migration: Islam as a Transnational Public Space, Bowen argues, "Transnational Islam creates and implies the existence and legitimacy of a global public space… of a debate, and that space cannot be reduced to…migration or transnational religious movements. Bowen breaks down migration into two categories: firstly, movement across borders for social or economic reasons, and secondly, tied to religious practices. Bowen cites the *Tabligh Jama'at* movement as an example of migration tied to religious practices. This *Tabligh* movement originated from India/ Pakistan and sends missionaries around the world to convince Muslims to return to what they believe is the right practice of Islam. Another group that migrated for religious purposes are the Sufis, whose devotion is to living and dead saints. Bowen refers to these groups because he believes that, oftentimes, when research is conducted about Islam and transnationalism in Europe, there is a focus on groups whose migration is directly tied to a religious purpose. Bowen believes that migration and Islamic movements have played an obvious role in developing a Muslim presence everywhere. Islam's transnational public space is beyond migration, in that it is dependent neither on specific migration patterns nor on activities of particularistic

transnational movement. This space has existed since the beginning of the Islamic era, and long before it extended to Europe, it regularly defined and developed debates and references among scholars and public figures. There is a distinct overlap between the beliefs in Islam and social justice. Islamic practices are not limited to boundaries and places; there was an advocacy of the idea for a return to a society during the time of the Prophet, a time when everyone lived according to the teachings of Islam and the practice of Muhammad. However, Bowen points out that there is a transnational public space in which Muslims from all over the world are trying to assess the role of Muslims in the Western sphere. Even this space is indeed limited since Bowen only as the role of Muslims in the Western sphere without assessing the role of Muslims in Islamic nations. However, he does so because his focus is on the migration of Muslims from Islamic nations to non-Islamic nations. The fact that this transnational space exists signals that Muslim migrants are not easily going to give up the universal nature of Islam; rather, they are working to maintain the unity and divinity that defines Islam.

Response of Faith-Based Organizations in Phenomenon Contexts of Forced Migration

Faith-Based Organisations (FBOs) have worked globally for decades, reaching some of the world's most abandoned people and also in remote areas. Researchers and philosophers have only recently studied their characteristics and symbolism. Giving meaning to FBOs and understanding how they operate remains largely rejected and neglected in the social life and policy sciences. Meanwhile, broad variation exists among FBOs; they stand for different religious traditions, cultures, people, and ways to tackle humanitarian approaches and assistance. In the view of Faith Based Organization, they are more likely to encompass a different set of motives and draw from as different donor based and network of actors from volunteers to religious congregations in other to help migrants but always against forced migration, even though Faith Based Organization have different kind of scopes, logics and methods, at times limited because of their religious affiliation and other times an ability to reach areas and aspects that others cannot because their faith-base provides them legitimacy and opportunity to work in challenging situations that might be less friendly to groups not affiliated with a specific religion or faith. Faith-based organisations (FBO) may harness greater moral authority than other non-faith-based organisations, which enables them to reframe and restructure humanitarian issues and debates about relief and help. In some instances, they may also have greater reach because they can connect with their local religious leaders and groups on the ground and on set before other international actors arrive. Faith-based organisations' motivations, however, may hamper their ability to be neutral and objective in humanitarian situations, making them appear less professional by international standards. Also, they may be bound by donors who expect their funds to be used for religious means and purposes when delivering aid to the migrants and refugees.

Migrant Health issues, the Islamic Call…

Access to health care is vital in Islam, and it is also essential and important to migrants' ability to lead fulfilling lives. Such access is a fundamental human right enshrined in international law. Article 25 of the 1948 Universal Declaration of Human Right emphasizes that everyone has the fundamental right to a standard of living adequate for the health and well-being of himself and of his family, including clothing, food, shelter and housing, medical treatment and other necessary social amenities, more so, Article 2.2 of the International Covenant on Economic, Social, and Cultural Rights stipulates that all individuals must have access to health care even the migrants and the refugees. States are expressly prohibited from stipulating and discriminating against non-nationals on the grounds of colour, sex, race, language, political affiliation, religion, faith or other issues, national or social origin, birth or other status. As per international law, governments are obligated to provide migrants and refugees with adequate health care, support the prevention, treatment, and control of diseases and facilitate health education in their midst. This also includes providing affordable health care insurance, treatment and essential medications. Governments are responsible for making sure that health care is provided equitably to all individuals within their borders, irrespective of their immigration status. Despite these international legal obligations and pledges, governments frequently bar non-citizens from receiving and having health care, particularly when they are unauthorised or awaiting adjudication of their asylum claims. Some countries provide such migrants access only to emergency health care, like accident and pregnancy delivery, antenatal treatment and postnatal care, while others provide only rudimentary health services at detention and correctional centres. As of 2016, unauthorised migrants and refugees had immediate access to universal health care only in Thailand and some Southeast Asian countries, and even some hospitals refused to provide them with insurance. Barring migrants and refugees from health care constitutes a violation of their human rights under international law. Migrants and refugees' exclusion from health care is based on the misperception that treating non-citizens would place a heavy burden on national healthcare systems. In general, however, migrants and refugees tend to be younger and in better health than native –born population. Barriers to health care in receiving countries, however, can put their health state at great risk and mess. Health issues left untreated can worsen over time, and limiting migrants' access to health care can ultimately lead to longer hospital stays, more acute health crises, and higher mortality rates.

Migrants and refugees in detention may face particularly acute health risks. Medical practitioners and doctors, including nurses, are not always available in detention and correctional centres and facilities, and those available do not always have authority, equipment, facilities, medicines a license to properly treat and operate patients. In the United States of America, a lack of adequate medical staffing at many detention and correctional centres has created many significant treatment delays and backlogs,

contributing to and helping to the deaths of numerous detainees and prisoners. The availability of specialised health care services is often limited. Pregnant prisoners and detainees, in particular, often lack adequate medical care. Prisoners and detainees also frequently lack access to counseling and psychiatric treatment and care. Indeed, a majority of Immigration and Customs Enforcement officers (ICEO) in prisons, correctional and detention centres lack mental health care providers. Detention and prison centres are also frequently overcrowded with inmates and possess poor or, at times, no sanitation system. This can increase the prevalence and exposure to diseases, particularly infections, viruses and psychiatric disorder. A study of over three thousand unauthorised immigrants in Malta, Spain and Germany found that a majority of health-related problems and issues experienced by prisoners and detainees, migrants and refugees resulted from overcrowding, poor hygiene, and malnutrition at the detention and correctional centres. Migrants and refugees' exclusion from medical health care not only increases their vulnerability, but also exposes their host societies to greater risk and danger in financial costs and public health issues. Indeed, medical conditions left unattended or untreated may become more expensive and difficult to treat over the years. Waiting for treatment may ultimately lead to longer hospital admissions and stays, placing a burden on healthcare systems. Finally, contagious and poor conditions may spread to migrants and refugees' communities and the native populace. Anti-retroviral treatments, for instance, are not available to irregular migrants and refugees in many European countries, heightening the risks of Ebola, Covid-19, STD and HIV transmission. Even when migrants have legal access to health facilities, it is difficult to them to receive adequate treatment; they always have health needs that differ from those of the native born populace, complicating and creating more problems for their treatment. For instance, many are affected and suffer from trauma due to exposure to violence or loss before their migration. Those displaced due to conflict or natural disasters may be at greater danger of adverse outcomes.

They have often experienced traumatic events en route to their host countries or upon arrival, those who left family members behind or who lack legal status are particularly prone to psychological, mental, emotional and physical stress, which can exacerbate physical ailments. A young researcher and philosopher in 2017 in the United States of America found that refugee and migrant youths are exposed to more violence than other immigrants on average, and consequently experience higher rates of dissociative symptoms, traumatic grief, mental issues, and phobic disorders. Migrants and refugees always arrive from regions with different epidemiological and health profiles, unstable conditions than their host countries, or have a genetic predisposition to conditions that are uncommon in those countries. Tuberculosis, micronutrient deficiencies, iron deficiencies and dental illness, and bone dislocations are particularly common among migrants and refugees. HIV, coronavirus, syphilis, Ebola, and malaria are also very common and usual; migrants and refugees may also lack formal records, which is against Islamic principles. Complicating health providers' efforts to provide accurate diagnoses and effective

prescriptions, migrants and refugees also frequently work in environments where they are at risk of work-related injuries. Research and studies suggest that they are at a higher risk of workplace-related, religious site accidents than native citizens. Before their trip, many work in hazardous sectors such as mining, construction, fishing and agricultural farming. Another research and study of nearly thirty thousand workers in thirty-one European countries revealed that migrants and refugees were more likely than native born workers to be exposed to high and harsh temperatures, timid weather condition, loud noises and strong vibrations, also work exposing them to long standing, they also often work in long hours which make them to sometimes develop fatigue.

The Cross-Border System on the Verge of Collapse

Europe continues to face its greatest migration wave since the end of World War II. The majority of migrants and refugees are arriving from outside the continent, especially the Middle East and North Africa (MENA), but also the Sahel, Sub-Saharan Africa and increasingly, Asia. In March 2018, Frontex, the EU's frontier agency, warned that the number of people undertaking the Central Mediterranean crossing was on the rise. With the arrival of summer, the next wave of MENA migration in Europe is about to be unleashed. A May 2017 German government report warned that up to six million, five hundred thousand (6.5million) people were clustered around the Mediterranean preparing to cross to Europe from Africa, awaiting favourable summer weather to launch to sea. Now that the Western Balkan migration route has been closed, Libya is fast becoming the main transition point, reportedly with two million and five hundred thousand (2.5million) migrants and refugees in North Africa waiting to cross the boat. Meanwhile, over three million(3million) remain stalled in Turkey, prevented from entering Europe by the EU's March 2016 refugee deal with the Turkish government. The figures could be high; some estimates put the number of migrants and refugees preparing to enter Europe as high as eight to ten million (8-10 million) people. The uninterrupted flow of migration into the European Union has redefined Europe's geostrategic position. Today, Europe's Southern border runs deep into Africa along the Sahel, Sub-Saharan Africa and across the Middle East. South Europe in particular remains exposed and vulnerable to pressure from MENA migration flows, which have had ripple effects and consequences. Among the effects it had are as follows.

1- The growing polarisation among the states across the continent, with fundamental and increasingly sharp division on the question of resettlement of the newly arriving immigrants and refugees, especially between Germany and Central and Eastern Europe.

2- The progressive erosion of the European Union's Shengen system of passport-free travel across Europe

3- Public confidence in the European government's ability to deal with the crisis has rapidly declined

4- Europeans' initial calm and goodwill, and even enthusiasm for the new arrivals and welcome culture, have given way to growing public anger.

Ways to solve the effects are:

1- The European Commission and some countries, especially Germany, have to make demands for European solidarity on resettlement quotas for the migrants and refugees who have already arrived in Europe.

2- Other European Union member states have demanded the slowdown of immigration flows by closing off access routes or increasing financial aid to migration transition countries outside Europe to keep the migrants and refugees in place

3- One of the most likely solutions is the strengthening of right-wing and populist political parties that oppose mass migration in the upcoming elections.

Population Projections to 2040: More than 21% Muslims in Europe

As background for the present empirical study, it is also worth noting what is at stake in pure demographic terms. Already some time ago, a high ranking U.S diplomat and security analyst, Timothy Savage, caused an uproar in the scholarly debate by stating that in light of the sheer demographics to be observed in the late 1990s, and the early 2000s, Europe's Muslim population could rise to 21% by 2040, Savage then almost prophetically stated: Most European countries closed their doors to labour immigration in the 1970s, following the first Arab oil embargo and the subsequent economic downturn, yet some five hundred thousand immigrants and refugees primarily family reunification cases and four hundred thousand asylum seekers arrive in western Europe each year. According to the International Organisation of Migration, Muslims make up a large and increasing proportion of both groups, coming primarily from Morocco, Algeria, Palestine, Iraq, Turkey and the former Yugoslavia. Muslims probably also make up a significant proportion of Western Europe's illegal immigrants, between one hundred thousand and five hundred thousand (100,000- 500,000) enter the European Union annually. Indeed, in several European countries, the words "Muslim" and "immigrant and refugee" are virtually synonymous. Currently, the waves of immigrants and asylum seekers from the Middle East and North Africa (MENA) the region with the world's second highest fertility rate have had more to do with worsening conditions in the MENA countries than with labour shortages in Europe, the region with the world's lowest fertility rate, as the MENA population doubles in the next three decades and Europe's shrinks, increased migratory flows from south and north appear unavoidable a trend augmented by Europe's graying population, as opposed to the youthful MENA average. In the year 2000 the UN projected that, to counterbalance their increasingly graying populations, EU states annually would need nine hundred and forty nine thousand migrants to maintain their 1995 populations; one million, five hundred and eighty eight thousand migrants

and refugees to maintain their working age population; or thirteen million, four hundred and eighty thousand migrants and refugees including asylum seekers to maintain their population support ratios, meanwhile, the ratio of people age fifteen to sixty five to those aged sixty six and older. In light of recent, more sophisticated population projections, it should be emphasised that Savage also observed already in a 2004 article that the Muslim birthrate in Europe is "higher than that of non-Muslims". Contributing to what he called the "burgeoning numbers of Muslims in Europe" even if no further migration were to occur. As a result, he predicted that Muslim communities in Europe would be "significantly younger than the non-Muslim population" and that Europe's "Generation X" and "Millennium Generation" would include considerably more Muslims than the world continent's population as a whole. It is also highlighted that one of France's five million Muslims are under the age of twenty compared to 22% of the French population as a whole; one third of German's Muslims are under 18 compared to 18% of the German population as a whole; one third of the U.K's Muslims are under fifteen compare to the 20% of the British population as a whole; and one third of Belgium's Muslims are under 15 compared to 18% of the country's population as a whole, it is concluded by noting that conservative projections estimated that, compared to 5% at the time of his analysis, Muslims would constitute 20% of Europe's population by 2040.

Conclusion

Migrants from around the world were encountered one million seven hundred times in the last two years, the highest number of illegal crossings recorded since at least 1965. Many of them were fleeing pandemic-ravaged countries, but the nearly one hundred and forty-seven thousand children whom agents encountered without parents or guardians were the largest number since 2007. The crossers hailed from around the world, many of them seeking economic opportunity as the coronavirus pandemic erased hundreds of millions of jobs. The agent caught people from more than one hundred and sixty countries in Asia, Africa and Latin America, with Mexico accounting for the largest share. A public health rule, invoked by President Donald J. Trump at the beginning of the pandemic in the year 2020 to seal the border of United State of America, has remained in place under the Biden administration, in 2021, the border patrol of the U.S has carried out more than one million expulsions of migrants back to Mexico or to the migrants home countries. Agents used the public health rule to expel migrants they encountered 60% of the time and to expel families 25% of the time. In particular, Republican lawmakers have been sharply critical of the admission of tens of thousands of unaccompanied children, along with their families, who would have been turned back in the first term as United State of the United States under the Trump administration. The Border Patrol released nearly 260,000 migrants into America, including some

with instructions to appear before an immigration judge for removal proceedings, according to Customs and Border Protection.

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COMPARATIVE ANALYSIS OF THE USE OF POSSESSIVE PRONOUNS IN ARABIC AND ENGLISH LANGUAGES AS TOOLS FOR TEACHING OF ISLAMIC STUDIES

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ABTRACT

This study presents a comparative analysis of the use of possessive pronouns in Arabic and English, with a focus on their application in teaching Islamic studies. The research aims to identify similarities and differences in the usage of possessive pronouns in both languages and explore their implications for teaching Islamic studies. The study employs a qualitative approach, analysing possessive pronouns in Arabic and English texts, including the Quran and Islamic literature. The findings reveal that while both languages use possessive pronouns to indicate possession and relationship, there are significant differences in their grammatical structures, usage, and connotations. The study highlights the importance of understanding these differences for effective teaching and learning of Islamic studies, particularly in multilingual and multicultural contexts. The research provides insights for educators and scholars on how to utilise possessive pronouns in Arabic and English to enhance the teaching and learning of Islamic studies. It is quite understood that there are eight classes of pronouns in the English language, while there are only two classes of them in Arabic. Personal and possessive pronouns are the two classes of pronouns in Arabic. The other six classes of pronoun have pronouns have other names by which they are called. This paper, therefore, intends to compare the possessive pronoun between English and Arabic. Examples of English and Arabic shall be shown and discussed as well.

Introduction

The Arabic language is a rich and complex language with a long history and significant cultural importance, while the English language is a global language with a significant impact on modern communication (Ismail, 2023). According to Yusuf (2021): Islamic studies encompass a broad range of academic disciplines that explore the history, theology, culture, and practices of Islam. According to Adunola (2021), Comparative analysis is a research methodology used to compare and contrast different phenomena, concepts, or entities. According to John (2024): Teaching and learning are interconnected processes that involve the transfer of knowledge, skills, and values from one person to another.

Possessive pronouns are the pronouns that show possessive and have two forms. A form functions as an adjective in English, and it is referred to as a pronominal adjective, while the other is a pure pronoun and functions as such (Akande, 1996). For example, (1) This is my bag.

(2)The bag is mine

1- "My" in the first sentence is a pronoun that functions as an adjective qualifying "bag"

2- "Mine" in the second sentence is a possessive pronoun and a subject complement.

The table below shows possessive pronouns in their adjective and independent pronoun forms in the English language

	Singular		Plural	
	Adjective form	Pronoun form	Adjective form	Pronoun form
1st person	My	Mine	Our	Ours
2nd person	Your	Yours	Your	Yours
3rd person	His	His	Their	Their
	Her	Hers	Their	Their
	Its	Its	Their	Their

ضمير متصل هو ما يتصل بإسم أو فعل أو حرف فتقع فيه موضعين :.

Possessive pronoun is a pronoun that joined with either noun (Ismu) or verb (Fi'lun) or particles (harfun) to indicate possession (i.e. ownership). It could appear in two places.

These are those that could be at the beginning of a sentence e.g. mine (liya), ours (lana), Yours (laka, laki, lakuma, lakum, lakunna) His (lahu) Hers (laha) their (lahuma, lahum, lahunna).

Below is the table indicating the possessive pronouns that could be at the beginning of a sentence.

1st person المتكلم

Feminine مؤنث Masculine مذكر	
Singular Mine مفرد* لِيَ Liya LiyaMufrad	* لِـيَ
Plural Ours جمع* لَـنَا Lana LanaJam'u	* لَنَا

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Explanationالبيان

لـــ(ي):"الياء"ضمير متصلبحرفللمفردالمذكر او المؤنثالمتكلم

Liya (mine): is the possessive pronoun of the first-person singular joined with particle (harf) used by both masculine and feminine gender

لـــ(نا):"النون"ضميرمتصلبحرفللجمعالذكوراوالإناثالمتكلميناوالمعظمنفسه

Lana (ours) is the possessive pronoun of the first-person plural joined with particle (harf) used by both masculine and feminine genders and he who holy him herself

الأمثلة example

ليذالكالكتاب

Liya dhalikal-kitabu

Mine is that book

That book is mine

لناذالكالبيت

Lana dhālika –l- bayti

Ours is that house

That house is ours

Allah says:

بعثناعليكمعبادالنا

--- Ba'athna 'alaykum 'ibadanlana

--- We turned against you our servants (Q17:15)

The verse of the Glorious Qur'an, showing the word of Allah as if Allah is many, and He is one, but He holy himself by using plural pronoun for Himself.

The prophet (SAW) said: " النكاحسنتي…"

" Marriage is my tradition"

Below is the table represents singular, dual and plural of possessive pronouns of second person, showing the different in the pronoun of their masculine and feminine genders.

At this point both masculine and feminine are written in the same way in English likewise in Arabic Language.

The implication of this research on teaching Islamic studies is that Al-Qur'an was revealed in Arabic Language such has the verse that was quoted above (بعثناعليكمعبادالنا) and our lingua franca in Nigeria is English Language. Understanding of possessive pronoun of both will make it easier for the teacher to explain better to the students in the class.

2nd person المخاطب

Feminine مؤنث	Masculine مذكر	
Singular * لَكِ	Yours	مفرد* لَكَ
Laki		Laka * Mufrad
Dual * لَكُمَا	Yours (both of you)	مثنى* لَكُمَا
Lakumalakumamuthanna		
Plural * لَكُنَّ	Yours (all of you)	جمع* لَكُمْ
LakunnaLakum Jam'u		

Explanationالبنان :

لـ(كَ): "الكافالمصو"ضميرمتصلبحرفللمفردالمذكرالمخاطب

Laka (yours): Is the possessive pronoun of the second person singular joined with particle (Harf) used for a masculine genders (m).

لـ(كِ): "الكافالمكسورة"ضميرمتصلبحرفللمفردالمؤنثالمخاطبة

Laki (yours): Is the possessive pronoun of the second person singular joined with particle (Harf) used for a feminine gender (f) .

At this point, it is obvious that (Laka) is used for male second person singular, while (Laki) is used for female second person singular, as against second person singular in the English Language, which only uses (yours) for both male and female.

لـ(كما): "كما"ضميرمتصلبحرفللمثنىالمذكريناوالمؤنثينالمخاطبين

Lakuma (yours): Is the possessive pronoun of the second person dual joined with particle (Harf) used for two masculine and or feminine genders.

Additionally, Arabic used (Lakuma) for either masculine or feminine dual, just like the English Language used (yours) for both of them.

لـ(كم): "كم"ضميرمتصلبحرفللجمعالذكورالمخاطبين

Lakum (yours): Is the possessive pronoun of the second person plural joined with the particle (Harf) used for masculine genders. It should also be realised that when both genders are involved in the plural, we will use (Lakum) as well.

لـ(كنّ): "كنّ"ضميرمتصلبحرفللجمعالإناثالمخاطبات

Lakunna (Yours): Is the possessive pronoun of the second person plural joined with the particle (Harf) used for feminine genders.

At this point, it should be known that when masculine and feminine are involved (Lakum) will still be used in Arabic.

الأمثلة Explanation

لكهذاالكتابلكِهذهسيارة

Laki hadhihisayyarah Laka hadha-l-kitabu

Yours is this car (f). Yours is this book (m)

This car is yours (f). This book is Yours (m)

لكماذانكدفترانلكماتانكمسطرتان

Lakumatanikamistaratanilakuma Dhanika Daftarani. Yours are those rulers (dual). Yours are those two exercise books. Those two rulers are yours. Those exercise books are yours.

لكمدينكملكنأعمالكن

LakunnaA‘malukunna Lakum dinukum

Your deeds are Yours (m) Yours is your religion (f)

Yours are your deeds (). Your religion is yours ()

Below is a table representing the singular, dual and plural forms of the possessive pronouns of the third person, showing the differences between the pronouns of the masculine and feminine genders.

3rd person الغائب

Feminine مونث	Masculine مذكر
Singular * لها Her	His مفرد* له
Laha	Lahu Mufrad
Dual * لهما Theirs (both of them)	مثنى* لمها
Lahuma	Lahumamathanna
Plural * لهنّ Theirs (They all)	جمع * لهم
Lahunna	Lahum Jam‘u

البيان :

إليـ(ه): "الهاء" هوضميرمتصلبحرفللمفردالمذكرالغائب

His (Lahu): Is a possessive pronoun of the third person singular joint with particle (Harf) used for the masculine gender (m)

إليـ(ها):"ها" هوضميرمتصلبحرفللمفردالمؤنثالغائبة

Laha (Hers): It is a possessive pronoun of the third person singular joint with particle (Harf) used for a feminine gender (f).

Both Arabic and English languages have different possessive pronouns for the third person singular. Masculine in Arabic is (Lahu), which can be translated in English as (His), (Laha) in Arabic, which can be translated in English as (Hers).

إليـ(هما): "هما" هوضميرمتصلبحرفللمثنىالمذكريناوالغائبين

Lahuma (Their): Is a possessive pronoun of the third person dual joint with particle (Harf) used for both masculine and feminine genders (m)

إليـ(هم):"هم" هوضميرمتصلبحرفللجمعالذكورالغائبين

Lahum (Theirs): It is a possessive pronoun of the third person plural, joined with the particle (Harf) used for masculine genders (m).

إليـ(كنّ):"كنّ" هوضميرمتصلبحرفللجمعالإناثالغائبات

Lahunna (Their): Is a possessive pronoun of the third person plural joint with particle (Hart) used for feminine genders (f)

الأمثلة:

لهالملكولهاالعرشالعظيم

Wa Laha -l- ‘arshul- ‘azumu Lahul- Mulku

And Hers is the big throne. His is the power

The big throne is Hers The power is Hers

لهماالبيتالواسعلهماالقوّة

Lahuma -l- Quwwah Lahuma -l- baytuWasi‘i

Their is the power. There is the wide house

The power is Their (dual). The wide house is Their (dual)

لهمأولئكالكتبلهنّالبعل

Lahuma -l- ba‘lu Lahuma ‘ulai’kal- Kutubu

Theirs is the husband. These are the books

The husband is their (plural). Those books are theirs (plural)

Some could be at the end of a sentence, and they are of three types, namely:

Possessive with noun متصلبإسم

Possessive with verb متصلبفعل

Possessive with particle / Preposition متصلبحرف

The possessive pronoun with a noun is a pronoun joined with a noun to show the possession (ownership) of such a name. below is a table representing the possessive pronoun with a noun indicating the first person singular.

Possessive with noun متصلبإسم

Feminineمؤنث	3rd Third Person	Masculine مذكر
Singular * كتابها	Her Book His Book	مفرد* كتابه
Kitauaha Kitabuhu Mufrad		
Dual * كتابهما	Their Book (Both of them)	مفرد* كتابهما
Kitabuhuma Kitabuhuma Muthanna		
Plural * كتابهما	Their Book (All of them)	جمع* كتابهم
KitabuhunnaKutabuhumJam'u		

النيان:

كتابــه: "الهاء"ضمير متصلبإسمللمفرد المذكر الغائب

Kitabuhu (His book): is a possessive pronoun of the third person singular joint with noun, used for a masculine gender

كتابها"الهاء"ضمير متصلبإسمللمفرد المؤنثالغائب

Kitabuha (Her book): is a possessive pronoun of the third person singular joint with noun, used for a feminine gender

كتابهما"هما"ضمير متصلبإسمللمثنىالذكر أو المؤنثيالغائبين

Kitabuhuma (Their book): is a possessive pronoun of the third person dual joint with noun, used for masculine and feminine genders

كتابهم"هم"ضمير متصلبإسمللجمعالذكور الغائبين

Kitabuhum (Their book): Is a possessive pronoun of the third person plural, joint with a noun, used for masculine genders

كتابهنّ"هنّ"ضمير متصلبإسمللجمعالإناثالغائبات

Kitabuhunna (their book): Is a possessive pronoun of the third person plural, joint with a noun, used for the feminine gender

الأمثلة

وجدتكتابهفىالخارجهذاكتابها

HadhakitabuhaWajudtuKitabuhu fil-kharij

This is her book. I found his book outside

ذالككتابهماقرأتاكتابهما

Qara'taaKitabahumaDhalikaKitabuhuma

Both of them read their book (f). That is their book, both (m)

فتحتكتابهمقرأتكتابهنّ

Qara'tu KitabahunnaFatahtuKitabahum

I read their book (p) (f). I opened their book (p) (m)

(2) The possessive pronoun with a predicate is a pronoun joined with a predicate to show the action performed by one. Below is a table that represents the possessive pronoun Joint with the predicate, showing the first person singular and plural.

Possessive with predicate متصلبفعل

Feminine مؤنث	1st First person	Masculine مذكر
Singular * ضربت	I beat	مذكر * ضربـت
Darabtu Darabtu		
Plural * ضربنا	We beat	جمع * ضربنا
Darabna Darabna		

البيان:

ضربت: "التاء"ضميرمتصلبفعللمفردالمذكرأوالمؤنث

Darabtu (I beat): is a possessive pronoun of first person singular joined with a predicate, used by the masculine and feminine genders.

ضربنا"نا"ضميرمتصلبفعللجمعالذكورأوالأناثالمتكلمين

Darabtna (we beat): Is a possessive pronoun of the first person plural, joined with a predicate, used by both masculine and feminine genders.

الأمثلة:

ضربتالتلميذضربناالكلب

Darabna -l- kalbuDarabtut-Tilmidha

We beat the dog, I beat the student

Looking into the above examples, one will see that it is a personal pronoun in English, unlike in Arabic, where it is joined with the predicate. So, in Arabic, it is a possessive pronoun.

Below is a table representing the singular, dual and plural of the possessive pronoun of the second person, showing the differences in the pronouns of the Masculine and feminine genders and the way they are used:

Possessive with verb متصلبفعل

Possessive with predicate متصلبفعل

Feminine مؤنث	1st First person	Masculine مذكر
Singular * ضربت DarabtuDarabtu	I beat	مذكر * ضربـت
Plural * ضربنا DarabnaDarabna	We beat	جمع * ضربنا

البيان:

ضربت: "التاء"ضميرمتصلبفعللمفردالمذكرأوالمؤنث

Darabtu (I beat): is a possessive pronoun of first person singular joined with a predicate, used by the masculine and feminine genders.

ضربنا"نا"ضميرمتصلبفعللجمعالذكورأوالأناثالمتكلمين

Darabtna (we beat): Is a possessive pronoun of first person plural, joined with the predicate, used by both masculine and feminine genders.

الأمثلة:

ضربتالتلميذضربناالكلب

Darabna -l- kalbuDarabtut-Tilmidha

We beat the dog, I beat the student

Looking into the above examples, one will see that it is a personal pronoun in English, unlike in Arabic, where it is joined with the predicate. So, in Arabic, it is a possessive pronoun.

Below is a table representing singular, dual and plural forms of the possessive pronoun of the second person, showing the differences in the pronouns of Masculine and feminine genders and the way they are used:

Possessive with verb متصلبفعل

Feminine مؤنث	2nd person المخاطب	Masculine مذكر
Singular *كتبتِ Katabtikatabtumufrad	You wrote	مفرد* كتبتَ
Dual * كتمتما Katabtumakatabtumamathanna	Both of (You wrote)	مثنى* كتبتما
Plural * كتبتنّ KatabtunnakatabtumJam'u	You (all) wrote	جمع * كتبتم

النيان:

كتبتَ: "التاء"ضميرمتصلبفعلللمفردالمذكرالمخاطب

Katabta (You wrote): Is a possessive pronoun of second person singular joined predicate, used for a masculine gender.

كتبتِ: "التاءالكسرة"ضميرمتصلبفعلللمفردالمؤنثالمخاطبة

Katabti (You wrote): Is a possessive pronoun of second person singular joined predicate, used for a feminine gender

كتبتما"تما"ضميرمتصلبفعلللمثنىالمذكرأوالمؤنثالمخاطبين

Katabtuma (You wrote): Is a possessive pronoun of second person dual joined predicate, used for masculine and feminine genders

كتبتم"تم"ضميرمتصلبفعلللجمعالمذكورالمخاطبين

Katabtum (You (all) wrote): Is a possessive pronoun of second person plural joined predicate, used for masculine genders

كتبتنّ"تن"ضمير متصلبفعللجمعالأناثالمخاطبات

Katabtunna (You wrote): Is a possessive pronoun of second person plural joined predicate, used for feminine genders

الأمثلة:

كتبتَالريالةكتبتِدرسكِ

KatabtidarsakiKatabtarisalatailayya

You wrote your lesson (f). You wrote the latter to me (m)

كتبتمارسالهإلىحاكمالولاية

KatabtumarisalatanilaHakimil

Both of you wrote a letter to the state governor

كتبتمالدرسفىالدفتركتبتنّدروسكنّ

KatabtunnadurisakunnaKatabtumud-dursa fid daftar

You (all) wrote your lessons f) You (all) wrote the lesson inside the exercise book

Below is the table representing singular, dual and plural of possessive pronoun of the third person, showing the differences in the pronoun of Masculine and feminine genders and the way they are used:

Possessive with verb متصلبفعل

Feminine مؤنث	3rd Person الغائب	Masculine مذكر
Singular * كتبت	She wrote	He wrote مفرد* كتب
KatabatKatabaMufrad		
Dual * كتبتا	They (both) wrote	مثنى* كتبا
Katabatakatabaamuthanna		

Plural * كتبنَّ	They (all) wrote جمع* كتبوا	
KatabnaKatabuuJam'u		

البيان:

كتب: ضميرفيهمستترتقديره"هو"ضميرمتصلبفعلللمفرالمذكرالغائب

Kataba (he wrote): It is a possessive pronoun of the third person singular, which is joined with a predicate used for the masculine gender.

كتبا: "الألفالإثنين"ضميرمتصلبفعلللمثنىالمذكرالغائين

Katabaa (they both wrote): It is a possessive pronoun of the third person dual joined with a predicate which is used for masculine genders.

كتبوا: "الواوالجمع"ضميرمتصلبفعلللجمعالذكورالغائبين

Katabuu (they (all) wrote): Is a possessive pronoun of the third person plural, joined with a predicate which is used for masculine genders.

كتبت: "التاءالتانيث"ضميرمتصلبفعلللمفردالمؤنثالغائبة

Katabat (she wrote): is a possessive pronoun of the third person singular, which is joined with a predicate, used for the feminine gender.

كتبتا: "تا"ضميرمتصلبفعلللمثنىالمؤنثالغائتين

Katabataa (they (both) wrote): It is a possessive pronoun of the third person dual joined with a predicate, which is used for feminine genders

كتبن: "نون"ضميرمتصلبفعلللجمعالأناثالغائبات

Katabna (they (all) wrote): wrote): Is a possessive pronoun of the third person plural, joined with a predicate which is used for feminine genders.

الأمثلة:

كتبريدرسالةإلىالبيتكتبتعائشةالدّرس

Katabat 'Aishatu d-darsaKatabaZaydurisalatanili-bayti

'Aisha wrote the lesson Zaydun wrote a letter to the house

آحمدوأبراهيمكتبارسالتينزينبوخفصةكتبتاالنميقة

Zaynab waHafsatuKatabatanNamiwah Ahmad wa Ibrahim katabarisalatayni

Zaynab and Hafsah wrote the letter Ahmad and Ibrahim wrote two letters.

حامدوموسىوعبداللطيفكتبواالدرسعائشةوزينبوحفصةكتبنالرسالة

‘Aisha wa Zaynab wa Hafsat Katabna r-risalah Hamidu wa Musa wa Abdullateef Katabuu d-darsa

‘Aishah, Zaynab and Hafsah wrote the letter. Hamidu, Musa and Abdullateef wrote the lesson

Below is a table representing the possessive pronoun of first person singular and plural which is joined with the particle (Harf)

Possessive with particle متصلبحرف

Possessive with particle متّصلبحرف

Feminine مؤنث	1st person	Masculine مذكر
Singular * إليّTo me	مفرد* إليّ	
IlayyaIlayya Mufrad		
Plural * إلينا To us	جمع* إلينا	
Ilayna		Ilayna Jam‘u

البيان:

إليّ: "الياء"ضميرمتصلبحرفللمفردالمذكرأوالؤنثالمتكلم

Ilayya (To me): “Ya” means “me” which is a possessive pronoun of the first person singular joined with a particle, and used by both Masculine and feminine genders.

إلينا: "نا"ضميرمتصلبحرفللمفردالمذكرأوالإناثالمتكلمين

Ilay-na (To us): “Na” means “us” which is a possessive pronoun of the person plural, joined with a particle and used by both Masculine and feminine genders.

الأمثلة :

كتبزيدالرسالةإليّكتبتعائشةرسالةإليّ

Katabat ‘Aishatu RisalataniKatabazaydur-Risalahilay-ya

‘Aishah wrote a letter to me Zaydu wrote the letter to me

أرسلهااللهُإلينـاأرسلتهَافاطمةُإلينَا

Arsalatiha Fatimah ilay-naArsalahullahuilay-na

Fatimah sent her to us. Allah sent him to us

Below is a table that represents the possessive pronouns of the second person singular, dual and plural, showing the differences in the pronouns of the masculine and feminine genders and the way they are used

Possessive with particle متصلبحرف

Feminine مؤنث	2nd Person المخاطب	Masculine مذكر
Singular * إليكTo you	مفرد* إليك	
IlaykiIlaykaMufrad		
Dual * إليكماTo (both of) you	مثنى* إليكما	
IlaykumaIlaykumamuthanna		
Plural * إليكنّTo you (all)	جمع* إليكم	
IlaykunnaIlaykumJam‘u		

البيان:

إليكَ: "الكاف"ضميرمتصلبحرفللمفردالمذكرالمخاطب

Ilay-ka (to you) “ka” means “you” which is a possessive pronoun of the second person singular, joined with a particle used for masculine gender

إليكِ: "الكافالمكسورة"ضميرمتصلبحرفللمفردالمؤنثالمخاطبة

Ilay-ki ((to you) “ki” means “you” which is a possessive pronoun of the second person singular joined with a particle used for feminine gender

إليكما: "كما"ضميرمتصلبحرفللمثنىالمذكرياوالمؤنثالمخاطبين

Ilay-kuma (To both of you) “Kuma means both of you” which is a possessive pronoun of the second person dual, joined with a particle used for masculine and feminine genders

إليكم: "كم"ضميرمتصلبحرفللجمعالمذكورالمخاطبين

Ilay-kum (To you all) “Kum means you all” which is a possessive pronoun of the second person plural, joined with a particle used for masculine genders

اليكنّ: "كنّ"ضميرمتصلبحرفللجمعالأناثالمخاطبات

Ilay-kunna (To you (all) “Kunna means you all” which is a possessive pronoun of the second person plural, joined with a particle used for feminine genders

الأمثلة:

ياتيإبر هيمبكتابهإليكغدا

Yati Ibrahim bikitabihiilay-ka Ghadan

Ibrahim will bring his book to-you tomorrow

آتيإليكفيهذامساء

Atiilay-ki fi hadha- masa’i

I will come to you this evening

سأرسلإبنيإليكماغدا

Sa arsaluibniilay-kumaghadan

I will send my son to (both of) tomorrow

هذهتحيةمنّيإليكم

Hadhihi Tahiyyah minniilay-kum

This is greeting from me to-you (all)

أرسلتإبنتيإليكنّبالأمس

Arsaltuibanatiilay-kunnabit’amsi

I sent my daughter to-you (all) yesterday

Below is the table representing the possessive pronouns of the third person singular, dual and plural, showing the differences in the pronoun of Masculine and feminine genders and the way they are used

Possessive with particle متصلبحرف

Feminine مؤنث	3rd Person الغائب	Masculine مذكر
Singular *إليها To her	To him * مفرد إليــه	
Ilay-ha		Ilay-hi Mufrad
Dual * إليهما To them (both)	إليهما*مثنى	
Ilayhima		Ilay-hima Muthanna
Plural * إليهن To them (all)	جمع * إليهم	
Ilayhinna		Ilay-him Jam'u

البيان:

إليــه: "الهاءالمكسرة"ضميرمتصلبحرفللمفردالمذكرالغائب

Ilay-hi (To him) "Hi" means "Him" which is a possessive pronoun of the third person singular, joined with a particle and used for masculine gender.

إليها: الهاءالمفتوحه: ضميرمتصلبحرفللمفردللمؤنثالغائبة

Ilay-ha (To her) "Ha" means "her" which is a possessive pronoun of the third person singular, joined with a particle and used for the feminine gender.

إليهما: "هما"ضميرمتصلبحرفللمثنىالمذكرىاوالمؤنثىالغائبين

Ilay-hima (To both of them) "Hima" means "both of them" which is a possessive pronoun of the third person dual, joined with a particle and used for masculine and feminine genders.

إليهم: "هم"ضميرمتصلبحرفللجمعالذكورالغائبين

Ilay-hum (To them (all)) "Him" means "Them all" which is a possessive pronoun of the third person plural, joined with a particle and used for masculine gender.

إليهنّ: "هنّ"ضميرمتصلبحرفللجمعالأناثالغائبات

Ilay-hinna (To them (all)) “Hinna” means “Them all” which is a possessive pronoun of the third person plural, joined with a particle and used for feminine gender.

الأمثلة

أرسلتكتابااليهكتبترسالةإليها

KatabturesalatanilayhaArsaltukitabanilayhi

I wrote a letter to her I sent a book to him

أرسلنىعمبدإليهما

Arsalani ‘Amidu ilayhima

Principal sent me to (both of) them

أرسلتإليهمأرسلناإليهنّ

UrsilnailayhinnaursiltuIlayhim

We were sent to them (f) I was sent to them (m)

Conclusion and recommendation

The structure of the Arabic language is quite different from that of the English language. Arabic has a dual form which differentiates its nouns and pronouns from those of English.

The teachers of Islamic studies are therefore expected to take note of those nouns and pronouns and make use of them appropriately while translating the Quran or Hadith to the students.

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INTEREST AND ATTITUDE OF UNDERGRADUATE BIOLOGY STUDENTS TOWARDS COURSES WITH MATHEMATICAL CONTENTS IN PUBLIC UNIVERSITIES OF OSUN STATE

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ABSTRACT

The study investigated the interest and attitude of Undergraduate Biology Education (UBES) students towards courses with mathematical content (MC) in public universities of Osun State. It assessed the level of interest shown towards courses with MC, and the attitude of students towards courses with MC was also determined, among others. The population comprised 312 UBES from 200-400 levels, and a total of 90 were sampled through stratified random sampling. An analytic descriptive survey method guided by four research questions was employed. Data was collected with a well-validated self-designed questionnaire titled "BESAMQ" on a 4-point Likert scale. The reliability coefficient through Cronbach's alpha was found to be 0.76. Data was analysed using appropriate descriptive and inferential statistics. It was revealed that adequate and effective support and classroom instructional approach from lecturers spur students' interest in learning mathematics. The interactive teaching method motivated their interest in the study of mathematics. Students' previous achievement in math significantly contributed to UBES' interest in courses with MC. UBES' attitude towards courses with MC (B coefficient 0.156, t-value=2.106, p-value=0.038. The difference in attitude of students according to gender is not significant enough (t=1.404, df=88, P-value >0.05). It was concluded that adequate and effective support and classroom instructional approach from lecturers motivated the students in studying courses with MC, among others. It was therefore recommended that teachers must always use more interactive and innovative strategies in teaching mathematics at the secondary school level to sustain students' interest and positive attitude towards the subject.

Introduction

Mathematics is a subject that has applications in virtually all fields of study. This is one of the core subjects for all students at all levels, and a foundation of all scientific processes. Alechenu (2012) describes mathematics as the "queen" of the sciences, without which it would be difficult for people to study other sciences like physics, chemistry, biology and computer science/information technology. According to Iji (2008), mathematics is described as a model of thinking which helps the learner to observe, report and reason logically about a problem and to communicate ideas, which makes it a vital tool in science. Adeneye and Abisola (2020) from their observation state that mathematics not only enhances problem-solving and analytical skills of students but also promotes their logical, functional and aesthetic skills. Mathematics helps in modelling. Mathematics can construct models of the solution processes. With the construction of such models, predictions can be made, and certain processes can be optimised. Mathematics is used in biology for basic, raw data gathering that is useful in tracking changes over time. Biostatistics uses statistical analyses to form conclusions about biological phenomena, such as drawing comparisons or correlations between biological variables. The subject also allows biologists to describe how molecules move in and out of cells, how bacteria shuttle through blood vessels, how drugs get broken down in the body and many other physiological processes. Even though adequate knowledge of mathematics is necessary in producing versatile and resourceful graduates needed for national transformation, it appears from a cursory look at the situation that students outside of the core mathematics department, but with some mathematics content, have a deep-seated fear of mathematics, otherwise known as a phobia. This fear is also exhibited by students who opt to study biology and biology-related courses in tertiary institutions. This category of students only makes concerted efforts to make a credit pass in mathematics, knowing that mathematics is an entry requirement, but with the hope that when they enter the University, they will not be required to take mathematics courses. These students fail to realise that some knowledge of mathematics is required for proper understanding of certain concepts in Biology. Studies over the past decade show that approximately 50% of life science students lack confidence in their mathematical abilities, and as a result, students often adopt a rigid attitude to learning mathematics. Olaniyan and Salmon (2015) pointed out that mathematics phobia is regarded as a mathematics weakness in students that deals with the psychological dimension of learning. A prolonged feeling of mathematics phobia impacts negatively on the interest of students in the subject.

Lack of interest in mathematics has direct implications for students' involvement in areas that require a strong mathematics background, including science, technology, engineering and mathematics (STEM) disciplines and careers, particularly for females. Lower interest is closely related to lower performance on mathematics-related achievement tests and lower grades in mathematics (Betz, 2010), less interest in taking challenging mathematics curricula before enrolling in College (Nosek, 2002), and less interest in pursuing a career in STEM Disciplines (Usher, 2009). Usher further states that females express less interest in mathematics than their male peers, and some studies link that lower interest to fewer females pursuing careers in STEM fields. The study of Ouek, et.al (2018) on relationships between affective factors, classroom instructional approach, interest, and motivation in mathematics among primary school students showed that positive affective factors, engaging instructional approaches, and intrinsic motivation were significantly related to increased interest and motivation in mathematics.

Attitudes of students towards learning are important factors in the learners' levels of goal setting, problem-solving abilities, their beliefs towards learning, their inner and external motivations in the process of learning and all the academic performances they perform. Being a successful learner starts with having a positive attitude towards learning. A positive attitude allows the students to relax, remember, focus and absorb information as they learn. Scholars have viewed attitude in several ways. For instance, Ngogo (2014) defines attitude as the accumulation of information about an object, person, situation or experience which forms an individual's opinion about or predisposition towards that thing. Achieng (2012) sees attitude as the way one thinks and feels about an act towards an objective and ideas. Fishbein and Ajzen (2010) further describe attitude as an inner feeling expressed by an individual that indicates a positive or negative willingness of the individual towards an object.

On the matter of attitude of students towards mathematics learning, Hashim et.al (2021), among other researchers, state that students' factors, attitude, are the key contributors to academic performance in mathematics. A study by Xu et al. (2016) investigated the relationship between students' interest and attitude in learning mathematics. Results showed that interest affected students' attitudes toward the subject. It also revealed that students' interest in learning the mathematics subject influenced students' attitude toward learning mathematics courses. Thus lack of interest and negative attitude towards learning mathematics was attributed to a large extent to low achievement in the subject.

Tubunemi and Ibiene (2020) carried out a study to determine the attitude of undergraduate biology education students of Ignatius Ajuru University of Education towards

mathematics and also to ascertain whether gender influences their attitude towards mathematics. Results indicated that there was no significant difference between male and female biology education students and their attitude towards mathematics. The study of Adeyemi & Ogunniyi (2020) on the relationship between interest and attitude towards learning mathematics among high school students revealed that significant positive correlation between interest and attitude towards learning mathematics, Interest in mathematics significantly predicted attitude towards learning mathematics, and that students' perceived difficulty and enjoyment of mathematics influenced their interest and attitude. Likewise, the study of Adeyemo & Oluwatobi (2023) on the relationship between attitude, interest, and achievement in mathematics among secondary school students showed a significant positive correlation between interest and achievement, a moderate positive correlation between attitude and achievement and interest was a stronger predictor of achievement than attitude. On gender differences, Oludipe& Owolabi (2022) investigated gender differences in interest and attitude towards mathematics among secondary school students in Nigeria. findings showed a significant gender difference in interest towards mathematics, no significant gender difference in attitude towards mathematics and that both males and females showed a positive interest and attitude towards mathematics. Following the background, this study is, therefore, designed to assess gender influence and factors affecting undergraduate biology education students' (UBES) interest and attitudes towards courses with mathematical content at Universities in Osun State.

The objectives of the study are to:

1. assess the level of interest undergraduate biology education students show towards courses with mathematical content at Universities in Osun State.
2. assess the attitude undergraduate biology education students have towards courses with mathematical content at Universities in Osun State.
3. determine the factors that contribute to undergraduate biology education students developing such interest and attitude towards courses with mathematical content at Universities in Osun State.
4. determine the influence of gender on undergraduate biology education students' attitude towards courses with mathematical content at Universities in Osun State.

The study was guided by the following research questions:

1. What is the level of interest undergraduate biology education students show towards courses with mathematical content at Universities in Osun State?

2. What attitude do undergraduate biology education students have towards courses with mathematical content at Universities in Osun State?

3. What factors contribute to undergraduate biology education students having such interest and attitude towards courses with mathematical content at Universities in Osun State?

4. What is the influence of gender on undergraduate biology education students' attitude towards courses with mathematical content at Universities in Osun State?

Statement of the problem

Over the years, informal observations have shown that undergraduates offering courses outside of core mathematics have mathophobia. This is not different from students who specialise in biology education. This issue stems from a complex interplay of factors, including a pervasive fear of mathematics during secondary education, which in turn results in a negative attitude towards the subject (Eze &Maduekwe, 2021; Okafor& Nwosu, 2022; Adebayo & Ede, 2021). The dread associated with mathematics and the resultant negative attitude exhibited by students can impede their active engagement in class. This lack of interest can detrimentally affect their comprehension of mathematical concepts. Subsequently, students' understanding of certain facets of biology that necessitate mathematical proficiency can be negatively affected. Consequently, a lack of mathematical proficiency and a negative attitude towards mathematics among students may hinder their comprehension of biological concepts that heavily rely on mathematical foundations (Pitt, 2020). From previous research, including that conducted by Adeyemo & Oluwatobi (2023), and Adeyemi & Ogunniyi (2020), consistently emphasise a strong connection between attitude and students' academic achievement. Against this background, the present study embarks on the tasks of assessing gender influence and factors affecting undergraduate biology education students' interest and attitudes towards courses with mathematical content at Universities in Osun State.

Methodology

The study adopted an analytic descriptive survey. The population of the study comprised level 2 (116), level 3 (75) and level 4(121) undergraduate Biology Education of Universities in Osun State, totalling 312 students. The researchers sampled 15 students, each from levels 2, 3 and 4, which gave a total of 90. The techniques used were stratified random sampling and simple

random sampling. The instrument used was named the Biology Education Students' Attitude to Mathematics Questionnaire (BESAMQ). The questionnaire has two sections, A and B. Section A elicited bio-data, while Section B has 20 items adapted from 4 positive Likert scales of strongly agree (SA), agree (A), strongly disagree (SD), and disagree (D) on attitude towards mathematics. The validity of the Instrument was determined by two experts in the Faculty of Education. The reliability coefficient of the instrument was r = 0.76 obtained through coefficient alpha by Cronbach as a measure of its internal Consistency. Data were analysed using frequency counts, mean and standard deviation, while regression analysis and t-test statistics were used for the hypotheses.

Results

Objective 1: To assess the level of interest undergraduate Biology education students show towards courses with mathematical content at the University in Osun State

Table 4.0: Distribution of the level of interest undergraduate Biology education students show towards courses with mathematical content at universities in Osun State

Level of Interest	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	**mean**	**Std Deviation**
	N(%)	N(%)	N(%)	N(%)		
I perform better in Mathematics	7(7.8)	16(17.8)	41(45.6)	26(28.9)	2.95	±0.88
Learning Mathematics theory is of interest	13(14.4)	19(21.1)	41(45.6)	17(18.9)	2.68	±0.94
The task involved in recalling maths concepts does not impede my interest	8(8.9)	14(15.6)	54(60.0)	14(15.6)	2.82	±0.80
In learning the subject						
Adequate affective support and classroom instructional approach from lecturers spur my interest in learning mathematics	3(3.3)	6(6.7)	64(71.1)	17(18.9)	3.05	±0.62

Interactive teaching methods motivate my interest in the study of mathematics.	8(8.9)	4(4.4)	57(63.3)	21(23.3)	3.01	±0.80

In interest, Table 4.0 above reveals that the majority of the undergraduate Biology education students, 71.1% (64) agreed that adequate affective support and classroom instructional approach from lecturers spur their interest in learning Mathematics. One of the factors that boosted students' interest, as shown in the table, is the interactive teaching methods, in which 63.3%(57) agreed that interactive teaching motivated their interest in the study of mathematics. The table also reveals that 35.5%(32) undergraduate biology students either disagreed or strongly disagreed that learning mathematical theory was a task of interest to them.

Objective 2: To assess the attitude undergraduate Biology education students have toward courses with mathematical content at the University in Osun State

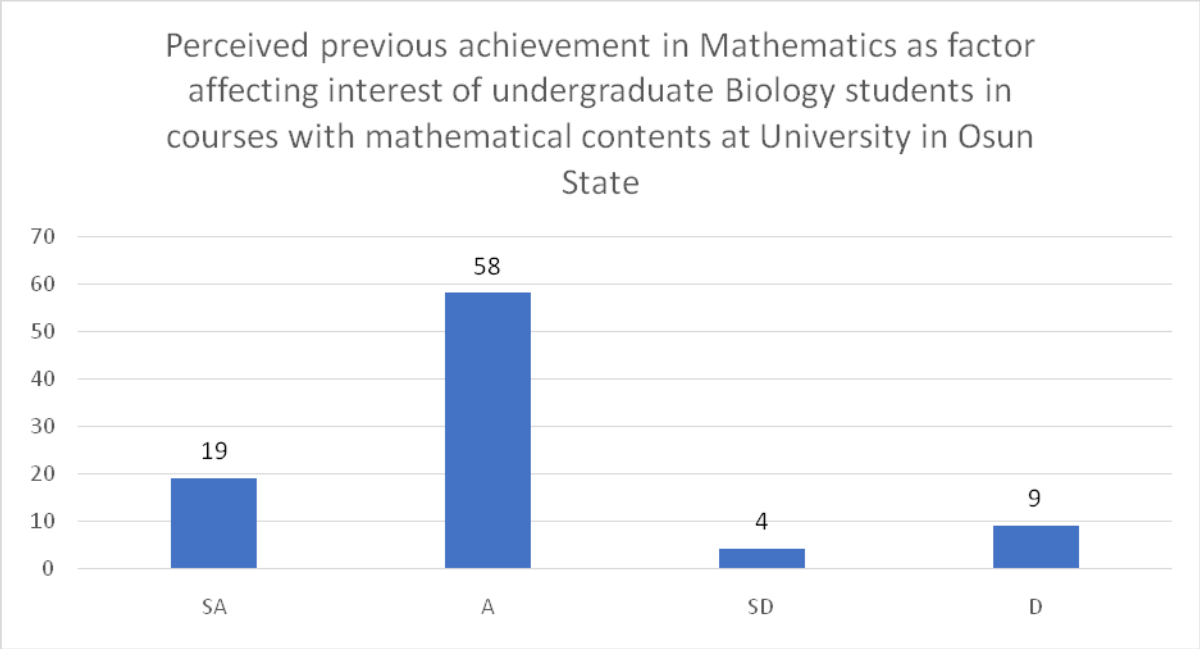
Table 4.1: Distribution of attitudes of undergraduate Biology education students towards courses with mathematical content at universities in Osun State

Attitudes	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	**mean**	**Std Deviation**
	N(%)	N(%)	N(%)	N(%)		
Mathematics is relevant to the study of Biology	10(11.1)	21(23.30	50(55.6)	9(10.0)	2.64	±0.81
The application of mathematical skills makes learning Biology easier	7(7.8)	30(33.3)	46(51.1)	7(7.8)	2.58	±0.74
I am not often overwhelmed by complex mathematics problems in my study of Biology	7(7.8)	24(26.7)	42(46.7)	17(18.9)	2.76	±0.84
Applying mathematics in Biology develops one's reasoning ability.	9(10.0)	15(16.7)	53(58.9)	13(14.4)	2.77	±0.81
Application of mathematics does not give me fear and anxiety in my study of Biology	11(12.2)	12(13.3)	51(56.7)	16(17.8)	2.80	±0.87

On attitude, Table 4.1 above shows that 23.3%(21) of respondents disagree, and 11.1%(10) of respondents strongly disagree that mathematics is relevant to the study of biology. The table reveals that 33.3%(30) of respondents disagree, and 7.8%(7) of respondents strongly disagree that the application of mathematical skill makes learning biology easier.

Objective 3: To determine the factors that contribute to undergraduate Biology education students developing such interest and attitude towards courses with mathematical content at the University in Osun State

Figure 1:Perceived previous achievement in Mathematics as a factor affecting interest of undergraduate Biology students in courses with mathematical content at University in Osun State (using frequency, percentages, mean and standard deviation)

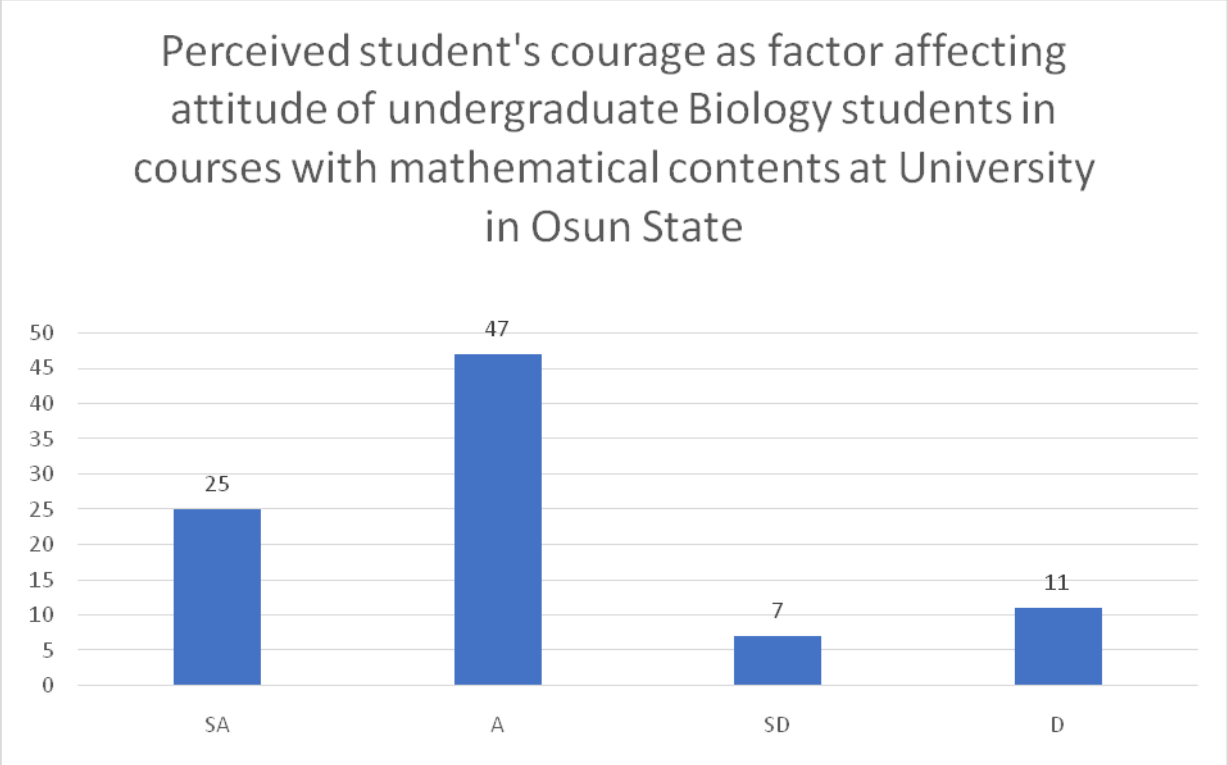


SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree

The figure above reveals the students perception on whether the previous achievement in mathematics affects their interest in courses with mathematical contents. Their response were coded and scored, strongly agreee coded as 4 and strong disagree coded as 1, such that the higher the score the higher the interest. The mean interest were found as follows, Strongly Disagree (interest in maths =2.20, std dev=±0.58). Disagree(interest in maths =3.02, std dev=±0.57) Agree (interest in maths = 2.86, std dev=±0.50) Strongly Agree (interest in maths = 3.12, std dev = ±0.60) . Interest of the students that strongly disagree were significantly lower to

the interest of those that strongly agree, with a statistical F ratio =3.644, df=(3,86) and p-value= 0.016

Figure 2: *Perceived student's courage as factor affecting attitude of undergraduate Biology students in courses with mathematical contents at University in Osun State (using frequency, percentages, mean and standard deviation)*



SA=Strongly Agree A=Agree D=Disagree SD=Strongly Disagree

Strongly Disagree (attitude toward math =2.08, std dev=±0.39). Disagree(attitude toward math =2.54, std dev=±0.42) Agree(attitude toward math = 2.65, std dev=±0.49) Strongly Agree(attitude toward maths = 3.08, std dev = ±0.51) . The attitude of the students that strongly agree were significantly different from those that just disagree, agree or strongly agree. Also attitude of those that either just disagree or agree were significantly different from those that strongly agree with a statistical F ratio=9.369, df=(3,86) and p-value= 0.001

Table 4.2: **Factors contributing to undergraduate Biology education students' interest in courses with mathematical contents at University in Osun State(Using regression analysis)**

	Interest in courses with mathematical contents				
	Unstandardized Coefficients		**Standardized Coefficients**	**Significant level index**	
	B Coefficient	**Std Error**	**Beta**	**t-value**	**p-value**
(Constant)	1.592	0.330	0.000	4.824	0.00
Interest and attitudes of students can be affected by their previous achievement in mathematics	0.165	0.078	0.208	2.114	0.038
Coping with nature of Mathematics is complex	-0.016	0.069	-0.025	0.234	0.816
Student's interest is jeopardized when they find the sequential procedures difficult.	0.001	0.074	0.002	0.014	0.989
Concentration on difficult keywords in Mathematics makes it complex.	-0.081	0.074	-0.119	-1.097	0.276
Teachers' quality and competence can affect students' interest and attitudes to learning Mathematics.	0.040	0.080	0.055	0.499	0.619
I am enthusiastic about offering Mathematics	0.195	0.078	0.315	2.494	0.015
I am not discouraged from courses having mathematical content.	0.184	0.072	0.279	2.558	0.012
Asking questions in Mathematics classes	-0.089	0.081	-0.142	-1.089	0.280

is exciting.

Mathematics-related courses are gender friendly.	0.199	0.075	0.292	2.663	0.009
Gender differences affect Mathematics courses	-0.163	0.067	-0.272	-2.422	0.018

Table 4.2 above revealed that the factors that significantly contributed to Biology education students' interest in courses with mathematical contents at the University in Osun State are: The previous achievement in mathematics, the students' enthusiasm, the students being courageous and some perceive gender related opinion.

Table 4.2 shows the regression analysis for finding the factors that contribute to undergraduate biology education students' interest in courses with mathematical content at universities in Osun State. Table 4.2 reveals that the students' previous achievement in mathematics significantly contributes to undergraduate biology education students' interest in courses with mathematical content at universities in Osun State, with a regression statistical index (B coefficient 0.165, t-value=2.114, p-value=0.038). It shows that the students' interest in courses with mathematical content will increase 0.165 times for every unit rise in perceived previous achievement in mathematics. Other factors that significantly contributed to undergraduate biology education students' interest in courses with mathematical content at universities in Osun State were: Students enthusiastic in offering mathematics (B coeff= 0.195, t-value=2.494, p-value significant=0.015), not being discouraged from having mathematical content (B coeff=0.184, t-value=2.558, p-value significant=0.012)

Table 4.3: **Factors contributing to undergraduate Biology education students' attitude toward courses with mathematical content at the University in Osun State(Using regression analysis)**

	Attitude toward courses with mathematical content				
	Unstandardized Coefficients		**Standardized Coefficients**	**Significant level index**	
	B Coefficient	**Std Error**	**Beta**	**t-value**	**p-value**

(Constant)	1.155	0.340	0.000	3.401	0.001
Interest and attitudes of students can be affected by their previous achievement in mathematics	0.102	0.080	0.129	1.270	0.208
Coping with the nature of Mathematics is complex	-0.076	0.071	-0.120	-1.075	0.285
Students' interest is jeopardised when they find the sequential procedures difficult.	-0.021	0.076	-0.031	-0.277	0.783
Concentration on difficult keywords in Mathematics makes it complex.	-0.069	0.076	-0.102	-0.907	0.367
Teachers' quality and competence can affect students' interest and attitudes to learning Mathematics.	0.097	0.083	0.135	1.176	0.243
I am enthusiastic about offering Mathematics	0.114	0.081	0.185	1.414	0.161
I am not discouraged from courses having mathematical content.	0.156	0.074	0.238	2.106	0.038
Asking questions in Mathematics classes is exciting.	0.045	0.084	0.072	0.536	0.593
Mathematics-related courses are gender friendly.	0.123	0.077	0.182	1.599	0.114
Gender differences affect Mathematics courses	0.076	0.069	0.128	1.098	0.275

Table 4.3 above showed that the courage of the students contributed significantly to undergraduate Biology education students' attitude toward courses with mathematical content at the University in Osun, with a regression statistical index (B coeff=0.156, t-value=2.106, p-value significant=0.038). it implies that the students' attitude toward courses with mathematical content at the University in Osun will significantly increase 0.156 times, for every unit rise in students' courage, at $p<0.05$

Objective 4: To determine the influence of gender on undergraduate Biology education students' attitudes towards courses with mathematical content at universities in Osun State.

Table 4.4:Descriptive statistics of undergraduate Biology education students' attitude towards courses with mathematical content at universities in Osun State by gender.

		Attitudes towards Mathematical Content			Interest in Mathematical content		
		N	Mean	Std Deviation	N	Mean	Std Deviation
Gender	Male	30	2.60	±0.57	30	2.81	±0.58
	Female	60	2.77	±0.54	60	2.95	±0.54

Table 4.5: Inferential of undergraduate Biology education students' attitude towards courses with mathematical content at universities in Osun State by gender.

	Gender influence						
	t-value	df	Significant (2-tailed)	Mean Difference	Std Error Difference	Lower	Upper
Attitude	-1.404	88	0.164	-0.173	0.123	-0.418	0.072
Interest	-1.122	88	0.265	-0.140	0.124	-0.387	0.107

Table 4.4 above shows that the attitude of undergraduate Biology students by gender, the attitude of female students is high a bit than that of male students; however, the difference in attitude of students according to their gender is not significant enough, with a statistical t-test index (t=-1.404, df=88) at p-value > 0.05.

Table 4.6: **The Distribution of respondents' socio-demographic characteristics**

		Frequency (N=90)	Percentage (%=100)
Gender	Male	30	33.3
	Female	60	66.7
Field of study	Biology	90	100.0
Department	Science & Tech Education	45	50.0
	STME	45	50.0
Institution	Obafemi Awolowo University	45	50.0
	Osun State University	45	50.0

Discussion of findings

The results of the study revealed that affective support and classroom instructional approach motivated the interests of the Undergraduates in courses with MC. It has been observed that teachers play a great role in motivating and sustaining the interest of students. When the approach to a subject is faulty, students' interests and participation in such subject (s) will be reduced. This is in line with the findings of Betz (2010), who discovered that lower interest in students is related to previous poor performance in mathematics. Findings from Quek et.al (2018) relayed that positive affective factors engaging instructional approach and intrinsic motivation were significantly related to interest and motivation in mathematics.

On the attitude of UBES towards courses with mathematical content, it was revealed by the findings of the study that the students did not agree that Mathematics is relevant to their study, thereby leading to a negative attitude towards any mathematics-related concepts. The study also reveals that the students did not believe in any way that mathematics skills are relevant to their studies. The study on the relationship between interest and attitude by Hashim et.al (2021) revealed a strong connectivity between interest and attitude of students towards learning. Also, the study of Adeyemi and Ogunniyi (2020) on the relationship between interest and attitude of high school students towards mathematics learning revealed that a significant positive correlation existed between interest and attitude towards learning math. It also revealed that interest in math significantly predicted attitude towards math and that perceived difficulty and enjoyment of

maths influenced students' interest and attitude. The study also revealed that students with strong courage have better sustained interest and a positive attitude towards mathematics.

It was revealed by the study that female Undergraduates possess a more positive attitude towards the course with MC. The study of Oludipe and Owolabi (2022) revealed that there was no significant gender difference in the attitude of students towards mathematics.

Conclusion

Based on the findings of the study, it was concluded that adequate and effective support and classroom instructional approach from Lecturers motivated the students in studying courses with mathematical content. The use of interactive teaching methods was a strong predictor of students' interest. The study further concluded that the previous performance of the UBES student in mathematics strongly affected the interest attitude towards the course with MC, and also developed their courage towards the course with MC. Previous achievement in math significantly contributed to UBES' interest in courses with MC. It also concluded that the courage of the students contributed significantly to UBES' attitude towards the course with MC. Statistically, gender has no significant influence on the UBES attitude towards Courses in MC.

Based on the conclusion, the study made the following recommendations:

1. Teachers should use more interactive and innovative strategies in teaching mathematics at the secondary school level to sustain students' interest and positive attitude towards the subject.

2. The teacher should also build students' confidence and courage in mathematics abilities through positive reinforcement, encouragement and motivation.

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FACTORS AFFECTING THE LEARNING OF ISLAMIC STUDIES AMONG STUDENTS: A CASE STUDY OF SELECTED SECONDARY SCHOOLS IN ILORIN, KWARA STATE.

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ABTRACT

The study aimed to investigate the factors influencing the study of Islamic studies in selected secondary schools in Ilorin, Kwara State. Four secondary schools were chosen for this research. A qualitative research approach was employed for this study. The in-depth, semi-structured interviews were conducted with the four selected public secondary schools in Ilorin, Kwara State, Nigeria. The interview transcripts were analysed using qualitative inductive data analysis techniques. The analysis uncovered several factors relating to the interest of students in learning Islamic studies in Nigerian secondary schools. These include the unsuitable medium of instruction, lack of instructional resources, and teachers' lack of interest in teaching, parent attitudes, and insufficient time allocation, among other factors influencing student interest in learning Islamic studies. Recommendations were made based on the findings of this study

Introduction

Knowledge is a great virtue and is an esteemed part of Islam. This is the reason that the Messenger of Allah (saw) said,"Ṭlabal'Ilmfarīḍatun'alāKulli Muslim" "Seeking knowledge is an obligation upon every Muslim" (Ibn Majah, 2024, 1: no. 224). This hadith denotes the significance of education in Islam. Therefore, pursuing knowledge of Islamic teaching is crucial for every Muslim male and female, old and young, because knowledge is a paramount tool for knowing and understanding the principles of Islamic teaching. Muslims cannot perfectly worship their lord and Creator without proper understanding and knowledge of Islam. The personal

development of a good character and high moral and ethical values has been the main objective of Islamic education. Additionally, Islamic education is not only focused on the transmission of knowledge and instruction but also on the training of the mind and the education of the whole being (Nasr, 1990). Accordingly, Atique (2012) aptly explains that education in Islam aims to couple and balance humanity's physical and spiritual development. The Qur'an says, "And so amongst men and crawling creatures and cattle, are they of various colours. Among His servants, it's the learned who fear God: for Allah is Exalted in Might, Oft-Forgiving." (35:28). In addition, Allah (SWT) sent the final messenger, Prophet Muhammad (s.a.w), to teach the Qur'ān to mankind and to serve as a model teacher for all to learn from until the last day. The Qur'ān says:

> *Serve Allah, and join not any partners with Him, and do good- to parents, kinsfolk, orphans, those in need, neighbours who are near, neighbours who are strangers, the companion by your side, the wayfarer (ye meet), and what your right hands possess: For Allah loveth not the arrogant, the vainglorious (Q4: 36).*

Allah (SWT) has provided guidelines for living a moral and dignified life favourable to Him, sometimes through passages of the Glorious Qur'ān. Accordingly, Aliyu, Abdur-Rafiu and Jayakumar (2024) viewed Islamic studies as a subject that aims to provide knowledge about Islam and its principles to Muslim children, which aids in the cultivation of the moral qualities that define a decent Muslim as both an individual and a member of society. Therefore, Islamic Studies is essential as it is of immense value to students' lives.

According to Adamu, Bashir and Abdullahi (2021:1), Islamic studies "train the sensibility of students in such a manner that their relationship with the creator, human relation, attitude to life, approach to all kinds of knowledge, and general decisions are all regulated by the value of Islam". Thus, Islamic Studies significantly facilitates students' knowledge of Islam and its teaching. It also comprises human relationships with their creator and others, relationships with the physical, economic, social, and cultural environments, and an understanding of other creatures.

According to Muhammad, Yunusa and Chubado (2022: 41), Islamic education is"one of the best systems of education, which makes an ethically groomed person with all the qualities which he/she should have as a human being". Additionally, Mohamad Johdi(2009: 2) elaborates on the aims and objectives of Islamic education. According to him, Islamic education aims:

> to provide the teachings of the Holy Quran as the primary source of education; to provide experiences which are based on fundamentals of Islam as embodied in the Holy Quran and Sunnah which cannot be changed; to provide experiences in the form of knowledge and skills with clear understanding that these experiences are likely to be changed in the

light of changes in society; to develop an understanding that knowledge without the basis in faith and religion is in complete education; to develop commitment towards the basic values which have been prescribed; to develop a sense of accountability towards the Almighty creator so that man can perform and succeed in the live; to encourage international brotherhood irrespective of differences in races and origins; to foster great consciousness of the Divine Presence in the universe; to bring man nearer to an understanding of God and of the relation in which man stands to his Creator; to develop piety and faith among the followers; to produce man who has faith as well as knowledge in spiritual development; and, to develop high quality of a good man who are universally accepted and has faith in righteous religion.

Islamic education, therefore, aims to inculcate good values in Muslim students for their survival in this present life and life after death. Islamic Studies education can also develop positive attitudes in students, such as faith, piety, virtue, God-fearing, self-restraint, respect for elders, open-mindedness, etc. Thus, Islamic education plays a crucial role in the development of individual Muslims and their community. It is the most important means to guide learners and Muslim Individuals to achieve the purpose for which they are created and to realise their life purpose.

However, despite all the benefits that may accrue from Islamic Studies education, students show little interest in the subject. Nevertheless, Students' interest has been considered an important factor in achieving the primary aims and objectives of education and student achievement (see Uyun et al., 2022, Yahyah &Kewulere, 2024; Lawal &Solarim, 2018, Adamu, Bashir & Abdullah, 2021). Learning motivation is among the major factors that affect student participation in the learning process (Uyun et al., 2022). Accordingly, Wilson (2017) cited in Yahyah and Kewulere (2024:71) stated that students tend to shy away and become frustrated with the subject because of their poor interest and attitude, which makes them weak academically and pay little or no attention to the subjects in the classroom. Similarly, in their study of students' indifference towards the study of Islamic studies in Nigerian Higher Institutions, Lawal and Solarim (2018) found that the low enrolment in Islamic Education is primarily due to inferiority complex, parental influence, and poor background in Islamic Studies. Thus, it is acknowledged that students' lack of interest affects their performance in Islamic religious studies in Nigerian schools.

Aims and Objectives of Islamic Studies in Nigerian Schools

Islamic Studies was introduced as a subject in the Nigerian school syllabus to develop Muslim students' intellectual, moral, and spiritual skills and provide them with knowledge of Islam and Islamic culture through strategic methods and approaches. It is a subject that is aimed at helping students gain Islamic knowledge and a comprehensive understanding of their role as vicegerents of Allah. According to Aminu (2024), Islamic studies education aims to inculcate Islamic morals, values, norms, principles, ideology and intellect for the economic development of Muslim nations. Accordingly, AbdulKabir (2023) reveals that "the main objective of Islamic religious studies in Nigerian primary and secondary schools is to teach Muslim children the fundamental knowledge of Islamic studies so that they can properly understand their religion and inculcate Islamic moral and ethical values so that they can live fruitful lives". Similarly, Umar, Abdullahi and Aminu (2020) state that the main purpose of Islamic studies in Nigerian schools is to provide the students with knowledge and wisdom that establishes the standard of value and judgment that pertains to all spheres and activities of human life.

Furthermore, the purposes of teaching Islamic studies in Nigerian schools, as outlined in the National Policy of Education of 2004, are:

i. To develop students' spiritual, intellectual, physical, and moral aspects for Ibadah.
ii. Make students understand the existence and oneness of Allah.
iii. To provide students with a broad knowledge of Islam as a religion, culture and civilisation.
iv. To provide students with knowledge of the Quranic and prophetic Sunnah as sources of Islamic knowledge.
v. To assist the learners to know how to worship Allah in the way He should be worshipped
vi. To prepare the students to perform their roles and responsibilities towards Allah, other human beings, and themselves, and make significant contributions to the development of contemporary Muslim communities.
vii. To assist students in understanding and finding solutions to the problems of modern Muslim communities (National Policy on Education, NPE, 2004).

In addition to the foregoing, the aim of Islamic studies in the Nigerian school curriculum, according to the Nigerian Educational Research and Development Council (2007), as observed by Abdulazeez (2020:299), is:

i. Accepting Allah (the Exalted) as the only source of morality and the Creator and Sustainer of all that exists;

ii. Fostering an attitude of appreciation to Allah and submission to the moral commands and guidance of Allah, in both our worship of Him and our social conduct;

iii. Awakening of the intellect faculty and reasoning based on the Qur'an injunctions: "Will you not use your reasoning?", "Will you not ponder and reflect?".

iv. Support of the pursuit of beneficial knowledge, as stated by Prophet (SAW): "the search for knowledge is a duty for every Muslim" and its application for the benefit of mankind in sciences, technology, and medicine, etc.;

v. Prioritising all aspects of the individual and the community development by giving suitable weight to the social, physical, moral, intellectual, and spiritual human needs,

vi. Promoting equality, brotherhood, and human rights through practical means to achieve ethnic harmony and social solidarity instead of greed and selfishness.

vii. Recognising Allah's presence as a Witness of all our thoughts, actions, and behaviour serves as a deterrent to illicit acts, be it in the public or private and as a good incentive to an excellent character.

Thus, the aim of Islamic studies education is to fulfil our first objective in life to faithfully serve Allah, who created us. Islamic studies education aims at developing Muslim individuals spiritually, physically, morally, intellectually, psychologically and socially. Based on the above discussion, it is expected that Islamic schools should train and help students develop their sense of spirituality to have a positive relationship with Allah, the creator. In addition, it emphasises the development of the individual in learning their relationship and duties towards their creator, fellow human beings, and other creatures so that they would be able to perform their duties according to the teachings of Islamic principles.

Statement of problem

There is no denying that students' interest in Islamic education is grossly declining and continues to decline. This decline comes from factors related to the curriculum contents, students, teachers, learning environment, teaching method, Arabic language proficiency and assessments, parent influence, peer influence, and lack of proper and adequate instructional material resources. For instance, Olaitan (2017), cited in Ali et *al*(2024, p.202) wrote that "secondary school students exhibit a lack of interest in offering Islamic Studies as a subject or selecting it as a field of study". Similarly, Adamu, *et al* (2021) wrote that "many Nigerian University students lack genuine

interest in studying Islamic Studies and they give little or no attention to it and always run or dream after other disciplines to become contemporary professionals but ignorantly forget to insert Islamic teachings into their struggles to be morally and ethically professionalized" (p. 6).

Hence, the student's lack of interest would lead to the underachievement of the Islamic Studies education goals of inculcating the right values and behaviours among the students to bring about changes in an individual, and society as dictated by their religious belief, and become a responsible individual. Recognising the significance of Islamic education as the means of inculcating Islamic teachings and values into Muslim individuals, it is pertinent for Muslim students to have a deep and sustained interest in learning the subject. Based on the foregoing, the purpose of this research is to explore the factors that contribute to students' low interest in Islamic religious studies education in Nigerian secondary schools. The study also sought to contribute to enhancing the teaching and learning of Islamic religious studies in Nigeria's secondary school system by examining the Islamic teachers' and students' perceptions to improve students' interest in the subject. Therefore, the study aims to provide discourse on the factors influencing student interest in learning Islamic education and proffer possible solutions to problems.

Purpose of the study

Accordingly, the general aim of this study is to identify the factors influencing students' desire in learning Islamic education. Specifically, this study is set:

1. To evaluate the purpose of Islamic religious studies in Nigerian schools
2. To investigate the factors affecting students' interest in learning Islamic education in Secondary Schools in Ilorin, Kwara State.
3. To scrutinise the actual state of Islamic studies in Nigerian secondary schools.

Research Question

The following are the research questions that guided the collection of the data for this study:

1. What are the purposes of Islamic Religious Studies in Nigerian secondary schools?
2. What are the factors influencing students' interest in learning Islamic studies?
3. What are the challenges faced in the pedagogy of Islamic Studies in selected secondary schools in Ilorin, Kwara State, Nigeria?

Methodology

The study is qualitative research that employs a case study research design. Qualitative research is an approach to social science research that emphasises collecting descriptive data in natural settings, uses inductive thinking, and emphasises understanding the subject's point of view (Creswell, 2014).

Yin (2003) asserted that case study researchers intend to produce comprehensive data and analyses of a single or multiple cases, like a study of an individual as a case study, a group of people, an event or a program.12 students from the selected schools participated in the in-depth semi-structured interviews to collect data. The researcher randomly selected three private and three public schools in Ilorin, Kwara State. At each school, 6 Islamic Studies teachers were randomly selected. Therefore, 12 Islamic Studies teachers were purposively sampled to participate in the study. All the selected teachers willingly participated in the study, and their teaching experience ranges from ten to fifteen years.

Studies on the factors affecting students' interest in Islamic education in Nigerian schools

Various studies have shown that students are not very interested in learning Islamic studies in Nigeria. For instance, Adamu *et al* (2021) analysed key challenges in teaching Islamic studies in Nigerian universities by investigating the various issues facing its teaching, learning, and development that always result in distress or failure for the designed goals of the course. Their research findings revealed that methodological, linguistic, and technological aspects directly impact the process of teaching and learning of Islamic studies in Nigerian Universities.

Kazeem and Balogun (2014) revealed that Islamic education has had difficulties with acceptability, funding, and enlightenment among Muslims and Nominal Christians in their study on the challenges faced by Islamic education in Nigeria. They argued further that Islamic education has not fostered the Islamization of knowledge and seeks to reshape all the branches of human knowledge, humanities, pure and applied sciences, per the Islamic view and perspective.

Similarly, Aliyu, Abdur-Rafiu and Jayakumar (2024) found that among the factors that determine students' selection of Islamic studies in secondary schools in Nigeria are parental influence, teachers' attitudes, teaching techniques, and the use of technology as an instructional medium. Likewise, Ibrahim and Abdulhamid (2017) studied the meaning and relevance of Islamic Education, the negative attitude of students towards embracing it, and the factors responsible for that negation. Their study also revealed that the majority of the students who are pursuing Islamic education are not as proficient in Arabic as they are in the English language. Their study also showed that Western culture and environmental influences contributed

significantly to the students' negative attitude towards the subject, in the sense that the school and home environment are not encouraging Islam and the acquisition of its knowledge.

Another factor raised by Busari (2018) is that Islamic education is viewed as an elective in Nigerian schools, rather than a compulsory subject that can develop students' faith, spirituality, and intellect. The author further noted that to reduce the number of subjects taught in primary and post-primary schools, the Federal Ministry of Education merged Islamic religious studies with other related disciplines. This, without doubt, is among the major factors that influence students' interest in the subject and decrease its value and effectiveness in the lives of Muslim children.

Another identifying factor influencing students' interest in Islamic education, according to various researchers, is the method of teaching. The popular methods of teaching Islamic studies education in Nigeria are rote learning, memorisation and note copying. Thus, memorisation is the norm and primary means of teaching with the teacher at the centre of activities (Yahyah &Kewulere, 2024). Although memorisation has its place in Islamic education, it cannot, on its own, arouse the pupil's real interest and imagination, nor capture their involvement in the learning process. Similarly, Mariya (2013) believed that students will perform better in Islamic studies when taught using guided inquiry and lecture methods.

Hence, many researchers have researched students' interests and educational performance in Islamic education. The present study is unique from the above-mentioned studies because the current research is not only focused on the influencing factors alone it is also concerned with how to increase students' interest in Islamic religious studies and determine the challenges facing teachers and students in teaching and learning Islamic education.

Data Analysis

Data collected from the interview were subjected to thematic analysis. This analysis used coding, categorising, and interpreting (McMillan & Schumacher, 2010).

Research Questions 1: What are the purposes of Islamic Religious Studies in Nigerian secondary schools?

Perceived Multiple Perspectives Regarding the Aims and Objectives of Islamic Religious Studies

Islamic Studies is a dynamic course of instruction that focuses primarily on providing guidelines for the Muslim youth to live a moral and dignified life, favourable to the Almighty Allah. Based on the interview in this research, all of the teachers state that the general objectives of Islamic Studies education in Nigeria are the inculcation of Islamic teachings and values in the

students and also to provide them with knowledge of divine revelation of the Glorious Quran and Prophetic Sunnah, worships such as performing daily prayers, respect for parents and other moral and value ethics. For example, Informant teacher A made the following comment:

> *Islamic religious studies is a subject that teaches Muslim children about their religion and the importance of their creation and worship… It also inculcates Islamic ethical values and morals in the learners. It also aims to teach the individual how to relate to or have good relationships with society, their family, and the world*.

Teacher B explained that the Islamic religion studies:

> *Apart from the teaching of the glorious Quran, the prophetic Sunnah, and the story of other prophets. Islamic religious studies are also concerned with how to teach Muslim children to become pious beings who are conscious of their religious duty ...And to provide them with the required knowledge to carry out their religious role.*

Teacher C also explained that:

> *Islamic religious studies is a subject that teaches students the revealed book, the Quran and Hadith, Fiqh, etc. Islamic religious studies also provide Muslim youths with the history of their religion and also teach and encourage Muslim children to be obedient servants of Allah …and to develop them morally and spiritually.*

Teacher D added further that:

> *Islamic religious studies aim to impart Islamic knowledge, values, and skills to the Muslim young generation. They teach students to be good students and good citizens, morals and values that guide their behaviour in society, and how to respect elders. They also present them with past events so that they will understand and appreciate the role of earlier Muslim scholars.*

Teacher E acknowledged that Islamic studies education aimed to develop and prepare students intellectually, morally, spiritually, and socially to be able to carry out their role and responsibility as obedient servants of Allah. Similarly, Teacher E supports the notion that the purpose of Islamic religious studies in Nigerian secondary schools is "Islamic studies focused on the teaching of the Qur'anic knowledge and the prophetic Sunnah and to develop students intellectually, spiritually and physically to become better human beings."

When students' perceptions were analysed, it was found that all the students shared similar opinions regarding the purposes of learning Islamic Religious Studies. They all believed that the purpose of learning Islamic Studies was to know more about the teachings of the Islamic religion. The following remarks expound on their responses to the issues.

> *"We learn Islamic studies to know about our religious duty and social responsibility and to know about the history of Islam,*" ST1.

Islamic studies teach us the message of the glorious Quran and the stories of the Prophets and other prophets like the Prophet Daud, Sualiman, Yusuf, Lukma, Zakariyyah, etc., and also of the other messengers of Islam like Jubril, Minkail, and so on. ST2

Learning Islamic studies aims to understand and memorise certain parts of the holy Quran and other beneficial Islamic teachings. ST3

We learned many meaningful and useful moral lessons from Islamic religious lessons like respect for our religion and others' religions, for our parents and elders, obedience, truthfulness, etc. … Our teacher also always advised us to pray regularly and also taught us how to pray" ST4,

We learn Islamic studies to gain a deeper knowledge and understanding of our religion because all the topics we learn in Islamic studies are important and useful for us in serving Allah", ST 5

Islamic religious studies teach us good attitudes, respect for our parents, teachers, siblings, families, even our classmates and friends. It teaches us to respect all other human beings" St6

All the respondents acknowledged the uncommon goals and knowledge offered through Islamic Studies education. The signs of such opportunities were attached to the fact that all the respondents emphasised that Islamic Studies subjects provide them with knowledge and skills to prepare them to become good and obedient Muslims. Thus far, the discussion has shown that the informants demonstrated fair knowledge of the goal of Social Studies. Their view corroborates Aminu (2024), AbdulKabir (2023), Umar *et al* (2020), that Islamic studies education seeks to instil Islamic values, norms, principles, ideology and intellect for the benefit of Muslim individuals and the development of entire nations. Consequently, the primary objective of Islamic Studies is to prepare the students to perform their obligations towards Allah, other human beings, and themselves, while significantly contributing to the development of contemporary Muslim communities and providing assistance to students in understanding and finding solutions to the problems of modern Muslim communities' (National Policy on Education, NPE, 2004).

Research Question 2: What are the factors influencing students' interest in learning Islamic studies?

Based on the findings of this study, the following major factors have influenced students' interest in learning Islamic studies:

1. ***Teaching approaches***

Observation revealed that the pedagogical methods of teaching Islamic studies education in Nigeria for the past decades were teacher-centred centre rote learning, memorisation and note copying approach. However, based on the participants' responses to the interview questions, all the teachers claimed to use a wide range of appropriate and cooperative learning methods such as dramatisation, discussion, Socratic questioning, and inquiry methods. Mariya (2013) argued that students can perform better in Islamic studies when taught using guided inquiry and lecture methods. The following are some of their responses to the question:

> *"To be a professional teacher of Islamic education, the teacher has to know the teachings of the Quran and Hadith and must be able to use them in their teaching process",* Teacher A.

> *I followed the Quranic and prophetic teaching methods in teaching because I know that as a Muslim and a teacher of Islamic education, I need to be versed in the sources of Islamic education that is Quran and Hadith as well as the Islamic disciplines that provide the tools in teaching about Islamic faith and duties according to its principles"* Teacher B.

> *I believe that teachers are the role models and the most important factor responsible for developing students' knowledge and values. Therefore, I always try my best to use the appropriate methods for every lesson I teach the students,* Teacher C.

Teacher D echoed these sentiments when she reported that:

> *The popular methods I use in teaching students are instruction, practical, demonstration, role model and exemplary method…I also gather some important and relevant information from the available materials regarding the issues that are related and concurrent in society, and discuss them with the students so that they will know the pros and cons of such issues.*

Contributing to the same issue, Teacher E. had the following to say;

> *I always follow Quranic instructions and Sunnah in teaching students…these two primary sources of Islamic religious knowledge are important for us as teachers of Islamic studies to know, understand and master so that we apply them in our teaching... Allah (SWT) says in the Glorious Quran "certainly you have in the messenger of Allah an Excellent exemplar for him who hopes in Allah and the final day, and who remember Allah much. The Prophet (saw) also told his followers before his death that I left two things for them (the Quran and my Sunnah), whoever holds tight to them will never go astray. This, I think, is enough evidence to know that these two sources are very important for Muslim individuals to learn and master, particularly for teachers of Islamic education."*

In addition, Teacher F expressed that:

No method is superior and we can adapt to a single method it depends on the topic because there are some factors that we need to consider before adopting any method, for example like age; we must consider the age of students because although most of the I use dramatization, role play methods; demonstration and excursion, group or individual assignment methods based on the topic we are treating, but I normally consider my students and its adaptability for the topic before choosing a method.

The analysis of the students' interviews reveals that Islamic Studies teachers used different methods to teach them. The following are some of their responses to this issue.

Our Islamic studies teacher used to give too many notes to copy, which made us feel bored during the Islamic studies period. After we finished copying the notes, sometimes the teacher just gave simple explanations depending on the remaining time, and they didn't give practice.", ST 1

Sometimes I don't attend the Islamic religious studies class because the teacher's teaching makes me get bored, like when the teacher gives too many notes to copy and gives some explanations sometimes, if we don't understand, they will not give us a chance to ask questions for clarification. ST2.

ST 3 reported that "

"Too much note copying makes me bored and sleepy, particularly when it includes Arabic text, because sometimes we will even ask to copy some Quranic verse and Hadith in the Arabic language and ask us to memorise them.

Our teacher is aggressive. When he asks us to memorise some text and we do not, we will be beaten, so sometimes I am afraid to go to class.
ST4,

Our teacher wrote too much on the chalkboard or gave the note to the class captain for us to copy, and then went back to the staff room until the period for his subject was over, and then came again. Sometimes he explained the previous note in the next Islamic studies period, and sometimes he may not explain. So at times when the teacher left, I also left the class and came back when it was time for another lesson, ST5.

Our teacher always wrote the notes on the chalkboard while we were busy copying it. Sometimes she gave some explanation at intervals, in which we did not pay much attention because if we did not fasten our notes, she would erase them and continue the note. ST6

Based on the findings of this study, the teaching method employed by some of the teachers of Islamic education is one of the major factors that led to students having less or no interest in learning the subject. It was also discovered that the students were not satisfied with their Islamic

education teachers' teaching approaches. These participants' views corroborate the finding of Adamu *et al* (2021) that Islamic Studies teachers are unfriendly, unapproachable, uncaring, incapable of handling the subject matter of their responsibility, lacking exemplary personality, and unreliable as role models and experts. As a result, they create many unresolved problems in the hearts of Muslim University students, discouraging them from attending classes.

2. Arabic Language Proficiency

Arabic language proficiency is among the most significant factors that affect students' interest and obstacles to teaching and learning Islamic religious studies in Nigerian secondary schools. Arabic language proficiency is important to Islamic education since the primary sources of Islamic education (Qur'an and Hadith) are written in Arabic; it is required for Islamic students to be able to read, write, and understand Arabic text. However, based on the interviews in this research, the study revealed students' difficulties in understanding the Arabic language and copying Arabic notes due to their little or no experience in Arabic. The following remarks captured their narration on this issue:

> *"I usually don't like the Islamic studies subject because of the Arabic aspect of it….there is no way we copied notes without copying Arabic, which is very difficult for me to write, and it makes me feel tired in the subject to the point that I sometimes skip class" ST1.*

In addition, another student stated that:

> *"I do not hate Islamic studies, I like it because it teaches me more about my religion and how to worship my creator, but when it comes to Arabic terminology of the subject, it makes me completely lose interest in the subject because I can read talk let of understand, Arabic text." ST2.*

Two of the participants stated emphatically that they had no background in the Arabic language when they said ST 3 and ST 4, they stated that they never attended any Arabic school and did not expect to be teaching it in their schools. They thought they would be only learning about Islamic history in Islamic studies, not knowing that they would be asked to copy and memorise Arabic texts.

ST5 began their responses with very similar responses that

> "*I have never attended Arabic school, I never go to madrasa. So I don't know how to read and write Arabic words, and as a result, my grade score in Islamic studies is very poor*."

ST 6 student also echoed these sentiments when he reported that

Islamic studies have several Arabic texts, like Quranic verses or some prophetic Sunna that we are supposed to write and memorise, and these texts are always necessary to remember for the examination. I have difficulty in writing and understanding Arabic words, so I don't like the subject and always hesitate to attend the class"

Their responses suggest that students with little background knowledge of the Arabic language may not perform well in Islamic education and may lose interest in the subject.

When teachers' perceptions were analysed, it was found that all the teachers shared similar opinions with students. They all believed students lost interest in Islamic studies due to difficulties reading, writing, and understanding Arabic texts. For instance, teacher A responded that:

"*Some of our students feel Islamic studies is a difficult subject because of its Arabic origin. They find it difficult to copy Arabic notes, even if they manage to copy the notes, some of them cannot read what they copied, although we used to explain the notes to them in the language they understand".*

Another respondent's teacher B made a similar point when she said:

"Students' inability to read, copy and understand Arabic text affects their interest and performance in Islamic education…students' ability to read, write and memorize Arabic texts will help them in understanding and comprehend the lesson taught and therefore passing the given exams, the case here is that 90 percent of our students cannot read Arabic text talk less of understanding it, I believed this is one of the main reason that makes student have no interest in the subject".

Teacher C echoed these sentiments when he expressed that:

It is not a deniable fact that most reliable sources of Islamic education or Islamic studies can only be found in the Arabic language… this is why the Arabic language is important for Muslim children and students, although we do not expect them to master the language as linguists will do, they should possess a certain degree of Arabic language to assist them in understanding Islamic studies subject and perform well in the examination…however, majority of our students have a poor background in Arabic that makes them hate Islamic studies subject.

In addition to what the previous participant said, Teacher D stated that:

It is a well-known fact that the Quran and Hadith are the primary sources of knowledge in Islam, and there is no way we can teach Islamic religious studies without teaching these two important sources of knowledge, which makes knowledge of the Arabic language important for our students if they want to excel in their studies. However, the students find learning Arabic very difficult and show no interest in it, no matter how hard we make them see the reason they need to have background knowledge of the Arabic language in their studies and life.

Teacher E remarked that:

> *"Some of our students show low interest in Islamic religious lessons and sometimes even find flimsy excuses to absent themselves from class…I later found out that some of them, though not all ran away from the class because of their inability to read and copy Arabic notes."*

Teacher F, in his response, also explained that:

> *"Every Muslim student must learn Islamic religious studies in both lower and upper secondary schools in Nigeria, not for knowledge gain alone but because it is a prerequisite of their religion. However, many students are not interested in the subject, if they were given a choice between Islamic studies and other subjects they would gladly choose other subject to Islamic religious studies because of my observation and understanding of their attitude towards the subject…some will not come to class, the one came will may not have a notebook, if we ask them to buy Islamic studies materials they will say they don't know how to read some of its contents because they were written in Arabic"*

Drawing on the synthesis of the narratives offered by the respondents, it is apparent that students have difficulty learning Islamic religious studies because of their inability to read, write, and understand Arabic text. These settings significantly contribute to the disinterest in Islamic religious studies in Nigerian secondary schools. This finding corroborates Adamu *et al.'s* (2021) findings that many Nigerian students lack sincere interest in studying Islamic Studies, paying it little to no attention. It also corroborates Aliyu e*t al* (2024) that students choose to skip the Arabic language course and instead pursue other subjects due to their fear of the Arabic language.

3. Curriculum content

The majority of the participants' teachers believe that Islamic religious studies have the potential to develop good values in the learner, but believe that there is a distinction between policy and practices that is also considered among the factors that led to students' disinterest in the subject, as was manifested in their response to the researcher's probe. For example, teacher A said:

> *I believed the Islamic religious syllabus was formulated with a broad range of content to build and develop Islamic knowledge and values in the students at each level. However, I think the syllabus seems too broad for the shortest time of one or two periods of 40 minutes to cover, and some of the content also seemed too wide and ambiguous for secondary students' level, perhaps this may be one of the reasons that made the students lose interest in the subject …"*

These pieces of evidence indicate that the Islamic Studies syllabus used in our schools is too broad and difficult for some students to comprehend. In other words, there are too many topics to be covered within a short period of a year.

…there is a need for the government or the Ministry of Education to provide us with the needed material resources to facilitate or to make learning Islamic studies more fun and interesting to the learners. One, there is a need for the provision of current and relevant textbooks. Two, we need electronic gadgets in terms of television, computer, radio and so on. Doing this will make the teaching and learning of Islamic studies conducive and more interesting for the students

Teacher C also stressed that:

As teachers, we are expected to use various techniques, instructional materials, and different kinds of activities to make teaching and learning of Islamic studies meaningful and lovable for the learners. However, several factors that include the unavailability of material resources, time factor, students' attitudes towards learning…some of our students have no interest in Islamic education…it's like a tug of war when it comes to the Islamic studies period"

Teacher C remarked further that:

Some of us teacher takes teaching as just part-time work and don't put much of their mind on it and as far as I'm concerned from my end, I think we need to organize a forum whereby all the teachers that are involved in Islamic Studies will sit down and think of how we can work out on how to the teaching and learning of Islamic Studies and make students develop greater interest in the subject

Teacher D said that:

One of the major problems we face with Islamic Studies generally is that the number of periods allocated to it is too small compared to other subjects that repeat five or more periods…. Both the periods and time allotted to the Subject are not enough for them to cover the subject syllabus and engage the student's active participation in the teaching process…*structure of the class, time allocated for the delivery of the curriculum... the problem of getting current textbook and teaching resources and materials ... the inability of the students to have the financial backing to provide for themselves for the materials needed for their learning* impede the effective teaching and learning of Islamic religious studies and demotivate students interest in the subject"

Teacher E declared that.

The time allocated for the Islamic Studies subject is not enough to teach Islamic Studies as a subject. Take for instance now the schedule for teaching Islamic Studies is 45 minutes and in a situation where one wants to explain one certain concept that goes beyond spending 45 minutes and this 45 minutes per class one has two periods per week so of which one will not be able to cover the topic schedule for that week, so in this regard, I'm imploring the government to please extend the period for this subject instead of two times in a week maybe should be having it four or five periods per week.

Teacher F also echoed these sentiments when he expressed that:

The time allocated in the timetable is not enough, it is just only 40 – 45 minutes per period, for both the teaching, explanation, and copying notes…..we have the slow ones among the students and if we give them plenty of time to copy the note to copy we will

not be able to explain it for them, and if they take the note home after copying it they will not bother to go through it, so if we asked them any question about the note they copied they will not be able to answer them so we have to give them an explanation on them then they will be able to contribute. But let's say the time factors are relevant or are adequate, that is, the time given for the lesson is enough, we will be able to give them time to copy and explain it to them, and they understand it better, and we have more interest in the Islamic studies subject.

4. Parent Influence

The parent and home environment can significantly influence students' enthusiasm in learning. Analysis of data revealed that among the factors hindering students' interest in Islamic education was the parental influence on their children's education. For instance, teacher A reported that:

> *"...some of the parents are ignorant of Islamic teachings, which makes the students not dedicated to the subject…some parents see the teaching of Islamic values as imposing on their children, like wearing the hijab (head cover) and decent clothes"*

Teacher A's response suggests that a lack of parental encouragement or negativity concerning their children's education greatly influences students' learning interests. Accordingly, teacher B also remarked that:

> *The attitudes and behaviour demonstrated by the parents play a great role in students' interest in learning… Some parents show nonchalant attitudes toward their children's education, particularly Islamic religious studies. For example, if a teacher of Islamic studies requests the audience of parents to discuss their ward's issue, they will not come, but if it is maths, English, or another science subject, they will come."*

Teachers C, D, and E echoed these sentiments when they admitted that some parents showed little interest in their children's education, hardly visited the schools, or checked their children's performance; even if we invited them to discuss their children's performance, they would not come.

Teacher F in his response to the same question affirmed that: *"Parents are no longer interested in their children's education nor ready to provide them with what they need in school"* The informant expressed further that: *the way the parents react to their children's performance in Islamic education greatly influences students interest in the subject…parent didn't care whether the students pass the Islamic studies as they do for the subject like Mathematics, English, Biology and other Science subjects."*

The study revealed that some parents exhibit nonchalant attitudes toward their children's education, particularly in Islamic religious studies. This confirms Aliyu *et al*. 's (2024) view that the majority of parents, due to their religious beliefs and expectations, do not permit their children to pursue Islamic Studies as a career.

Research Question 3: What are the challenges faced in the pedagogy of Islamic Studies in selected secondary schools in Ilorin, Kwara State, Nigeria?

In response to the question, the participant teacher mentioned students of interest, lack of proper and adequate instruction, students' absenteeism,

1. Students' Lack of Interest

Students' lack of Interest was among the many challenges the teachers faced in teaching Islamic studies, and they said it affected their teaching process. If the students love and are interested in the subject, it will allow them to learn and gain more knowledge. However, the participants' teachers expressed that students see Islamic studies as boring and show no interest in the subject. They believed that if not for the sake of mandated examination, the students might not attend class when it is Islamic studies period. They reported that students' lack of interest in the subject affects them negatively and results in poor performance in Islamic education. In confirming some of these participants' responses, Adamu *et al*(2008) opine that factors such as the interest of the Student, teachers, and parental factors, school curriculum deficiency, the Country's official language barrier and pedagogical problems militate against its potency.

2. Lack of proper and adequate instructional material. Resources:

All the participants in the study revealed that the lack of proper and adequate instructional resources is among the greatest challenges facing them in the teaching of Islamic education. The following remarks expounded their responses to the issues:

Teacher A remarked that*: "In my school, we do not have up-to-date textbooks of Islamic religious studies, as we've been using the same old textbooks for more than two decades, which I think is no longer relevant for our students…"*

Teacher B expressed that:

'We teachers of Islamic studies, based on my 12 years of teaching experience, can confidently say we are facing the problem of lack of appropriate and current materials… we rely on our knowledge of particular topics to deliver lessons"

In addition, Teacher C described the challenges as*:*

In our schools, we face many challenges ranging from the structure of the class to the time allocated for delivering the curriculum. The problem is getting current textbooks and other teaching materials resources to facilitate the teaching and learning of Islamic education and allow the teacher to deliver effectively.

Another respondent, Teacher D, elaborated further on the challenges as follows:

…teaching aids are not provided in most cases, so we go on improvisation... As we all know, 80% of Islamic studies material is written in Arabic, and most of our students have no background knowledge of the Arabic language. Therefore, as a teacher of Islamic studies, I always struggle to get the right and appropriate materials to deliver quality lessons to the learners…so also as I said earlier, the period allotted for Islamic studies in the school timetable is not enough; these are among the major problems I, as a teacher, am facing…"

Teacher D's submission corroborates Badirudeen's (2024) observation that "most of the time, the lecturers improvise within their locality or teach arithmetically to the students and the role of instructional materials in teaching". Accordingly, Teacher E described how the country's imbalanced society and economic situations influence their teaching profession. He said:
"We teachers are experiencing a lot of difficulty and challenges in terms of *incentives for the job, poor salary structure, late payment of our salaries and allowances, non-inclusion in decision making in matters concerning us…*

According to Teacher F:

Teachers face challenges when it comes to teaching Islamic studies firstly we lack material resources, secondly time factors, thirdly current Islamic studies textbooks, as well as students' attitudes…. the lack of or insufficient proper material resources did not allow students opportunities to acquire Islamic knowledge and skills and the development of Islamic teachings and values required to sustain and improve their way of life and actively contribute to the development of the society in which they live.

Drawing on the synthesis of the narratives offered by the respondents, it is obvious that a lack of or a shortage of current and proper instructional materials, a lack of student interest in

Islamic studies lessons, inadequate periods and time allotted in the school timetable for Islamic religious studies, are not enough for effective teaching. This is compared with the findings of Badirudeen (2024:8), who identified that not all Islamic Studies lecturers are Arabic literate, resulting in the inadequacy of the available textbooks to teach the students. This is compared with the findings of *Muhammad, Yunusa and Chubado (2022)where a lack* of adequate teaching aids and textbooks was identified among various factors that impact the effective teaching of Islamic studies in public primary schools.

Discussion and Conclusion

The study examines factors influencing students' interest in learning Islamic religious studies.

Research Questions 1:

The research question investigates teachers' and students' perceptions of the aims and objectives of Islamic Religious Studies in Nigerian secondary schools. The analysis of the results of the findings reveals that all the participants, both teachers and students, had positive perceptions about the aim and objectives of Islamic education. They all believed that Islamic education aimed at the inculcation of Islamic teachings and values in the students and also providing them with knowledge of the divine revelation of the Glorious Quran and Prophetic Sunnah, as well as developing learners morally, spiritually, and socially, is the primary aim of Islamic Education. This view supports that of Atique (2012), who expressed that the purpose of education in Islam is to associate and balance the physical and spiritual development of humanity.

It was also revealed that Islamic religious studies aim to provide Muslim youths with the history of their religion and teach and encourage Muslim children to be obedient servants of Allah. The participants' students also acknowledged the uncommon goals and knowledge offered through Islamic Studies education. However, despite knowing the benefits that may accrue from Islamic studies as declared above, Students still show a lack of interest in Islamic Studies as a subject.

Another essential finding of this study is that relevant and current Islamic Studies textbooks are not available in schools, and a lack of effective supervision and evaluation of the Islamic Studies curriculum also influences student interest in the subject. This finding is consistent with AbdulKabir (2023) that the lack of essential material resources and current and proper Islamic studies textbooks has resulted in many Islamic studies teachers utilising outdated materials, which has also greatly influenced students' interest in Islamic Studies

Research Question 2

The second research question investigates the major determinants of students' interest in learning Islamic religious studies. The overall findings showed that several factors, including teaching approaches, Arabic language proficiency, curriculum content, and parent influence, among other factors, led to students' low interest in Islamic studies. This finding corroborates Ibrahim and Abdulhamid (2017), who admitted that most of the students pursuing Islamic education are more fluent in English than they are in the Arabic language. The finding also confirms Aliyu, Abdur-Rafiu and Jayakumar (2024) that parental influence, teachers' attitudes, teaching techniques, and the use of technology (instructional media) are the elements that determine students' selection of Islamic studies in secondary schools in Nigeria.

Research Question 3: What are the challenges facing teachers and students in teaching and learning Islamic education?

The last research Question examines the challenges faced by the teachers. The study revealed numerous problems surrounding the effective teaching and learning of Islamic religious studies in Nigerian secondary schools. Some of the problems faced are consistent with what others like Kazeem and Balogun (2014), Aliyu, Abdur-Rafiu and Jayakumar (2024), Ibrahim and Abdulhamid (2017), Busari (2018) and Yahyah and Kewulere (2024) noted as factors hindering the successful teaching and learning of Islamic religious studies and other educational subjects in Nigerian secondary schools. Generally, the challenges do not have much to do with the teachers alone; other stakeholders, including the Ministry of Education, curriculum developers and parents, are jointly responsible for such challenges. The above statement is in line with Owoyale-AbdulGaniy& Ibrahim's (2020:276) statement that "government in collaboration with stakeholders should ensure that teachers and students are given regular training and re-training on the use of modern instructional materials that would facilitate effective pedagogy".

Instructional materials are the tools that are used to disseminate curriculum information and make it clearly understood and meaningful to the students. From the basic information collected from the participants, it is clear that both human and material resources are needed to effectively facilitate the realisation of the Islamic Studies curriculum; likewise, achieving its prime objective of instilling Islamic teachings and values in Muslim children while making it interesting to students. The availability of proper and adequate instructional materials in the curriculum is a crucial approach to improving teaching and learning quality at all levels of education. All the participants revealed that students' interest in Islamic studies is influenced by

the lack of proper and adequate instructional resources, hindering effective teaching and learning. These findings are consistent with the study of Owoyale and Ibrahim (2020), which concluded that the lack of instructional materials makes it difficult for effective teaching and learning of Islamic Studies in senior secondary schools in Kwara State.

The study revealed that the degree of students' nonattendance in class was among the many challenges the teachers faced in teaching and learning Islamic studies, and greatly affected the effective teaching process. Some participants' teachers also mentioned students' lack of interest, students' background in the Arabic language, inadequate proper and current material resources, improper teaching medium, the time allotted for the subject, textbooks, as well as nonchalant attitudes of parents towards their children's education hinder the effective teaching and learning of Islamic religious studies in Nigeria schools and immensely contribute to students loss of interest in the subject. It was also revealed that the current books and other materials used in teaching Islamic studies are outdated and cannot meet students' needs and motivate them.

Based on the findings, several factors influence students' interest in learning Islamic education, such as students' lack of background knowledge of the Arabic language, lack of instructional materials, and an improper medium of instruction among the problems facing the teaching of Islamic studies education and considered among the factors contributing to the lack of interest among students in learning Islamic education. To make Islamic studies more understandable and interesting to the students, Islamic studies should be taught through translated work in learners' local or national languages. Hence, the provision of relevant teaching and learning materials and specialised books will enable efficient and effective teaching; it will also help in realising the Islamic religious studies objectives.

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DETECTING DIFFERENTIAL ITEM FUNCTIONING IN 2024 WASSCE ECONOMICS OBJECTIVE TEST ITEMS USING MANTEL-HAENSZEL (MH) STATISTICAL PROCEDURE

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Introduction

ABTRACT

Teachers in the classroom quickly set tests just to represent the syllabus or to achieve the objectives. Technical issues like difficulty, discrimination, options functionality and other things that make an item unique in a test are not given sufficient attention. Test experts look at those technical issues but not many of them look at differential item functioning. The concern of this study was to identify 2024 WASSCE Economics objective test items that are functioning differently among groups of examinees (Gender and school location). This study adopted a descriptive research design using a survey. The target population for the study was all rural and urban senior secondary three students offering Economics in the Kwara Central Senatorial District. In the study, 798 students were involved. A multistage sampling procedure comprising of proportionate sampling technique was employed. The Mantel-Haenszel approach was used for the data obtained. Findings show that some items functioned differently concerning gender, and some items functioned differently concerning school location. It was therefore recommended that ***(a)*** *the Mantel-Heanszel statistical procedure should be used for differential item function (DIF) analysis of any achievement test to ensure test items that are free from bias towards a particular group. (b)Examining bodies like WAEC should ensure that items to be used to examine their candidates are free from any form of DIF by subjecting DIF analysis before administration.*

Introduction

Teachers in the classroom quickly set tests just to represent the syllabus or to achieve their objectives. Technical issues like difficulty, discrimination, options functionality and other things that make an item unique in a test are not given sufficient attention. Test experts look at those technical issues, but not many of them look at differential item functioning. Odili (2014) defined differential item functioning as the phenomenon that occurs when test takers from different groups who have been matched on the same ability levels perform in test items in a different way. Bastug (2016), in his view, submits that DIF occurs when examinees who have the same ability level but from different groups have different probabilities of a correct response. From another angle, French et al (2014) explained the concept of DIF as a situation where examinees from two groups who have equal levels of the measured ability have different probabilities of endorsing the same item response.

In secondary schools, despite the direct relevance of Economics and laudable substantial investment in the study of the subject by the Nigerian government, students still perform differently in the subject when it comes to internal and external examinations. Buttressing further, Ikeh et al. (2020), for instance, noted that in 2018, WAEC Economics multiple-choice items were conducted, and students still performed differently with respect to school location. The analysis revealed that out of 50 items in the 2018 WAEC Economics questions, 31 items, which represent 62% of the test items, displayed significant location DIF at the 0.05 level of significance. Among the 31 items, 27 items representing 54% were identified to exhibit significant location DIF in favour of urban school students, while only 4 items representing 8% differentially functioned in favour of rural school students. The way items function differentially has been a source of worry to researchers, stakeholders in education, the general public and the students themselves. The reasons why Students perform differently in various subjects, including Economics, have been attributed to a number of factors like school location, gender and so on.

It is therefore necessary to investigate items that function differently in the 2024 WASSCE Economics objective test to ascertain the level of potentially biased items. Different research studies have also been conducted by researchers on DIF, for instance, Sa'ad (2020) in another study examined the Differential Item Functioning of the 2014 NECO English Language Examination in the North Senatorial District of Kano State, as three variables were considered, which include gender, school type and school location. In another study, Omorogiuwa and Iro-Aghedo (2016) researched on determination of Differential Item Functioning by gender in the

2015 NABTEB Mathematics Multiple-Choice Examinations in Nigeria. Also, Amuche and Fan (2014) investigated differential item functioning about school type and school location using the 2012 NECO Biology in Taraba State. The Mantel-Haenszel method was equally adopted to carry out their analysis. Ibrahim and Abba (2019) carried out DIF analysis on the English language using the 2010 NECO examination.

Based on the research activities conducted by various researchers as mentioned above, different subjects like English Language, Biology, and Mathematics were the subjects used, and none of these studies used the 2024 WASSCE Economics. Different locale was equally used for their studies, but not Kwara Central, Nigeria. Also, with respect to DIF size, most of the studies conducted did not actually tell whether items flagging DIF exhibited a negligible, moderate or large size of DIF to the best knowledge of the researcher. This creates room for a gap to be covered in this study.

Purpose of the Study

The concern of this study was to identify 2024 WASSCE Economics objective test items that are functioning differently among groups of examinees. Specifically, the study intends to assess:

a. Economics objective test items of WASSCE 2024 function differently between male and female testees.
b. Economics objective test items of WASSCE 2024 function differently between urban and rural testees.
c. Economics objective test items of WASSCE 2024 function differently between private and public school testees.

Research Questions

The following research questions were derived to pilot this research study.

a. Does differential item functioning occur in the 2024 WASSCE economics objective test items between male and female testees?
b. Does differential item functioning occur in the 2024 WASSCE economics objective test items between urban and rural testees?

Methodology

This study adopted a descriptive research design. The population for this study was all rural and urban senior secondary school students offering Economics in the Kwara Central

senatorial district. The researcher selected a sample of seven hundred and ninety-eight (798) SS3 Economics students from selected senior secondary schools in the Kwara Central senatorial district. The overall total number of schools used for this research study was twenty-five (25) rural and thirty-two (32) urban senior secondary schools located in rural and urban areas.

A multistage sampling procedure comprising of proportionate sampling technique as well as purposive sampling was employed for effective selection of the sample in the study. The 2024 WASSCE Economics objective test was adopted as an instrument for the study. The items were developed, moderated, validated and used by the WAEC in 2024. The instrument, which consisted of two sections, was titled the Economics Achievement Test (EAT), and it has 50 items. Each item consists of a question and a list of possible answers, lettered A-D, of which only one option is the correct answer. Each item of the instrument was scored 1 for the correct option and 0 for the wrong option, with a maximum of 50 and a minimum of 0. The instrument is a standardised test which is presumed to be accurate, reliable and valid.

.The data gathered from the administration of the instrument were scored dichotomously. Frequency and percentage were used to describe the demographic characteristics of the examinees, while the Mantel-Haenszel approach was used to answer the research questions raised.

Table 2: Demographic Characteristics of the Examinees

Categories	Characteristics	Frequency	Percentage
Gender	Male	356	44.60
	Female	442	55.40
	Total	798	100.00
School Location	Urban 524	65.70	
	Rural 274	34.30	
	Total 798	100.00	

The demographic characteristics reveal that three hundred and thirty-five (44.0%) of the students were males, while the rest (55.40%) were females. Five hundred and twenty-four (65.70%) of the students were from urban schools, while the rest two hundred and seventy-four (34.30%) were from rural schools. Four hundred and forty-eight (56.14%) of the students were from private senior secondary schools, while three hundred and fifty (43.86%) of the examinees labeled as were from public senior secondary schools.

Answering Research Questions

To answer the research questions raised in this study, the Mantel-Haenszel approach was used to assess DIF in the 2024 WASSCE Economics multiple-choice test items. Also, the DIF size was determined by the researcher based on Michaelides' (2008) classification. An item shows DIF if the p-value of MH is significant at 0.05. In her classification, items could be categorised into three groups for example Negligible DIF, which is known as A level, moderate DIF, known as B level, and large DIF items are known as C level. If the absolute value of MH D-DIF is less than or equal to 1, the item is negligible, which simply means no DIF in the test. If the Absolute value of MH D-DIF is between 1 and 1.5, then the item is moderate, and it can be readjusted. Lastly, if the absolute value of the MH D-DIF value is greater than 1.5, then that item is large and it can be discarded. It is imperative to equally add that an item favoured the reference group if the odds ratio is greater 1, while the focal group is favoured if the odds ratio is less than 1.

Research Question 1: Does differential item functioning occur in the 2024 WASSCE Economics objective test items between male and female testees

Table 3: Result of Mantel-Heanszel analysis between male and female testees

Items	MHX²	MH P-Value	αMH Odds ratio	Log	MH D-DIF	DIF Level	Favouring Group
1	2.199	0.138	1.258	0.229	-0.538		
2	0.717	0.397	1.152	0.141	-0.331		
3	0.967	0.325	0.844	-0.170	0.399		
4	0.368	0.544	0.904	-0.101	0.237		
5	0.621	0.431	0.881	-0.127	0.298		
6	0.000	0.987	0.992	-0.008	0.019		
7	**8.592**	**0.003**	1.542	0.433	-1.018	B	FEMALE

8	0.122	0.727	1.079	0.076	-0.179		
9	0.307	0.580	1.095	0.091	-0.214		
10	0.069	0.792	0.952	-0.049	0.115		
11	0.660	0.416	1.143	0.134	-0.315		
12	0.100	0.752	0.946	-0.056	0.132		
13	0.089	0.765	1.055	0.053	-0.125		
14	0.031	0.583	1.111	0.105	-0.247		
15	**5.591**	**0.018**	1.488	0.398	-0.935	A	FEMALE
16	1.401	0.236	1.252	0.225	-0.523		
17	0.230	0.632	1.103	0.098	-0.230		
18	2.812	0.094	1.284	0.250	-0.588		
19	1.121	0.290	1.237	0.213	-0.501		
20	3.459	0.063	0.757	0.278	0.653		
21	0.456	0.500	0.894	-0.112	0.263		
22	1.853	0.173	0.811	-0.209	0.491		
23	1.879	0.170	1.257	0.228	0.536		
24	0.134	0.714	0.925	-0.078	0.183		
25	0.414	0.520	1.114	0.108	-0.254		
26	2.828	0.093	0.778	- 0.251	0.589		
27	0.000	0.983	0.993	-0.007	0.016		
28	0.004	0.949	1.003	0.003	0.007		
29	**4.797**	**0.029**	1.436	0.362	-0.851	A	FEMALE
30	0.053	0.819	1.045	0.044	-0.103		
31	0.065	0.799	1.053	0.051	-0.119		
32	0.095	0.758	1.055	0.054	-0.127		
33	0.864	0.353	1.186	0.170	-0.399		

34	0.430	0.512	1.130	0.122	-0.287		
35	0.138	0.710	1.071	0.069	-0.162		
36	0.995	0.318	1.187	0.172	-0.404		
37	2.118	0.146	0.801	-0.222	0.522		
38	0.495	0.482	0.878	-0.130	0.305		
39	0.017	0.896	0.971	-0.029	0.068		
40	**5.320**	**0.021**	0.704	-0.350	0.823	A	MALE
41	0.239	0.625	0.921	-0.082	0.193		
42	0.944	0.331	1.165	0.153	-0.359		
43	0.014	0.905	1.029	0.029	-0.086		
44	1.396	0.237	1.211	0.192	-0.451		
45	0.039	0.844	1.043	0.042	-0.099		
46	0.030	0.862	0.961	-0.040	0.094		
47	0.362	0.548	1.108	0.103	-0.240		
48	0.009	0.923	1.027	0.027	-0.063		
49	0.000	0.988	0.987	-0.013	0.031		
50	0.130	0.718	1.064	0.062	-0.146		

The results of Mantel-Heanszel statistics in Table 3 above reveal that 4 (8%) items, i.e. items 7, 15, 29, and 40, functioned differently concerning gender (male and female) out of 50 objective test items in the 2024 WASSCE Economics test. This is because the Mantel-Hean's chi-square value was greater than the critical value of 3.84 at a 0.05 significance level. The rest 46 items (92%) did not function differently. Also, 3 items (75%), i.e. 7, 15 and 29 showed negative value in favour of the reference group (female) while one item (25%), i.e. 40 showed positive value in favour of the focal group (male). Educational Testing Services (ETS) categorisation scheme indicated item 7 to be a moderate level of DIF (level B), while the rest items 15, 29 and 40 were a small level of DIF, i.e. negligible DIF (level A). Items in negligible status can be retained in the test, while those that exhibited moderate status can be adjusted.

Research Question 2: Does differential item functioning occur in the 2024 WASSCE Economics objective test items between urban and rural testees?

Table 4: Result of Mantel-Hean's analysis between urban and rural testees

Items	MHX²	MH P-Value	αMH Odds ratio	Log	MH D-DIF	DIF Level	Favouring Group
1	0.814	0.367	0.860	-0.151	0.355		
2	0.565	0.452	1.144	0.135	-0.317		
3	**8.450**	**0.004**	1.631	0.489	-1.149	B	URBAN
4	3.305	0.053	1.349	0.300	-0.705		
5	3.759	0.053	1.362	0.309	-0.726		
6	**5.364**	**0.021**	1.435	0.361	-0.848	A	URBAN
7	0.933	0.334	0.855	-0.157	0.369		
8	**5.809**	**0.016**	0.641	-0.444	1.043	B	RURAL
9.	**11.938**	**0.001**	0.588	-0.531	1.248	B	RURAL
10	0.586	0.444	1.137	0.129	-0.303		
11	0.017	0.897	0.968	-0.033	0.078		
12	0.926	0.336	1.169	0.156	0.367		
13	0.200	0.655	1.082	0.078	0.731		
14	3.000	0.083	0.733	-0.311	0.731		
15	**5.281**	**0.022**	0.672	-0.398	0.935	A	RURAL
16	1.796	0.180	0.770	-0.261	0.613		
17	0.006	0.936	0.970	-0.031	0.073		
18	**9.457**	**0.002**	1.609	0.476	-1.119	B	URBAN
19	0.097	0.756	1.083	0.080	-0.188		
20	**4.227**	**0.040**	1.381	0.323	-0.759	A	URBAN

21	0.400	0.527	0.895	-0.111	0.261		
22	0.923	0.337	0.854	-0.157	0.369		
23	0.000	0.987	1.017	0.016	- 0.038		
24	1.709	0.191	1.296	0.259	-0.609		
25	**4.018**	**0.045**	1.382	0.323	-0.759	A	URBAN
26	0.404	0.525	1.112	0.106	-0.245		
27	**7.706**	**0.006**	1.532	0.427	-1.003	A	URBAN
28	1.404	0.236	0.805	-0.217	0.509		
29	1.370	0.242	0.813	-0.208	0.509		
30	0.074	0.785	1.055	0.053	-0.125		
31	1.181	0.277	0.821	-0.187	0.439		
32	0.000	0.937	1.023	0.023	-0.054		
33	2.173	0.140	1.327	0.283	-0.665		
34	**5.011**	**0.025**	0.674	-0.394	0.956	A	RURAL
35	**5.071**	**0.024**	0.691	-0.369	0.867	A	RURAL
36	**5.207**	**0.022**	0.679	-0.387	0.909	A	RURAL
37	2.914	0.088	0.764	-0.269	0.632		
38	0.793	0.373	0.847	-0.166	0.390		
39	2.717	0.099	1.295	0.258	-0.606		
40	0.202	0.653	1.084	0.081	-0.190		
41	0.040	0.842	0.959	-0.042	0.099		
42	0.046	0.830	0.956	-0.044	0.103		
43	2.923	0.087	0.759	-0.276	0.649		
44	0.624	0.430	0.871	-0.138	0.324		
45	**6.200**	**0.013**	0.668	-0.404	0.949	A	RURAL
46	0.006	0.938	0.999	-0.001	0.002		

47	1.451	0.228	0.817	-0.203	0.447
48	0.068	0.794	0.947	-0.055	0.129
49	1.605	0.205	0.814	-0.206	0.484
50	2.369	0.124	1.274	0.242	0.569

The results of Mantel-Heanszel statistics in table 4 above reveals that 13 (26%) items i.e. items 3, 6, 8, 9, 15, 18, 20, 25, 27, 34, 35, 36, and 45 functioned differentially concerning school location (urban and rural) out of 50 objective test items in the 2024 WAEC Economics test. This is because Mantel-Haenszel's chi-square value was greater than the critical value of 3.84 at a 0.05 significance level. The rest 37 items (74%) did not function differently. Also, 6 items (46.2%), i.e. 3, 6, 18, 20, 25 and 27 showed negative value in favour of reference group (urban) while 7 items (53.8%) i.e. 8, 9, 15, 34, 35, 36 and 45 showed positive value in favour of focal group (rural). Educational Testing Services (ETS) categorisation scheme indicated items 3, 8, 9, and 18 to be a moderate level of DIF (level B), while the rest items 6, 15, 20, 25, 27, 34, 35, 36 and 45were a small level of DIF, i.e. negligible DIF (level A).

Summary of Findings

Findings obtained from the study were summarised as follows;

1. 4 (8%) items, i.e. items 7, 15, 29, and 40, functioned differently concerning gender (male and female) out of 50 objective test items in the 2024 WASSCE Economics test. Items 7, 15 and 29 showed negative values in favour of the reference group (female), while one item, 40, showed positive values in favour of the focal group (male).
2. 13 (26%) items i.e. items 3, 6, 8, 9, 15, 18, 20, 25, 27, 34, 35, 36, and 45 functioned differentially concerning school location (urban and rural) out of 50 objective test items in the 2024 WASSCE Economics test.6 items i.e. 3, 6, 18, 20, 25 and 27 showed negative value in favour of reference group (urban) while 7 items i.e. 8, 9, 15, 34, 35, 36 and 45 showed positive value in favour of focal group (rural).

Discussion of the Findings

Differential Item Functioning analysis helps to know items that function differentially with respect to groups like gender, school type and school location. The result of the first research question revealed that 4 items functioned differentially, i.e. items 7, 15 and 29 showed negative

values in favour of the reference group (female) while one item, 40, showed a positive value in favour of the focal group (male). The outcome of this present study agreed with the findings of Jimoh et al. (2020), who in their study observed that 16 items exhibited DIF with respect to gender group using the Mantel-Heanszel Approach in the 2018 Joint Mock Mathematics Multiple-choice. The research findings also agree with the findings of Laro (2016), who noticed gender DIF in his study. The finding equally corroborated with Kalaycioglu's (2022) findings who observed that there were eleven (11) out of 234 items identified as showing B-level gender-related DIF.

3. Also, in the second research question, the researcher attempted to find out if any items were functioning differentially between urban and rural testees After the analysis, it was discovered that 13 items functioned differentially i.e. 3, 6, 18, 20, 25 and 27 showed negative values in favour of reference group (urban) while 7 items i.e. 8, 9, 15, 34, 35, 36 and 45 showed positive value in favour of focal group (rural). The result of this study is in agreement with Amuche and Fan (2018), who noticed eight items that function differentially in NECO Biology. The finding is also in agreement with Ogbebor and Onuka's (2013) findings, noting school location DIF. The outcome of this study contradicts the findings of Alade et al. (2020), who observed that all fifty items in WASSCE 2018 exhibited school location DIF. Whereas only thirteen items functioned differently in this research study.

Conclusion

Following the results generated from this research study, it was concluded that testees with respect to gender exhibited the same ability level, as only three items showed a negligible level of DIF, while only one item showed a moderate level out of fifty items. The outcome of this study equally showed that thirteen items exhibited DIF, with four items displaying a moderate effect size, while nine items exhibited a small effect size. Also, concerning school type, twenty-six items showed differential item functioning using the Mantel-Haenszel approach, of which twelve of the items showed a large effect size, eight items showed in moderate level, while the remaining six items exhibited a small effect size. It was therefore concluded that the items that exhibited a moderate size level should be reframed, and the ones that exhibited a large level should be discarded for fairness to be ensured in the conduct of subsequent examinations.

Recommendations

The researcher provided the following recommendations following the findings derived from this study:

1. The Mantel-Heanszel approach should be used for DIF analysis of any achievement test for test items to be free from bias towards a particular group.
2. Test practitioners should endeavour to perform DIF analysis in a pilot study before administration of test(s) so that items that function differentially for different test-taking groups can be identified for possible replacement.
3. Examining bodies like WAEC should ensure that items to be used to examine their candidates are free from any form of DIF by subjecting DIF analysis before administration.

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NAVIGATING THE TENSIONS BETWEEN LIBERAL DEMOCRACY, LIBERALISM, AND DEMOCRATIC THEORY: A CRITICAL REVIEW

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ABTRACT

Since the democratic slogan crossed the Atlantic in the early 20th century, we can say that the contemporary world is sold on the idea of democracy. Today, any country in the world that is not presently under democratic rule either becomes suspect in the comity of nations or is outrightly considered a pariah state. It is therefore not surprising that all governments today appeal to the idea of popular sovereignty inherent in the democratic ideology. From the most totalitarian of governments to the most benevolent, everyone wants to be associated with the global legitimacy that comes with democratisation. It all started with the Athenian democracy, known as direct democracy to the present-day democracy called liberal democracy. Yet thinkers argued that the celebratory view of liberal democracy neglects to explore whether there are any tensions or contradictions between the concepts of the two components of liberal democracy, "Liberal and Democracy ."This study explores the concept of both liberalism and liberal democracy in order to discuss the contradictions between them. This paper, furthermore, discusses the theory of democracy to expose tensions between democratic theory and liberalism.

Introduction

Liberalism and liberal democracy are intertwined yet distinct political ideologies. While both ideologies share a commitment to individual rights, freedoms and the rule of law, they diverge in their emphasis on state intervention, governance structure and the role of democracy. This article delves into the nuances of liberalism versus liberal democracy, analysing their

historical roots, core principles that have shaped governance, political discourse, and societal values around the world, and contemporary relevance in the global political landscape. In this article, we will critically examine the tenets of liberalism and liberal democracy, exploring their intersections, contradictions and implications for modern governance.

By dissecting these ideologies within the context of democratic political theory, historical developments and contemporary challenges, we aim to shed light on the complexities of navigating between ideals of liberalism, the practicalities of liberal democracy and democratic theory in the quest for effective and inclusive governance. Through a comparative analysis of liberalism and liberal democracy, this article seeks to provoke thought, stimulate discourse and inspire a deeper understanding of the ideological underpinnings that shape our political institutions, policies and political norms. By unravelling the intricacies of these ideologies and their dynamic interaction within the realm of governance, we aim to contribute to a nuanced of exploration of the tensions, dilemmas inherent in the coexistence of liberalism and liberal democracy**.**

The Idea of Democracy

Thinkers have been inconsistent due to varied concepts used at different periods of history in different situations. In reality, there are many definitions of democracy. Democracy is commonly contrasted in classical literature with the "rule of the few" (aristocracy) and the "rule of one" (monarchy). Today, democracy is usually understood as it translates literally: The "rule of many" as implied in Abraham Lincoln's famous definition, “government of the people by the people and for the people”. For Dahl, R. A. (1971), democracy is a system of government that is the rule of the people, either directly or through representatives. Democracy is based on the principle of popular sovereignty and equality and accountability (Held, 2006), the cores features of democracy include free and fair elections, protection of individual rights and the rule of law (Lijphart, 1999)While the term democracy is typically used in the context of a political state, the principles are also applicable to other bodies such as inter-governmental organizations, grassroots’ organizations, labour unions, trade unions, professional bodies and educational institutions.

Contrary to both procedural and substantive theorists who limited democracy to how and what government should do, Lord Bryce argued that: Democracy connotes a state of society (Bryce, 1920). Democracy means many things to many people, (Sheldon, 2005) captured well Alexis de Tocqueville’s opinion about democracy, and he wrote that: Tocqueville himself did not

provide a precise and consistent definition of democracy. Its meaning depended on the context in which he wrote. He often used the term democracy to refer to the levelling egalitarian tendencies in history and society. Democracy then became synonymous with legal, political or social equality. He used democracy to refer to equality of conditions when he was discussing the social state of societies undergoing the transition to democracy. When referring to political democracy, Tocqueville used the term to describe political systems based on the doctrine of the sovereignty of the people, where all citizens had the right to vote and participate in public affairs. Universal suffrage is the hallmark of the sovereignty of the people. It permitted them to take part in making the law by choosing their lawmakers; it permitted them to share in the application of the laws by electing the agents of the executive power.

There can be no truly so-called democracy unless the condition of society itself is democratic. Equality of condition implies a society in which the members are independent of one another as against what obtains in an aristocratic or oligarchic society. Classical democracy believes in the equality of all people before the law. A truly democratic society, so-called, cannot judge a person by social position, economic class, creed or race. Traditional democratic theory also values popular participation as an opportunity for individual self–development: responsibility for governing one's conduct develops one's character, self-reliance, intelligence and moral judgment, in short, one's dignity. In the same vein, Mill argued that, "people can know truth only by discovering it for themselves" (Mill, 1962)

Liberalism versus Liberal Democracy

The relationship between liberalism and liberal democracy is complex and contested. Some scholars argue that liberalism and democracy are complementary ideologies, as they share common values such as individual liberty, equality, and justice (Ackerman, 1991) others contend that liberalism and democracy are mutually exclusive as liberalism prioritizes individual rights and freedoms over collective interests and democratic values(Macpherson, 1977:) Despite its popularity and significance in contemporary democratic theory, liberal democracy remains an essentially contested conception in two significant senses. In the first place, scholars have questioned the congruity of liberalism and democracy. In other words, they question whether we can find anything in the liberal idea that is conducive to democracy. When the first liberal democracies were founded, the liberals themselves were viewed as extreme and rather enemies of national and international peace and stability. The conservatives who opposed liberalism and democracy saw themselves as defenders of traditional values. When Napoleon Bonaparte

overthrew the baby of the French Revolution and established the first French Empire, and proceeded to conquer most of Europe, the position of those criticising democracy and liberalism was upheld. Napoleon was eventually defeated, and an alliance was instituted in Europe to stop the spread of liberalism or democracy. However, Tocqueville argued that "The progress of democracy is providential and beyond any power to resist" liberal democratic ideals continued to spread among the general population, and, over the 19th century, traditional monarchy faced challenges.

Reforms and revolutions helped move most European countries towards liberal democracy. Liberalism ceased being a fringe opinion and joined the political mainstream. The political spectrum changed; by the end of the 19th century, liberal democracy was no longer only a "liberal" idea, but an idea supported by many different ideologies. After the two World Wars, liberal democracy became dominant among theories of government and is now endorsed by the vast majority of the political spectrum.

Although liberal democracy was originally put forward by Enlightenment thinkers, especially J.J. Rousseau, the relationship between democracy and liberalism has been controversial since the beginning. The ideology of liberalism, particularly in its classical form, is highly individualistic and concerns itself with limiting the power of the state over the individual. In contrast, democracy is seen by some as a collectivist ideal, concerned with empowering the masses.

Thus, liberal democracy may be seen as a compromise between liberal individualism and democratic collectivism. Those who hold this view sometimes point to the existence of 'illiberal democracy' and 'liberal autocracy' as evidence that constitutional liberalism and democratic government are not necessarily interconnected. On the other hand, there is the view that constitutional liberalism and democratic government are not only compatible but necessary for the true existence of each other, both arising from the underlying concept of political equality. The Freedom House research institute today simply defines liberal democracy as an "electoral democracy protecting civil liberties".

Liberalism is a political ideology that emphasises individual freedoms, rights, and dignity (Rawls, 1971; Nozick, 1974). Liberalism involves the creation and defence of a society in which "free and equal" right-bearing individuals can flourish with the minimum political interference from the state. This was the consequence of liberalism's early challenge to despotic monarchies and other tyrannical systems. Liberals argue that individuals should be free to pursue their

interests and goals, as long as they do no harm to others (Mill J.S. 1859). The principles of Liberalism include individual liberty, equality, and justice (Dworkin, 1977); this raises a problem of how to achieve a balance between liberty and coercion. The liberal concern with the rule of law and the right to choose, could only be sustained through the recognition of the "political equality of all mature individuals. In light of this conjunction, Held enjoined that liberal democracy as a concept should be treated with caution. This is because, according to him:

> *The "celebration" view of liberal democracy neglects to explore whether there are any tensions or even perhaps contradictions, between the "liberal" and democratic compounds of liberal democracy: for example, between the liberal preoccupation with individual right or "frontiers of freedom" which "nobody should be permitted to cross", and the democratic concern for the regulation of individual and collective action, that is for public accountability. (Held, 1995).*

Secondly, even granting the meaningfulness of the idea of "liberal democracy", we still need to confront another incongruity. This has to do with the contemporary ubiquity of the liberal democratic idea as the putative panacea for all states, irrespective of cultural differences. A cautious analysis of the concept of liberal democracy by Margolis exposed this incongruity. For him, the concept of liberal democracy reveals an unstable mix of disparate elements which suggest that liberalism and democracy point in different directions. Yet, this has been largely ignored by liberal democrats. The concept of liberal democracy attempts to facilitate the engrafting of one tradition (i.e. liberalism or liberal universalism) with another (i.e. Athenian democracy). For instance, while liberalism is conceived to be basically historical, "committed to an essentially changeless or species-specific model of reason apt for discerning the proper norms of human life," democracy, on the contrary, denotes a "taxonomic category for certain historical actualities, ancient and modern" (Margolis, 1999).

Margolis' critique was basically on universally accepted liberal democracy. For him, it seems demonstrably false that there can be any changeless, neutral, universal norms or principle that fixes human nature at any time. This is true not only from the sheer diversities that populate the world, but also from the Hegelian critique of Kant, which rejects the possibility of applying the Kantian principle of universality to any internally consistent policy. Margolis further argued that "if the principle of practical reason are subject to cultural variability, then the argument for neutral, objective, universalized, essential or necessary norms of moral and political life would simply be prejudiced as a historical contraption" (Margolis, 1999). this argument implies that liberal democracy can only be "second best", in Plato's words. There cannot, therefore, be even

an essentially correct way of organising political affairs. The inability of liberals to grasp this point led to the discrepancy between the logic of liberalism as a universal ideology and the logic of multiculturalism, and hence a dilemma for liberal societies. He explained that:

> *There are hidden difficulties here. Liberal theorists tend to be "proceduralists" rather than "substantivists": that is, they believe that the advocacy of natural rights and a liberal conception of justice in no way commits a society to any substantive view of virtue or the good life. They think of liberalism as occupied with purely formal or procedural ("rational") goods serving every tolerable form of life. That explains the importance of Kant (of a blind loyalty to Kant) for the liberal cause; it is the point of convergence among the best known contemporary liberal theorists: Rawls and Ronald Dworkin in the United States, Habermas and Karl-Otto Apel in Germany. It accounts for the liberal penchant for neutrality and objectivity. But, of course, the paradox of liberalism betrays the fiction: there is no determinate procedural payoff in supporting formal rights separated from actual history. (Margolis, 1999)*

Having shed light on the tensions between democracy and liberalism, before concluding this research, let's also highlight tensions between democratic theory and liberalism. According to Janda, Berry & Goldman (2000).

> *There are two schools of thought about what constitutes democracy. The first believes democracy is a form of government. It emphasises the procedures that enable the people to govern - meeting to discuss issues, voting in elections, holding public offices, etc. The second school of thought rejects the principle of responsiveness and sees democracy in the substance of government policies and in the protection of liberties. The procedural theoretical approach focuses on how decisions are taken; the substantive theoretical approach is concerned with what government does.*

Procedural Democratic Theory

Procedurally, in the democratic model, a society achieves popular participation through majority rule and respect for the rights of minorities. Self-development presumes self, and self-government comes about only by encouraging each individual to contribute to the development of public policy, which in turn affects society. Freedom of speech and press, freedom to dissent and freedom to form opposition parties and associations are essential to ensure individual participation. Ideally, Democracy, as Abraham Lincoln described it in his popular speech at Gettysburg in 1863, "is the government of the people by the people and for the people" Democracy, democracy as we experience it today, is the government of some people by some

people and for some people. Despotism, corruption, and bad governance should not find a place in a democratic society because members are equal and participate and contribute directly or indirectly to the affairs of the government.

Procedural democratic theory sets forth only principles that describe how government should make decisions. The principles address three different questions: a) who should participate in decision making? b) How much should each participant's vote count? c) How many votes are needed to reach a decision?

Following the procedural democratic approach, all adults should participate in government decision-making, and everyone within the boundaries of the political community should be allowed to vote. The theory of democracy itself does not exclude any adult from participation. This principle is referred to as *universal participation* (Janda et al, 2000). From the beginning, thinkers had criticised this principle. According to them, in the Athenian democracy, the government was not by the whole people; slaves, children, women and resident strangers were excluded. This problem of who should constitute the "demos" in a democracy became till today the fundamental basis upon which the democratic theory revolves. How many times should each participant's vote count? According to the procedural theory, all votes should be counted equally. This is the principle of *political equality*. Universal participation and political equality are two different principles: It is enough for everyone to participate in a decision; all votes must carry equal weight.

One other question that has engaged the attention of analysts is how many votes are needed to reach a decision? Procedural democratic theory responds that a group should only do what the majority of its participants expect it to do. The majority always means 50 per cent plus one person at least. This is the principle referred to as *majority rule*. The three principles, universal participation, political equality and majority rule, are widely recognised as necessary for democratic decision making. Small, simple societies can meet these principles. With a direct or *participatory democracy*, all members of the group can meet to make decisions and observe political equality and majority rule. The origins of participatory democracy can be traced back to the Greek city-state of Athens, as previously said, where important decisions of government were taken by the people. Athenians believed that they ruled themselves rather than having a small number of people rule on their behalf. (ibid)

The theory of direct democracy had one of its exponents in Jean Jacques Rousseau. It is important to consider Rousseau's views, not only because of the significance of his thought, but

also because he had a direct influence on some modern democratic thinkers. Rousseau's influence was also felt by thinkers of the French Revolution, and so by the modern world. According to Claude Ake (1992) "The French Revolution is the midwife of the modern world"**. As** the foremost exponent of democratic theory, his writing has a great impact on Alexis de Tocqueville. In a letter he wrote to his friend Kergolow, Tocqueville explained how he was influenced by three great writers, namely: Pascal, J. J. Rousseau and Montesquieu. Just like Hobbes in the Leviathan and Locke in the Second Treatise of Government, Rousseau, in his classic The Social Contract, developed an account of a state of nature and the social contract. Rousseau's theory came against the backdrop of France and Europe in the 17th century, according to which, kings ruled by a direct sacred authority by "divine right" or absolute government. On the other hand, there was also the theory of the natural rights of man, according to which man was free and should not be "bound". Nobody had been able to solve the problem of how to reconcile these two theories. Both could not be upheld at once, because if the absolute state led to tyranny and slavery, absolute freedom *for* the individual led to anarchy.

Rousseau also had consented to these *two* claims when he cried in the first sentence of the *Social Contract* that *man* was *born free*, but *everywhere he* is in *chains*. Then he went ahead to develop the social contract. In Hobbes' and Locke's versions of the social contract, sovereignty is transferred from the people to *the* state and its rulers, although *for* Locke, the surrender of rights of self-government was a conditional matter. For Rousseau, Hobbes and Locke's theories were unacceptable, he stressed by contrast that sovereignty does not only originate in the people, but it ought to stay there. He stated:

> *Sovereignty cannot be represented, for the same reason it cannot be alienated; then the people's deputies are not and could not be its representatives, they are merely agents, and they cannot decide anything finally. Any law which the people have not ratified in person is void,' it is not law at all. (Rousseau 1762).*

This makes Rousseau a great democratic theorist. He argues that sovereignty cannot be surrendered or delegated to any person or group of people. It cannot be exercised at all through elected representatives, so he does not support proportional representation. Rousseau's ideal democratic state is a very small compact state, where everybody can personally participate in decision-making and law-making. All direct democracies to date have been practised in relatively small communities, like villages or city-states or in small towns with populations under 10,000. Other current examples of direct democracy are found in small civic organisations like universities and associations.

All over the world, direct/participatory Athenian democracy is rare. Participatory democracy is commonly rejected because it is not adaptable in large and complex societies. Relatively, only a *few* people will take part in participatory government. For example, in Nigeria, we cannot all gather in Abuja to decide government policies. So, in large and complex societies, *Representative democracy* will be more suitable. In such a system, citizens participate in government by electing public officials to make decisions on their behalf. Elected officials are expected to represent the voters' views and interests - that is, to serve as agents of the citizenry and to act for them. In a representative government, universal participation, political equality and majority rule, which are principles of participatory democracy, are also present.

But what happens after the elections? The elected representatives might not take the decisions the people would have taken had they gathered for the same purpose. To account for this possibility in a representative government, a procedural theoretical approach provides a fourth decision-making principle: *responsiveness*. Elected representatives should respond to public opinion. According to Stimson, Michael, McKuen, and Erikson, who are procedural democratic theorists:

This responsiveness does not mean that legislators simply cast their ballots on the basis of whether the people back home want alternative A or alternative B. Issues are not usually so straightforward. Rather, responsiveness means following the general contours of public opinion in formulating complex pieces of legislation.

(Stimson, McKuen, Erikson, 1995).

By adding responsiveness to deal with the case of indirect democracy, we have four principles of procedural democratic theory:

1. Universal participation.
2. Political equality.
3. Majority rule.
4. Government responsiveness to public opinion.

The Substantive Democratic Theory

According to the procedural approach, the principle of responsiveness is compulsory. The government should do what the majority wants, irrespective of what it is. This seems a reasonable

way to protect the rights of citizens in a representative democracy, but it is not. Let us take Niger Republic which is an example of a representative democracy. Muslims are the majority in Niger. Assuming the Muslim majority backed a constitutional amendment to ban the admission of Christians in public schools. If that is passed by the legislature and ratified by the states, from a procedural approach, the action would be democratic. But, what about freedom of religion? What about the minorities? The rule by the larger part (majority) of the society against the lesser part (minority) was highlighted by Tocqueville as a problem of democracy, which he termed the Tyranny of the majority.

To limit the government's responsiveness to public opinion, we must look beyond procedural democratic theory to substantive democratic theory. This focuses on the substance of government policies, not only on the procedures followed in making those polices. This theory argues that in a democratic government, certain principles must be incorporated into government policies. For example, substantive theorists would reject a law that bans the admission of Christians in schools, because it would violate a substantive principle, freedom of religion. Therefore, they reject the fourth principle: Government responsiveness to public opinion as advocated by exponents of the procedural approach. In order to protect the rights of the minority and individuals, the substantive theory advocates that government policies should guarantee civil liberties (freedom of expression, freedom of the press and freedom of religion) and civil rights (protection against discrimination in employment and housing).Social rights (adequate health care, quality education, decent housing) and economic rights (private property and steady employment). According to C. B. Macpherson (1975)

> *Policies that promote social equality are essential to democratic government. A state must guarantee unemployment benefits and adequate housing to be called democratic.*

Most democratic theorists share this view. Tocqueville was one of the first to suggest institutional mechanisms - established procedures and organisations to translate public opinion into government policy (responsiveness) in such a way that the tyranny of the majority could be checked. Examples of these institutional mechanisms are: credible elections, political parties, legislature, interest groups, etc. Substantive theorists also support the concept of pluralism, which asserts that modern society consists of innumerable groups that share economic, religious, academic, ethnic or cultural interests. People of similar interests organise formal associations. Tocqueville was also one of the first exponents of a pluralistic society. He stated:

> *In democratic countries, the science of association is the mother of science, the progress of all (the rest depends upon the progress it has made. Amongst the laws which rule human societies, there is one which seems to be more precise and clear than all others. If men are to remain civilised... the art of associating must grow and improve in the same ratio in which the equality of conditions increases. (Tocqueville, 1956).*

When an organised association seeks to influence government policy, it is called an interest group. The pluralist model of democracy interprets "government by the people" to mean government by people operating through competing interest groups. According to the model, democracy exists when many (plural) organisations operate separately from the government, press their interest or*even* challenge clearly than all others. If men are to remain civilised... the art of associating must grow and improve in the same ratio in which the equality of conditions increases. (Tocqueville, 1956)

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The two major mechanisms in a pluralist democracy are interest groups and a decentralised structure of government. The few decision makers at the top are too busy to hear the claims of competing interest groups. But a decentralised government structure offers the access and openness necessary for a pluralist democracy. A good example, the constitution of the United States of America approaches the pluralist ideal in such a way that it divides authority among the branches of government. When the National Association for the Advancement of Coloured People (NAACP) could not get the Congress to outlaw segregated schools in the South, it turned to the federal court system, which did what Congress would not.

Although many scholars have contributed to this model, pluralist democracy is most closely identified with Robert Dahl. According to him: The fundamental axiom of pluralist democracy is that instead of a single center of sovereign power there must be multiple centers of power, none of which can be wholly sovereign.(Dahl, 1967).Robert Dahl is a good student of Tocqueville who advocated the need for pressure groups in order to ensure a strong democratic culture. Tocqueville was concerned about the dangers of equality or conditions which is one of the features of democratization. An example, he pointed out that equality of conditions could lead

any society to the tyranny of the majority, bureaucratization of government, centralization, despotism, individualism. Heargued that political liberties development of free associations, religion, decentralization and the rule of law are needed to check these dangers and strengthen any democracy worldwide. Substantive theorists have agreed that there was much in democratic policies than the formal arrangements for representation, participation and decision making.

Theoretical democratic tensions with liberalism

1 Liberalism's emphasis on individual rights: Democratic theory emphasizes the importance of protecting individual rights and freedoms; however liberalism's strong emphasis on individual rights can sometimes conflict with the democratic principle of majority rule.

2 Democratic theory's focus on collective decision making: Democratic theory emphasizes on collective decision-making and the role of citizens in shaping the democratic process, however, liberalism's emphasis on individual rights and freedoms can sometimes lead to tensions with the democratic principle of collective decision making

3 The role of representation in liberal democracy: Democratic theory emphasizes the importance of representation in liberal democracy. However, liberalism's emphasis on individual rights and freedoms can sometimes lead to tensions with the democratic principle of representation.

Conclusion

This paper has navigated the complex tensions liberal democracy, liberalism and democratic theory highlighting the contradictions and paradixes that arise from their inter relationships. Through a critical review of existing literature, this paper has demonstrated that Liberal democracy's emphasis on individual rights and freedoms can sometimes conflict with democratic theory's emphasis on collective decision making and participation (Dahl, 1956; Habermas, 1996). This paper also, has shown that liberalism's focus on individual rights and limited government can sometimes undermine democratic theory emphasis on social justice and equality (Rawls, 1971; Macpherson 1977).

Ultimately, this paper argues that a nuanced understanding of the relationship between liberal democracy, liberalism is essential for building more just and equitable democratic societies. By acknowledging and working through tensions and contradictions between these concepts, scholars and policy makers can develop more sophisticated approaches to democratic governance and social justice.

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IMPACTS OF MULTIMEDIA INSTRUCTIONAL STRATEGY ON STUDENTS' CONCEPTUAL UNDERSTANDING OF GENETICS IN SECONDARY SCHOOLS IN ILORIN, NIGERIA

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ABTRACT

The purpose of this study was to examine the impacts of multimedia instructional strategies on students' conceptual understanding of genetics in biology. A quasi-experimental design was employed for the research. The study population comprised all students studying biology in public secondary schools within Ilorin, Kwara State, Nigeria, during the 2024 academic year. Through purposive sampling, co-educational public secondary schools in Ilorin were selected. The sample consisted of intact classes totalling 94 biology students. The experimental group received instruction using a multimedia instructional strategy (MIS), whereas the control group was taught using the traditional teacher-centred approach. The study utilised multimedia resources (videos with audio on genetics), structured lesson plans, and a researcher-developed assessment tool titled the Genetics Achievement Test (GAT). Experts confirmed the instrument's content validity, and its reliability was established with a Pearson Product-Moment Correlation, yielding a coefficient of 0.77. Data were analysed using descriptive statistics such as mean and standard deviation, along with inferential statistics using the t-test at a 0.05 level of significance. The findings revealed a statistically significant difference in achievement between students exposed to MIS and those taught with conventional methods, in favour of the experimental group. These results suggest that multimedia instructional strategies significantly enhance students' conceptual understanding of genetics. Therefore, it is recommended that biology educators integrate MIS into their teaching practices to enhance students' understanding of genetic concepts and improve their overall academic performance.

Introduction

Biology is a science subject taught at senior secondary school levels in Nigeria. It is perceived as the most popular of the three natural science disciplines amongst secondary school students in Nigeria (Jibril *et al.*, 2015). According to Adewale *et al*. (2016) biology subject is regarded as the simplest and easiest science subject that usually attracts the widest enrolment among Nigerian students at the Senior School Certificate Examinations. Genetics concept is the study of how living organisms transfer traits like observable or detectable characteristics from generation to generation (Armstrong and Wilkinson 2020), It is an important aspect of human development and a discipline in biology that is difficult to teach and learn, thereby promoting rote learning of the concept (Jibril, 2024 & Abimbola, 1998). Therefore, the need for conceptual understanding of genetics is very important, and teachers need to employ methods will aid critical thinking and more conceptual understanding of genetics. Science educators have continued to place emphasis on teaching and learning strategies that can facilitate critical conceptual understandings in the sciences that can improve academic achievement in the 21st century (Abdulrahim *et al.,* 2018). Thus, the study focused on the impacts of using multimedia as a medium of instruction in genetics.

Multimedia strategy presents learning through the use of pictures and words. For instance, learning involving the use of PowerPoint presentations, a pre-recorded lecture or reading a physics textbook. (University of Buffalo, 2025) .According to Mayer (2011), Multimedia instruction refers to a learning environment that combines visuals and text to enhance understanding. It includes resources like textbooks, videos, narrated slide presentations, online animations, and educational computer games designed to support effective learning. This strategy is based on three principles of cognitive science as dual channels, limited capacity, and active processing; five cognitive processes of learning such as selecting words and pictures, organizing words and pictures, and integrating); and five representations learning as external representations, sensory copies in sensory memory, images,sounds in working memory, pictorial and verbal models in working memory, and knowledge in long-term memory. According to Ye (2024) multimedia teaching in the primary school classroom plays a pivotal role in enhancing the educational experience for young learners. The study further highlighted some impact of multimedia resources (such as interactive digital content, videos, animations, etc.) on learners as enhancing comprehension, engagement in critical thinking and creating interactive learning environments, fostering intellectual development.

Several studies have been conducted on the effectiveness of multimedia strategy in teaching and learning, among which are Ayodeji (2021), Akinbadewa (2020; Akinbadewa and Sofowora, 2020; Alamina and Otuturu,2019. In addition, recent studies on multimedia were reviewed in this study:

Kasa et al. (2024) conducted a study on the effects of multimedia and dynamic classroom integrated instruction (DCII) on students' academic achievement in respiration and photosynthesis. The study employed a non-equivalent, quasi-experimental design. A total of 94 secondary school students were sampled for the study. Data were collected using biology achievement tests, classroom observations, and focus group discussions. The data were analysed using paired and independent sample t-tests, repeated measure analysis of variance, and thematic analysis. The results revealed a statistically significant difference in biology achievement between the experimental group. It was concluded that multimedia creates a more active learning environment, simplifies complex content and enhances students' achievement. In the same vein,Okoli et al. (2024) studied the effect of using multimedia on the achievement of upper basic education students in Basic Science in secondary schools in Anambra state. The study adopted a quasi-experimental research design. The sample comprised. Of 79Seventy-nine (37 control and 42 experimental) upper basic 9 students from the 19 co-educational schools in Awka Education Zone. The instrument used for data collection was an Achievement Test (BSAT) of 40 multiple-choice questions. Mean and standard deviation were used to answer the research questions, while Analysis of covariance was used to test the hypotheses at a 0.05 level of significance. The findings revealed that. there was a significant difference in the students' academic achievement in Basic Science when taught using multimedia.

Earlier, Onuigwe et al. (2023) studied the effect of multimedia instructional packages on secondary school students' academic performance in Chemistry. The design adopted for this study was a quasi-experimental type of a pretest-posttest nonequivalent control group design. The population of the study comprised 2,109 SS1 students (1,027 males and 1,082 females) in public secondary schools in Enugu Education Zone of Enugu State. The sample for this study comprised 415 SS1 students drawn using a multistage sampling procedure. Data were collected with a researcher-designed test titled ''Chemistry Performance Test (CPT) . Mean and standard deviation were used to answer the research questions, and Analysis of Covariance (ANCOVA) was used to test the hypotheses. The findings of the study revealed that students exposed to a multimedia instructional package performed better than those taught using a conventional teaching method.

Kiat et al. (2020) examined the effectiveness of multimedia-based learning on the academic achievement of science subjects. The study was a descriptive design. The sample involved 40 junior high school students in Malaysia. The sample was divided into two groups (control and experiment). The data collected were analysed using a t-test. The results of the analysis revealed that the experimental group performed better than the control group. Therefore, there was a significant difference between traditional teaching and multimedia teaching. The study concluded that the use of multimedia in learning enables students to learn at their own pace and helps students to develop a better understanding of science. Similarly, Khan et al.(2020) examined the effect of multimedia instructions on the academic performance of secondary and higher secondary school students in Bangladesh. A sample size of 600 secondary and higher secondary school students was involved. Data was collected from copies of questionnaires. The data collected were analysed using a two-stage structural equations modelling approach. The study results revealed that organised class lectures of multimedia instruction have a direct positive relationship with the academic performance of secondary and higher secondary students. Also, In study conducted by Igbibo et al.(2019) on multimedia instructional packages and students' academic performance in biology. A quasi-experimental design was employed for the study. The population comprised all senior secondary two biology students in Obio Local Government Area in Rivers State. Apurposive sampling was used to select 100 students in two intact classes for the study. A 30-item cell division performance test was used to collect and the data collected were analysed using a t-test. Findings from the study revealed that a multimedia instructional package significantly enhanced the academic performance of students in cell division.

Based on these backdrops, this study investigated the effect of multimedia on the Genetics concept in biology. This is because it has been reported by teachers and students to be one of the difficult biology topics in secondary schools in Kwara State over the years (Abimbola,1998 &Jibril, Bello &Ayinde, 2021). Researchers have employed different strategies to aid the teaching of this concept to maximise meaningful learning, conceptual understanding, eliminate misconceptions as well as improve the academic achievements of senior school students.

Research Questions

The following research question was answered in this study:

1. Is there a difference in the achievement of students taught genetics using multimedia and those taught with the conventional method?

Research Hypothesis

The following null hypothesis would be tested in this study:

1. There are no statistically significant differences in the achievement of students taught genetics using multimedia and conventional methods

Methodology

The study was a Quasi-experimental study of a non-equivalent, on-randomized pretest; posttest control group design. The sample comprised 94 students from intact classes from two co-educational public secondary schools in Ilorin city. A purposive sampling technique was used to select the schools for the study. The Senior School two (SSII) Biology students were the target population. The target population were not preparing for WASSCE. Instruments employed for the study was a researcher-designed Genetics Achievement Test (GAT). The Research instruments were given to three experienced Biology teachers and two Biology educators from the Department of Science Education, University of Ilorin, Nigeria for face and content validity. Also, the draft of the PTG was given to an expert in the field of measurement and evaluation for the standard of the items. Reliability of the instrument was determined using the test-retest method with a week's interval on the students of a non-participating school. A reliability index of 0.77 was obtained using Pearson's product-moment correlation coefficient.

The researcher sought permission to conduct the study in the sampled schools by presenting an introductory letter to the Principals of the selected schools for consideration. With permission, the researcher was introduced to the Biology teachers of the schools for familiarity and arrangements were made for the study to take place. The researcher and Biology teachers, who were the Research assistants, distributed the consent forms to the students. The form was given to each student to be completed and returned to the Research assistants of each school. These consent forms were given to seek students' consent to participate in the study. The copies of the collected consent forms were returned to the Researcher. Then, pretests were administered to the participating students in both experimental and control groups before the commencement of the teaching. The experimental group was taught using a multimedia strategy on genetics, and the control group with a conventional method. A posttest was administered to all the groups at the end of the lessons.

Data Analysis and Results

The research question was answered with a mean, and the research hypotheses were tested at a 0.05 level of significance

Research Question 1: Is there differences in the achievement of students taught genetics using a multimedia strategy and those taught with a conventional method

Table 1: Mean for the experimental and control groups

Group	N	X
Experimental group	40	66.30
Control	54	45.41

The result from Table 1 revealed the mean scores for the experimental and the control group. The result revealed that the experimental group had an approximate mean score of 66.30 and the control group had an approximate mean of 45.41. The result shows that the experimental group has a higher mean score than the control group students after the treatment. Thus, multimedia strategy improves students' understanding of concepts in genetics as reflected in their scores in achievement in GAT.

Hypothesis 1: There is no statistical significant differences in the achievement of students taught genetics using multimedia strategy and the conventional method

Table 2: t-test of Post-test Scores of Experimental and Control Groups

Group	Mean	Std. Deviation	t-value	t-cal	Decision
Experimental	66.30	9.27	10.78	1.98	Sig.
Control	45.41	10.50			

Table 2 reveals that the mean achievement scores of the students in the experimental group were higher than those of the control that did not experience any form of treatment. The difference is therefore accounted for by the treatment on the experimental group (t-cal = 10.78, t tab = 1.98) computed at a 0.05 level of significance. This means that there was a difference between the experimental and control groups, as the t-value 10.78 was greater than the t-tab 1.98. Hypothesis one is hereby rejected, which means that there was a significant difference in the achievement of students that exposed to multimedia instruction and those of the conventional method. This means that the experimental group performed better than the control group in GAT.

Discussion of Findings

This study revealed that multimedia strategy has a positive impact on students' performance in GAT, i.e. the approach improves students' conceptual understanding of the genetic concept as reflected from their performances in the GAT. Hypothesis one was rejected because there was a significant difference in the achievement of students taught with MIS. This is in favour of the MIS group. This finding was in line with the results of studies conducted by Kasa et al. (2024); Onuigwe et al. (2023), and Kiat et al. (2020), that students taught using a multimedia instructional approach had better academic achievement than the control group. Previous research also revealed that the use of multimedia can increase conceptual knowledge and eliminate misconceptions (Lihan & Oruc, 2016; Akinbadewa & Sofowora, 2020). Multimedia approach improves students-teacher interactions and communication as well as aids students' attention and curiosity during the teaching and learning process.

Conclusion

1. Multimedia Instructional Approach aids more conceptual understanding and better achievement of senior school students in genetics.
2. Multimedia instructional approach improves students' learning, active interactions and curiosity

Recommendations

The following recommendations were made based on the findings

1. Teachers in senior secondary schools should incorporate multimedia instructional strategies when teaching genetic concepts.
2. Training workshops should be organised to equip educators with the necessary skills for effectively using multimedia tools in their instructional practices.

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THE SYNTAX OF NEGATION IN THE YORUBA: A CROSS-LINGUISTIC PERSPECTIVE

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ABTRACT

The syntax of negation in the Yoruba language presents a rich area of study, reflecting unique linguistic structures that contribute to our broader understanding of negation across languages. This study explores Yoruba negation patterns, comparing them cross-linguistically with other languages to highlight syntactic similarities and differences. Yoruba, a Niger-Congo language spoken primarily in southwestern Nigeria, utilizes specific negation markers, such as "kò" and "kò sì," which convey negation within various sentence structures, through a cross-linguistic analysis the positioning of negation markers in Yoruba sentences, especially in contrast to negation systems in Indo-European and other African languages, focusing on the syntactic placement and scope of negation within different clause types. Furthermore, negation interacts with tense, aspect, and verb forms, illustrating unique syntactic phenomena such as double negation and negative concord, as seen in Yoruba dialects. Additionally, it examines negation's role in questions, commands, and complex sentence structures. This research contributes to theoretical discussions on negation, highlighting the language's distinct syntactic strategies and providing insights into typological universals and language-specific variations. Yoruba syntax. Findings from this research underscore the role of syntactic parameters in shaping negation systems, reinforcing Yoruba's position within the typology of negation across languages. This study also contributes to syntax theory, offering a deeper understanding of negation in understudied languages and suggesting directions for further research in linguistic typology and language preservation.

Introduction

The Yoruba language, *p*rimarily spoken in southwestern Nigeria and parts of West Africa, is a member of the Niger-Congo language family and exhibits unique syntactic structures, especially in its approach to negation. Linguists study Yoruba syntax to explore the grammatical rules and sentence structures that govern the language, offering insights into broader typological questions within African languages and comparative linguistics (Bamgbose, 2018). Yoruba syntax provides a window into the interplay of grammatical categories, word order, and the positioning of various markers within sentences, thereby contributing valuable data for understanding syntactic variation across languages (Ajayi, 2005).

Negation in Yoruba is particularly distinctive, as it uses specific negative markers like kò and kò sì to indicate negation across different tenses, aspects, and sentence types. Unlike some Indo-European languages, Yoruba does not rely on auxiliary verbs to convey negation, but rather employs particles that precede the verb to negate the statement directly (Owoyele, 2004). This approach aligns with negation structures found in other African languages, where negative particles are commonly used, though the position and form of these particles vary significantly across language families and regions (Heine & Nurse, 2000). The study of the syntax of negation in Yoruba, therefore, reveals important typological information about negation as a linguistic universal and its variations. Syntactically, negation in Yoruba also interacts with tense and aspect markers, adding a layer of complexity to its structure. Yoruba uses particular syntactic constructions to convey the negation of actions in the past, present, and future, which highlights the relationship between tense, aspect, and negation (Akanbi, 2012). For instance, while negation in the present tense is straightforward, negation in the past tense often involves different structural choices, such as reduplication or the introduction of additional particles (Adewole, 2015). Such nuances make Yoruba a valuable case study within comparative linguistics for understanding how languages encode temporal information in negative constructions.

The concept of negative markers is critical in understanding how negation is expressed. Yoruba, for instance, utilises particles as its primary markers, unlike languages that employ morphological or phonological changes within verbs (Ajayi, 2005). Furthermore, negation patterns in Yoruba exhibit features such as negative concord, where multiple negative elements co-occur within a sentence to reinforce negation. This phenomenon, seen in many African and Romance languages, allows for a sentence to contain more than one negative expression without resulting in positive meaning (Horn, 1989). Negative concord is a form of double negation that

reinforces rather than cancels out the negative meaning, which is the case in many dialects of Yoruba (Owoyele, 2004).

Through an examination of Yoruba language structure and the syntactic mechanics behind its negation patterns, scholars can gain deeper insights into the universality and variability of syntax across languages. These insights inform broader theories of syntax, such as syntax theory, which aims to construct universal principles for language structures while recognising variations shaped by linguistic, geographic, and cultural factors. As languages evolve, variations in syntax and negation reflect adaptive strategies for clarity, emphasis, and communicative efficacy, further enriching the comparative study of negation and syntax across linguistic families.

The syntax of negation in Yoruba represents an intersection of linguistic theory and typology, revealing significant insights into how languages construct and interpret negation. Comparative studies highlight the complexity and diversity of negation strategies, positioning Yoruba as a key language in understanding both African linguistic patterns and universal syntactic principles. Through exploring Yoruba's unique approaches to negation, scholars can better grasp the roles that tense, aspect, and cultural context play in shaping the syntax of negation globally.

Theoretical Framework

The study of negation in Yorùbá necessitates a theoretical framework that captures its structural, functional, and interpretative properties. Several linguistic theories have been proposed to explain the phenomenon of negation across languages, including Negative Concord Theory, Jespersen's Cycle, the Minimalist Program, and Polarity Theory. Each of these theories provides a unique lens through which negation can be analysed. However, for a robust analysis of Yorùbá negation, Negative Concord Theory proves to be the most appropriate, as it accounts for the systematic co-occurrence of multiple negation markers and their syntactic and semantic implications.

Negative Concord Theory

Negative Concord Theory provides a framework for understanding languages in which multiple negative elements appear within a clause but collectively convey a single negative meaning. In some languages, such as English, double negation leads to an affirmative

interpretation (e.g., I don't know anything implies I know something). However, in Yorùbá, multiple negation markers do not cancel each other but rather reinforce the negative meaning. For instance, in the sentence *Kò sí ẹnití kò mọ̀ ọ* (No one does not know him/her), the negative markers kò and sí co-occur without yielding a positive interpretation. This suggests that Yorùbá follows a strict negative concord system, where multiple negative elements within a clause function together to establish a single negation.

Negative Concord Theory effectively accounts for this pattern by arguing that in certain languages, negation is distributed across multiple syntactic positions as a means of reinforcing negativity. The presence of multiple negative markers in Yorùbá is thus a grammatical requirement rather than redundancy. This theory also explains why negation in Yorùbá interacts with existential constructions, as seen in *Kò sí owó* (There is no money), where kò and sí collectively express non-existence. Furthermore, negation in Yorùbá extends beyond standard negation to include negation in interrogatives (Ṣé kò sí ounje? – Is there no food?) and serial verb constructions (*Mo kò le lọ sí ibẹ̀* – I cannot go there), reinforcing the systematicity of negative concord.

To capture the syntactic distribution and functional role of negation markers in Yorùbá, Negative Concord Theory provides the most comprehensive explanation of the language's negation system. It aligns with the morphosyntactic structure of Yorùbá and offers a formal mechanism for analysing how negation interacts with tense, aspect, and focus.

Jespersen's Cycle and the Evolution Theory

Jespersen's Cycle, proposed by Otto Jespersen (1917), describes the diachronic evolution of negation in languages. According to this theory, negation typically progresses through a three-stage cycle: (i) an initial stage where negation is marked by a single element, (ii) an expansion phase where negation is reinforced by additional markers, and (iii) a final stage where the original negation marker disappears, leaving the reinforced element as the new negation marker. This theory has been widely applied to the study of negation in European languages such as French. The applicability of Jespersen's Cycle to Yorùbá negation remains limited, as historical evidence suggests that the Yorùbá negation system has remained relatively stable over time. Unlike in some Indo-European languages, where older negation markers have been replaced, Yorùbá negation has consistently relied on the pre-verbal negation marker *kò*. However, there are instances where negation is reinforced by additional elements, such as in the existential negation

structure *Kò sí* (There is no…), which suggests that Yorùbá may exhibit features of the expansion phase of Jespersen's Cycle. Nevertheless, the lack of evidence for the eventual loss of *kò* as a negation marker challenges the applicability of this model to Yorùbá.

While Jespersen's Cycle provides valuable insights into the historical development of negation across languages, it does not sufficiently explain the synchronic structure of negation in Yorùbá. The stability of Yorùbá negation suggests that the language does not follow the full cyclic progression outlined in Jespersen's model.

The Minimalist Program and the Syntactic Structure

The Minimalist Program, introduced by Noam Chomsky (1995), seeks to explain linguistic structures using principles of economy and efficiency. Under this framework, negation is analysed in terms of its syntactic features and how it interacts with other elements within a sentence. In Yorùbá, negation is consistently realised through the marker kò, which occupies a fixed syntactic position before the verb. This rigid placement aligns with the principles of the Minimalist Program, which suggests that languages optimise their structures by maintaining consistent syntactic positions for functional elements.

Minimalist analysis also accounts for how negation interacts with auxiliary verbs and tense markers in Yorùbá. For example, in the sentence *Ó kò ń jeun* (He/she is not eating), the negation marker kò precedes the progressive aspect marker ń, demonstrating a predictable syntactic order. This consistency suggests that negation is governed by underlying syntactic constraints that ensure its proper placement within the clause.

Despite its explanatory power in accounting for the placement of negation markers, the Minimalist Program does not fully capture the phenomenon of negative concord in Yorùbá. While it provides a formal syntactic account of negation placement, it does not adequately address the semantic implications of multiple negation markers in a clause. Therefore, while useful for understanding the syntactic structure of Yorùbá negation, the Minimalist Program is insufficient as a comprehensive model for analysing its full range of functions

Among the theories examined, the Negative Concord Theory proves to be the most suitable for analysing negation in Yorùbá. It effectively captures the language's use of multiple negation markers, its syntactic regularities, and its semantic implications. While Jespersen's Cycle, the Minimalist Program, and Polarity Theory each offer valuable perspectives, they do not fully account for the distinct characteristics of Yorùbá negation. By adopting a Negative Concord

approach, this study contributes to a deeper understanding of Yorùbá syntax and its typological significance within the Niger-Congo language family.

Empirical Studies

Negation is a fundamental linguistic feature that enables speakers to deny propositions, contradict statements, and express the absence of entities or actions. In the context of the Yorùbá language, negation exhibits a rich and complex system that has been the subject of extensive scholarly investigation. This aspect aims to synthesise contemporary research on Yorùbá negation, highlighting key empirical findings on the topic.

Recent studies have refined the understanding of sentential negation in Yorùbá. Adebayo (2021) challenges earlier assumptions by asserting that Yorùbá possesses four primary sentential negative markers: *kìí, kò, kọ́, and má.* These markers are categorised into two morphemes based on mood: the k-morpheme, used in real's mood, and the má-morpheme, employed in irreal's mood. The distinctions among kìí, kò, and kọ́ are further delineated by their interaction with aspect and focus within sentences.

The semantics of negative focus constructions in Yorùbá have been critically examined to understand the scope and interpretation of negation. Ilori (2020) investigates the kó-negative constructions, traditionally viewed as negating only the immediately preceding constituent. Through semantic analysis, Ilori demonstrates that kó negates the entire proposition embedded within the focus construction, not merely the focused element. This insight challenges prior interpretations and underscores the necessity of considering the broader propositional context in analysing Yorùbá negation.

Negation patterns exhibit notable variation across Yorùbá dialects, reflecting the language's rich diversity. Sanusi and Ọmọlewu (2016) conduct a comparative analysis of negative constructions in Standard Yorùbá and the Ẹ̀gbá dialect. Their study reveals significant differences in the behaviour and syntactic positioning of negative markers between the two varieties. For instance, while má functions as a negative marker in Standard Yorùbá, it serves as a progressive marker in the Ẹ̀gbá dialect. Additionally, the negative marker *kò* in Standard Yorùbá has variants kò and ò in Ẹ̀gbá, highlighting the syntactic and morphological diversity within the language.

Further exploration into other dialects, such as Ọ̀rọ̀, reveals unique morphosyntactic strategies for negation. Ante (2018) identifies that negation in Ọ̀rọ̀ is achieved through circumfixation, involving the simultaneous prefixation and suffixation of negative morphemes to

the root verb. This process differs from the strategies observed in Standard Yorùbá and other dialects, emphasising the importance of dialect-specific analyses in understanding the full spectrum of negation in Yorùbá.

The morphosyntactic properties of negation in Yorùbá have been a focal point in recent linguistic research. Fábùnmi (2014) provides an in-depth analysis of negation across sixteen Yorùbá dialects, proposing that negation operates as an independent syntactic projection, termed the Negative Phrase (NegP). This perspective aligns with the Minimalist Program's view of functional categories and offers a unified framework for understanding the placement and function of negative markers within Yorùbá sentence structure.

The study of negation in Yorùbá encompasses a multifaceted exploration of its semantic, syntactic, and dialectal dimensions. Recent scholarship has significantly advanced the understanding of sentential negative markers, negative focus constructions, and the morphosyntactic underpinnings of negation across various dialects. These insights not only contribute to the theoretical modelling of negation in Yorùbá but also enhance the broader comprehension of negation as a universal linguistic phenomenon.

Types of Yoruba Negations

Negation in Yorùbá encompasses various types-such as standard, imperative, existential, and concordial negation, serving distinct grammatical functions and offering key insights into the language's syntactic and semantic structure.

Standard Negation

Standard negation in Yoruba is achieved using the negative particle kò, which precedes the verb in declarative sentences to indicate denial or contradiction. It remains consistent across different tenses and aspects, ensuring clarity in negative statements. Unlike English, where auxiliary verbs may be needed (e.g., "do not" or "did not"), Yoruba maintains a straightforward structure by simply inserting *kò* before the verb. This negation pattern is used in daily conversations, formal discourse, and literature to express actions that did not occur or are not occurring. The verb itself remains unchanged, making the construction simple and predictable. This form of negation is an essential part of Yoruba grammar, allowing speakers to effectively communicate opposition or denial. Scholars like Bamgbose (2018) emphasise its consistency and efficiency in negative sentence formation.

Examples:

1. Ade rí i. → Ade kò rí i. (Ade saw it. → Ade did not see it.)

2. Mo fẹ́ jẹun. → Emi kò fẹ́ jẹun. (I want to eat. → I do not want to eat.)

3. A bá wọn. → A kò bá wọn. (We met them. → We did not meet them.)

Negative Imperatives

Negative imperatives in Yoruba are formed using má, which functions as a prohibitive marker. This construction negates commands, warnings, or instructions, preventing an action from occurring. Yoruba does not require auxiliary verbs like "do not" in English; rather, má is placed directly before the verb to indicate prohibition. This structure is commonly used in parental instructions, religious teachings, traditional proverbs, and formal directives. The simplicity of má makes it highly effective in commanding attention and ensuring immediate compliance. According to Bamgbose (2018), negative imperatives in Yoruba are direct and leave no room for ambiguity, making them useful in various social contexts.

Examples:

1. Má ṣiwà wu. (Do not misbehave.)

2. Má ta ìwé yẹn. (Do not sell that book.)

3. Má tan ìròyìnyìí. (Do not spread this news.)

Existential Negation

Existential negation in Yoruba is expressed using *kò sí*, which conveys the absence or non-existence of an object, entity, or condition. This structure is crucial in indicating that something is missing, unavailable, or does not exist. It is commonly used in daily speech, literature, and formal discourse to describe situations where an item, person, or concept is absent. Unlike standard negation, which negates actions, existential negation negates presence or availability. According to Adesola (2010), this form of negation is a fundamental aspect of Yoruba syntax, as it helps in constructing meaningful expressions of absence or lack.

Examples:

1. Ìwé kò sí nínú apoti. (There is no book in the box.)

2. Ọmọ kò sí nílé. (There is no child at home.)

3. Oúnjẹ kò sí nílé. (There is no food at home.)

Negation of Progressive Aspect

Negating the progressive aspect in Yoruba requires combining the standard negation marker kò with the progressive marker ń. This negation structure expresses the idea that an action is not currently in progress. The placement of *kò* before ń modifies the ongoing action, resulting in a clear indication that something is not happening at the moment. This negation type is crucial in everyday communication, helping speakers express real-time negations effectively. Ajayi (2007) noted that Yoruba's integration of negation with aspect markers reflects the language's grammatical complexity, ensuring precise temporal expressions.

Examples:

1. Ó ń sun. → Ó kò ń sun. (He/she is sleeping. → He/she is not sleeping.)

2. Wọ́n ń ṣiṣẹ́. → Wọ́n kò ń ṣiṣẹ́. (They are working. → They are not working.)

3. Mo ń kọ ìwé. → Mo kò ń kọ ìwé. (I am writing a book. → I am not writing a book.)

Double Negation

Double negation in Yoruba is a rare but emphatic structure used to reinforce a negation. It involves using multiple negative markers in a single sentence to stress denial or prohibition. Unlike in English, where double negatives often lead to a positive interpretation, Yoruba double negation serves to strengthen the original negative meaning. Bamgbose (2018) explains that this structure is primarily used in rhetorical contexts or formal discourse, adding depth to the speaker's assertion.

Examples:

1. Kò sí ẹniti kò mọ ọ. (There is no one who does not know him/her.)

2. Kò sí ohuntí kò le ṣẹlẹ̀. (There is nothing that cannot happen.)

3. Kò sí ẹnití kò lè gbọ́. (There is no one who cannot hear.)

Negative Concord

Negative concord occurs when multiple negative elements appear in a sentence while maintaining a single negative meaning. This type of negation ensures that all negative markers work together harmoniously, rather than cancelling each other out. In Yoruba, kò and sí often co-occur to reinforce negation without contradiction. Adesola (2010) highlighted that this phenomenon aligns Yoruba with other negative concord languages, strengthening its syntactic structure.

Examples:

1. Kò sí ẹnikantí kò mọ ọ. (There is no one who does not know him/her.)

2. Kò sí ohun tó kò yẹ. (There is nothing that is not proper.)

3. Kò sí ibi tí kò le lọ. (There is no place he/she cannot go.)

Interrogative Negation

Interrogative negation combines negation with a question to express doubt, disbelief, or rhetorical emphasis. This form often uses sé (the interrogative marker) along with kò to create negative questions. It is commonly found in conversations where the speaker seeks clarification or indirectly asserts a point. Ajayi (2007) emphasises that interrogative negation plays a vital role in persuasive discourse.

Examples:

1. Ṣé ó kò mọ pé mowà níbí? (Does he/she not know that I am here?)

2. Ṣé wọn kò gbà á? (Did they not accept it?)

3. Ṣé a kò le lọ lọ́la?(Can we not go tomorrow?)

Sentential Negative Markers in Yorùbá

Yorùbá employs distinct negative markers to indicate negation in sentences. Adebayo (2021) identifies four main markers: *kìí, kò, kọ́, and má*. These markers fall into two broad categories based on mood: the k-morpheme, used in realis mood, and the má-morpheme, used in irrealis mood. The k-morpheme manifests in forms such as *kò* for declarative negation *(Ó kò lọ –*

"He/She did not go") and kìí for habitual negation (*Ó kìí sùnlásìkò* – "He/She does not sleep on time"). The má-morpheme is used for prohibition (*Má sùnnísìnyí* – "Do not sleep now"), marking its irrealis function (Adebayo, 2021).

Dialectal Variations in Yorùbá Negation

Negation in Yorùbá varies significantly across dialects. Sanusi and Ọmọlewu (2016) examined Standard Yorùbá (SY) and Ègbá dialect (ẸD), noting that má, which functions as a negative marker in SY, acts as a progressive marker in ẸD. Likewise, the negative marker kò appears in variants such as *kò and ò* in ẸD. These variations suggest that negation in Yorùbá dialects is not uniform but shaped by historical and regional influences. Fábùnmi (2013) further investigated negation across sixteen Yorùbá dialects, highlighting morpho-phonological differences. For instance, while Standard Yorùbá uses *kò, kìí, and kọ́*, the Ìlàjẹ dialect uses éè (Méè lọ – "I did not go") (Fábùnmi, 2013).

Semantic Scope of Negation in Yorùbá

The semantic scope of negation in Yorùbá has generated scholarly debate. Ilori (2020) challenges the traditional belief that *kó* negates only the noun phrase that precedes it. Through an analysis of entailments and presuppositions, Ilori (2020) argues that kó negation applies to the entire proposition rather than just the negated constituent. In the sentence *Ayò kó ni ó pè é* ("It was not Ayo that called you"), negation is not limited to "Ayo" but extends to the assumption that someone else called. This broader interpretation of kó negation reflects Yorùbá's syntactic and pragmatic flexibility (Ilori, 2020). Coegation in Yorùbá underscores its syntactic complexity, semantic nuances, and dialectal variations. Research from Nigerian and international scholars reveals that Yorùbá negation is governed by distinct morphemes *(kìí, kò, kọ́, má*), each functioning within specific grammatical contexts. Additionally, dialectal differences highlight the dynamic evolution of negation patterns in Yorùbá. The syntactic structure and semantic scope of negation, particularly regarding kó-negative constructions, demonstrate the language's intricate linguistic features. Understanding these aspects contributes to broader discussions in linguistic typology and African language studies, reinforcing the significance of Yorùbá negation in theoretical and applied linguistics. Yoruba employs diverse strategies to express denial, prohibition, contrast, and rhetorical emphasis. Understanding these various types of negation enhances communication clarity and provides insight into Yoruba syntax and morphology..

Below are some examples of Yoruba Negations and their analysis

1. Mo ti kò jẹun - "I have not eaten."

In this sentence, the auxiliary ti indicates a past perfect tense, and kò negates the action of eating. The combination of *ti and kò* marks the completion of a negative event in the past. The negation is placed before the verb *jẹun*(eat), signalling that the action has not occurred up to the present. This structure shows the interaction of tense, aspect, and negation in Yoruba syntax, reflecting a typical pattern in the language.

2. Wọ́n kòni lọ - "They will not go."

The future tense marker*ni* is combined with *kò* to create negation in the future tense. The negation precedes the verb lọ (go), adhering to the syntactic rule of placing negation before the verb. This construction emphasises the future action that will not take place, and it illustrates how Yoruba handles future negation simply and directly.

3. Emi kò fẹ́ràn rẹ mọ́ - "I no longer like him/her."

The phrase kò plus mọ́ (anymore) is used to emphasise the cessation of the liking or affection. This structure is employed to show that a past condition has changed. The negation particle *kò* comes before the verb *fẹ́ràn*(like), indicating that the liking no longer exists in the present. The addition of mọ́ further reinforces the discontinuity of the action, highlighting the negation's role in changing the emotional state of the subject.

4. Ade ki yoorí mi - "Ade will not see me."

In this sentence, *yóò* (will) marks future tense, while ki negates the verb*rí* (see). The negation is placed before the verb, maintaining the standard syntactic order. The sentence is an example of how Yoruba constructs future tense negation, indicating that the event (seeing) will not happen in the future.

5. Ẹ ò tí ì kò sìn - "You have not yet served."

The phrase ò tí ì expresses an incomplete action, while *kò* negates the event of serving. The structure is a combination of aspect and negation, where *kò* marks the non-occurrence of the action until the present moment. The sentence reflects Yoruba's use of aspect to convey actions that are yet to be completed, with negation reinforcing the unfinished nature of the action.

6. Emi kò tí ì kúrò níbẹ̀ - “I have not yet left there.”

Similar to the previous example, this construction uses *kò tí ì* to show that the action (leaving) has not yet been completed. The combination of the negative marker kò with the aspectual *tí ì* (not yet) illustrates Yoruba's syntactic flexibility in marking both negation and aspect. The phrase clearly communicates that the action is pending and has not taken place up until the present.

7. Àwa ki yóò rí imọ́ - “We will not see it anymore.”

The future tense marker *yóò* and negation *kò* combine to express that the event (seeing) will not occur in the future. Mọ́ emphasises the discontinuity of the action. This structure shows how negation and aspect work together in Yoruba to convey a sense of finality about the action, indicating that seeing the object will not happen anymore.

8. Wọ́n kò tí ì lọ sí ilé-ékó - “They have not yet gone to school.”

This sentence uses the negative particle *kò* in combination with the aspectual marker *tí ì*, which emphasises the action (going to school) that has not yet occurred. The structure of the sentence highlights the interaction between aspect and negation, showing that the action is incomplete and has not been accomplished up to the present moment. The combination of aspect and negation is an important feature in Yoruba syntax, particularly in expressing actions that are yet to take place.

9. Olu ti kò wá - “Olu has not come.”

The word *ti* (present perfect tense) is combined with the negative particle *kò* to form a structure that expresses a past action that is yet to be completed. The verb *wá* (come) is negated by *kò*, meaning that the action of coming has not occurred, even though it is expected. The tense and aspect interplay with negation to highlight the incompletion of the action. This structure emphasises that the event was anticipated but did not happen as expected.

10. Emi kò mọ ibití ó ti lọ - “I do not know where he/she has gone.”

This sentence demonstrates a more complex sentence structure with embedded clauses. The negative marker *kò* negates the main verb mọ (know), while the embedded clause*ibití ó ti lọ* (where he/she has gone) specifies the object of knowledge. The negation applies to the main verb, showing that the subject lacks knowledge about the event described in the relative clause. This

construction shows how negation functions in complex sentences without altering the overall syntactic structure.

11. Wọ́n kò fẹ́ràn mi, ṣùgbọ́n monífẹ́ fúnwọn - "They do not love me, but I love them."

This sentence consists of two clauses connected by*ṣùgbọ́n* (but). The first clause has the negation particle *kò* before *fẹ́ràn* (love), indicating the absence of love from the subject towards the object. The second clause demonstrates a simple affirmative structure, where love is present from the speaker to the subject. This structure highlights how Yoruba handles contrastive negation, where negation occurs in one clause while affirmation occurs in another, maintaining the syntactic order in both cases.

12. Kò ṣéé ṣelái fi ọwọ́ rọ̀ - "It cannot be done without effort."

This sentence combines modality and negation. The verb*ṣéé* (can be done) is negated by kò, indicating that the action (doing) is not possible. The phrase *lái fi ọwọ́ rọ̀* (without effort) suggests a condition for the action. This construction is an example of how Yoruba uses negation to indicate impossibility, and it illustrates the use of negation in expressing modality (ability and possibility) while also showing syntactic coherence.

13. Ọmọ náà kò gbàdúrà, àmọ́ kò sùn - "The child did not pray, but he/she did not sleep."

This sentence shows how negation operates within multiple clauses. The first clause uses kò to negate the verb *gbàdúrà* (pray), while the second clause negates sùn (sleep) using kò again. Despite the negation, both actions (praying and sleeping) are presented in the same overall negative framework, demonstrating that both actions were absent. The contrastive conjunction *àmọ́* (but) emphasises the fact that the child did not perform one action while still not performing another, which shows how Yoruba can combine negation across different clauses in one sentence.

14. Emi kò nífigbogboowó mi raaṣọ - "I did not spend all my money to buy clothes."

In this sentence, the negation particle kò negates the verb phrase *nífiraaṣọ* (spend to buy clothes). This construction uses kò to negate the entire action of spending money, emphasising that the subject did not complete the action in full. The verb*nífi* indicates the action of spending, while the negative kò negates this transaction. The sentence structure shows how Yoruba can use negation to express partial actions or prevent a specific outcome from occurring.

15. Wọ́n kò fẹ́ ká jẹ́ kí ó ṣeeyi yen- "They did not want us to allow him/her to do that."

The sentence uses a double negation structure where the negation *kò* is applied to the verb*fẹ́* (want), indicating that the subject did not desire the action. Additionally, the verb phrase *kà* (allow) is also negated indirectly by the modal construction. This structure highlights the way Yoruba can use multiple negations in complex clauses, as well as the interaction between negation and modality in expressing disallowance.

Challenges Facing the Study of Negation in Yoruba and Possible Solutions

The study of negation in Yoruba, like any linguistic study, is not without its challenges. These challenges stem from various factors such as complexities in data collection, variation in language usage, cross-linguistic issues, the evolving nature of language, and limitations in linguistic theory. This section provides a detailed examination of these challenges and proposes solutions that can help mitigate them.

One of the primary challenges in the study of negation in Yoruba is the complex nature of its negation structures. Yoruba, like many other languages, uses different forms of negation, including single negation, double negation, negative concord, and negation with aspectual markers. Each of these structures has distinct syntactic properties that can lead to ambiguity when interpreting the data. For instance, negation with aspectual markers such as kò ti (not yet) introduces challenges in understanding how tense, aspect, and negation interact. While negation may function uniformly, the truth is that the syntactic structure varies according to the verb form and the tense of the action in the sentence.

Yoruba, being spoken across different regions in West Africa, exhibits significant dialectal variation, especially in terms of negation. These dialectal variations may impact the standardisation of negation forms and pose a challenge for researchers trying to develop a comprehensive understanding of negation in the language. For example, while the negative marker *kò* is widespread in many Yoruba dialects, other variants, such as *kò-ń* in some dialects, may introduce further variation. In addition to regional dialects, there may also be differences in negation patterns due to sociolects and registers, such as formal versus informal speech. In the context of Yoruba, the informal or colloquial registers may feature more instances of double negation and negative concord than formal speech. To address this challenge, it is essential to undertake dialectological research that compares various Yoruba dialects. The use of large-scale surveys across Yoruba-speaking regions can help gather data on how negation is used in different contexts. Working closely with linguists familiar with the different Yoruba dialects will also help to ensure that regional and societal variations are well-represented in the study. Furthermore,

ensuring the inclusion of both formal and informal speech registers will provide a more comprehensive understanding of negation in the language (Akinlabi, 2009).

Languages, including Yoruba, are dynamic and constantly evolving. This evolution can affect how negation structures are used in everyday speech, with new negation forms emerging over time. For instance, the usage of *kò* has expanded to incorporate various tense and aspect markers, and new forms of negation may arise, particularly due to the influence of contact languages such as English or Pidgin. This evolution presents a challenge for scholars trying to capture and analyse the "standard" or "traditional" forms of negation in Yoruba, as the language is continuously changing, especially in urban areas. To address the evolving nature of the language, researchers should focus on longitudinal studies that track the development and transformation of negation structures over time. Additionally, researchers can collaborate with sociolinguists to explore the influence of language contact and how Yoruba speakers adapt their negation forms in response to societal changes. By tracking these changes and their social implications, scholars can better understand the evolution of negation and its future trajectories (Labov, 2001; Trudgill, 2000).

Another challenge lies in the theoretical frameworks available to analyze negation in Yoruba. While many linguistic theories, such as generative grammar or construction grammar, offer tools for analysing syntactic structures, they may not fully capture the complexities of negation in Yoruba. For instance, Yoruba's use of negative markers in complex structures like double negation and negative concord requires theories that can account for the interplay between syntax, semantics, and pragmatics. Researchers should consider using more comprehensive theories, such as Optimality Theory (OT) or Head-Driven Phrase Structure Grammar (HPSG), which can handle complex interactions between different levels of grammar. These frameworks are better equipped to handle the interaction of negation with other elements like aspect, modality, and tense. The adoption of a multi-theoretical approach, drawing on the strengths of various linguistic frameworks, would allow for a more nuanced understanding of Yoruba negation (McCarthy, 2002).

Contributions to Existing Knowledge

The study on the syntax of negation in Yoruba from a cross-linguistic perspective makes significant contributions to linguistic scholarship. It provides a comprehensive analysis of negation in Yoruba, offering fresh insights into its structure, functions, and variations while situating it within the broader context of linguistic typology. This research advances knowledge

in syntax, comparative linguistics, and language technology, making it relevant to both theoretical and applied linguistics.

One of the major contributions of this study is its expansion of Yoruba syntax studies. Although Yoruba grammar has been widely studied, research on negation remains relatively underdeveloped. By providing a systematic analysis of negation, this study enhances our understanding of how negative constructions operate in Yoruba. It categorises different types of negation, including standard negation, negative imperatives, existential negation, and contrastive negation, thereby offering a more structured approach to analysing negative markers such as kò, má, and kì í. This categorisation clarifies the syntactic and semantic roles of negation in Yoruba, filling an important gap in linguistic research. Furthermore, the study contributes to comparative linguistics by situating Yoruba negation within a cross-linguistic framework.

The integration of multiple theoretical frameworks also enhances the significance of this study. It applies Generative Grammar, Minimalist Syntax, and Typological Studies to analyse Yoruba negation, demonstrating how Yoruba negation fits within universal syntactic principles. By engaging with theoretical debates on negation, this study provides insights into parametric variation, showing how Yoruba differs from or aligns with other languages in its treatment of negative markers. This theoretical contribution strengthens our understanding of how syntactic rules operate across languages.

Dialectal variations in negation across Yoruba-speaking communities also form an important part of this study's contribution. The research identifies regional differences in the use of negative markers and their syntactic structures, providing sociolinguistic insights into language variation. This is particularly useful for dialectal studies, language documentation, and efforts aimed at preserving linguistic diversity within Yoruba. By documenting how negation patterns differ across Yoruba dialects, this study offers a rich resource for future research on language variation and change.

Finally, the study addresses key challenges in studying Yoruba negation and proposes solutions. It examines issues such as historical influences on negation patterns, syntactic ambiguity, and the need for standardisation in Yoruba grammar. By identifying these challenges and suggesting possible solutions, the study contributes to ongoing discussions on African language preservation and linguistic development. This research underscores the importance of studying negation not only for theoretical linguistic analysis but also for practical applications in education and language policy.

Conclusion

The study of negation in Yorùbá underscores its syntactic complexity, semantic nuances, and dialectal variations. Research from Nigerian and international scholars reveals that Yorùbá negation is governed by distinct morphemes (kìí, kò, kọ́, má), each functioning within specific grammatical contexts. Additionally, dialectal differences highlight the dynamic evolution of negation patterns in Yorùbá. The syntactic structure and semantic scope of negation, particularly regarding kó-negative constructions, demonstrate the language's intricate linguistic features. Understanding these aspects contributes to broader discussions in linguistic typology and African language studies, reinforcing the significance of Yorùbá negation in theoretical and applied linguistics.

Recommendations

Based on the detailed analysis of the syntax and typology of negation in the Yorùbá language from a cross-linguistic perspective, the following recommendations are proposed for researchers, educators, computational linguists, curriculum developers, and language policy makers:

As a result of diversity in negation forms across Yorùbá dialects, there is a need for linguists and local researchers to conduct comprehensive documentation projects. This will help preserve lesser-known dialectal variants and provide a fuller understanding of negation patterns across the Yorùbá-speaking regions (Fábùnmi, 2013). Such documentation can inform comparative studies and support the development of inclusive teaching materials

Yorùbá language instructors should integrate detailed modules on different types of negation—including standard negation, imperative negation, existential negation, and negative concord—into formal educational curricula. Teaching negation as a structured grammatical category can enhance students' fluency and improve grammatical accuracy in both written and spoken forms of the language (Adebayo, 2021).

For computational linguists and software developers working on Yorùbá NLP (Natural Language Processing), attention must be paid to the accurate parsing of negative constructions. As Yorùbá allows negative concord and double negation, language processing tools must be

trained to distinguish between emphatic and canceling negation. This is essential for building robust applications in speech recognition, machine translation, and sentiment analysis.

Researchers studying negation in Yorùbá are encouraged to adopt the Negative Concord Theory as a primary theoretical framework. This model accurately explains the multiple negation markers found in Yorùbá syntax without misinterpreting them as contradictory (Ajiboye, 2018). Its application can refine linguistic analysis and foster alignment with cross-linguistic studies on negation.

Comparative studies should be extended to other Niger-Congo languages and beyond, focusing on how negation interacts with tense, aspect, and mood. This will illuminate universal and language-specific features of negation and contribute to linguistic typology. Such studies can also validate the findings of this research in wider African and global linguistic contexts.

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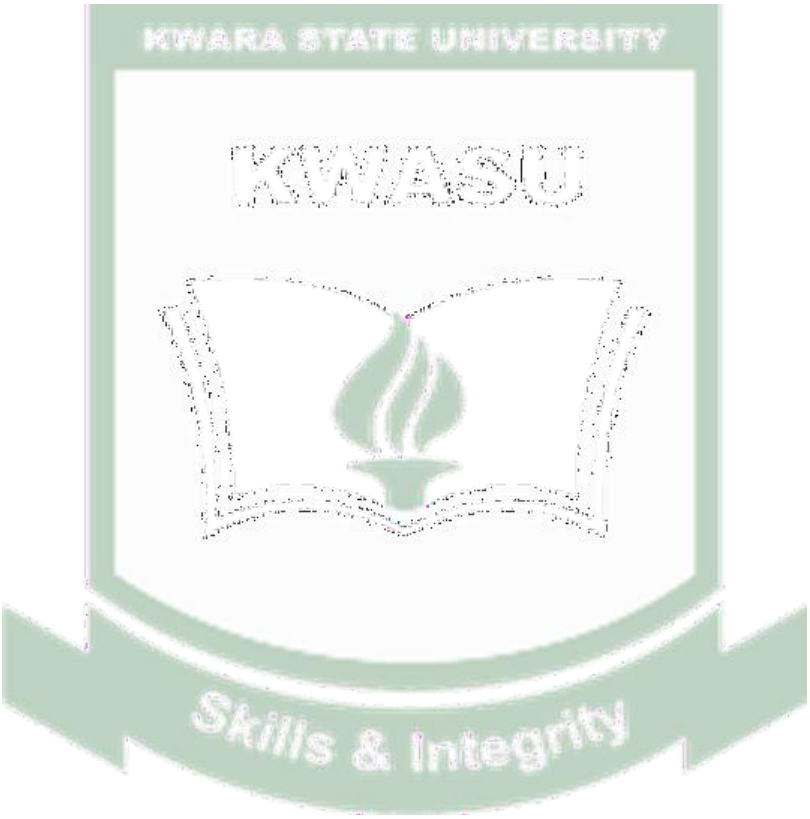
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THE NIGERIAN POLITICAL ADMINISTRATION: STUMBLING BLOCK TO SOCIO-ECONOMIC DEVELOPMENT AND POLITICAL LEADERSHIP IN AFRICA.

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ABTRACT

The assumption of the African leadership role by Nigeria seems ordained because, as at her independence in 1960, she had possessed all the requisite qualification, like population, resources (human and material), Land mass, and might more than the countries that had been independent for over 100 years before her. The performance of these functions, which was supported by other African Countries, was the best attestation to this status, but was hampered by political activities within Nigeria itself. It is given that this paper attempts to evaluate the activities of the Nigerian leaders since independence till date and the effect of their administration on the socio-economic well-being of the Nigerian populace. It equally diagnoses the impact of these activities on the contest, which some African countries are putting towards the leadership position which Nigeria has toiled so much to occupy. The study, however, concludes that until Nigeria stipulates a political culture which must be constitutionally engraved in our social administration, the much-echoed economic development that would confirm Nigeria's leadership of the African continent might continue to be unrealistic.

Introduction

The commencement of indigenous political activities in Nigeria was intertwined with gross irregularities and electoral fraud because the election that led to the emergence of Sir Abubakar Tafawa Balewa of the Northern People's Congress (NPC) as the first Prime Minister was stoically accepted by the opposition parties (UNDP, 2016). The political debacle was corroborated by the census and western regional crisis of 1962, the general election crisis of 1964,

and the western regional election crisis of 1965, which culminated in a military coup and the subsequent military rule for many years (Dare and Oyewole, 2002 & Bolaji, 2023). Notable among the offences levelled against the politicians by the military were embezzlement, misappropriation of public funds, gross misconduct, and misbehaviour in public offices, victimisation of political opponents and a host of other offences. Although the military became the worst offenders of the offences levelled against the politicians, most of them eventually metamorphosed into politics, hence our definition of politicians includes the military.

Theoretical Underpinnings

Politics, according to Henslim (2008) refers to power relations wherever they exist; it is the ability to get your way even over the resistance of others. It involves the authoritative allocation of values which people struggle to acquire. Naturally, politics seems conflicting considering its contested and contextual nature (Michelle, 2024 & Troy & Atin, 2025). This best explains why conflict theory is mostly relevant for political analysis. For conflict theory, society is a forum of inequality, considering the fact that resources (power, education, etc.) are not evenly endowed. For the understanding of social behaviour, the continuous contest and competition for political positions, economic values, social status, etc, present the best means. Conflict theory specifies the place of power, competition and social inequality in shaping society. Conflicts prescribed maintenance of social order by dominance of certain groups by a group as against co-operation between the components of the society (Iskandarsyah & Zulkarnain, 2022).

The Nigerian political position, as it is known, is mostly contested and scrambled for by Nigerians from different ethnic backgrounds, especially the presidency, which is the first and most influential position in the country. However, the keen contest for this position does not signify keen interest in the socio-economic development of the Nigerian society, but majorly in the total change of lifestyle for the president and his cohorts, as past and present public office holders have shown. The fear of being marginalised in political positions, civil service appointments and revenue allocations turned the election into a win-at-all-costs affair for contestants since the loyalty is not to Nigeria as a society, but the immediate origin and tribe. In their arguments towards political instability in Nigeria, Akinsanya and Ayoade (2005) emphasised that Nigeria attained independence as a nation of three separate regions (Eastern, Northern and Western) and the nation's Capital Territory of Lagos. Each of the regions was dominated by a major ethnic group. The Hausa-Fulani predominantly North was controlled and dominated by the Northern People's Congress (NPC), the Eastern region, mainly Ibo's

commanded and won by the National Convention of Nigerian Citizens (NCNC) and the Western region, mainly Yoruba's, controlled by the Action Group (AG). Each of the parties is expected to propagate their ethnic political programmes in the overall political administration of Nigeria. Unfortunately, none of the parties emerged with a clear majority in the December 12, 1959, Federal Elections, as clearly shown in Table 1, thus creating a political stalemate.

TABLE 1: December 1959 Federal Election Returns By Seats

PARTY	NORTHERN NIGERIA *	WESTERN NIGERIA**	EASTERN NIGERIA	LAGOS TERRITORY	NATIONAL TOTAL
NPC	134	-	-	-	134
NCNC/NEPU***	8	21	58	2	89
AG/UMBC***	25	33	14	1	73
OTHERS	7	8	1	-	16

** Only male adults were enfranchised.*

*** Western Nigeria then included the present Edo and Delta states (Mid-Western State).*

**** The expressions NEPU and UMBC stand for the Northern Elements Progressive Union and the United Middle Belt Congress, respectively.*

Source: *Adeoye, A. A. "The Inevitability of Instability in Nigeria" The Need for a Constitutional Political Culture.*

Nigerian Political Administration: An Overview

The defects presently witnessed in the Nigerian political administration were the by-product of what the colonialists handed over to the first set of leaders of the Nigerian Nation. In his account, Ige (1995) stressed that as far as the British were concerned, they appreciated the hard work, openness and constructive proposals of the Action Group, but they could not put their bet on that party and chief Awolowo because they could not be sure that he would not turn out to be a radical like Kwame Nkrumah. It is true, they surmised that Awolowo was inward-looking and had never shown flair for African and international politics. But his party's social programmes were bound to stir Nigeria into assuming its proper position as the giant of Africa, and probably contest development with the Western world, even her colonial master, Britain. The Action Group government of Western Nigeria had also demonstrated that it could speedily

transform a British-dominated civil service into an indigenous one. British civil servants did not like this, and people like F.K. Butler, who said free primary education was impossible, did not love the Action Group and its leaders.

The British had a good working relationship with Abubakar Tafawa Balewa since 1952 as a minister. Despite not being the leader of the NPC, he distinguished himself and always appeared modest always and always giving the impression of indecision during the 1954, 1956 and 1957 constitutional conferences; Abubakar Tafawa Balewa spoke little, but took copious notes. He had with him officials who accompanied him from the Lagos secretariat. They must all have been noting all the loopholes in the proposed constitution. This was the calibre of the personnel that the British handed Nigeria over to. As soon as the East and the West were accorded "self-government" in 1956, the Action Group proceeded to take a bold and necessary step for the easy implementation of its programmes. It appointed an agent general in the United Kingdom to look after its affairs. The Western region appointed an able lawyer, Chief M.E.R. Okorodudu, as his agent, and he gave his government far more publicity than the federal government got, which led to the federal and Eastern governments of Nigeria being envious of the Western government of Nigeria. The fact that the western region had more students in the United Kingdom and students on scholarship than even the federal government was enough to be envious of (Ige, 1995).

Probably, the British detest leadership contests from any of their colonies and since Nigeria was viewed as a potential, the delivery of political power to the tribe that does not contest issues with them right from the colonial days, on whom they can put their trust. This became the basis under which the tribe has been re-emphasising itself in political power, hence the claiming of leadership as their birthright. This argument also supports our electoral misconduct. African democracies, for Adebanwi (2004) are associated with a considerable number of violent crises. From Liberia to Nigeria, from Sierra Leone to Angola, from the Ivory Coast to Algeria, ethno-religious and political formations are up in war against one another in democratic states that describe themselves as democracies. Perhaps one way to instantly dismiss the matter is to simply argue that these policies are not in the proper sense democratic states. At best, they are what have been described as 'non-democratic democracies'; therefore, they would not be expected to enjoy the relative political tranquillity which democratic states are expected to enjoy. But this would be too dismissive and indeed, would blind us to the very challenging conditions under which these polities attempt to build and consolidate democratic governance, and would also encourage us to

ignore the fact that democracy itself is a perpetual work in progress. Indeed, in contemporary Africa, democracy is a struggle, a means of livelihood and not a social service.

Political Administration is connected with the organisation, and the planning of the state, government or public affairs (Hornby, 2010). Considering the prototype of politics which Nigerian leaders inherited from the British, our politics is focused on administering firstly the self, the organisation, and planning of their immediate family, tribe, ethnic group or state rather than the larger society. This, of course, at the expense of the nation and as a result, the tribe of the contestant strongly supports winning the election at all costs to enable the candidate to serve his ethnic interest. This same fact supports the mismanagement and diversion of public funds by our leaders into their personal use, which average Nigerian citizens consider normal in social administration. Also, an ideal political administration is supposed to be a by-product of a credible election.

Nigeria's renewed attempt at democratic polity in 1999 generated so much enthusiasm comparable to the mood in the country on the eve of national independence in 1960. However, the experiences in the first three years of its enthronement have diminished the enthusiasm of Nigerians in the same way; the enthusiasm with which they bid farewell to the infamous colonial rule was diminished. In a very short time, reverberations in the political firmament have stultified democratic progression and supplanted it with regression (Ayandiji, 2004). Right from the first republic, the incumbent administration exhibits various atrocities in government, prominent among which are the systems of ensuring a continuous stay in government so as to continue the mismanagement and embezzlement of public funds. Dare and Oyewole (2002) argue that a population census was conducted in 1962, but the figures leaked out, and there were many criticisms that the figures were rigged. As a result, it was cancelled and another census was ordered in 1963. Before then, a census board under the authority of the Prime Minister was set up. The census was taken in November 1963 and in February 1964; the provisional figures put the population of the country as 55,653,821. The Northern Region with 29,777,968, the Eastern Region with 12,388,646, the Western Region with 10,278,500, the Mid-Western Region with 2,533,337 and Lagos City with 675,352 people. The figures again generated a lot of criticism, but in the long run, the federal government, the Northern and the Western regional governments accepted the figures, but the Mid-Western and the Eastern governments rejected the results because they were inflated and there were gross irregularities. Of course, the census results were perfected in anticipation of the coming election rather than using them to plan for the country.

The aforementioned assertion was attested to by kingdom (2011) who asserted that election history vis-à-vis Nigerian politics revealed that the process of choosing leaders is often characterised by violence. The circumstances that brought about the Nigerian civil war was ignited by electoral malpractices co-ordinated by the Abubakar Tafawa Balewa led government in the first general and regional elections organized by indigenous leaders in 1964 and 1965. In the usual fraudulent manner, the ruling party was returned to virtually all positions from the federal to the regional without recourse. This instigated protest, violence and widespread killings degenerating into wanton destruction of lives and properties that claimed no fewer than 200 innocent lives (Carver, 1966 & Aluko, 2009).Added to this, Dare and Oyewole (2002) further advocated that based on the accepted census figures of 1963, the North was allotted 167 parliamentary seats out of 312, a reduction of 7 seats from what it had before; the East was allotted 70 seats as against 73 in the 1959 election; the West gained 10 seats being allowed 57 as against 47 in 1959, the Midwest area lost one seat, 14 seats in 1964 as against the 15 it had in 1959, Lagos, the federal capital was given 4 seats as against 3 in the 1959 elections. During the nomination process for these seats and the electioneering campaign that followed a lot of irregularities were reported, such as the inability of the UPGA candidates to get nomination papers or the electoral officers being conveniently absent when UPGA candidates wanted to file nomination papers in the Northern and Western regions controlled by the NPC and NNDP. At the close of nomination period, many seats in the North and West were declared unopposed.

It is in consideration of act of this nature that prompted Akintilebo (2011) to specify that one of the dangerous phenomena in the electoral process in the Nigeria politics is the criminality involved in the practice. The Nigerian politics over the years have been immersed in endemic electoral violence. Rather than elections to be embraced as one of the important processes that strengthen democratic institutions and facilitate peaceful transition of power; they are seen as violent means of acquiring the spoils of democracy. Just as the first, second and third republics, Nigeria's fourth republic was bedevilled by several forms of violence and crimes, among which are murder, arson, electoral violence, assassination, intra-and inter-party clashes among party members in the political process. Probably, the most disruptive and challenging of all the political disturbances which Nigeria had experienced was the June 12 1993, political disturbance in which Nigeria lost many souls and properties, which is incalculable. It could as well be concluded that the June 12 political crisis stands out to be the most disturbing to the socio-economic development of the Nigerian society. It marks the beginning of the epileptic functioning of all Nigerian petroleum refineries, which commences the era of importation of petroleum products

that have impacted negatively on our economy. However, it must be stated that this political disturbance, which engraved a permanent socio-economic stigma on Nigeria, was the making of the military.

Emmanuel Ojo (2004) noted that after General Ibrahim Babangida took over power in August 1985, he released a new political programme which would anchor Nigeria's political proceedings, institutional adjustment, and the re-orientation of the nation's political culture. In the quest for searching for a new political order, he constituted a 17-member political bureau basically for reviewing Nigeria's past political failures in 1987 for the purpose of achieving a new plan or scheme for the country's politics. Inclusive in the programme was the political transition process as well as constituting constitution review committee (CRC) for reviewing the 1979 constitution and the establishment of a National Electoral Commission (NEC) saddled with organising a non-partisan local government election at the end of 1987. Furthermore, the National Population Commission (NPC), Code of Conduct Bureau (CCB) and Code of Conduct Tribunal (CCT) were equally established while modalities for forming political parties, revenue allocation formula and state creation were being discussed by the commission.

As a testimony to the government's commitment to actualising the political programme, the government through a decree registered two (2)political parties i.e. Social Democratic Party (SDP) and the National Republican Convention (NRC) having refused to endorse the two (2) leading political parties, i.e. People's Solidarity Party (PSP) andthe Nigerian National Congress (NNC) (Diamond, 1991 & Ihonvbare, 1991). It should be noted that the handover date specified in the political transition programme was highly characterised by modifications, alterations and revisions. Firstly, October 1992 was pronounced as against the initial date of October 1990, this was later reviewed to January 1993, and further amended to August 27, 1993, when the regime had spent eight years in power. Another contradiction or disparity in the transition timetable was the outlawing and prohibition of presidential aspirants in the course of the transition programme. On 27th June 1990, the military government proscribed all former Second Republic politicians from open and hidden political participation, which includes holding any public office for ten years commencing from the resumption of party politics (Onuoha, Bassey, Ozinegbe, & Uno, 2020). This step is meant to serve as a deterrent to others who might be induced to facilitate the emergence of new breed politicians.

To climax the elongated transition programme, another election was fixed for June 12, 1993 between the candidate of the S D P chief MKO Abiola and Alhaji Bashir Tofa, the N R C

candidate. Two days before the June 12 election, an organization, Association for Better Nigeria (ABN) alleged to be registered presented a case before Justice Bassey Ikpeme preventing the National Electoral Commission (NEC) from conducting the election on June 12, the Judge later ruled that the election be postponed till the determination of the case. However, the N E C considered the postponement of an election that is barely 48 hours away from commencement to be grossly irrational; therefore, the election took place with the least acrimony and was staged to avert any crisis that could ensue from the postponement (Guardian 13th & 14th June, 1993).

It might interest us to know that Justice Bassey Ikpeme, who ruled over the staging of the June 12 1993, election at the federal high court in Abuja, was appointed a high court judge just in December 1992, and the ABN suit was her first major case to be heard. The fact that the judge ruled over the case at the wake of night almost disrupted the proceedings and preparing logistics for the election. Despite the challenges, NEC released a considerable part of the election, and 58% of the total votes cast in 14 states were won by Chief MKO Abiola of the Social Democratic Party, publicly displayed at N E C headquarters in Abuja. Election results from the remaining 16 states were halted and never released to date. This was due to the ruling of Justice Dahir Saleh, the chief judge of the federal capital territory, that the election result should no longer be announced until after the determination of the A B N's case. After a while, the leader of the A B N, Chief Arthur Nzeribe, called for total cancellation of the election because it was fraudulent and unconstitutional. Eleven days after the election, precisely 23rd June, 1993, General Babangida annulled the election and suspended the National Electoral Commission (Ojo, 2004).

Table2: Political Crisis in Nigeria.

Year of crisis	Causes/nature of crisis	Parties involved in the crisis	Effects of crisis on the society	Casualties recorded due to crisis
1962	Serious conflicts within the Action Group	Chief Obafemi Awolowo (Party Leader) & Chief S. L. Akintola (Deputy Party Leader)	Social disintegration of the Western region of Nigeria	UNKNOWN
1962-1964	Census crisis (Inflation and Rigging of census	The Nigerian Society	Leads to wrong projections for developmental purposes,	UNKNOWN

	Figures)		boundary adjustments and constituency delimitations	
1964	General Election Crisis of 1964, an Election characterised by irregularities	United Progressive Grand Alliance (UPGA) and Nigerian National Alliance (NNA)	Victimisation of opposition parties, Enmity, agonism and social disruptions.	1000 people lost their lives
1965	Western Regional Election of 1965	Nigeria National Democratic Party (NNDP) and Action Group (AG)	Widespread killing, arson, looting and wanton destruction of property.	Over 2000 lives were lost, and many were arrested
1967-1970	The Killings of officers of Ibo Origins in the coup of July 29, 1966	Lt. Col. Yakubu Gowon (Head of Nigeria's Military Government) and Lt. Col. O. Ojukwu (Gov. of the Eastern Region).	Led to the total disruption of the socio-economic activities of the country.	1-3 million civilian casualties, 20,000 individuals lost their lives during the civil war.

Source: E.O. Qjo (2016). The Awolowo-Akintola leadership tussle: A re-interpretation. Journal of Arts & Humanities, 5(1). Ekiti State University.

African Leadership Role Performance: The Definition of Nigeria's Playership.

After independence and the confirmation of Nigeria as the 99th member of the United Nations Organisation, Nigeria's prime minister at the General Assembly of the organization on the 7th of October, 1960 in New York specified the basic tenets of Nigeria's political administration and foreign policy in his maiden address to the plenary of the 15th regular session of the UNO as stated:

Firstly, Nigeria desires to be cordial and amiable with all nations by participating actively in the work and assignments of the UNO;

Secondly, Nigeria, a large and densely populated nation of over 35 million (in 1960), now 237.527,782 (Worldometer, 2025), with the potential of geographical and expansionist intentions;

Thirdly, Nigeria will not forget or abandon our old friends, as we are proud to have been admitted as a member of the British Commonwealth,

Fourthly, the country desires to work with other African states for the development of the continent and equally assist other aspiring African countries to gain independence.

The fourth and last policy statement is the concern of this paper. Reference was made to when Portugal, in the course of debates in the United Nations General Assembly, claimed that Angola was a province of Portugal and the Nigerian Foreign Minister, Honourable (Dr.) JaJa Nwachukwu retorted that Nigerians could never accept the fiction that any square inch of an African territory could be considered part of a metropolitan European country. In the case of apartheid South Africa, he recalled that Nigeria, along with twenty-five other African countries, had drafted and sponsored a strongly worded resolution which sought to impose sanctions on that regime, but the Western powers and fellow travellers supported a weak Indian resolution, which did not go far enough. On the other hand, he emphasised that Nigeria played a leading role in the withdrawal of the apartheid South African regime from the Commonwealth during the wealth prime ministers conference in London in March 1961. Moreover, in June 1961, the minister of labour late Mr. J.M. Johnson, moved a resolution to compel South Africa to quit the International Labour Organisation (ILO). The motion was carried, but when South Africa refused to quit, the Nigerian delegation walked out of the ILO meeting. South African was therefore obliged to leave.

Given Nigeria's acclaimed leadership role in West Africa, much of her integrity has been staked in the defence of West African interests across the globe to the extent that it seems unstrategic for her to withdraw from the worthwhile venture. The formation of ECOWAS in 1975, through the pioneering efforts of Nigeria and Togo, remains an expression of the country's concern for the sub-region she is simply the major financier of the organization and thus harbor its headquarters in Abuja not only was Nigeria the spokesperson for the African continent, her global clout also made her the spokes person for group of 77 countries, non-aligned movement and the ECOWAS Group formed in 1997 by the Abacha administration as a way of defeating global isolation (saliu, 2006b).

In terms of international bureaucrats, Saliu (2010) emphasised that Nigeria's profile at the UN has been a good one. Simeon Adebo, Joe Garba, Ibrahim Gambari, Olu Adeniji, Chris Garba, among other personalities, have been engaged at one time or the other in helping to discharge the mandate of the United Nations. Of worthy importance is the fact that late Joe Garba headed the 44th session of the UN General Assembly to the admiration of the world (Garba, 1993) Ibrahim Gambari is a notable Nigeria in the UN system in the capacity of the UN under-secretary who has just been appointed as the Special Envoy of the UN Secretary General on African Affairs (Dafur

Crisis). Aided by the numerical strength of the African Countries, the Country, acting in concert with other African Countries, has made the UN more concerned about Africa. The issues of economic underdevelopment and poverty have been consistently placed on the front burner of the UN activities. Although not totally successful, there are a number of interventions by the global body in the continued search for relevance and breakthrough by African Countries.

In the struggles to raise Africa's voices, Nigeria was a champion in the race for an African Secretary General of the UN. Not minding the difficulties involved in selling General Olusegun Obasanjo as Nigeria's candidate, the country never lost the focus of fighting for an African UN chief scribe, which became a reality with the appointment of the Egyptian Boutros-Ghali as the UN Secretary in 1992 (Udedibia, 2010). Perhaps, the greatest impact which the country has made at the level of the UN is in the area of security functions. She not only heads the UN peacekeeping committee, but she also heads the military advisory council on peacekeeping. By implication, the country has achieved global recognition as a frontliner in peacekeeping. This earned the country the position of the United Nations Mission in Sierra-Leone, which Olu Adeniji headed while General Luther Agwai headed the U N Mission in Darfur. Considering this, Nigeria can be regarded as a great player at the U N which is bound to continue for years to come (Saliu, 2010). Nigeria's leadership role also manifested when it spearheaded the creation of the ECOWAS monitoring group (ECOMOG) as part of its care and concern for its sister nations. This group was employed in curbing the excesses of Liberian Master Sergeant and later President Samuel Doe. After some seven years of bloody civil crisis, ECOMOG successfully conducted a Presidential election, which Charles Taylor won. Also, in Sierra-Leone, ECOMOG equally challenged Major Koromah's military administration that jotted the democratic setting in that country. She successfully reinstated the Tejjan Kabbah democratic government (Saliu, 2006a).

EffectsofInternalpoliticalCrisis on Socio-Economic Development and Continental Leadership

The call for representative and democratic governance originates from the belief that it assures the right of humans, guarantees peace and stability, as well as securing steady development, which all serve as prerequisites, criteria and conditions for self-determination, personal and general economic well-being of a society (Alanamu, 2005). More elaborately, Coser (1966) believes that conflicts perform some functions in society: In this thesis, he stressed that conflicts prevent social stagnation. He defined social conflict as a contest for values on the demand for status, power and scarce resources which the group intended to use in subjugating,

injuring and eliminating antagonists. Ige (1995) argues that throughout 1965, curfew was hardly lifted in most parts of the Western region, which impacted negatively on the socio-economic development of the region and the country at large. Dare and Oyewole (2002) reported that at the close of the nomination period for the 1965 Western regional election, many seats were declared unopposed. This was terribly frustrating for people who had long waited to constitutionally vote Chief Akintola out of power. But this was not all, the election itself was so grossly rigged that the people, seeing no hope to realise their ambition, began to take the law into their own hands. There was widespread killing, arson, looting and wanton destruction of lives and properties.

Ojo (2004) submits that the political crisis which the annulment of the June 12 presidential election plunged the nation into was undoubtedly the most catastrophic, with widespread and devastating consequences that resulted in widespread loss of lives and properties. In its thirty-three (33)years as a sovereign state, apart from the civil war of 1966-1970, the survival and existence of Nigeria as a political entity has never been put to such danger or peril, totally destabilising the socio-economic proceedings. Reacting to the annulment of his mandate, Chief MKO Abiola said that if the lawmakers are breakers, he might follow suit, hence the compulsion of going about planning a protest in the country. Good governing decisions by the military seem more of a mistake, as the source that established them in power does not correlate with that. After this, protests began in every nook and cranny of the country, led by the Campaign for Democracy (CD). The CD declared a day's mass peaceful non-violent protest, which was approached violently by the police, leading to the death of not less than one hundred (100) peaceful protesters.

Invariably, the concern of this paper, being the disturbance and deception which the political crisis had inflicted on the socio-economic well-being of Nigeria due to the style of administration employed by our politicians, was largely informed by egocentrism. Although, Adebisi (1999) contends that the seeds of ethnic violence were sown by the British Colonial Policies in Nigeria with the adoption of a divide and rule tactics, which later robbed Nigerians of the common front for nation building and the subsequent emergence of regional leaders and regional political parties however, this excuse does not suffice the aversion of the various crisis which our leader foments in pursuance of their selfish interests. Just as Ige (1995) pointed out that the period 1951 – 1955 witnessed very great political activity in Nigeria. Our political leaders used those years to lay the foundation of what we have today. Unfortunately, they did not have an agreeable not to talk of an agreed plan to build upon. So, the British Official provided some

design for the whole country, and our respective leaders tore out the portions which they knew very well, drew the plan for such areas, and then came together to put the plans together.

However, the focal point of the manifestoes of our leaders never allowed them to deeply think of making provision for the other regions of the country in their party programmes, hence, the more they try to develop their various regions economically, the more such efforts cause disturbance and crisis in the entire Nigeria society. All said and done, the political administration in Nigeria has been greatly disturbing and destructive to the Nigerian populace and economy. The economy is meant to be propagated by citizens, and in a situation where citizens are disturbed and disrupted, the economy of such a society will suffer. As emphasised in table 2, it can determine the contribution any of the victims of the political crisis would have contributed to the growth of the economy if otherwise.

According to Adeyemo (2002), without question, Nigeria became the prime mover and driving force for the ECOMOG peace-keeping initiative in Liberia, and so the peace-keeping troops had a large Nigerian contingent (about 7,800 troops). Nigeria was in Liberia to end the carnage, lawlessness and anarchy in the country. Also, when the Sierra Leonean political crisis emerged, Nigeria once again provided the needed leadership and support for the restoration of peace and democracy in Sierra-Leone. Like Sierra-Leone, democracy was equally threatened in Guinea-Bissau on June 7 (a day before General Sani Abacha's death) 1998 when the country's former Chief of Army Staff-General Ansoumane wane led a rebellion against the democratically elected government of president Joan Bernardo Vierra of Guinea Bissau which got her independence from Portugal in 1975 Nigeria equally rose to the challenge.

Charity, they say, begins at home. Despite all the efforts geared by Nigeria (including monetary, military, and other support) in ensuring that Africa remains intact, the leadership position of the continent was not accorded to her because she has failed in putting her house in order. Corruption in the form of electoral fraud, embezzlement, mismanagement and maladministration perpetrated by her leaders has impacted negatively on the economy and the organisation of the Nigerian society to the extent of losing her rightful place in the continent.

Conclusion

In the view of Akinsanya (2005) Nigeria's record of comparative 'moderation' stands out in sharp contrast to the far more dramatic and militant assertiveness of certain smaller African states such as Ghana and Guinea…, it was a record that... brought no little disappointment to

those Nigerian patriots who had hoped that their country would assume a more 'dynamic' role of leadership in African… Affairs, a role they believed was destined by size and population to play. But her display of political immaturity in administrative terms which manifested her irresponsible attitude of not being able to organise her home convince the smaller countries of Africa of her incapacity to officially assume the leadership role of the continent.

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ASSESSMENT OF INTERDEPARTMENTAL TRANSFER AND ACADEMIC PERFORMANCE OF KWARA STATE UNIVERSITY UNDERGRADUATE STUDENTS

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ABTRACT

This study investigated factors determining undergraduate interdepartmental transfer and academic performance in Kwara State University, Malete. It examined the relationship between interdepartmental transfers and academic performance before and after. The study adopted a descriptive design in which one hundred twenty (120) students were purposely selected from 100 to 400 level students of KWASU in the second semester, 2024/2025 academic session. The findings of the study showed that the majority of undergraduate students at the prestigious Kwara State University, Malete, transfer from one department to another due to their academic struggles with the programme offered or reality of labour markets or interest shift, especially first-year students. Furthermore, there is no statistically significant correlation between students' interdepartmental transfer and academic performance before which was attributed to some factors such as lack of interest in the first programme offered or no better guidance before enrolment into the program that might cause poor performance and a change of departments. In addition, this study found a significant positive correlation between students' interdepartmental transfer and their academic performance due to some factors, such as keen interest in the second programme offered or proper guidance that brings about very good academic performance and preference to stay in the second programme transferred from the side of the students. Finally, the study recommended among other things, provision of counseling services before and during studying, having more than one study advisor or course advisers with adequate training and supportive welfare services to ensure commitment to guiding the students rightly based on their ability and letting students decide on their selves which program they will study matches their ability and interest that will make them become a functional member of the society.

Introduction

The academic performance of university students is a multidimensional construct influenced by various factors, including personal, institutional, and socio-economic variables. One such institutional factor is interdepartmental transfer, where students change from one academic department or program to another within the same university. In Nigerian universities such as Kwara State University, Malete (KWASU), interdepartmental transfers are often initiated due to a disparity between students' interests and their initial program of study, academic struggles, or as a result of administrative restructuring (Ogunlade & Akinyemi, 2020). While such transfers are intended to improve students' academic satisfaction and performance, they may also introduce transitional challenges that affect learning outcomes. Academic performance remains a central concern for stakeholders in the educational sector, particularly at the tertiary level, where students are expected to make significant academic and professional decisions that shape their future careers. It is widely acknowledged that a student's performance in university is determined by a multifaceted interplay of individual, environmental, psychological, and institutional factors. Among the institutional factors, interdepartmental transfer, defined as the movement of a student from one academic department or program to another within the same institution, emerged as an area that warrants closer scrutiny due to its potential impact on academic outcomes.

At KWASU, interdepartmental transfer has become increasingly common, especially after the first or second year of study. Students often transfer to departments perceived as less demanding or more aligned with their career goals. However, this transition is not without consequences. Adebayo and Salami (2019) reported that differences in departmental academic culture and the need to adapt to new learning environments can disrupt academic progression and performance. Adebayo et al. (2019) further added that transferred students may encounter courses they have not previously taken but are essential in the new department, which may leave them struggling to catch up with their peers. Furthermore, adjustment difficulties such as unfamiliarity with departmental culture, lack of mentoring, and limited peer support can hinder their academic integration. Ibrahim (2021) maintained that the academic performance post-transfer may not always improve as expected; in some cases, it stagnates or worsens due to a lack of adequate academic advising and poor preparatory support. Some students seek to change departments due to a lack of interest or passion for their initially assigned course of study, often a result of admission constraints or administrative placements during the university entry process (Ogunlade & Akinyemi, 2020). Others may struggle academically in their original departments and believe that a change to a different program could offer better opportunities for success.

Okoli and Nwafor (2018) examined the impact of program switching on students' performance in a Nigerian university and found that students who transferred to new departments often had mixed academic outcomes. While some experienced academic improvement due to better alignment with their interests and strengths, others underperformed due to adjustment difficulties and a lack of prerequisite knowledge. Similarly, Ibrahim (2021) explored how academic advising affects students who have changed departments and concluded that personalised academic support plays a critical role in the post-transfer success of students.

It was further observed that the success of interdepartmental transfer policies depends not only on the reasons for transfer but also on the availability of academic and psychosocial support systems. Students who are adequately guided during the transfer process through academic advising, peer mentoring, and course mapping are more likely to succeed in their new departments. Ogunlade et al. (2020) reported that students who transfer without adequate preparation or support may find themselves overwhelmed by new academic challenges, which could ultimately affect their cumulative grade point averages (CGPA) and overall academic standing. Moreover, the psychological implications of interdepartmental transfers should not be underestimated. Students often experience stress, anxiety, and feelings of uncertainty as they navigate new academic terrains. These emotions, if not properly managed, can lead to reduced motivation, low self-esteem, and poor academic engagement (Adebayo & Salami, 2019). This reinforces the importance of institutional support mechanisms to help students manage both the academic and emotional aspects of departmental transitions.

Accordingly, several factors, such as wrong placement, have been identified to influence students' performance and department changes that, if not properly addressed, may result in the loss of the university's reputation and industries may lose confidence in graduates from the university (Khumalo & Utete, 2023; Algalga, 2016).

This study aimed at assessing factors influencing the interdepartmental transfers on the academic performance of undergraduate students at KWASU. It sought to answer the relationship between students' departmental change and their performance trends before and after transfer to fill the educational vacuum in making an informed decision for proper placements for students' academic success and the university at large.

Statement of the Problem

Academic performance is a central indicator of student success in higher education and remains a major concern for researchers, institutions, lecturers, and policymakers. At Kwara State University (KWASU), a growing trend among undergraduate students is the practice of

interdepartmental transfer, where students change their course of study or academic department after initial admission. While this practice is often motivated by a desire for better arrangement with academic strengths, career aspirations, or relief from academic difficulties in their initial departments, the academic consequences of such transfers remain largely undocumented and poorly understood. Despite its increasing prevalence, there is limited empirical evidence at KWASU to determine factors influencing students' interdepartmental transfers positively or negatively and to investigate the relationship between interdepartmental transfers and the academic performance of students. Some students report improved performance after switching to departments they find more suitable, while others struggle to cope with new curricular demands and unfamiliar academic environments. The lack of a standardised policy or support system to guide and monitor students through this transition further complicates the issue, potentially putting students at risk of academic decline.

Moreover, most existing studies on academic performance in Nigerian universities focus broadly on factors such as socioeconomic background, motivation, and learning habits, with little attention given to the specific dynamics of departmental changes. This creates a significant knowledge gap, particularly in considering how such transfers affect cumulative grade point averages (CGPA), graduation timelines, and overall academic outcomes.

Therefore, the problem this study seeks to address is the lack of comprehensive data and understanding regarding the major factors determining interdepartmental transfers and the relationship between interdepartmental transfers and the academic performance of undergraduate students at KWASU. Without such knowledge, the university may be unable to implement effective policies or provide adequate support to ensure that students who transfer departments are positioned for academic success.

Objectives of the Study

1. To investigate the factors that influence undergraduate students' decisions to transfer from one department to another.
2. To examine the relationship between interdepartmental transfer before and academic performance among undergraduate students.
3. To assess the relationship between interdepartmental transfer after and academic performance after among undergraduate students.

Research Question

1. What are the major factors influencing students' decisions to transfer departments at KWASU?

Research Hypotheses

H_{01}: There is no significant relationship between interdepartmental transfer and academic performance before among KWASU undergraduate students

H_02: There is no significant relationship between interdepartmental transfer and academic performance among KWASU undergraduate students

Methodology

This study adopted a descriptive survey research design with a quantitative approach. The design is appropriate because it allows researchers to collect data from a sample of the population to describe and analyse existing conditions, opinions, and patterns regarding interdepartmental transfers and students' academic performance at KWASU. The target population of the study comprised all undergraduate students of Kwara State University (KWASU) who had undergone interdepartmental transfers between 100 to 400 levels across all faculties in the second semester, 2024/2025 academic session. A sample size of **120** students was selected using a purposive sampling technique, focusing on students who have successfully transferred from one department to another and have available academic performance records before and after the transfer. This technique was justified as it ensures that only students with relevant experiences were selected to provide accurate and meaningful data for the study.

A questionnaire and an academic performance data sheet were used to obtain data. The questionnaire used was on a 4-point Likert scale. The questionnaire was validated by experts in educational measurement and evaluation for content and face validity. A pilot study was conducted with **15** students who had transferred departments but were not part of the final analyses of this study. The reliability of the instrument was established using the Cronbach Alpha, with a reliability coefficient of **0.78**. For final analyses, questionnaires were administered electronically to the selected students via WhatsApp. In order to ethically obtain respondents' academic performance, inquiry was made to submit their CGPA records willingly directly to the researchers as obtainable before and after their transfers based on their results printout from their portals themselves. These academic data were corroborated by their academic performance spreadsheets available to the researchers. Data collected were fetched into SPSS and analysed using Descriptive statistics (mean, standard deviation, frequency count, and percentage) to analyse factors influencing students' decisions in answering the research question, and Pearson correlation was used to test the formulated hypotheses.

Results

Research question: *What are the major factors influencing students' decisions to transfer departments at KWASU?*

The descriptive statistics table 1 shows major factors influencing students' decisions to transfer departments at KWASU.

Table 1: Factors Influencing Students' Decisions Departmental Transfer

S/N	Items	Frequency % of D/SD	Frequency % of A/SA	Mean	St.D	Decision
1	I got transferred from my previous department because I didn't understand what was being taught there	12 (10%)	108 (90%)	66	1.00	Moderate
2	I don't meet my course level adviser regularly	28 (23.3%)	92 (76.6%)	74	2.00	Strong
3	I sought a transfer from my previous department because my CGPA is very low	53 (44%)	67 (55.8%)	86.5	2.00	Strong
4	My parents asked me to transfer to another department	30 (25%)	90 (75%)	75	2.00	Strong
5	I sought a transfer to another department to copy my friends	19 (15.8%)	101 (84%)	69.5	1.00	Moderate
6	My level of education is not strong	9 (7.5%)	111(92.5%)	64.5	1.00	Strong
7	I made a wrong decision to join the programme of my interest	16 (13.3%)	104 (86.6%)	68	1.00	Moderate
8	I transferred from my previous department because I am from a poor family background	27 (22.5%)	93 (77.5%)	73.5	2.00	Strong
9	I do come late for lectures	33 (27.5%)	87 (72.5%)	76.5	2.00	Strong
10	I transferred from my previous department because of my future career	25 (20.8%)	95 (79.1%)	72.5	2.00	Strong

Table 1 shows that the major factors influencing students to make stern decisions on interdepartmental transfer are that, majority of students decided to transfer from one department to another because they cannot grasp their field of specialisation (M = 66, SD =2) (n 108; 90%). Some of them make strong decisions to transfer because they don't regularly meet the level of advisers assigned to them for academic advice (M = 74, SD =2) (n= 92; 76.6%). Others agreed that they have low grades (M=86.5, SD = 2) because they don't regularly attend lectures. The

percentage of those who decided personally due to family or peer decisions was 75% (M=75, SD = 2) and 84% (M=69.5, SD = 1), respectively. Some are of the view that they erroneously chose their programme(M=68, SD = 1). The proportion of those who strongly agreed to coming late for lectures was 72.5% with (M=76.5, SD = 2), while others decided to transfer due to their future career opportunities after collegiate lives (M=72.5, SD = 2). The next tables 2 and 3of Pearson correlation explain the relationship between students' interdepartmental transfer and academic performance/

Hypotheses Testing

H_{01}: *There is no significant relationship between interdepartmental transfer and academic performance before among KWASU undergraduate students.*

Table 2: Pearson Correlation Showing the Relationship between Interdepartmental Transfer and Academic Performance Before

		Interdepartmental transfer before	**Academic Performance Before**
Interdepartmental transfer before	1		0.032**
	Sig. (2-tailed)		.433
	N	120	
Academic Performance Before			1

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

Table 2 shows that there is no statistically significant correlation between respondents' interdepartmental transfer before and their academic performance before (r = 0.032**, p .433).

This hypothesis was accepted, indicating that there was no relationship between students' interdepartmental transfer and their academic performance before applying for transfer. This could be as a result of some factors, such as a lack of interest in the first programme offered or a

lack of seeking better guidance on the first programme, which might be one of the causes for the respondents' low academic performance, leading to the decision to change departments.

$H_0$2: *There is no significant relationship between interdepartmental transfer and academic performance among KWASU undergraduate students.*

Table 3: Pearson Correlation Showing the Relationship between Interdepartmental Transfer and Academic Performance After

	Interdepartmental transfer After	Academic Performance After
Interdepartmental transfer After	1	0.461**
Sig. (2-tailed)		.000
N	120	
Academic Performance Before		1

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

Table 3 shows that there is a statistically significant positive correlation between respondents' interdepartmental transfer after and their academic performance after ($r = 0.461^{**}$, $p < .000$). This hypothesis was rejected as there is a strong relationship between students' interdepartmental transfer and academic performance after applying for transfer which could be due to some factors such as keen interest in the second programme offered and having better guidance on the second programme that bring about very good academic performance from the side of the students to prefer staying in the alternate department.

Discussion of the Findings

The findings of this study indicated that the majority of undergraduate students at the prestigious Kwara State University, Malete, transfer from one department to another due to the limited intellectual capability of their programme offered or labour markets, especially for first-year students. These findings are in agreement with the findings of Ogunlade et al. (2020), who found that many students hopped from program to program due to their interest or academic struggles. This may be attributed to the improper placement of students without considering their capabilities. Also, there is no statistically significant correlation between students' interdepartmental transfer and their academic performance before as low performance is traced to some factors, such as lack of interest in the first programme offered, which might cause them to

perform poorly. These findings are in tandem with the study of Adebayo et al., (2019), students' adaptation to new learning environments can disrupt their academic progression and performance. In addition, Gravetter and Wallnau (2004)revealed a lack of relationship between respondents' interdepartmental transfer before and their academic performance before was weak. Moreover, this study found a significant positive correlation between students' interdepartmental transfer and their academic performance due to some factors, such as keen interest in the second programme offered, which brings about very good academic performance from the side of students. These findings were congruent with those of Okoli et al. (2018) that some students experienced academic improvement due to better alignment with their interests and strengths. Based on the findings, the following conclusions and recommendations were made.

Conclusions

The study concluded that students transfer from one department to another due to struggles with the academic programme offered or an interest shift, especially first-year students. The study concluded that there is no statistically significant correlation between students' interdepartmental transfer and their academic performance before, due to a lack of interest in the first programme. But a significant positive correlation between students' interdepartmental transfer and their academic performance after due to their keen interest in the second programme offered, which brings about very good academic performance from the side of the students.

Recommendations

This study made the following recommendations in light of its findings:

1. Students should be provided with counselling services before choosing a program of interest in any Nigerian university
2. There should be more than one level adviser for students after course registration and while studying.
3. Since students are to embark on studying, parents' influences or other external influences are to be limited so as to allow students to decide on their own.
4. Level or course advisers should be motivated by providing the needed welfare to remain committed to guiding students as expected.

5. The lecturer-student relationship should be created to make teaching and learning a lovable thing and fun.

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THE INFLUENCE OF HOME VARIABLES ON UPPER BASIC STUDENTS' MOTHER-TONGUE- ENGLISH ACHIEVEMENT IN KWARA STATE, NIGERIA

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ABTRACT

The Federal Government of Nigeria's (FGN) language of education policy emphasises simultaneous exposure to both the English language and Mother-Tongue (MT)/Language of the Immediate Environment (LoIE) from lower to Upper Basic school levels, so that by the end of Upper Basic school level, students would have become biliterate in MT/LoIE and English Language. However, Upper Basic students were observed to be unable to carry out literacy activities effectively in their MT and English languages, despite the Government's bi-literacy provisions in the National Policy on Education. This paper seeks to analyse the influence of home variables on the Upper Basic mother-tongue English bi-literacy achievement in Kwara State, Nigeria. Descriptive survey research of a cross-sectional type was adopted for the study, using all the Upper Basic III students in Kwara State as the target population. The sample consisted of 384 respondents. An adapted achievement test and focus group discussion were used to gather data. The percentage, Mean and Standard Deviation, chi-square and One-Way ANOVA were used to answer the research questions and test the hypotheses. It was found out that all the variables of parents' age, parents' education and home language significantly influenced bi-literacy achievement in Kwara State. The study, therefore, recommends that parents should perform their foundation role by emphasising the use of the mother tongue at home to foster bi-literacy skills in their children.

Introduction

The linguistic situation in Nigeria is very complex, as evident in the number of indigenous languages across the different ethnic nationalities that make up the country. Inter-ethnic communication through the medium of an indigenous language becomes a great challenge. This is not only because natives of different languages do not understand one another's codes, but also because of language nationalism exhibited by language natives in favour of their different linguistic heritages. Being a foreign language, all the indigenous linguistic groups saw English as neutral, hence, embraced it as a unifying code for effective inter-ethnic communications.

At functional levels, the English language is used in situations where the indigenous languages cannot achieve the communication objective among the people. This presupposes that the English language co-exists with the indigenous languages. Subsequently, the prestige and honour enjoyed by the English language placed it on a higher status compared to the native languages, such that proficiency in it is considered synonymous with civilisation. The unintended consequence on the part of Nigerians, however, is that the indigenous languages appear less important and using them has become a symbol of low class, illiteracy, crudity and poverty. This further propelled the dominance of the English language over the indigenous languages.

In the National Policy on Education (NPE) (2014), English is considered a second language (L2), a national language and a Lingua Franca, while the indigenous languages are assigned the roles of mediums of instruction for the first four years and subjects across all levels of the Nigerian education. The hegemony of the English language over the indigenous languages has its downsides. Empirically, many of the indigenous languages have been relegated to the background, thereby resulting in the shift, extinction and eventual death of some of the indigenous languages as well as the indigenous knowledge buried in them (Ogunmodimu, 2015).

The Federal Government of Nigeria made provisions for the use of the indigenous languages, especially the three most recognised ones (Yoruba, Hausa and Igbo) in the National Policy on Education (NPE). This linguistic enactment is done in a way that not only compels the indigenous languages in the school children both as mediums for the display of literacy and literacy subjects at the basic level of Nigeria's education, but also make them as separate disciplines within the university curriculum. This is in addition to the continuous learning and usage of English Language. With this, one could assume that school children are expected to become bilingual and biliterate by being able to communicate in both the indigenous and the English languages without letting one negatively affect the other. This is a situation McCray (2015) refers to as additive bi-literacy. The opposite of it is the subtractive bi-literacy, which,

according to Soltero (2004), encourages the use of the L1 only for a short period of time—up to Basic 3, thereby giving preference to the L2 over the L1.

The term literacy can traditionally be defined as the ability to read, write and do some calculations. When these literacy skills (reading, writing and numeracy) are exhibited in more than one language, it is called bi-literacy. Bi-literacy is a step beyond bilingualism (AbdulRahman & Lawal, 2019). There has been scholarly agreement regarding the concept of bi-literacy. Scholars, such as Honberger (2004) and Cummins (2014) uphold the centrality of the higher-order skills of two languages in defining bi-literacy, although with little differences at the level of functionality. While linking bilingualism with bi-literacy, Cummins' (2014) submissions show that being biliterate can be attributed to academic language proficiency. According to the scholar, bilingual proficiency and fluency can be in three dimensions: discrete language skills, conversational fluency and academic proficiency. The author, therefore, defines bi-literacy as a crucial basis on which access to different and varied social and cultural worlds is guaranteed. More explicitly, Hornberger (2004) defines bi-literacy as all evidence of communication in two languages.

Underscoring the importance of the indigenous languages in enhancing literacy experience in schools, the FGN, in the NPE states that "every child shall be taught in the mother tongue or language of the immediate environment for the first four years of basic education….In addition, it is expected that every child shall learn one Nigerian language" (NPE, 2014: p. 4). This policy provision is an attempt to afford the Nigerian child continuous access to the indigenous and English languages by exposing them to literacy experience in both languages, thereby making them biliterate in English and one or more indigenous languages at certain times in their educational journey.

In spite of the positive colouration of the quoted part of the NPE, the language provisions are riddled with a number of inconsistencies in the way language of education is structured at the basic level of the Nigerian education system. This is in addition to the policy's complete silence on the language of evaluation and provisions for people with special abilities.

The display of bi-literacy by school children varies from child to child. And this may be the product of home-based factors. Such factors include: parents' age, parents' level of formal education and home language. Assessing how these factors influence the bi-literacy achievement of Upper Basic students is of both social and academic significance.

Objectives of the Study

This study aimed at assessing the influence of parental variables on the Upper Basic students' mother-tongue-English bi-literacy achievement in Kwara State, Nigeria. The focus of the study specifically was to assess the general bi-literacy achievement and the influence of home variables such as parents' age, parents' educational level and home language on bi-literacy achievement.

Research Questions

This study aimed to find answers to the following questions:

1. What is the general mother tongue-English bi-literacy achievement of Upper Basic students in Kwara State, Nigeria?
2. Do parents' age have any influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria?
3. Does parents' educational level have any influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria?
4. Does home language have any influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria?

Research Hypotheses

H_{01}: There is no significant difference in the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria.

H_{02}: Parents' age does not have any significant influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria.

H_{03}: Parents' educational level does not have any significant influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria.

H_{04}: Home language has no significant influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria.

Methodology

A descriptive research of cross-sectional type was used in this study. All Basic students were the population for this study. The target population were the Upper Basic III students in Kwara State. Three hundred and eighty-four (384) respondents were selected using a proportionate sampling technique. An adapted achievement test and focus group discussion were used to gather data for this study. Four research questions and four hypotheses were answered and

tested using Mean and Standard Deviation, Percentage, and One-way Analysis of Variance (ANOVA).

Results

Demographic Information of the Students' Parents

Table 1:Demographic Information of Respondents in Kwara State

		KWARA	
Variables	**Characteristics**	**Frequency**	**(%)**
Parents' Age	Young (20-40)	103	26.8
	Older (41-60)	196	51.0
	Oldest (60 & above)	85	22.1
	Total	**384**	**100.0**
Parents' Education	Low (SSCE)	111	28.9
	Medium (National Diploma)	192	50
	High (First Degree and above)	81	21.1
	Total	**384**	**100.0**
Home Language	Yoruba	73	19
	English	146	38
	Both Yoruba and English	140	36.5
	Other Language	25	6.5
	Total	**384**	**100.0**

The results, as displayed in Table 1 above, showed the sampled Upper Basic students' demographic distribution in Kwara State.

Based on parents' age, the Young parents (20-40 years old) were 103 (26%), the older parents (41-60 years old) were 196 (51%), and the oldest parents (61 years and above) were 85 (22.1%). On parents' educational level, the parents who were within low level (SSCE or its equivalent) were 111 (28.9%), those that were at the medium level (National Diploma or its Equivalent) were 192 (50%) and the ones within high level (First Degree or its equivalent) were 81 (21.1%),

Regarding home language, homes where Yoruba was used were 73 (19.0%), and the ones where English was the home language were 146 (38.0%). The homes where both English and Yoruba languages were combined for communication were 140 (36.5%), while homes where language(s) other than Yoruba and English were used were 25 (6.5%).

Research Question 1

What is the general mother tongue-English bi-literacy achievement of Upper Basic students in Kwara State, Nigeria?

Table 2: General Mother tongue-English bi-literacy Achievement of Upper Basic Students in Kwara State, Nigeria

State	Characteristics			Mean	S.D.	Inference
				Yoruba - English General Literacy		
Kwara	Yoruba-English Achievement	General	Literacy	46.57	8.88	Basic

Table 2 indicates the general bi-literacy achievement of Upper Basic students in Yoruba and English from Kwara State. With the mean scores of 46.57, the general bi-literacy achievement level was "Basic" with S.D. 8.88.

Research Question 2

Does parents' age have any influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria?

Table 3: ANOVA Summary of the Difference in the General Bi-literacy Achievements of Upper Basic Students in Kwara, Nigeria, Based on Parents' Age. (N=384)

Groups	Sum of Squares	Df	Mean Square	Cal. F	P-Value	Decision
Between Groups	2471.515	2	1235.758			
Within Groups	27607.837	381	72.462	17.054	.000	**HO Rejected**
Total	30079.352	383				

*significance at **p**<0.05

As shown in Table 3, the F-value of 17.054 was obtained with the P-value of .000 calculated at 0.05 alpha level. Since the p-value of .000 is less than the alpha level (0.05), Hypothesis three A was rejected. This implies that the hypothesis which stated that there is no significant difference in the general bi-literacy achievements of Upper Basic students in Kwara state, Nigeria based on Parents' Age is rejected. Therefore, Parents' Age significantly differentiated the general bi-literacy achievements among Upper Basic students in Kwara state, Nigeria. In order to determine the source of difference, Duncan Post-Hoc analysis was carried out as shown in Table 4.

Table 4: Post-Hoc Analysis of Significant Influence of Parents' Ageon General bi-literacy Achievements among Upper Basic Students in Kwara State, Nigeria(N=384)

Parents' Age	N	Subset for alpha=0.05	
		1	2
20-40 (Young)	103	42.43	
61 and above (Oldest)	85		47.39
41-60 (Older)	196		48.39

*significance @ 0.05

Table 4 shows that the young parents have a low mean score of 42.43 in subset 1, while the "Oldest" and "Older" parents with higher mean scores of 47.39 and 48.39 are in subset 2. The result proves that there was a significant difference among them, in favour of students of the "Older" and "Oldest" parents.

Research Question 3:

Does parents' educational level have any influence on the general bi-literacy achievements of Upper Basic students in Kwara State, Nigeria?

Table 5: ANOVA Summary of the Difference in the General Literacy Achievements of Upper Basic Students in Kwara, Nigeria Based on Parents' Level of Education. (N=384).

Groups	Sum of Squares	df	Mean Square	Cal. F	P-Value	Decision
Between Groups	2044.171	2	1022.085			
Within Groups	28029.277	380	73.761	13.857	.000	**HO Rejected**
Total	30073.447	382				

*significance at **p**<0.05

As shown in Table 5, the F-value of 13.857 was obtained with the P-value of .000 calculated at 0.05 alpha level. Since the p-value of .000 is less than the alpha level (0.05), Hypothesis 2 was rejected. Therefore, Parents' Level of Education significantly differentiated the general bi-literacy achievements among Upper Basic students in Kwara state, Nigeria. In order to determine the source of the difference, Duncan's post hoc analysis was carried out as shown in Table 6.

Table 6: Post-Hoc Analysis of Significant Influence of Parents' Level of Education on the General bi-literacy Achievements among Upper Basic Students in Kwara State, Nigeria(N=384)

Parents' Level of Education	N	Subset for alpha=0.05	
		1	2
Low (SSCE)	110	42.96	
High (First Degree)	81		47.44
Medium(National Diploma)	192		48.26

*significance @ 0.05

Table 6 shows that the parents with low qualifications had a low mean score of 42.9616, as seen in subset 1, while the parents with High and Medium qualifications had higher mean scores of 47.44 and 48.26, as seen in subset 2. The result proves that there was a significant

KWARA STATE UNIVERSITY

difference among them, first in favour of parents with "medium" and then those with "high" education.

Hypothesis Four: *No significant difference exists in the general bi-literacy achievements of Upper Basic students in Kwara States, Nigeria based on home language.*

Table 7: ANOVA Summary of the Difference in the General bi-literacy Achievements of Upper Basic Students in Kwara State, Nigeria Based on Home Language (N=384).

Groups	Sum of Squares	Df	Mean Square	Cal. F	P-Value	Decision
Between Groups	5835.837	3	1945.279			
Within Groups	24023.611	379	63.951	30.42	.000	**HO Rejected**
Total	30073.447	**382**				

*significance at **p**<0.05

As shown in Table 7, the F-value of 30.42 was obtained with the P-value of .000 calculated at 0.05 alpha level. Since the p-value of .000 is less than the alpha level (0.05), Hypothesis Four A is rejected. Therefore, home language significantly influenced the general bi-literacy achievements among Upper Basic students in Kwara State, Nigeria. In order to determine the source of the difference, Duncan's post hoc analysis was carried out as shown in Table 8.

Table 8: Post-Hoc Analysis of Significant Influence of Home Language on General bi-literacy Achievements among Upper Basic Students in Kwara State, Nigeria (N=384)

Home Language	N	Subset for alpha=0.05	
		1	2
Yoruba	72	38.57	
English	146		47.63
Both English and Yoruba	140		49.07
Other Language	25		49.26

*significance @ 0.05

Table 8 shows that homes where Yoruba language is used appear under subset 1 while the three other language possibilities fall under subset 2. The result proved that English, both Yoruba and English and other languages have higher mean score compared to Yoruba which has the lowest mean score. Therefore, significant difference only existed between using Yoruba only and any other language/language combinations at home.

Discussion and Conclusion

The findings of this study showed that the general bi-literacy achievement of the Upper Basic students in Kwara State, Nigeria, was still at the "basic" level. This is, however, far from what the National Language Policy promises. One can opine that a country like Nigeria that relies so much on English as a tool for intra- and international communications and seeks to reposition the indigenous language (Yoruba), perhaps because of its entrenched epistemologies, to a competitive standard, should not be at the 'basic' level of achievement in the two languages. This is not to mention the low score (40%) that qualified for the so-called 'basic' level. Bearing this in mind, the 'basic' achievement level in bi-literacy as recorded by the students from Kwara state could still be considered as less proficient.

The finding disagrees with Mba's (2012) position that many Nigerian children have lost their indigenous languages completely due to overexposure to the English language at an early stage of their lives. The finding also disagrees with Ogunmodimmu (2015), who asserts that bi-literacy might not be feasible because many indigenous languages lack proper codification.Parents' age, parents' education, and home language significantly influenced bi-literacy achievement in Kwara.

This means that parents' variables are important predictors for the children's bi-literacy achievement. This finding agrees with Dooga (2012) who explains that home variables play significant roles in determining the survival of a language and its achievement. Also, the finding aligns with Guang-Lea(2020), who opines that effective language training is influenced by the learners' parental age group, among other factors.

Recommendations

Based on the conclusions drawn in this study, the following recommendations are highlighted for effective bi-literacy achievement among secondary school students.

1. **Parents:** should emphasise the use of the mother tongue to foster bi-literacy skills within the home. This would help them perform their pivotal role in laying a solid foundation and complement the school's efforts towards raising bilingual and biliterate children.
2. **Teachers** should learn to appreciate the linguistic backgrounds of their students and explore the best approach towards making their students biliterate as projected in the National Policy on Education.
3. **Education Planners:** should review the content of the Language of Education Policy statement to reflect current linguistic realities across the different parts of Nigeria in such a way that would favour the Nigerian indigenous languages and help learners become biliterate seamlessly.

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INTEGRATING AI INTO OFFICE TECHNOLOGY: A PATHWAY TO SUSTAINABLE BUSINESS PRACTICES

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ABTRACT

The increasing need for sustainable business practices has prompted the exploration of digital solutions, with Artificial Intelligence (AI) emerging as a key enabler. AI serves as a transformation tool in achieving sustainable office operations. Its integration requires strategic planning, ethical implementation, and workforce readiness. As office environments seek to enhance operational efficiency and environmental responsibility, AI-driven technologies are being integrated into resource management, documentation, and decision-making systems. This study investigates how AI applications in office technology contribute to sustainability by reducing environmental impact, optimising resource use, and improving productivity. It also examines the implications of AI integration for policy, workforce development, and ethical governance. A multidisciplinary literature review was conducted, drawing from recent academic and industry sources to assess trends in AI adoption, its operational outcomes, and alignment with sustainability frameworks such as the Triple Bottom Line (TBL) approach. Findings reveal that AI enhances energy efficiency, reduces paper dependency, streamlines human resource processes, and supports data-driven decision-making. AI's predictive capabilities also improve maintenance and reduce waste. These applications collectively contribute to environmental, economic, and social sustainability. The study suggests that organisations and policymakers must invest in AI infrastructure, training, and regulatory frameworks to ensure responsible and effective adoption.

Introduction

In the contemporary global landscape, the pursuit of sustainable business practices has become a critical priority for organisations across all sectors. This urgency is driven by a convergence of factors, including the escalating threats of environmental degradation, increasing economic instability, and the rapid transformation of workplace structures and expectations. Businesses are under growing pressure from governments, stakeholders, consumers, and international bodies to implement strategies that not only ensure profitability but also support long-term ecological and societal well-being. Within this broader context, the office environment which is serving as the operational nucleus of many organisations that have emerged as key areas for innovation in sustainability. These environments are increasingly integrating advanced technologies to minimise environmental footprints and optimise operational efficiencies. One of the most transformative technologies being adopted in modern office settings is Artificial Intelligence (AI). The integration of AI into office technology offers a multifaceted approach to achieving sustainability goals while also enhancing productivity and organisational responsiveness. AI applications in office environments include intelligent scheduling systems, automated documentation processes, predictive analytics for resource management, digital assistants for administrative tasks, and smart energy management tools. These innovations collectively contribute to the streamlining of workflows, reduction in paper-based activities, and substantial energy savings, thereby promoting both environmental and economic sustainability.

Smart scheduling systems powered by AI, for instance, can optimise meeting times, reduce employee idle time, and ensure the efficient use of physical office space and utilities. Automated documentation and digital workflows reduce the reliance on paper, helping to conserve natural resources and cut down on waste production. AI-driven resource management systems analyse real-time data to regulate lighting, heating, and cooling in office buildings, leading to significant reductions in energy consumption and operational costs. Furthermore, AI enhances decision-making by processing vast datasets with speed and accuracy, enabling businesses to forecast trends, monitor sustainability metrics, and align strategies with environmental goals. The shift toward AI-enhanced office technology signifies a proactive response to the global call for sustainability and innovation. By embedding AI into everyday office functions, organisations are not only future-proofing their operations but also demonstrating their commitment to responsible business practices. As companies continue to navigate the complexities of the 21st-century economy, the strategic adoption of AI in office

environments presents a promising pathway for achieving sustainable development goals, reducing ecological impacts, and fostering a more resilient and adaptive workplace culture (Chui, Manyika, & Miremadi, 2018).

Statement of the Problem

Despite growing recognition of the potential of artificial intelligence (AI) to enhance sustainability within office environments, there remains a gap in understanding its long-term impacts on organisational sustainability metrics. Most existing studies focus on short-term benefits, leaving a lack of longitudinal data to inform strategic planning. Additionally, limited research exists on the relationship between AI technologies and organisational culture, particularly in terms of facilitating effective change management. The absence of interdisciplinary perspectives combining environmental science, organisational behaviour, and information systems further constrains a holistic understanding of AI's role in sustainable office practices. Moreover, while AI promises benefits such as improved energy management, streamlined administrative processes, enhanced decision-making, and employee well-being, its ethical implications, infrastructural demands, and environmental footprint are often overlooked. Without addressing these critical issues, organisations may struggle to implement AI responsibly and effectively. Therefore, there is a pressing need for comprehensive research that explores these dimensions and informs the development of sustainable, ethical, and context-specific AI implementation frameworks.

Conceptual Framework

The theoretical grounding of this study in Technological Determinism and the Triple Bottom Line (TBL) approach provides a robust conceptual framework for understanding the transformative role of Artificial Intelligence (AI) in modern office technology and its implications for sustainability.

Technological Determinism

Technological determinism posits that technological innovation is the principal driver of social, organisational, and cultural change. Rooted in contemporary interpretations such as those by Wyatt (2020), the theory asserts that technology not only influences how tasks are performed but also reshapes institutional structures, economic systems, and even human behaviour. In the

context of this study, AI, being a disruptive technological force, demonstrates a clear deterministic influence on office operations. It reconfigures workflows through automation, alters human resource dynamics via intelligent systems, and even shapes strategic decision-making through predictive analytics.

The relevance of this theory to the study lies in its ability to explain the causal relationship between AI adoption and the evolution of office environments into more efficient, responsive, and sustainable systems. As AI technologies are integrated into workplace infrastructure (e.g., smart energy systems, digitalised documentation, AI-driven HR), they directly shape operational routines and organisational cultures, often rendering traditional systems obsolete. Hence, technological determinism helps to conceptualise how AI can lead not just to efficiency gains but also to a broader cultural shift toward innovation and sustainability in office settings.

Triple Bottom Line (TBL) Framework

The Triple Bottom Line framework was proposed by John Elkington (1997). The Triple Bottom Line (TBL) framework expands the traditional notion of organisational performance by adding two additional dimensions, social and environmental, to the conventional economic bottom line. TBL encourages businesses to consider their broader impact on society and the environment, fostering long-term value creation across these three interconnected domains. In this study, the TBL framework is instrumental in evaluating the multi-dimensional impact of AI in office settings:

- **Environmental Sustainability:** AI facilitates smart resource management (e.g., energy-efficient systems, paperless operations), thereby reducing the environmental footprint of office activities.
- **Economic Efficiency:** Automation and data analytics improve productivity, reduce costs, and enhance decision-making, all contributing to better financial performance.
- **Social Responsibility:** AI-supported HR systems can improve employee engagement, performance monitoring, and well-being, contributing to more humane and inclusive workplace cultures.

The integration of TBL into this study ensures a holistic assessment of AI's role, moving beyond mere efficiency to consider ethical, ecological, and societal implications. It frames AI not just as a

technological tool, but as a lever for sustainable development, aligning technological innovation with global sustainability goals.

Significance of the Study

Together, technological determinism and the TBL framework provide a comprehensive theoretical lens through which to examine the transformative power of AI in office technology. While technological determinism explains *how* the mechanisms through which AI reshapes organisational functions, the TBL framework explains *why* the purpose and broader impacts of adopting such technologies are in alignment with sustainability goals. By grounding the study in these theories, the research emphasises that AI integration in office settings is not merely a trend but a paradigm shift that redefines operational norms, ethical standards, and corporate responsibility in the digital era.

Literature Review

Recent studies emphasise AI's potential in promoting sustainability within office environments. Energy consumption in office buildings constitutes a significant portion of global energy use. AI-driven energy management systems have demonstrated substantial potential in optimising energy usage and reducing carbon emissions. For instance, AI applications can modernise outdated HVAC systems, leading to significant energy savings. A case study at 45 Broadway in Manhattan revealed that AI from BrainBox helped reduce HVAC energy consumption by 15.8%, saving $42,000 annually and cutting 37 metric tons of carbon dioxide. Similarly, Zhou et al. (2020) emphasised that AI-driven energy management systems in offices can significantly reduce energy consumption. Moreover, AI technologies facilitate the creation of intelligent building control systems that maintain thermal comfort while enhancing energy efficiency. A systematic review by Merabet et al. (2021) highlighted the application of AI-assisted techniques in intelligent building control systems, emphasising their role in optimising energy efficiency and thermal comfort. These systems utilise machine learning algorithms to predict occupancy patterns and adjust energy usage accordingly, contributing to sustainable office operations.

Administrative processes in office environments often involve repetitive tasks that consume time and resources. AI-powered chatbots and virtual assistants have emerged as effective tools for automating such tasks, thereby enhancing workflow efficiency and reducing

paper usage. Huang and Rust (2021) discussed how AI-driven chatbots and virtual assistants streamline administrative tasks, reducing paper use and enhancing workflow efficiency. These AI applications handle scheduling, information retrieval, and customer service inquiries, allowing human employees to focus on more strategic activities. Furthermore, the adoption of AI in document management systems facilitates the transition to paperless offices. By digitising documents and automating data entry processes, organisations can significantly reduce their reliance on paper, contributing to environmental sustainability. This shift not only conserves natural resources but also enhances data accessibility and security within office environments.

AI applications such as predictive analytics and natural language processing (NLP) empower organisations to make informed decisions aligned with sustainability goals. Predictive analytics enables the analysis of large data sets to forecast trends, identify inefficiencies, and optimise resource allocation. Brynjolfsson and McAfee (2017) highlighted the role of AI in enhancing decision-making processes, contributing to strategic sustainability goals. NLP technologies facilitate the extraction of meaningful insights from unstructured data sources, such as emails and reports. By analysing communication patterns and content, organisations can identify areas for improvement in sustainability practices and employee engagement. These AI-driven insights support the development of targeted strategies to promote sustainable behaviours within office environments.

The integration of AI into supply chain management processes within office environments contributes to sustainability by optimising procurement, inventory management, and logistics. Naz et al. (2022) reviewed the applications of AI in sustainable supply chains, highlighting its role in enhancing efficiency and reducing environmental impact.AI algorithms can predict demand patterns, optimise inventory levels, and identify opportunities for waste reduction, thereby supporting sustainable office operations. Additionally, AI facilitates the implementation of circular economy principles by enabling the tracking and analysis of product lifecycles. This capability allows organisations to design processes that minimise waste and promote the reuse and recycling of materials, aligning with broader sustainability objectives.

While AI offers significant benefits for sustainability in office environments, its adoption also presents ethical considerations and challenges. Concerns regarding data privacy, algorithmic bias, and job displacement necessitate the development of responsible AI governance frameworks. Mittelstadt et al. (2016) emphasised the importance of transparency, accountability, and fairness in AI deployment to ensure it genuinely contributes to sustainable development.

Furthermore, the environmental impact of AI technologies themselves, particularly the energy consumption of data centres, must be addressed. Studies have highlighted the substantial energy and water usage associated with AI infrastructure, raising questions about the net sustainability benefits of AI adoption. Organisations must consider these factors when implementing AI solutions, striving to balance technological advancement with environmental responsibility.

AI technologies also play a role in promoting employee well-being and productivity, contributing indirectly to sustainability in office environments. Predictive analytics can be used to monitor employee health and workload, enabling early intervention to prevent burnout and enhance job satisfaction. By fostering a supportive work environment, organisations can reduce turnover rates and associated resource expenditures. Moreover, AI-driven ergonomic assessments and personalised work recommendations can improve physical comfort and reduce the risk of workplace injuries. These applications not only enhance employee well-being but also contribute to the overall efficiency and sustainability of office operations.

The adoption of AI in office environments within developing economies and among micro, small, and medium enterprises (MSMEs) presents unique opportunities and challenges. Chigada and Madzinga (2021) found that AI adoption in African office environments offers a chance to leapfrog outdated technologies and achieve sustainable growth, although infrastructural and skill-related barriers must be addressed. Similarly, research by Usman and Harto (2024) emphasised the potential of AI to enhance productivity and resource usage in MSMEs, while also highlighting challenges such as implementation costs and technical infrastructure inadequacies. To realise the sustainability benefits of AI in these contexts, targeted policies and support mechanisms are necessary. Investments in digital infrastructure, education, and training can facilitate the effective integration of AI technologies, enabling MSMEs and organisations in developing economies to contribute to sustainable development goals.

AI Applications in Office Technology: A Sustainable Transformation

Artificial Intelligence (AI) is profoundly transforming contemporary office environments, influencing nearly every facet of technology-driven operations. As organisations strive to improve efficiency, sustainability, and cost-effectiveness, the integration of AI has emerged as a cornerstone in office technology. This transformation is not limited to automating mundane tasks; it encompasses sophisticated capabilities such as smart resource management, document

automation, workforce optimisation, and data-driven decision-making. Each of these domains is evolving to align organisational goals with sustainability principles and competitive performance.

1. Smart Resource Management

One of the most impact areas where AI is revolutionising office technology is in the domain of smart resource management. Offices, traditionally energy-intensive environments, have increasingly adopted AI-enabled systems to monitor, regulate, and optimise energy usage. These AI-driven systems, often embedded in lighting, heating, ventilation, and air conditioning (HVAC) networks, are capable of analysing real-time data and adjusting energy consumption based on occupancy and environmental conditions. For instance, smart lighting systems integrated with motion detectors and AI algorithms can automatically dim or turn off lights in unoccupied rooms, significantly reducing unnecessary electricity usage. Similarly, AI-powered HVAC systems adjust temperature settings in real-time, accounting for weather forecasts, occupancy levels, and historical usage patterns, thus ensuring optimal energy consumption and occupant comfort (Khosrow-Pour, 2020).

The benefits of AI-driven intelligent systems extend well beyond improved operational efficiency. By optimising energy consumption and minimising unnecessary waste, AI technologies significantly contribute to reducing greenhouse gas emissions, thereby promoting environmentally sustainable business practices (Khosrow-Pour, 2020). Furthermore, AI-powered predictive maintenance enables facilities managers to detect and address potential equipment issues before they escalate, reducing downtime and extending the life span of infrastructure factors that contribute to cost efficiency and environmental stewardship (Ghobakhloo, 2020). Within the larger framework of corporate sustainability, AI-enabled smart resource management supports organisations in achieving environmental, social, and governance (ESG) benchmarks. As companies face increasing pressure from regulators and stakeholders to demonstrate environmental accountability, AI becomes a critical tool for monitoring, evaluating, and reporting sustainability performance. Automated systems equipped with real-time analytics generate precise and timely insights, facilitating adherence to environmental standards and fostering transparency in corporate sustainability disclosures (Bughin et al., 2018; Davenport & Ronanki, 2018).

2. Document Automation and Digitisation

Another significant domain where AI is exerting transformational influence is in document automation and digitisation. Traditionally, offices have been notorious for their dependency on paper, contributing to deforestation, high operational costs, and inefficiencies in data retrieval. The advent of AI-driven document management systems has led to a paradigm shift, where the emphasis is now on digitisation, automation, and intelligent data processing. AI technologies, such as optical character recognition (OCR), natural language processing (NLP), and machine learning (ML), are central to this transformation. These technologies allow for the automatic conversion of physical documents into digital formats, thereby facilitating easy storage, retrieval, and processing of information. Furthermore, AI can categorise, tag, and analyse vast amounts of digital documents, enabling employees to access critical information in real time without the burden of manual searches. This streamlining of information management not only enhances productivity but also reduces the ecological footprint associated with printing and paper usage (Ghobakhloo, 2020).

The environmental benefits of AI-driven document automation are multifold. By reducing paper consumption, organisations conserve forest resources and decrease waste generation. Moreover, the reduction in the need for physical storage space translates to lower energy consumption for lighting, heating, and cooling archival areas. These changes align with green office initiatives and corporate social responsibility (CSR) programs aimed at promoting sustainability. Beyond environmental considerations, document automation enhances data security and regulatory compliance. AI systems can automatically detect and flag inconsistencies, potential breaches, or sensitive information, thereby preventing data leaks and ensuring adherence to privacy laws. Intelligent document processing also supports version control, audit trails, and user access management, which are critical for organisations handling large volumes of sensitive data.

3. Human Resource and Workflow Management

AI's influence is equally significant in human resources (HR) and workflow management, where it serves as a catalyst for efficiency, fairness, and strategic planning. In the realm of recruitment, AI tools analyse resumes, social media profiles, and performance data to identify the most suitable candidates. These systems use natural language processing and machine learning to match candidates' qualifications with job requirements, minimising human bias and expediting

the hiring process (Davenport & Ronanki, 2018). Beyond hiring, AI enhances workforce scheduling and task allocation. Intelligent algorithms assess employee availability, skills, and performance history to create optimal work schedules that align with project demands and individual capabilities. This not only improves productivity but also boosts employee satisfaction by accommodating personal preferences and reducing scheduling conflicts. In large organisations, where coordinating shifts and assignments manually can be cumbersome, AI proves invaluable in maintaining seamless operations.

Performance tracking is another area where AI offers substantial improvements. Traditional performance appraisals often suffer from subjectivity and inconsistency. AI, however, enables continuous performance monitoring through real-time analytics and feedback systems. These systems track key performance indicators (KPIs), analyse work patterns, and provide personalised development recommendations. This data-driven approach ensures objectivity, facilitates skill development, and aligns individual goals with organisational objectives.

Moreover, AI-driven HR management contributes to sustainability by optimising resource allocation and minimising administrative overhead. Automating routine tasks such as payroll processing, leave management, and benefits administration reduces paper usage and lowers the demand for physical office supplies. These efficiencies translate into lower operational costs and a more sustainable workplace ecosystem. Importantly, AI's role in workforce management extends to employee well-being. Advanced AI systems can monitor stress levels and work-life balance through indicators such as work hours, email patterns, and communication frequency. When anomalies are detected, managers can intervene with support measures, thereby fostering a healthier and more productive work environment.

4. Data-Driven Decision Making

The era of big data has necessitated a shift toward data-driven decision-making in office environments. AI plays a central role in this transition by enabling organisations to process and analyse vast datasets, uncover hidden patterns, and generate actionable insights. Predictive analytics, powered by machine learning algorithms, allows companies to forecast market trends, customer behaviour, and operational bottlenecks with remarkable accuracy (Bughin et al., 2018). This capability is particularly valuable in strategic planning and resource allocation. For instance, AI can identify underperforming business units, recommend process improvements, and simulate

the outcomes of various strategic options. These insights empower decision-makers to act proactively rather than reactively, enhancing organisational agility and competitiveness.

In the context of sustainability, AI enables companies to align their operations with environmental and social metrics. By analysing energy consumption, waste generation, and supply chain data, AI systems provide recommendations for reducing carbon footprints and enhancing sustainability performance. These systems also facilitate real-time monitoring and reporting, which are crucial for meeting regulatory requirements and maintaining stakeholder trust. Furthermore, AI-supported dashboards and visualisation tools present complex data in intuitive formats, enabling executives and managers to make informed decisions quickly. These tools can also integrate data from diverse sources, such as financial records, customer feedback, and social media, to provide a holistic view of organisational performance. This comprehensive perspective is invaluable for strategic alignment and continuous improvement.

The integration of AI in decision-making processes democratizes access to intelligence across all organisational levels. Employees, regardless of their technical expertise, can leverage AI-generated insights to improve their performance, enhance customer satisfaction, and contribute to organisational goals. As such, AI fosters a culture of informed decision-making, collaboration, and innovation.

Challenges and Considerations

While the benefits of AI in office technology are substantial, it is important to acknowledge the associated challenges. One major concern is the potential for job displacement due to automation. As AI takes over routine tasks, some roles may become obsolete, necessitating upskilling and reskilling initiatives to prepare the workforce for evolving job requirements. Also, data privacy and ethical considerations is another concern (Binns et al., 2018). AI systems rely heavily on data, which raises questions about consent, security, and algorithmic transparency. Organizations must implement robust data governance frameworks and ensure that AI systems are designed and deployed in a manner that respects individual rights and promotes fairness.

Additionally, the cost of implementing AI technologies can be prohibitive for small and medium-sized enterprises (SMEs). While the long-term benefits often outweigh the initial investment, access to funding and technical expertise remains a barrier for many organisations. Despite these challenges, the trajectory of AI in office technology remains overwhelmingly

positive. With appropriate safeguards, inclusive policies, and continuous innovation, AI has the potential to reshape office environments into more efficient, sustainable, and human-centric spaces.

Ethical deployment of artificial intelligence (AI) necessitates a multi-dimensional approach encompassing transparency, fairness, accountability, and alignment with core human values. As AI systems increasingly influence decisions in areas such as recruitment, resource allocation, and performance evaluation, it becomes imperative that these systems operate in ways that uphold ethical principles and respect human rights. Transparency, in this context, refers to the ability of stakeholders to understand how AI models function, including insight into the data they are trained on and the logic behind their decision-making processes. Transparent AI fosters trust, enabling users and regulators to scrutinise and validate outcomes, particularly in high-stakes environments (Floridi et al., 2018).

Fairness, another critical aspect, involves ensuring that AI systems do not perpetuate or exacerbate existing social inequalities. Biased training data, if left unchecked, can lead to discriminatory outcomes, disadvantaging certain groups while privileging others. For instance, AI used in human resource management must be carefully audited to prevent gender or racial bias in recruitment and promotion processes. Techniques such as bias detection algorithms, inclusive data sampling, and fairness-aware modelling are crucial in mitigating such risks (Binns, 2018). Moreover, ethical AI must align with human-centric values such as respect for autonomy, beneficence, and non-maleficence. These principles guide the development and deployment of AI systems that prioritise human well-being, ensure informed consent, and avoid causing harm. According to Floridi et al. (2018), this alignment is essential to avoid scenarios where AI operates in morally ambiguous or socially harmful ways. As AI systems become more autonomous, embedding ethical reasoning capabilities through interdisciplinary approaches involving philosophy, cognitive science, and law becomes a necessary safeguard.

Accountability is another cornerstone of ethical AI. Organisations must define clear lines of responsibility when AI systems are involved in decision-making. This includes the establishment of oversight bodies, AI ethics committees, and the implementation of governance frameworks that ensure AI applications comply with legal and ethical standards. Furthermore, ethical deployment should involve continuous monitoring and iterative evaluations to adapt to new ethical challenges as technologies evolve (Jobin et al., 2019). Inclusive stakeholder engagement plays a vital role in ethical AI governance. Policymakers, technologists, civil society,

and end-users must collaboratively shape AI policies to ensure that diverse perspectives and societal values are represented. Such engagement promotes democratic legitimacy and enhances the societal acceptance of AI technologies.

In summary, the ethical deployment of AI is not solely a technical issue but a profound sociotechnical challenge that requires intentional design, rigorous oversight, and alignment with fundamental human values. As Floridi et al. (2018) and others argue, embedding ethics into AI systems from conception through implementation is crucial for ensuring that technological advancements lead to equitable and sustainable outcomes for all.

Policy Implications

As artificial intelligence (AI) becomes increasingly embedded in organisational processes and decision-making, governments and industry leaders must craft comprehensive policies and regulatory frameworks that balance innovation with responsibility. Encouraging AI adoption requires not only investment in digital infrastructure but also robust legal structures that address ethical risks such as algorithmic bias, data privacy, accountability, and transparency. Policymakers should prioritise the development of national AI strategies that promote inclusive innovation, ensuring that AI technologies benefit all sectors of society and do not reinforce existing inequalities.

Education and workforce development represent a critical pillar of these policies. Investment in AI literacy, reskilling, and upskilling initiatives is essential to prepare current and future workers for AI-enabled workplaces. This includes integrating AI-related competencies into educational curricula, vocational training programs, and public awareness campaigns to bridge the digital skills gap (OECD, 2019). A workforce equipped with relevant AI skills can facilitate smoother adoption and minimise displacement caused by automation.

Furthermore, organisations should be mandated or incentivised to adopt sustainability metrics that track the environmental impact of AI deployment. This could include monitoring energy consumption of AI systems, measuring carbon footprints, and promoting the use of green data centers. Governments can lead by example through the implementation of eco-conscious procurement policies and the funding of research into energy-efficient AI models. Cross-sector collaboration between governments, academia, and private enterprises will also be vital in

developing adaptable, forward-looking policy frameworks that align AI integration with ethical, economic, and environmental sustainability goals.

Conclusion

The integration of artificial intelligence (AI) into office technology represents a pivotal advancement in the pursuit of operational excellence and sustainable development. Through applications such as smart resource management, document automation, human resource optimisation, and data-driven decision-making, AI is transforming traditional office environments into intelligent ecosystems that align business goals with environmental and social responsibility. By enhancing efficiency, reducing resource consumption, and enabling strategic foresight, AI not only drives cost savings but also supports global sustainability targets. Its capacity to monitor, analyse, and improve workflows makes it an indispensable tool in navigating the challenges of the modern workplace. However, the benefits of AI cannot be realised without deliberate planning and a strong ethical foundation. Ensuring transparency, accountability, and fairness in AI deployment is essential for building trust and promoting inclusive technological progress.

Moreover, fostering a culture of continuous learning and investing in workforce development will be key to maximising the potential of AI while minimising disruptions. Policymakers, educators, and industry leaders must collaborate to create supportive environments that encourage responsible AI use and prepare society for future transformations. In essence, AI is not merely a tool for automation; it is a catalyst for sustainable innovation. As businesses evolve, embracing AI in office technology will be crucial to creating adaptive, efficient, and environmentally conscious workplaces that are well-positioned for long-term success in an increasingly digital world.

Recommendations

Based on the findings about AI integration in office technology and its implications for sustainability, the following recommendations are suggested.

i. Organizations and developers should prioritize ethical principles in the design and implementation of AI systems. This includes ensuring transparency, accountability, data privacy, and fairness to prevent bias and discrimination in AI decision-making processes.
ii. Governments, academic institutions, and corporate leaders should invest in continuous education and skill development to prepare employees for AI-enhanced work

environments. This will bridge the skills gap and foster a culture of adaptability and innovation.

iii. Policymakers should establish comprehensive AI governance frameworks that promote responsible innovation while protecting public interest. These frameworks should address ethical standards, data governance, environmental impact, and security concerns.

iv. Organisations should integrate AI into their environmental sustainability strategies. By adopting AI tools for energy efficiency, waste reduction, and resource optimisation, businesses can significantly contribute to achieving Environmental, Social, and Governance (ESG) goals.

v. More interdisciplinary research is needed to measure and understand the long-term impacts of AI on sustainability. Funding should be directed toward longitudinal studies across different industries and regions to inform evidence-based policy and practice.

vi. Companies should define and track key performance indicators (KPIs) related to the environmental and social impacts of AI integration. These metrics can guide decision-making and demonstrate commitment to sustainable practices.

vii. Collaboration between governments, private companies, and civil society organisations can accelerate the adoption of AI in office environments while ensuring alignment with public interest and sustainable development goals.

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CHALLENGES ENCOUNTERED BY THE SOUTH-WEST NIGERIAN PUBLIC UNIVERSITIES IN ACCESSING TETFUND INTERVENTION ASSISTANCE

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ABTRACT

This study examines the challenges faced by public universities in the South-west region of Nigeria in accessing intervention assistance provided by the Tertiary Education Trust Fund (TETFund). The study examined the challenges encountered by public universities in South-west Nigeria in accessing TETFund intervention assistance. Three (3) research questions were raised and answered in this study. The study employed a survey research design. A total sample of 2,476 respondents was selected through a simple random sampling technique. The instruments used for data collection are: TETFund Facilities Availability Check List (TFAC); TETFund Academic Staff Facilities Availability Checklist (TASFAC), and TETFund Accessibility Check List (TACL). With reliability coefficients of 0.92, 0.94 and 0.94, respectively. Data gathered for the study were analysed using the combined qualitative and quantitative analytical methods involving thematic, frequency counts and percentages. Findings revealed that: TETFund desk officers identified three major challenges facing universities in meeting the criteria listed by TETFund for normal (regular) intervention. These were late programmes, stringent standards, and programme suspension. It concludes that many eligible academic staff are unable to benefit from TETFund, despite the fund's objective to support educational development. Based on the findings, it was recommended that universities have not been able to meet some of the criteria listed by TETFund for accessing normal (regular) intervention of the agency's stringent standards.

Introduction

Funding is critical to the development of the university education system as many other factors such as staff training, library, research and infrastructural development, conference among others depend on the availability of funds. Therefore, inadequate funding will hinder the accomplishment of the expected goals of the agency or any other body related to the development of the educational sector (Wenibowei &Warrant, 2021). This fact necessitated the establishment of the Tertiary Education Trust Fund (TETFund).

TETFund was originally established as Education Trust Fund (ETF) by the Act No 7 of 1993 as amended by Act No 40 of 1998 (now repealed and replaced with (Tertiary Education Trust Fund Act 2011). It is an intervention agency set up to provide supplementary support to all level of public tertiary institutions with the main objective of using funding alongside project management for the rehabilitation, restoration and consolidation of Tertiary Education in Nigeria. The main source of income available to the Fund is the two per cent education tax paid from the assessable profit of companies registered in Nigeria. The Federal Inland Revenue Services (FIRS) assesses and collects the tax on behalf of the Fund (TETFund, 2025).

The funds are disbursed for the general improvement of education in Federal and State tertiary educations, specifically for the provision or maintenance of;

- Essential physical infrastructure for teaching and learning
- Instructional materials and equipment
- Research and publications
- Academic staff training and development and
- Any other need which, in the opinion of the Board of Trustees, is critical and essential for the improvement and maintenance of standards in the higher educational institutions.

Despite the TETFund Enactment Act and compulsory education tax made payable by all registered companies operating in Nigeria, it is still apparent that resources, both financial and human, are generally declining in Nigerian universities as a result of underfunding. This agency is a body that steps in to provide infrastructure to facilitate the expansion of universities, training and retraining of the staff through higher degrees, conferences, and seminars within and outside the country for human capital development and has been observed to have failed in the delivery of some of her statutory obligations. It could be said that the intervention funds are not appropriately used for what they are purposively allocated for, and this has become another threat

to the support provided for university education in Nigeria. In a press conference in May 2018, the then TETFund Executive Secretary, Dr. Abdullahi Bichi Baffa, acknowledged that when he was appointed in August 2016, the agency was marked by corruption (Premium Times, 2018).

A study conducted by Aprebo and Amaewhule (2018), it revealed how much the research done by State universities in Rivers and Bayelsa can access and use TETfund facilities for infrastructural development. The findings revealed that there was agreement among the desk officers, directors of the work, academic planning, and physical planning. Consequently, TETfund cannot be quickly accessed by universities upon request, even if they can demonstrate a need for it. Universities are not given TETfund facilities based on careful evaluation or in accordance with precedence. This is accurate as all of the items' means fall below the 2.50 threshold, and it has been established that universities in Rivers and Bayelsa states do not have easy access to the TET fund.

The study also revealed that desk officers, work directors, physical planning directors, and academic planning directors at the DVC, and directors of academic planning all agreed that universities in the states of Rivers and Bayelsa could use TETfund to build their infrastructure. Based on the findings, it was concluded that TETFund is utilised for the provision of institutional buildings, administrative offices, ICT infrastructure, instructional technology, leisure facilities, and lecture/classroom halls. Given that the mean scores for these items exceeded the criterion mean of 2.50, it is evident that TETFund plays a significant role in enhancing infrastructural development in Nigerian universities.

Onwuchekwa (2016) also conducted a study to assess, with a focus on the South-east of the country, the effect of the TETFund intervention financial resources on educational research at Nigerian institutions. According to the survey, just 0.14 per cent of the 265.02 billion naira set aside for research were accessed. In other words, the lecturers in Southeast Universities only accessed and used 5.28 per cent of the TETFund intervention money. 94.72 per cent of the funds are not being used. As a result, the researcher found that TETFund intervention money has little or no impact on academic research in universities in the South-East, Nigeria. It was recommended that TETFund should endeavour to establish ICT centers for the state owned tertiary institutions to make the students ICT conscious and literate, TETFund should as well endeavour to fund the provision of other infrastructures like new office furniture, school library, electricity and borehole, and they should make a greater effort to fund seminars, workshops, conferences,

overseas training, academic staff development at state tertiary institutions would involve ICT application training and retraining.

In another study conducted by Oraka et al. (2017), the Education Tax Fund (ETF), with an emphasis on tertiary institutions specifically, has favourably impacted the development of Nigerian education, according to the hypotheses tested. The results also showed how much funding is given to each institution relative to the total amounts given to all the tertiary institutions under consideration. On average, the university system receives 50% of the total annual funding, while the remaining 50% shared between colleges of education and polytechnics. The third hypothesis claimed that one of the factors confusing the nation's educational funding is the rising expense of state administration, the high student population in all educational institutions, and the increased debt loads. Loans are scarce; thus, this might also be requested for staff training to increase capacity and gain technical know-how.

Despite TETFund's involvement in staff training, Onyeizugbe et al. (2016) stated that the criteria for receiving the funds given to them are difficult for many tertiary schools to meet. They concluded that some academic staff are missing out on free tools for professional development. Additionally, Eno-Abasi (2015) discussed how many universities had complained about how challenging it is to get funding. It was further revealed that TETFund alone cannot bear the entire responsibility and that the management of the institutions is also to blame for failing to promote the fund. The institution-level internal politics are another barrier to accessing the money. The study recommended that to access the amount allotted for them, academic staff and institution management should work towards timely and effective proposal completion.

The numerous obstacles involved in gaining access to the fund may be the cause of academic staff missing out on the fantastic chance to receive funding through TETFund intervention. Academic staff members with administrative experience typically hold a variety of roles. Olayemi and Adebayo (2020), established that academic staff members who have held administrative positions such as Dean, Director of Programs, Head of Department, Vice Chancellor, or Deputy Vice Chancellor may possess enhanced insight into the challenges involved in accessing TETFund support. Their accumulated administrative experience could reduce the likelihood of encountering obstacles related to obtaining training or research funding, as their roles may have granted them procedural knowledge and institutional leverage.

In a study conducted by Akomolafe and Belo (2019) on the difficulties in accessing TETFund and the training of academic staff in Southwest Nigerian universities. It was discovered that there are many obstacles that academic staff must overcome in order to access the TETFund

for training. These obstacles include a lengthy application process, low staff knowledge of the fund, and strict requirements, among others. This implies that there are significant difficulties in obtaining funding for training the teaching staff. This situation may have arisen due to the unavailability or delayed disbursement of funds to academic staff when needed. Consequently, certain policies perceived as stringent or challenging by some staff were introduced to regulate fund access. A plausible justification for these measures is to prevent the misuse or misappropriation of TETFund resources (Adebayo & Ojo, 2021).

In another study conducted by Grace (2016), the results showed that academic study in South East Nigerian universities was not significantly impacted by the 5.28% influence of the TETFund intervention money. This indicated that while 94.72% of the TETFund intervention money was not accessible, the lecturers at these universities only accessed and used 5.28 of it. The researcher concluded that the federal government, through TETFUND, had provided funding to universities so that they could carry out studies that would fulfil the requirements of the general public. Because of the complicated requirements, the lecturers are unable to utilise the fund. The money is permitted to go dormant. Low research output is the result of this.

The quality of the research, according to TETFUND, is subpar. As a result, the research intervention fund for TETFUND has little impact on educational research in Nigerian institutions. The researcher recommended that TETFund streamline its application procedures to enable lecturers to access funding promptly. It was also suggested that lecturers undertake studies to demonstrate the extent to which universities provide training on the necessary steps involved from proposal submission to the application for the first tranche of funding. Furthermore, the researcher emphasised the importance of ensuring that both the public and private sectors are furnished with relevant data that can drive socioeconomic development and improve the standard of living.

The findings of the study conducted by Abdulaziz et al. (2020) showed that Lagos State University in Nigeria, a trust fund for higher education intervention regarding the training of academic staff ability, revealed a dissatisfying element of the fund's accessibility. The results also demonstrated that TETFund's involvement at Lagos State University was a top priority for the professional growth of the academic staff. Due to the expected role they will play in the development of the country, the empowerment of university lecturers is not a contentious issue. Additionally, through academic staff development programs at LASU, the TETFund intervention played a major part in positively transforming teaching and learning.

The poor implementation of TETFund to lecturers is referenced to the conclusion on the effect of TETFund intervention on academic staff performance and the distribution of TETFund

intervention to lecturers at LASU for research and improved performance. It was determined that the TETFund's efforts to improve the Faculties at Lagos State University were successful insofar as they had a significant impact on the establishment of the facilities necessary for efficient teaching and learning there. Additionally, TETFund's assistance was primarily intended to support Lagos State University's academic faculties. It also implied that there should be a reduction or elimination of the degree of bureaucratic obstacles typically associated with obtaining monies that have been granted.

TETFund's ability to create tertiary institutions necessary for Nigeria's national development has been questioned on a number of occasions. Wenibowei and Warrant (2021) claimed that although the fund has the ability, there may be a number of constraints. The following issues were mentioned by Professor Suleiman Bogoro in his report on the opinion of the Executive Secretary of the Fund:

1. The restrictions imposed by the Fund's enabling legislation which preclude her from looking into other options for boosting its revenue streams outside of education tax receipts and investments in secure securities.
2. interference with the distribution of funding for projects by some state governments;
3. Inconsistencies in education tax payments by businesses leading to low EDT collections;
4. Some of the beneficiary organisations' insufficient use of the disbursements;
5. The Fund faces significant challenges as a result of the nation's reliance on oil and gas as its primary sources of income, as any decline in price has a detrimental impact on the collection of EDT.
6. Given the Fund's limited and competitive resources, the frequency with which governments at all levels create tertiary public institutions places tremendous pressure on the Fund;
7. There is a preponderance for state governments to establish many universities politically, only to leave them to their fate or force them to depend almost entirely on TETFund.
8. A significant source of worry has been the lack of coordination between the pertinent government bodies' procedures for granting tax holidays to businesses.
9. Beneficiaries' overt and covert misinterpretation of the TETFund's guidelines for its interventions;

10. the public's view that intervention funds are to be misused; and

Worrisome state government meddling in the allocation of TETFund funds to state tertiary institutions' procurement processes has slowed down project projection (Bogoro, 2019).

Considering these limiting factors, the Fund may struggle to achieve its intended impact on Nigeria's tertiary education system. Notably, one of the most pressing challenges facing both TETFund and the broader tertiary education sector is the persistent issue of inadequate funding. In lieu of this background, the study investigated the challenges encountered by the South-west Nigerian public universities in accessing TETFund intervention assistance.

Statement of the Problem

Despite the establishment of the Tertiary Education Trust Fund (TETFund) as a critical mechanism for addressing infrastructural decay, academic staff development, and research funding in Nigerian public tertiary institutions, universities in South-west Nigeria continue to face significant barriers in accessing its intervention assistance. While the Fund was designed to provide equitable and timely financial support, several institutions report procedural bottlenecks, bureaucratic delays, a lack of awareness among academic staff, inadequate training on proposal writing, and insufficient institutional capacity to meet eligibility requirements. These challenges have undermined the effectiveness of TETFund in fulfilling its core mandate within the region. In some cases, universities either fail to access available grants or experience substantial delays in disbursement, thereby stalling academic and infrastructural development. Moreover, there are concerns about transparency and administrative inefficiencies that further complicate the process. Given the strategic role that South-west Nigerian public universities play in national development and innovation, it is imperative to identify and critically examine the specific challenges that hinder their access to TETFund assistance. Understanding these issues is essential for proposing workable solutions that will enhance institutional access, optimise fund utilisation, and improve the quality of tertiary education in the region.

Research Questions

The following research questions were raised and answered in this study;

1. What are the challenges facing universities in meeting the criteria listed by TETFund for normal (regular) intervention?

2. What are the challenges facing universities in meeting the criteria listed by TETFund for special intervention?
3. What are the challenges facing universities in meeting the criteria listed by TETFund for special high-impact intervention?

Methodology

This study adopted a descriptive survey research design. This is because the variable challenges encountered by public universities in South-West Nigeria in accessing TETFund intervention funds had already occurred, and the researcher did not manipulate the variables of the study. The population for this study consists of all the 15 TETFund's Desk Officers, 15 Directors of Physical Planning and all the 10,699 lecturers in the fifteen (15) public Universities in South-west Nigeria, which are made up of seven (7) Federal and eight (8) State Universities recognised by the National Universities Commission (NUC, 2022).

The sample size for this study consisted of two thousand four hundred and seventy-six (2,476) respondents (that is, 40% of the total population of the academic staff of the universities selected for this study). Simple random and purposive sampling techniques were used to select 50% of the total public universities in South-west, Nigeria for this study. Eight (8) public universities (4 States and 4 Federal) were selected for this study. One (1) TETFund's Desk Officer and one (1) Director of Physical Planning in each of the selected universities were purposively sampled because in each of the selected universities, there is only one (1) TETFund's Desk Officer and one (1) Director of Physical Planning. The simple random sampling technique was adopted to select 2,476 (40% academic staff) of the total population of the universities selected for this study in South West, Nigeria (lecturers that have worked for the minimum period of 5 years were sampled for this study because those categories of lecturers are no longer on probation and their services must have been confirmed by the University management). A stratified sampling technique based on ownership (that is, State and Federal universities) was used to select universities in the South West.

Three (3) sets of instruments were used for data collection in this study. These are: TETFund Facilities Availability Check List (TFAC), TETFund Academic Staff Facilities Availability Checklist (TASFAC) and TETFund Accessibility Check List (TACL). The reliability of the instruments was determined through a pilot test using the Rater's reliability. The inter-raters' scores obtained from the observers were correlated. The reliability coefficients of 0.92, 0.94 and 0.94 from the observers provided that the TASFAC, TFAC and TACL instruments were

reliable. Data gathered for the study were analysed using the combined qualitative and quantitative analytical methods involving thematic, frequency counts and percentages.

Results and Discussion

In answering the research questions, the open-ended section addressing the challenges of public universities to meet the enlisted criteria for normal, special and high impact interventions, the questionnaire data were transcribed and organised to form common themes. The identified themes from the TETFund desk officers' responses were used, given a detailed descriptive narrative of the under-listed challenges.

Research Question 1: What are the challenges facing universities in meeting the criteria listed by TETFund for normal (regular) intervention?

Table 1: *Challenges for Normal, Special and High Impact Interventions by Universities (n= 8)*

Description of Common Themes	Example Quote	Frequency n (%)
Normal (Regular) Intervention		
Late programme	"Those who have started their programme before the years of intervention have not been receiving a favourable response from TETFund. The majority of them were denied approval by TETFund. Only those who have a current date of admission were approved."	2 (25.0)
Stringent standard	"For the Academic Research Journal, we have not been accessing of late because of our inability to meet up with one of the criteria set by TETFund..."	3 (37.5)
Programme suspension	"... Conference Attendance was put on suspension since March 2020."	3 (37.5)
Special Intervention		
Subjective Practice	"Special intervention funds for zonal intervention, national research fund, and higher	6 (75.0)

	education book development are based on the discretionary powers of the Board."	
Special High Impact Intervention Constitutional Power of the Board	"Special high-impact intervention funds, such as high-impact intervention and disaster recovery intervention, were based on the discretionary powers of the Board."	5 (62.5)

Based on the varied experiences of the respondents, according to Table 1, TETFund desk officers identified three major challenges facing universities in meeting the criteria listed by TETFund for normal (regular) intervention. These were (a) a late programme, (b) a stringent standard, and (c) programme suspension. Two of the respondents (TETFund desk officers) shared their views that missing an intervention programme year could later become a difficult task to fulfil in the following year. One of these respondents noted the challenge by stating that:

> *Those who have started their programme before the years of intervention have not been receiving a favourable response from TETFund. The majority of them were denied approval by TETFund. Only those who have a current date of admission were approved.*

The majority of the respondents (at least three TETFund desk officers) also see stringent standards and suspension of the intervention programme as one of the major challenges facing universities in meeting the criteria listed for normal (regular) intervention. One of these respondents shared the view that:

> *For the Academic Research Journal, we have not been accessing of late because of our inability to meet one of the criteria set by TETFund. Conference Attendance has been suspended since March 2020.*

Research Question 2: What are the challenges facing universities in meeting the criteria listed by TETFund for special intervention?

Challenges for Special Intervention

Most of the respondents (six TETFund desk officers) attributed the challenges facing universities in meeting the criteria listed by TETFund for special intervention to subjective practice by board members of the agency (Tertiary Education Trust Fund). One respondent noted that "special intervention funds for zonal intervention, national research fund, and higher education book development are based on discretionary powers of the Board." This means that

intervention funds of this type can only be disbursed at the discretion of the Board of Trustees of TETFund, a challenge confronting virtually all public universities in the Southwest, Nigeria.

Research Question 3: What are the challenges facing universities in meeting the criteria listed by TETFund for special high-impact intervention?

Challenges for Special High-Impact Intervention

Most of the respondents (five TETFund desk officers) also attributed the challenges facing universities in meeting the criteria listed by TETFund for special high-impact intervention to subjective practice within the board of the agency (Tertiary Education Trust Fund). The majority of the respondents stated that "special high-impact intervention funds, such as high-impact intervention and disaster recovery intervention, were based on discretionary powers of the Board." This means that intervention funds of this type can only be disbursed at the discretion of the Board of Trustees of TETFund, a challenge confronting nearly two-thirds of public universities in the Southwest, Nigeria.

This finding implies that most of the challenges encountered by beneficiary institutions are made by the agency. This finding is corroborated by Onyeizugbe, Obiageli and Igbodo (2016), who noted that in spite of the intervention of TETFund in the area of staff training, many tertiary institutions are unable to meet the conditions for accessing funds allocated to them. They concluded that many academic staff thus miss the opportunities to access the free funds for academic training and development. Eno-Abasi (2015) equally remarked that many institutions complained that the process of accessing the fund is cumbersome. It was further explained that TETFund alone cannot take all the blame, but the managers of the institutions are also to be blamed for not publicising the fund. Another hindrance to accessing the fund, according to him, is the in-house politics at the institutional level. He therefore suggested that academic staff and institutions' management should work towards achieving the timely and successful completion of proposals to access the fund earmarked for them. The reason why academic staff miss the golden opportunity of getting funds through TETFund intervention could be traced to the series of challenges inherent in accessing the fund. Dayo (2014) also reported that incomplete documentation on the part of the institutions applying for the fund is one of the reasons for not accessing these funds. It may be that the institutions failed to file the document on time or did not complete the process.

The findings are also supported by Akomolafe and Belo (2019) in a study conducted on academic staff training and the challenges of accessing TETFund in Southwest Nigerian

Universities. The study revealed that there are many challenges inherent in accessing TETFund for training by academic staff; some of which include cumbersome procedures for accessing the fund, low level of staff awareness about the fund, and stringent conditions, among others. The implication of this is that the challenges involved in accessing the fund for academic staff training are on a high level. A probable reason for this could be that the available funds could not go around the academic staff when the need it arises. Hence, the introduction of some policies could be interpreted by some academic staff as challenges. Another probable reason could be to checkmate abuse of the fund.

Conclusion

The findings from the study reveal that public universities in Southwest Nigeria face significant challenges in accessing TETFund intervention assistance across regular, special, and high-impact interventions. For regular interventions, factors such as late program initiation, stringent eligibility standards, and programme suspension hinder universities from meeting TETFund's criteria. Notably, missing a year of intervention often results in difficulty accessing funding in subsequent years. Special interventions are largely influenced by the discretionary powers of TETFund's Board of Trustees, making the process subjective and less transparent. This discretionary practice also extends to special high-impact interventions, such as zonal and disaster recovery funding, limiting equitable access for many institutions in the region.

The challenges identified are both systemic and institutional. On one hand, TETFund's bureaucratic procedures, unclear guidelines, and inconsistent disbursement practices hamper accessibility. On the other hand, institutional shortcomings such as inadequate documentation, lack of awareness among academic staff, and internal politics also contribute to missing funding opportunities. Consequently, many eligible academic staff are unable to benefit from TETFund, despite the fund's objective to support educational development.

In light of these findings, it is clear that both TETFund and the beneficiary institutions must adopt reforms. TETFund should simplify its procedures, enhance transparency, and ensure equitable disbursement of funds. Meanwhile, universities should build internal capacity, sensitise academic staff, and ensure timely and complete documentation to fully benefit from the intervention opportunities.

Recommendations

Based on the findings of this study, the following recommendations were suggested;

- Universities have not been able to meet some of the criteria listed by TETFund for accessing normal (regular) intervention of the agency's stringent standards. For public universities to fully benefit from the objectives of TETFund, the agency's board of trustees should endeavour to restructure some of its policy statements to accommodate access for more public universities to benefit from the agency's fund.
- The percentage of academic staff who benefited from academic staff training and development (AST&D) intervention programme, academic research journal intervention programme, national research grant intervention programme, and academic/manuscripts development intervention programme is drastically low; also, the same categories of people continually benefits from the fund on yearly basis while some others are deprived of the privilege as a result of favoritism and nepotism. The agency should ensure that all the qualified academic staff in public universities benefit from the fund, and the administrators of the beneficiary universities should be cautioned and regulated to ameliorate the level of favouritism and nepotism among university staff.
- It has been reaffirmed time without time again that information is power, and the gain you get from empowering your associates more than offsets the risk of informing your competitor. The management of the beneficiary institutions should enlighten lecturers on the processes involved to access the fund from the submission stage to the application for the first tranche.

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ASSESSMENT OF CHALLENGES FACING THE IMPLEMENTATION OF NOMADIC EDUCATION PROGRAMME IN KWARA STATE, NIGERIA

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ABTRACT

The study investigated Challenges faced by the Implementation of the nomadic education programme in Kwara State, Nigeria. This was with a view to providing information on what the nomadic education programme has contributed to sustainable development in Kwara State, Nigeria. A descriptive survey research design was adopted for the study. The population for the study consisted of 1680 adult learners and 101 facilitators (as of 2024) in Kwara State. The sample of the study comprised a selection of 378 nomadic education learners and 54 nomadic education facilitators from 18 nomadic education centres using a multistage sampling technique. Two research instruments were used to collect information from the respondents: the Learner Questionnaire (LQ) and the Interview Guide (IG). The (LQ) with a reliability coefficient of 0.85 was used to elicit information from learners, while the (IG) was used to elicit information from the facilitators. One objective, one research question and one hypothesis were formulated to guide the study. Literature was reviewed under the conceptual framework, theoretical and empirical reviews. The research questions were answered using mean and standard deviation, while the hypotheses were tested using Analysis of Variance (ANOVA) at 0.05 alpha level of 0.05. Findings from the study revealed that the constraints to nomads' participation in the nomadic education programme in Kwara State were severe ($\bar{x}$= 2.73±0.76) across the educational centres. Furthermore, availability of educational infrastructure (F= 87.325; p= 0.000), curricula implementation (F= 36.900; p= 0.000), availability of trained facilitators (F= 26.822; p= 0.000), and constraints to nomadic education (F= 83.212; p= 0.000) significantly influenced nomads' participation in nomadic educational programmes in the study area. Also, participation in nomadic education significantly influenced. It was therefore recommended that the government should provide incentives that would encourage and motivate nomads to enrol and actively participate in nomadic education.

Introduction

Nomadic education has existed since the colonial period, but it did not receive national attention until the late 1980s (Lar, 2010). The Nigerian 1979 Constitution and the National Policy on Education (FRN, 2013) recognised the need to provide equal educational opportunities for all citizens. This led to a Federal Government initiative aimed at ensuring that no one is excluded from acquiring basic education (Gidado, 2023). The 1999 Constitution of the Federal Republic of Nigeria further emphasised that education is a fundamental human right, reinforcing the justification for introducing the Nomadic Education Programme (NEP) in 1968.

Kwara State, located in north-central Nigeria, is home to a significant population of nomadic communities. These groups, predominantly pastoralists, rely on mobile livelihoods, making it difficult for them to engage in conventional, static educational systems. Despite government efforts to bridge educational disparities through policies such as the National Policy on Education and the establishment of the National Commission for Nomadic Education (NCNE) in 1989, significant gaps remain in ensuring equitable access to education for nomadic populations in Kwara State.

The Nomadic Education Programme is designed to address these challenges by offering flexible, culturally relevant, and context-sensitive educational services. Its primary goal is to enhance literacy levels, improve livelihood opportunities, and promote social integration, all while respecting the traditions and lifestyles of nomadic groups. However, the programme's success is hindered by several challenges, including inadequate funding, poor infrastructure, a shortage of qualified teachers, and resistance to formal education due to cultural and economic factors (Mbayuav, 2023).

The implementation of nomadic education in Kwara State faces additional complexities due to the diverse composition of nomadic groups, geographic barriers, and limited government support. Understanding these dynamics is crucial for designing effective strategies to improve educational outcomes. This study aims to assess the current state of nomadic education in Kwara State, identify challenges hindering its effective implementation, and propose actionable solutions to enhance access and quality. By focusing on Kwara State's unique context, this research contributes to the broader discourse on inclusive education and supports Nigeria's efforts toward achieving Sustainable Development Goal (SDG) 4, which emphasises quality education for all, regardless of socioeconomic or cultural background.

Afolabi and Yusuf (2018), in Aelakun Iyanuoluwa (2023), identified facilitators, supervision, funding, responsibility, land use, lack of facilities, languages, library facilities and unpreparedness of the nomads as some of the constraints to proper implementation of nomadic education policies. Also Ajah and Nnamchi (2021), as cited in Aleke (2014), identified inappropriate curriculum, cultural issues, attitude and value, low population density, inconducive learning environment, improper supervision of facilitators, insecurity and community clashes/conflicts as some of the challenges militating against nomadic education. Osokoya, Atinmo, Ajayi and Sarumi (2010) stated the major constraints to the nomadic education programme identified by the stakeholders to include climate change, inadequate funding, inadequate infrastructural facilities, haphazard transfer of facilitators, and lack of incentive for the facilitators and supervisors. According to Adeyemi, Oribabor and Adeyemi (2021), despite the laudable objectives of Nomadic Education Programme in Nigeria, the programme has not been progressive in the country due to challenges such as, lack of manpower and educational resources, poor supervisory practices, inability and unwillingness of nomad children to access nomadic centres, effect of communal/ethnic crises on nomads and the inability of the programme to impact on the socio-economic life of nomads. The following can be deduced from the above submission as challenges to nomadic education policies.

1. **Inadequate Funding:** Inadequate funding of education has been one of the challenges militating against the effective implementation of nomadic education policies. Lack of funds is responsible for inadequate instructional and infrastructural facilities required. The programme suffers from insufficient financial resources, which limit the provision of essential infrastructural facilities, learning materials, and facilitators ' salaries. This hinders the overall effectiveness of the programme.

2. **Poor Infrastructure:** Many nomadic centres/ schools lack basic infrastructure such as classrooms, furniture, and sanitation facilities. In some cases, centres/schools are located in remote areas with limited access to electricity and potable water. Nomadic communities often lack basic infrastructure such as schools, classrooms, and learning materials. This makes it difficult to provide quality education to nomadic children. Availability, adequacy, accessibility and utilisation of school facilities are very pertinent to the implementation of policies on nomadic education in Nigeria. Owoeye (2021) noted that the availability and adequacy of school facilities a strong variables to the achievement of quality nomadic education in Nigeria. Kana (2022), in a progress report on the nomadic education programme in the northeast States in Nigeria, submits

that inadequate classrooms, inadequate furniture, shortage of instructional materials such as chalk, chalkboards, primers, textbooks, audio-visual visual and audio aids are the most acute problems of the nomadic education programme. Thus, it may be very difficult to fully implement the policies for nomadic education in this region of the country. Infrastructural facilities are grossly inadequate to support the implementation of policies on nomadic education in Nigeria (Okoli & Atelhe, 2014). Drawing inference from the above, one can then assert that the implementation of policies on nomadic education in Nigeria may not be possible if there is a continuous state of inadequate school infrastructure.

3. Shortage of Qualified Teachers / Facilitators

There is a scarcity of trained facilitators/teachers who are familiar with the nomadic lifestyle and capable of delivering culturally sensitive education. Frequent transfer of facilitators/teachers to conventional schools also exacerbates the problem.Nomadic education programmes often face a shortage of qualified and trained teachers who are familiar with the specific needs and challenges of nomadic communities. According to Tahir, Muhammad and Mohammed (2018), nomadic education has a history of inadequate manpower to implement the policies of the nomadic education programme. Some available teachers seem not to be trained in the areas of nomadic education. Since the programme required extra commitments, security challenges and the risk of being subjected to remote ways of life, facilitators /teachers seem to be scared of presenting themselves from training that will further qualify them for nomadic education. To corroborate this, Maduewesi and Ofejobe (2022), penned that nomadic teachers face dangers and hazards in the bush, and they are not being motivated by the government with underpayments. In search of seeking comforts, many of them worked and negotiated their transfers to conventional schools in urban regions of the country. The continuous existence of this trend makes an already difficult task to become even more difficult over the years. The government have to spend a lot of funds in the retraining of teachers for the nomadic schools. Adeyemi et al (2021) also lamented that after huge funding in training/retraining of teachers for the nomadic schools by NCNE, most of them are transferred indiscriminately to conventional schools after being faced with the realities of the job. This led to a reduction in the number of special teachers in nomadic schools, which affects the quality of education offered to nomadic children. The lasting effect of this development is that the implementation of nomadic education in Nigeria will be more difficult since there is no adequate human capital for the programme.

4. Unsuitable Curriculum: The curriculum focuses mainly on the history and cultures of the society rather than teaching pastoral procedures. The contents of the curriculum are considered unsuitable for the nomads' children. It does not provide practical skills to improve their means of livelihood. Mbayuav (2023) stated that the use of the English language as a medium of instruction at the elementary level does not cater for the nomads' peculiarity. The nomads have certain attitudes towards their education. It is not that the people do not appreciate the government's efforts towards the education of their children, but they reject any programme or system that is inimical to their way of life. This may be attributed to nomads not being fully involved in the decision-making on the policies that affect their lives. The implication of this is that it will be very difficult to implement and impose policies on nomadic education on the nomads since the programme doesn't capture their interest. According to Lawani (2015), the high illiteracy level of adult nomads makes schooling meaningless to them which makes it difficult to motivate their children towards formal learning since they feel in most cases they are not being involved in decision making that has to do with them. Rather, the children are often engaged in the tasks of rearing animals and fishing at the expense of schooling, thereby making activities of the government in implementing policies of nomadic education futile.

5. Limited Access to Education: Nomadic communities are often located in remote areas, making it challenging for children to access educational facilities. Lack of transportation, inaccessible roads, bad terrain and long distances from schools further exacerbate this issue. According to FRN (1999) noted that the major constraint faced by the nomads in their participation in formal and non-formal education are the centrality of child labour in their production system, and their physical isolation since they operate in a mostly inaccessible physical environment. Also, insecurity seems to be dominant in some areas where nomads reside in Nigeria; some nomadic communities live in areas prone to conflicts or insecurity, which can disrupt educational activities and pose risks to the

6. High Dropout Rates: Nomadic learners often drop out of school due to the migratory nature of their communities, economic challenges, or cultural factors. This interrupts their education and makes it difficult to sustain enrolment.

Addressing These Challenges:

To improve the implementation of the NEP in Kwara State, the following measures can be taken:

a. Increase government funding and partnerships with NGOs.
b. Construct more mobile and semi-permanent schools.
c. Provide incentives and training for teachers to specialise in nomadic education.
d. Adapt the curriculum to be culturally and practically relevant.
e. Address security concerns and ensure the safety of learners and educators.
f. Promote awareness campaigns to highlight the importance of education among nomadic communities.

Addressing these challenges requires a coordinated effort among government, local communities, and development partners.

Statement of the Problem

Implementation of the nomadic education programme in Kwara State is crucial for several reasons. Firstly, education provides opportunities for nomadic learners to acquire essential skills and knowledge that can empower them to improve their livelihoods and break the cycle of poverty within their communities. More so, nomadic education can contribute to social integration and cohesion by fostering understanding and interaction between nomadic and settled populations. However, the participation of nomads in this programme can be influenced by various factors. Accessibility remains a significant challenge, as nomadic communities often inhabit remote or hard-to-reach areas. Cultural beliefs and practices may also play a role, with some nomadic groups placing less emphasis on formal education within their lifestyle. To address these challenges and increase participation, the nomadic education programme needs to be culturally sensitive and flexible, taking into account the unique needs and preferences of nomadic communities. Mobile schools, community outreach efforts and partnerships with local leaders can help bridge the gap and encourage nomads to engage with educational opportunities. More so, highlighting the tangible benefits of education, such as improved health, economic opportunities, and social inclusion, can further incentivise participation among nomadic populations.

Methodology

A descriptive survey design was adopted for the study. The population for the study consisted of all the nomadic education learners and facilitators in the study area. There were 1687 nomadic learners and 101 facilitators. The sample for the study consists of 368 facilitators and 54 nomadic facilitators. The instruments used for data collation were a questionnaire and an interview titled Assessment of the challenges facing the implementation of nomadic education

programme in Kwara State (ACFINEPQ). One objective, one research question and one hypothesis were formulated to guide the study. The data collected from research questions were analysed using mean and standard deviation, while the hypotheses were tested using Analysis of Variance (ANOVA) at 0.05 alpha level of 0.05.

Objective of the Study

The study aims to examine the implementation of the Nomadic Education Programme to ascertain its sustainability in Kwara State, Nigeria. Specifically, the study is to:

1. examine the constraints nomadic education programmes faced in Kwara State.

Research Question

1: What are the constraints to nomads' participation in nomadic educational programmes in Kwara State?

Research Hypothesis

$H_0$1: Constraints to nomadic education programmes have no significant influence on nomad participation in the nomadic education programme in Kwara State.

Research Question 1: What are the constraints to nomads' participation in nomadic educational programmes in Kwara State?

Table 1: Constraints to Implementation of Nomadic Educational Programmes in Kwara State

	N	Sum	$\bar{x}$	SD	Remark
Lack of facilitators who teach in the Fulfulde language	378	994	2.63	2.40	Severe Constraint
Migration pattern of the nomads and other pastoralists	378	1005	2.66	1.15	Severe Constraint
Fears of Western education as taboo	378	958	2.53	1.19	Severe Constraint
Poorly formulated and implemented nomadic education curricula	378	955	2.53	1.08	Severe Constraint
Lack of mobile classroom structures for learning at nomadic educational centres	378	1151	3.05	1.08	Very Severe Constraint
Poor funding of nomadic education	378	1139	3.01	1.14	Very Severe

					Constraint
Lack of appropriate incentives to motivate nomads to participate in modern educational learning	378	1141	3.02	0.86	Very Severe Constraint
Cultural disparities that create biases and societal distrust	378	979	2.59	1.15	Severe Constraint
Farmers-nomads clashes due to the land tenure system and the migratory pattern of nomads	378	914	2.42	1.00	Mild Constraint
Poorly formulated policies that do not involve nomads on decision-making regarding matters that affect their lives	378	1056	2.79	0.87	Severe Constraint
Weighted mean		**1029.2**	**2.73**	**0.76**	**Severe Constraint**

Source: Field Survey, 2024

Key: $\bar{x}$= Mean; SD= Standard Deviation

Thresholds: Mean value ≤ 2.49= Mild Constraint; 2.50-2.99= Severe Constraint; ≥ 3.00= Very Severe Constraint

Table: presented the constraints to nomadic education programmes in Kwara State. The level of constraint was measured using ten items, and the scores were compared with the criterion mean of 2.50. It was observed from the result that three items were marked "Very Severe Constraint", six items were marked "Severe Constraint", and one item was marked "Mild Constraint". The items remarked very severe constraint were; lack of mobile classroom structures for learning at nomadic educational centres ($\bar{x}$=3.05±1.08), poor funding of nomadic education ($\bar{x}$=3.01±1.14), and lack of appropriate incentives to motivate nomads to participate in modern educational learning($\bar{x}$=3.02±0.86); those remarked severe constraint were; lack of facilitators that teach with Fulfulde language ($\bar{x}$=2.63±2.40), migration pattern of the nomads and other pastoralists ($\bar{x}$=2.66±1.15), fear of western education as taboo ($\bar{x}$=2.53±1.19), poorly formulated and implemented nomadic education curricula ($\bar{x}$=2.53±1.08), cultural disparities that create biases and societal distrusts ($\bar{x}$=2.59±1.15), and poorly formulated policies that do not involve nomads on decision making regarding matters that affect their lives ($\bar{x}$=2.79±0.87); while that remarked mild constraint was farmers-nomads clashes due to land tenure system and migratory pattern of nomads ($\bar{x}$=2.53±1.19). In addition, the weighted mean indicated that the constraints to nomadic education programmes were severe in Kwara State.

Hypothesis: Constraints to nomadic education programmes have no significant influence on nomadic participation in nomadic educational programmes in Kwara State.

Table 4.11a: ANOVA on the influence of constraints to nomadic education on nomad participation in the nomadic educational programme

	Sum of Squares	df	Mean Square	F	p-value	Decision
Between Groups	94.557	2	47.278	83.212	0.000	Significant
Within Groups	213.062	375	0.568			
Total	307.619	377				

Source: Data Analysis, 2024

Table 4.11a presents the summary of the Analysis of Variance (ANOVA) on the influence of constraints to nomadic education on nomad participation in the nomadic educational programme in Kwara State. The result as presented in the Table, showed that constraints to the nomadic education programme have a significant influence (F= 83.212; p= 0.000) on nomad participation in the nomadic educational programme in Kwara State. Therefore, the null hypothesis was rejected at the 0.05 alpha level of significance.

Table 4.11b: Least Significant Difference (LSD) Post-hoc Multiple Comparisons Test

Level of Constraints		Mean Diff	Std. Error	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
Minor constraint	Severe constraint	0.88218*	0.10191	0.000	0.6818	1.0826
	Very severe constraint	1.10056*	0.08869	0.000	0.9262	1.2750
Severe constraint	Minor constraint	-0.88218*	0.10191	0.000	-1.0826	-0.6818
	Very severe constraint	0.21837*	0.10124	0.032	0.0193	0.4174
Very severe constraint	Minor constraint	-1.10056*	0.08869	0.000	-1.2750	-0.9262

Severe constraint	-0.21837*	0.10124	0.032	-0.4174	-0.0193

***. The mean difference is significant at the 0.05 level.**

Source: Data Analysis, 2024

Table 4.11b presents the summary of the post hoc test of multiple comparisons on the influence of constraints to nomadic education on nomad participation in the nomadic educational programme in Kwara State. The result as presented on the Table showed that with very severe constraints, nomads were 1.100 times (mean difference= -1.10056; p= 0.000) less likely to participate in nomadic educational programme when compared with mild constraints; also; nomads were 0.218 times (mean difference= -0.21837; p= 0.032) less likely to participate in nomadic educational programme when compared with severe constraints. In addition, it was further observed that with severe constraints, nomads were 0.882 times (mean difference 0.88218; p= 0.000) less likely to participate in the nomadic educational programme when compared with when the constraints were mild. This implied that the more severe the constraints experienced by nomads at their educational centres, the less likely the nomads would participate in nomadic educational programmes.

Discussion of Findings

Findings on constraints revealed criticality or severity of barriers to the full delivery of nomadic educational programmes, and among the very severe constraints were lack of classroom structures at nomadic educational centres, poor funding of nomadic education, and absent of appropriate incentives to motivate nomads to participate in modern educational learning; these factors presented significant barriers to accessibility and effective delivery of education for nomadic community. Factors like a shortage of facilitators that are proficient in Fulfulde, the language spoken by many nomads, the migratory pattern of nomads and other pastoralists, and the cultural perception of Western education as taboo were found to be severe constraints to efficient delivery of nomadic education. In addition, a lack of policies that involve nomads in decision-making, poorly formulated and implemented curricula for nomadic education, and cultural disparities that create societal biases and distrust were observed to have severely complicated the delivery of nomadic educational programmes. Interestingly, farmers-nomads clashes due to the land tenure system and the migratory pattern of nomads were found to have a minor or negligible effect on the delivery and effectiveness of nomadic education. In general, the

constraints to the nomadic educational programme for Sustainable Development Goal of education for All were severe in Kwara State. Also, inferential analysis further established that constraints to the nomadic education programme significantly influenced nomad participation in the nomadic educational programme, with the likelihood of participation decreasing with increasing severity of the constraints. The finding was in tandem with Bello et al. (2022), who reported that nomadic education in Nigeria is constrained by a myriad of challenges, like inadequate teachers, poor funding, and poor monitoring and supervision. Similarly, Adelakun et al. (2023) averred that inadequate funding, poor educational infrastructure, unsuitable curriculum, and lack of trained teachers were among the major constraints militating against efficient delivery of the nomadic education programme in Nigeria.

Conclusion

Based on the findings of this study, it is concluded that nomads' participation in the Nomadic Education Programme in Kwara State is at an average level. The state of infrastructure in nomadic education centres is moderate, and the overall progress toward Sustainable Development Goal 4 (Education for All) in Kwara State remains average. However, several critical areas require urgent attention:

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- The implementation of nomadic education curricula is poor.
- The availability of trained facilitators, particularly those proficient in Fulfulde, is low.
- Constraints to participation, including lack of infrastructure, inadequate funding, and cultural resistance, remain severe across nomadic education centres.

The study further established that educational infrastructure, curriculum implementation, availability of trained facilitators, and existing challenges significantly influence nomadic participation in education programmes. Moreover, the level of participation directly impacts the achievement of SDG 4 goals.

- The availability of trained facilitators, particularly those proficient in Fulfulde, is low.

- Constraints to participation, including lack of infrastructure, inadequate funding, and cultural resistance, remain severe across nomadic education centres.

The study further established that educational infrastructure, curriculum implementation, availability of trained facilitators, and existing challenges significantly influence nomadic participation in education programmes. Moreover, the level of participation directly impacts the achievement of SDG 4 goals.

Recommendations

To address these issues, the following measures are recommended:

1. Government and Non-Governmental Organisations (NGOs) should provide incentives to encourage nomads to enrol and actively participate in education programmes.
2. The government should invest in infrastructure, including mobile classrooms, furniture, and essential learning materials (textbooks, visual aids, etc.).
3. The Ministry of Education and NCNE should develop and implement a curriculum that aligns with nomadic learners' needs, incorporating Fulfulde alongside English and promoting peaceful coexistence with host communities.
4. Recruitment of trained facilitators should be prioritised, ensuring they are proficient in both English and Fulfulde. Additionally, facilitators should receive competitive remuneration and continuous professional training.
5. The National Commission for Nomadic Education should conduct biannual audits to evaluate programme progress and make necessary improvements to ensure the achievement of Sustainable Development Goal 4.

By implementing these strategies, the Nomadic Education Programme can become more effective, ensuring greater participation, improved literacy, and enhanced socioeconomic outcomes for nomadic communities in Kwara State.

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USE OF CLIMATE SMART AGRICULTURAL (CSA) PRACTICES AMONGST SMALLHOLDER FARMERS: IMPLICATIONS FOR AGRICULTURAL EXTENSION EDUCATION IN NIGERIA.

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ABTRACT

The study investigated farmers' perception about CSA practices, and examined their level and determinants of use, drawing implications for extension education in Nigeria. Three-stage sampling procedure was used to select 160 smallholder farmers in Nasarawa state, Nigeria. A structured interview schedule was used to elicit data, which were summarised with mean scores, while multiple linear regression was used for inferential deductions. Results showed that 29% received information about CSA practices from extension, 58% had formal education, and 65.8% were members of a farmers' association. Farmers opine that 'climate change is taking place' with 'drastic changes occurring in the past 5 – 15 years' and that 'climate change resulted in high temperature, and moisture reduction in soil'. Irrigation (0.65), crop rotation (0.60), mixed cropping (0.58), planting early maturing varieties (0.55) were most used CSA practices while the least used were green-house technology (0.06), construction of water retention structures (0.11), planting crop varieties requiring little water (0.21) and planting drought resistance varieties (0.18) with respective index scores in parenthesis. The significant determinants of use of CSA practices were knowledge (B=.202), education level (B=1.107) perception (B=0.120) at p<0.05. The study concludes with implications of the findings for agricultural extension education and some recommendations.

Introduction

Climate change has continued to pose aserious threat to food security, and mostly in developing nations where agriculture serves as the main source of people's livelihood (Ani et al.,

2022; Abdulrahman et. al.,2021). As a result, the availability and accessibility of natural resources, such as land, water, and biodiversity that are essential for agricultural production, have been adversely affected, thus causing reduced crop yields and livestock productivity, thereby threatening farmers' livelihoods and well-being. (Okonkwo, 2018).

Agriculture is a major contributor to and victim of climate change. On one hand, it contributes to about 24% of the global greenhouse gas emissions that cause climate change, mostly from land use change, livestock production, fertiliser use, and rice cultivation. However, agriculture is highly sensitive and vulnerable to the adverse effects of climate change because of its dependence on the availability and quality of natural resources, such as land, water, and biodiversity. Climate change has an impact on the productivity and profitability of agricultural systems, as well as farmers' and consumers' food security and well-being (Wagner et al., 2020).

However, smallholder farmers must make use of climate-smart agricultural (CSA) practices to adapt to the changing climate and guarantee food security. According to Adika (2019), CSA practices are "agricultural practices that sustainability increase productivity, enhance resilience (adaptation), reduce/remove greenhouse gases (mitigation), while enhancing the achievement of national food security and development goals." CSA has the potential to lower greenhouse gas emissions and the environmental damage brought on by climate change while simultaneously increasing farmers' income, resilience, and productivity. It is worth noting that the use of climate-smart agricultural practices among smallholder farmers could be influenced by socioeconomic, institutional, and biophysical factors in the steps to improve the adaptive capacity of farmers and improve food security (Olooto et al., 2022).

Nigerian smallholder farmers have yet to embrace CSA practices (Musafiri et al., 2021). This might be due to farmers' lack of knowledge, skills, and awareness of climate change. It has been reported that agricultural extension education is essential for increasing farmers' ability to implement CSA practices and enhance their livelihood (Mashi et al., 2022). It also helps to equip farmers with the information and abilities they need to implement climate change-resilient, sustainable farming methods. Agricultural extension education is regarded as the process of providing information, training, and advisory services to farmers through various media and channels to improve their agricultural practices and livelihoods (Raidimi and Katibi, 2019). Agricultural extension education for CSA practices is that, which can help to increase the awareness, knowledge, and skills of smallholder farmers on CSA practices, as well as facilitate their access to inputs, markets, and policies that support CSA practices and their adoption. Better food security, adaptation, mitigation, and results for smallholder farmers and the environment can

result from this. Thus, this contributes to farmers' development of positive attitudes and behaviours regarding agricultural practices (Danso-Abbeam et al., 2018).

However, the availability of agricultural extension education to smallholder farmers is viewed as a threat to the adoption of agricultural practices, particularly those associated with climate-smart smart (Agwu Agwu Ejem, 2023). This study thus examined the use of climate-smart practices among smallholder farmers with the implications for extension education in Northern Nigeria.

Specific objectives of the study are to:

1. examine smallholder farmers' perception about climate change.
2. identify CSA used by the farmers
3. examine the determinants of use of CSA practices.

Methodology

The study was carried out in Nassarawa State, which is in the middle belt, or central region of Nigeria. The state is located between the Latitude: 8° 34' 13.854" longitude: 8° 18' 31.8384" E. The state is bordered to the north by Kaduna, to the east by Plateau State, and to the west by the Federal Capital Territory. It has a total land mass of about 27,137.8 km with a total of 13 Local Government Areas. Through the use of an interview schedule, the research employs purposive and random sampling methods. Two Local Government Areas (LGAs), Karu and Keffi LGAs, were purposely selected from the thirteen (13) Local Government Areas of Nasarawa State. The LGA's high concentration of smallholder farmers and the obvious effects of climate change served as the basis for the selection. Four communities in each of the LGAs were then chosen at random for the study. Finally, the study selected twenty (20) farmers randomly in each of the selected communities, making a sample size of 160 farmers. The response variable of the regression model, use of CSA practices, was measured on a 2-point scale Yes = 1 and No = 0, for used and unused CSA practices, respectively. The summated scale was used to obtain total 'used score', which was used as the dependent variable in the regression model. Perception was scored on a 5-point Likert-type scale: Strongly agree = 5, Agree = 4, Undecided = 3, Disagree = 2, and Strongly Disagree = 1. Respondents' responses were obtained using a semi-structured interview schedule, and inferential deductions were made using multiple linear regression and frequency counts and mean scores to summarise the data.

Results and Discussion

Results in Table 1 show that the smallholder farmers mostly had a favorable perception about changes in climate in the study area. More specifically, perceptional view of respondents and respective mean score obtained included: 'climate change is taking place' (4.48), with 'drastic changes occurring in the past 5 – 15 years'(4.37), 'climate changes has resulted into high temperature and moisture reduction on soil which lead to wilting of crop' (4.52), 'increase in rainfall due to climate change result into erosion and flooding causing crop destruction' (4.39), 'emergence of new strains of pest and diseases' (4.29). The least weighted mean score (4.25) recorded was on 'desert encroachment and destruction of the ecological system being caused by climate'. The findings of this study align with the findings of Moutouama et al. (2022) and Nyang'au et al. (2021), which revealed a similar perception of farmers on climate change. These suggest that farmers strongly perceive climate change impacts on agriculture, highlighting the need for targeted extension education on climate-resilient practices, adaptation strategies, and climate-smart agriculture to enhance farmer resilience and sustainability.

Table 1: Smallholder farmers' perception about climate change

Perception statements	Mean	Std. D
I believe that climate change is currently occurring	4.48	.571
Climate change has been occurring very drastically over the last 5-15 years	4.37	.695
Climate change has led to increased temperatures and soil moisture reduction, resulting in crop wilting	4.52	.571
Increased rainfall due to climate change leads to erosion, flooding, and the destruction of crops	4.39	.681
The emergence of new strains of pests and diseases is linked to increasing temperature variations	4.29	.863
Desert encroachment is primarily caused by climate change and the destruction of ecological systems	4.25	.955
The increasing frequency and severity of droughts in our region are clear indicators of climate change	4.35	.529
Climate change impacts, such as droughts and unpredictable weather patterns, have negatively affected my farming activities	4.52	.624
The increased intensity of flooding has led to a decline and instability in agricultural production	4.55	.758
Climate change has contributed significantly to food insecurity and poverty in our community	4.56	.600

Source: Computed, 2023

Results in Table 2 show that the use of early maturing variety planting (0.55), crop rotation (0.60), irrigation (0.65), and mixed cropping (0.58) were the most frequently employed CSA practices by farmers in the study area. However, in descending order, the least popular methods were building water retention structures, planting drought-tolerant varieties, and planting flood-tolerant varieties (0.19). This is consistent with the findings of Moutouama et al. (2022), who found that early maturing varieties and crop rotation were the most common climate-smart practices employed by small-scale farmers. The findings imply that while farmers are adopting some climate-smart agriculture (CSA) practices like early maturing varieties, crop rotation, irrigation, and mixed cropping, there's a notable gap in the adoption of other crucial practices such as building water retention structures and planting drought/flood-tolerant varieties, suggesting a need for targeted extension services and training to promote more comprehensive CSA adoption.

Table 2: Distribution of respondents by climate-smart practices used

Practices	Percentage using the practices	Mean	Std. Deviation
Appropriate climate-tolerant varieties	51.6	.52	.501
Flood-tolerant varieties	18.6	.19	.391
Drought-tolerant varieties	18.0	.18	.385
Disease & Pest-tolerant Varieties	31.1	.31	.464
Early maturing varieties	54.7	.55	.499
Mixed Cropping	57.8	.58	.495
Integrated cropping system	13.0	.13	.338
Improved fallowing	9.9	.10	.300
Greenhouse technology	6.2	.06	.242
Crop Rotation	59.6	.60	.492
Rainwater harvesting	45.3	.45	.499
Irrigation	64.6	.65	.480
Soil and water conservation	15.5	.16	.363
Construction of water retention structures	11.2	.11	.316
Crops using little water	21.1	.21	.409
Planting Cover crops	24.2	.24	.430
Mulch cover	21.1	.21	.409

Source: Computed, 2023

Determinants of the use of CSA practices amongst the farmers

The results of the multiple linear regression analysis show that knowledge (B = 0.202), education (B = 1.170) and perception (B = 0.120) had significant and positive relationships with the use of CSA practices amongst smallholder farmers at $p < 0.05$. Conversely, farming experience (B = -0.071) had a significant but inverse relationship with the use of CSA practices. The overall model shows that 16.1 % variation in the dependent variable and is significant (F = 3.657) at $p < 0.01$. These results indicate that increasing farmers' knowledge, reshaping their perception through continuous climate education, would significantly enhance the use of CSA practices. The finding of this study corroborates those of Nyang'au et al. (2021) and Amir et al. (2020), which show that a high level of education and knowledge significantly influences the use of CSA practices among small-scale farmers. Asrat and Simane (2018) also noted that the perception of farmers has a significant influence on the use of climate change practices.

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Table 3: Results of regression analysis on determinants of use of climate-smart practices amongst farmers

	Unstandardized Coefficients		Standardized Coefficients		
Regression Model	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	-2.271	2.944		-.771	.442
Knowledge	.202	.068	.232	2.992	.003
Sex	.651	.718	.078	.906	.366
Education	1.170	.486	.190	2.408	.017
Perception	.120	.055	.178	2.181	.031
Undergone any training on climate-smart practices for more than 2 weeks in an institution	-.329	.317	-.084	-1.037	.301
Size of farm	.092	.109	.079	.846	.399
Farming experience	-.071	.037	-.186	-1.929	.056
Member of the farmers' association	-.433	.508	-.068	-.852	.396

Source: Computed, 2023

Implications for agricultural extension education in Nigeria

Given the study's findings, the following are some implications for extension service education in Nigeria:

1. Improved Climate Change Education: According to the study, Nigerian agricultural extension education programs must give climate change education top priority. Extension services should concentrate on increasing awareness and offering training on climate-smart agricultural practices, given farmers' perceptions of drastic climate changes and their effects on agricultural productivity.

2. Targeted Knowledge Dissemination: The results highlight the significance of using extension services to spread knowledge about climate-smart agricultural practices. Extension agents can help farmers adopt and implement CSA practices like crop rotation, irrigation, and mixed cropping by enhancing their knowledge of these techniques.

3. Customised Educational Programs: Efforts to educate Nigerian smallholder farmers should be adapted to their unique circumstances and needs. Creating specialised training materials, seminars, and exhibits that highlight regional climate issues and workable solutions may be one way to achieve this.

4. Partnerships with Farmers' Associations: To spread knowledge and encourage the adoption of CSA practices, agricultural extension organisations should work closely with farmers' associations, as a significant percentage of farmers are members of these organisations. Partnerships can help farmers learn from one another, share knowledge, and work together.

5. Promotion of Innovative Technologies: Extension services ought to aggressively support cutting-edge technologies that smallholder farmers have not fully utilised, like greenhouse technology and water retention structures. This could entail offering access, financial incentives, and technical supportand access to resources to facilitate the adoption of these practices.

6. Continuous Capacity Building Agricultural extension education programs should place a high priority on ongoing capacity building among extension agents, given the important role that knowledge, education level, and perception play in determining the adoption of CSA practices. This entails giving them the most recent data, effective communication techniques, and resources necessary to interact with farmers on climate change issues.

7. Policy Support and Advocacy: At both the national and local levels, agricultural extension organisations ought to promote climate-smart agriculture-friendly policies and funding. This entails promoting financial resources, the construction of infrastructure, and institutional assistance to enable the broad implementation of CSA methods among Nigerian smallholder farmers.

Conclusion

This study underscores the importance of strengthening agricultural extension services to enhance smallholder farmers' resilience to climate change. In conclusion, investing in targeted climate change education, tailored extension programs, partnerships, and innovative climate-resilient practices is crucial for promoting sustainable agricultural productivity and adapting to climate change impacts.

Recommendations

The following suggestions are made for the study in light of the aforementioned:

1. More funding is required for agricultural extension services to improve outreach and education initiatives aimed at smallholder farmers regarding climate change.
2. Customised training materials and extension programs centred on climate-smart agricultural practices must be created, taking into consideration the unique requirements and environments of various farming communities.
3. To encourage information exchange and cooperative action on climate change adaptation, partnerships between government agencies, farmers' associations, research institutes, and agricultural extension organisations must be fostered.
4. The advancement of cutting-edge methods and technologies that boost agricultural productivity and climate resilience must be given top priority, taking into account the socioeconomic limitations smallholder farmers face.

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ASSESSMENT OF DISCIPLINARY TECHNIQUES IN THE MANAGEMENT OF PUBLIC SECONDARY SCHOOLS IN JIGAWA STATE.

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ABTRACT

Orderliness in behaviour is fundamental for effective management of public secondary schools to ensure the actualisation of the goal of secondary education. Thus, the effective disciplinary techniques cannot be overemphasised to ensure efficacy in the management of public secondary schools in Jigawa State, Nigeria. Thus, Orderliness in behaviour is fundamental for effective management of public secondary schools to ensure the actualisation of the goal of secondary education. Thus, the effective disciplinary techniques cannot be overemphasised to ensure efficacy in the management of public secondary schools in Jigawa State, Nigeria. A survey research design was adopted for the study. The population of the study was 6925, and the total sample size was 288. A simple random sampling technique was used. The research instrument used for the collection of data was a closed-ended questionnaire titled "A questionnaire on the assessment of discipline technique in the management of public secondary schools in Jigawa state, Nigeria". The reliability of the instrument was obtained using the test-retest method, and the reliability coefficient was determined at 0.86. The data were analysed through the use of analysis of variance (ANOVA). The findings of the study showed that punctuality, examination malpractice, disciplinary management system, truancy, among others, were given little attention over the years due to a low level of commitment on the part of the stakeholders in the State. However, it has been concluded that the school authority sets standards for both internal and external examinations, orientation was always organised before the commencement of any examination in the school, and this made students be law-abiding about both internal and external examinations.

The measures which the school authority takes to ensure that students are punctual were not satisfactory, and this made students come to school at will and leave school before school closes for the day. Based on the findings of the study, it was recommended that, as a matter of emergency, there should be more efforts by the relevant authorities with a view to ensuring strict adherence to law and order for both teachers and students in public secondary schools in Jigawa State. Moreover, irregularities in the maintenance of discipline in public secondary schools in the state should be addressed. Posters, lectures and videos that have a direct relevance to examination ethics should be prepared and presented to the students by the school authorities to enable them to possess the pre-requisite knowledge of examination guidelines in the schools.

Introduction

Institutions concerned with examining learners in specific examinations usually design certain norms, known as the "code of conduct of examination", to ensure absolute integrity of results. Occasions where the rules are boycotted either by the teacher or learner may lead to examination irregularities and malpractice. This pollutes the results of the students and poses a great threat to the validity and reliability of the examination results and certification. It is further advised that this could be better taught through grooming students in the values of study, study habits and development of study skills. Keeping the teachers, school principals, invigilators, supervisors and examining bodies' officials informed about their expected behaviours, actions, and secrecy of examination questions is highly recommended. Parents and teachers' associations' meetings could also be used to talk to parents about the advantages of adhering to examination ethics during examinations. Schools are seen as providers of education, as education is an important process that each individual has to undergo in life today. This is even so in this digital age, as the world is more globalised and information and communication technology takes root in every aspect of our lives. Thus, education is seen as the key to unlock the treasure trove of knowledge.

According to Hood (2001), apart from unfortunately leaking the questions, students also pick and drop copied materials at appropriate points during the examination according to plans. They exchange their question papers with answers jotted on them. They smuggle question papers out of the hall to mercenaries to answer for the students. Ajibola (2014)**,** on attitude towards education, stated that, teachers, parents, students and the public all place discipline at the top of their concern, with teachers ranking it at the top because it affects learning, their emotional lives

and it outweighs all other factors combined in determining teacher's success, Jeng (2011) advises that students should understand that discipline is one of the most fundamental characteristics of human beings in school, in our homes and indeed everywhere in the world. Stakeholders concur that ensuring discipline in schools is top on the agenda because one cannot acquire knowledge without character. Soet (2005), in his study, "Perception of the causes of indiscipline among students in Mt. Elgon district," asserts that schools need discipline, as discipline problems occur when a student refuses to obey the rules of the school. Rules that deal with human actions will eventually be broken and require some sort of punishment.

Discipline is crucial in school, in work workplace, and in general life situations. Therefore, in view of this assertion; Kochhar (2007) opines that the principal holds the major position on influencing the punctuality level of the teachers through effective and efficient supervision of teachers' lesson plan and lesson note, punctuality, adherence to curriculum content, evaluation of students and conduct of extra-curricular activities. He stressed that the principal, as the head of a school, is the architect of the quality of activities in the schools, and the quality of academic achievement of students and teachers' dedication to duties depend on the supervisory role of the principal. According to Kwajo (2011), teachers' punctuality in educational institutions is determined through:

i. Supervising teachers' lesson notes and making sure that teachers use appropriate teaching methods and instructional aides.
ii. Organising mini-teaching within the teachers and allowing teachers to go to conferences, seminars and workshops.
iii. Monitoring of teachers' punctuality to school and to teach in the class.
iv. Supervising teachers' evaluation of students and conduct of extra-curricular activities.
v. Establishment of cordial school and community relationship

Objectives of the Study

1. Assess the maintenance of examination ethics in the management of public Secondary Schools in Jigawa state
2. Determine the maintenance of punctuality in public Secondary Schools in Jigawa State

Research Questions

The following research questions were raised:

1. To what extent do examination ethics comply in public secondary schools in Jigawa State?
2. In what ways are punctual students being rewarded in public secondary schools in Jigawa state?

Hypotheses

The following null hypotheses were formulated:

1. There is no significant difference in the opinions of teachers, principals and supervisors on the maintenance of examination ethics in public secondary schools in Jigawa State.
2. There is no significant difference in the opinions of respondents on the maintenance of punctuality in public secondary schools in Jigawa State.

Research Methodology

A descriptive survey research design was adopted for the study. The population of the study was 6925, and the total sample size was 288. A simple random sampling technique was used. The research instrument used for the collection of data was a questionnaire. The data were analysed and interpreted through the use of analysis of variance (ANOVA) at the significance level of 0.05. Hypothesis is retained when p value<0.05 and rejected when p value>0.05 at the level of significance, respectively.

Answers to Research Questions

Research Question One: To what extent are examination ethics complied with in public secondary schools in Jigawa State?

The responses of all the respondents were collated, analysed and presented in a table. Thus, the table below gives details.

Table I: Descriptive Statistics on the Maintenance of Examination Ethics in Public Secondary Schools in Jigawa State

S/N	ITEM STATEMENT	RESPONSES CATEGORY	AGREEED		UNDECIDED		DISAGREED	
			F	%	F	%	F	%
1	No student is allowed to enter the exam hall with foreign material	Teachers	238	92.3	3	1.2	16	6.2
		Principals	34	94.4	-	-	2	5.6
		Supervisors	12	92.3	-	-	1	7.7
2	School authorities set the standard for internal and external examination	Teacher	203	89	16	6	10	4
		Principal	32	88	3	8	1	3
		Supervisors	8	60	-	-	5	39
3	Sanctions are enforced on students who are caught cheating during an examination	Teachers	227	88	20	8	9	3
		Principals	31	86	4	11	1	3
		Supervisors	10	77	-	-	3	23
4	A conducive examination atmosphere is provided to enable students to write their exams comfortably	Teachers	228	88	13	3	16	6
		Principals	30	83	4	11	2	6
		Supervisors	6	46	-	-	7	53
5	Students are seriously cautioned to abstain from any form of examination malpractice in school	Teachers	231	50	13	5	12	5
		Principals	28	77	5	14	3	9
		Supervisors	11	85	-	-	2	15
6	Orientation is always organized before the	Teachers	228	88	13	5	17	7

	commencement of any examination	Principals	26	73	4	11	6	17
		Supervisors	9	69	2	15	2	15
7	Students are law abiding with regard to both internal and external examinations	Teachers	218	84	21	8	18	8
		Principals	30	83	1	3	5	14
		Supervisors	10	77	-	-	3	23
8	Teachers are very cautious in maintaining the habit of discipline before, during and after the examination	Teachers	225	88	20	8	11	4
		Principals	27	75	4	11	5	14
		Supervisors	10	77	1	8	2	16
9	Posters are always displayed in the school on better ways to write exams	Teachers	198	77	33	13	27	11
		Principals	25	70	7	19	4	11
		Supervisors	8	62	1	8	4	31
10	Phones are not allowed in to the exams hall by candidates	Teachers	216	84	18	7	21	9
		Principals	30	84	2	6	4	12
		Supervisors	10	77	-	-	3	23

Table 1 above shows that there was unanimous agreement of opinions between the respondents on items 1 to 3 in the table above, which assessed whether no student is allowed to enter the exam hall with foreign materials, the school authority sets a standard for internal and external examination and sanctions are enforced on any student caught cheating during examination. 92% of teachers, 94% of principals and 92% of supervisors agreed to item 1, 89% of teachers, 88% of principals and 60% of supervisors agreed to item 2, while 88% of teachers, 86% of principals and 77% of supervisors agreed to item 3. Items 4and 5 showed that 88% of teachers, 83% of principals agreed while 53% of supervisors disagreed, 50% of teachers, 77% of principals and 85% of supervisors agreed that conducive examination atmosphere is provided to enable students write their exams comfortably and Students are seriously cautioned to abstain from any form of examination malpractice in school. Item 6 and 7 in the table above showed that 88% of teachers, 73% of principals and 69% of supervisors agreed to item 6 that Orientation is always organized before the commencement of any examination, however 84%, of teachers, 83% of

principals and 77% of supervisors agreed that Students are law abiding about both internal and external examinations in public secondary schools. In items 8 and 9 88% of teachers, 75% of principals and 77% of teachers agreed on that Teachers are very cautious in maintaining the habit of discipline before, during and after examinations, while 77% of teachers, 70% of principals and 62% of supervisors agreed that Posters are always displayed in the school on better ways to write exams. Item 10 in the table above indicates that 84% of teachers, 84% of principals and 77% supervisors agreed that Phones are not allowed into the exam hall by candidates in secondary schools.

Research Question Two: In what ways are punctual students being rewarded in public secondary schools in Jigawa state?

Table II: Descriptive Statistics on the Maintenance of Punctuality in Public Secondary Schools in Jigawa State

S/N	ITEM STATEMENT	RESPONSES CATEGORY	AGREEED		UNDECIDED		DISAGREED	
			F	%	F	%	F	%
1	Students report to school before the hour of eight every morning	Teachers	222	86	17	7	12	5
		Principals	29	81	5	14	2	5
		Supervisors	10	77	-	-	3	23
2	Lessons are delivered with full attendance of the students	Teacher	206	80	16	6	30	12
		Principal	23	64	5	14	8	23
		Supervisors	10	77	-	-	3	23
3	No late arrivals is entertained in school	Teachers	217	84	17	7	22	9
		Principals	32	89	1	3	3	8
		Supervisors	9	68	1	8	3	23
4	There are cases of students arriving late coming in school	Teachers	216	85	20	8	19	7
		Principals	29	80	5	14	2	6
		Supervisors	7	77	-	-	3	23

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5	Punctual students are rewarded in the school	Teachers	208	81	27	11	20	8
		Principals	30	84	2	6	4	12
		Supervisors	7	54	2	15	4	31
6	No student goes out of the school during the break period	Teachers	201	78	22	9	33	13
		Principals	25	69	5	14	6	17
		Supervisors	9	61	2	15	3	23
7	Students leave school before school closes for the day	Teachers	173	67	22	9	62	24
		Principals	27	75	2	6	7	19
		Supervisors	7	54	1	8	5	38
8	The school authority takes strict action against any student who leaves school before the closing time	Teachers	213	83	13	5	29	11
		Principals	31	86	2	6	3	9
		Supervisors	10	77	1	8	2	16
9	Some students come to school at will	Teachers	189	73	18	7	49	19
		Principals	29	80	4	11	3	9
		Supervisors	7	54	2	15	4	31
10	The attendance of students during morning assembly is well appreciated	Teachers	201	78	8	3	48	19
		Principals	29	81	4	11	3	9
		Supervisors	9	69	1	8	3	23

Table II above shows 86% of teachers, 81%of principals and 77% supervisors in item 1 agreed that Students report to school before the hour of eight every morning, and in item 2, 80% of teachers, 64% of principals and 77 of supervisors agreed that Lessons are delivered with full attendance of the students, therefore this indicates that there is unanimous agreement in the opinions of respondent in item 1 and 2. In items 3 and 4, 84% of teachers, 89% of principals and 68% of supervisors opined that no late coming is entertained in the school, and 85% of teachers, 80% of principals and 77% of supervisors are of the view that there are cases of students late coming to school. Items 5 and 6, 81% of teachers, 84% of principals and 54% of supervisors agreed in item 5 that Punctual students are rewarded in the school, item 6 showed that 78% of

teachers, 69% of principals and 61% of supervisors agreed on that no student goes out of the school during the break period. Item 7 and 8, 67% of teachers, 75% of principals and 54% of supervisors agreed Students leave school before school closes for the day in 7 specifically, while 83% of teachers, 86% of principals and 77% of supervisor's support that School authority takes strict action against any student who leaves school before the closing time. In items 9 and 10, 73% of teachers, 80% of principals and 54% of supervisors agreed that students come to school at will, while in item 10,78% of teachers, 81% of principals and 69% of supervisors support the view that attendance of students during morning assembly is well appreciated.

Hypotheses Testing

The test of hypotheses was carried out using one-way Analysis of Variance (ANOVA).

HO1: States that there is no significant difference in the opinions of Teachers, Principals and Supervisors on the maintenance of examination ethics in public secondary schools in Jigawa State

Table III: Summary of the Analysis of Variance Statistics (ANOVA) on the Maintenance of Examination Ethics in Public Secondary Schools in Jigawa State.

Status	Sum of Squares	df	Mean square	F	Prob.	f.critical
Between Groups	36.401	2	18.200	.810	.446	2.69
Within Groups	6827.854	304	22.460			
Total	**6864.254**	**306**				

The table III above shows that the probability level of significance p(.446) is greater than 0.05. This means that there is no significant difference in the opinions of respondents on the Maintenance of Examination Ethics in public secondary schools in Jigawa State. Therefore, the null hypothesis is retained.

HO II: Hypothesis I states that there is no significant difference in the opinions of respondents on the maintenance of punctuality in public secondary schools in Jigawa State.

Table IV: Summary of the Analysis of Variance Statistics (ANOVA) on the Maintenance of Punctuality in Public Secondary Schools in Jigawa State.

Status	Sum of Square	df	Mean square	F	Prob.	f. critical
Between Groups	255.151	2	127.576	4.726	.010	2.69
Within Groups	8207.136	304	26.997			
Total	**8462.287**	**306**				

The table IV above shows that the probability level of significance p(.010) is less than 0.05. This means that there is a significant difference in the opinions of respondents on the Maintenance of punctuality in public secondary schools in Jigawa State. Therefore, the null hypothesis is rejected.

Findings of the Study

The study revealed that;

1. There was effective maintenance of examination ethics in public secondary schools in Jigawa State because the school authority set standards for both internal and external examinations, orientation was always organised before the commencement of any examination in the school, and this made students to be law-abiding about both internal and external examinations.
2. There was ineffective maintenance of punctuality in public secondary schools in Jigawa State, and this was because the measures which the school authority took to ensure that students are punctual were not satisfactory, and this made students come to school at will and leave school before school closed.

Recommendations

Based on the results of the findings presented so far, the following recommendations were proffered:

1. Posters, lectures and videos that have a direct relevance to examination ethics should be prepared and presented/displayed to the students by the school authorities to enable them to possess the pre-requisite knowledge of examination guidelines in the schools. In the

area of lectures/orientation, a resource person can be invited to deliver the lectures with the sole aim of maintaining the ethical guidelines of examinations in the school system.

2. All those who have a stake in the affairs of education should work together to provide concrete and realistic measures of bringing punctuality in public secondary schools back to life through frequent monitoring and assessment of attendance.

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ENHANCING CYBERSECURITY AWARENESS AND EDUCATION TO MITIGATE CYBER FRAUD AMONG NIGERIAN UNDERGRADUATES

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ABTRACT

This study investigates the rising incidence of cyber fraud among students in tertiary institutions in Kwara State, Nigeria, particularly in the context of increased digital engagement during the COVID-19 pandemic. Utilising a qualitative survey design, data were collected from 72 lecturers across various public institutions. The findings reveal three primary intervention strategies: the integration of cybersecurity education into the curriculum, the implementation of comprehensive cybersecurity awareness campaigns, and the establishment of legal enforcement and rehabilitation programs. Participants emphasised the necessity of embedding digital ethics and literacy within educational frameworks to equip students with the knowledge to navigate online risks responsibly. Additionally, the study highlights the importance of strong institutional policies and cryptographic techniques to enhance digital security. By adopting a multifaceted approach that combines education, awareness, and policy enforcement, this research aims to foster a secure digital environment, ultimately reducing students' involvement in cyber fraud.

Introduction

The growing menace of cyber fraud has become a major global concern, as incidents of financial losses, intellectual property theft, and personal identity fraud have become widespread among individuals, corporate organisations, and governments. This surge in cybercrime is closely

tied to the rapid digital transformation of businesses and the increasing dependence on online platforms. In recent years, particularly during the COVID-19 pandemic, there has been an unprecedented shift toward technology-driven solutions, such as telecommuting and remote learning, to keep people and businesses connected. The pandemic also accelerated the digitisation of products and services, the rise of e-commerce, and the adoption of online business continuity strategies. Consequently, more people are now online than ever before, with the World Economic Forum reporting a 50% increase in internet traffic since April 2020, when the pandemic first took hold.

This widespread digital migration has underscored the need for individuals to acquire more IT knowledge and skills for survival. For students, in particular, technology is now a fundamental part of education. To thrive as 21st-century learners, they must possess technological literacy. However, this increased exposure to the digital world has not only empowered learners to solve academic problems but has also led some to misuse their skills. Many youths, especially students, have begun leveraging their technological abilities to engage in cyber fraud.

Cyber fraud refers to crimes committed online through platforms such as email and social media, including identity theft, phishing, and hacking schemes designed to steal money (Adebayo & Ogunlade, 2019). Among Nigerian youth, cyber fraud has become a prevalent and illegal means of making money. It involves deceiving people on the internet for personal gain, whether financial, social, or otherwise. Despite the opportunities provided by technology, many undergraduates in Nigeria have turned to cyber-fraud, reflecting a complex combination of socio-economic pressures, technological advancements, and a lack of awareness about the legal and ethical ramifications of such activities.

Several factors contribute to the involvement of Nigerian undergraduates in cyber fraud. Many students face financial difficulties due to the high cost of education and living expenses, driving them to seek illicit sources of income (Adewale, 2018). Additionally, widespread access to the internet and the growing reliance on digital platforms for communication and financial transactions provide fertile ground for cybercrime. Tech-savvy students, in particular, may exploit these opportunities for personal gain (Oluwaseyi et al., 2020). Unfortunately, a significant number of undergraduates lack proper education on cybersecurity, leaving them vulnerable to manipulation by experienced cybercriminals. The absence of awareness programmes within educational institutions exacerbates this problem (Adebayo & Ogunlade, 2019).

Peer pressure and association with criminal networks, both within and outside academic environments, further lure undergraduates into cyber fraud (Olumide et al., 2021). However, engaging in such illegal activities comes with serious consequences. Students involved in cyber fraud risk severe legal penalties, including imprisonment and hefty fines, as outlined in the Nigerian Cybercrime (Prohibition, Prevention, etc.) Act of 2015 (National Assembly, 2015). Additionally, participation in cyber fraud can tarnish students' academic reputations and jeopardize their future career prospects. Employers increasingly scrutinize candidates' online activities, and a criminal record can have long-lasting effects on an individual's professional life. Moreover, instances of cyber fraud among students can damage the reputation of educational institutions, leading to a loss of trust from stakeholders and potential consequences for institutional accreditation.

Ola Olukoyede, Chairman of the Economic and Financial Crimes Commission (EFCC), has described cybercrime as a "menace and cankerworm" in Nigerian society. He noted that cybercrime is so widespread that "seven out of 10 Nigerian students" are involved in it (2024). If the current trend continues, more than 70% of Nigerian youths could soon become ex-convicts, further exacerbating the issue. In light of this alarming situation, this study investigates strategies to reduce the prevalence of cyber fraud among undergraduates in Kwara State.

Theoretical Explanation

The Differential Opportunity Theory, developed by Cloward and Ohlin (1960), builds on the ideas of anomie, popularized by Emile Durkheim, and strain, as articulated by Robert Merton. Cloward and Ohlin introduced the concept of "opportunity structures" to examine criminal behaviour. They argued that while individuals across all social strata share the same goal of success, the opportunities to achieve these goals are not equally available, especially for those in lower socio-economic classes. When individuals face socio-economic strain, they may resort to criminal behaviour if opportunities for such behaviour exist. According to this theory, the availability of opportunities not only influences one's likelihood of committing a crime but also determines the type and level of crime they might engage in. For example, in communities with limited access to education or technological resources, individuals who feel blocked from achieving their goals may be less likely to commit crimes due to the absence of opportunities.

In essence, the theory suggests that not all opportunities lead to crime, and not all crimes require opportunities. However, opportunities play a significant role in enabling criminal

behaviour. Applying this theory to the current realities of youth involvement in cybercrime in Nigerian society, it can be argued that the rise in cybercrimes among students and undergraduates is linked to increased access to education and technological resources. The internet provides an anonymous platform that many young people exploit to commit cybercrimes. Differential opportunities in internet crime are evident in the varying levels of involvement among youths in different types of cyber fraud. For instance, some youths engage in more sophisticated forms of cybercrime due to their higher level of education and ICT expertise.

Despite its influence, the Differential Opportunity Theory has faced criticism. Critics argue that it overlooks how changes in lifestyle and work routines affect the opportunity structure for crime, suggesting that opportunity itself may be influenced by other factors rather than being the sole determinant of criminal behaviour.

Purpose of the Study

This study examined lecturers' suggested intervention approach to reducing student involvement in cyber-fraud among tertiary institution students in Kwara State, Nigeria.

Research Questions

One research question was supposed to guide the study.

a. What are the lecturers' suggested intervention approaches to curbing cyber-fraud among tertiary institution students in Kwara state?

Methodology

The study employed a qualitative survey design, utilising open-ended questions to gather data. In qualitative research, purposive or purposeful sampling is often chosen when the goal is to gain a deep understanding of a particular phenomenon. This approach emphasises depth over breadth, focusing on obtaining nuanced insights rather than broad generalisations. The design is well-suited to exploring complex issues in a detailed manner, making it appropriate for this study.

The population for the research included lecturers from seven universities, seven polytechnics, and six colleges of education in Kwara State. The decision to focus on public institutions aligns with Samob's (2010) assertion that researchers can select a sample if it aligns with the specific characteristics of interest. In this case, the target population comprised all 24 tertiary institutions in Kwara State. These institutions were purposively selected for the study, reflecting a total population of 13,821 lecturers (as reported by the Human Resources Department in 2023 from all the sampled institutions).From this total, three lecturers from each institution

were selected, resulting in a sample size of 72 lecturers. The study involved a total of 72 participants, consistent with Creswell and Creswell's (2014) emphasis on the importance of purposeful sampling in qualitative research. Purposeful sampling is particularly valuable when the goal is to gain a deep understanding of a specific phenomenon, as was the case in this study.

A qualitative method was employed, utilising an open-ended interview approach developed by the researchers. Thematic data analysis was used to process the data collected from the 60 participants. Following the guidelines outlined by Creswell (2014), the researcher adhered to the stages of data analysis. To enhance the efficiency of this process, NVIVO 10, a qualitative data analysis software, was utilised. As Creswell (2014) notes, NVIVO assists in the storage, sorting, coding, and analysis of data, as well as in generating representations of the findings.To ensure confidentiality, pseudonyms were used to report the participants' suggestions, following the advice of McCann and Clark (2003). Creswell (2009) further stresses the importance of protecting the anonymity of individuals, roles, and incidents in research. This was achieved by using pseudonyms for both the participants and the locations where data were collected.

Results

The interview data wereanalysed using a thematic approach, which allowed the findings to be organised into themes, sub-themes, and even sub-sub-themes, as well as represented through graphical models. This method provided a structured way to capture and present the perspectives and actual words of the 72 informants, facilitated by the use of NVivo 12 qualitative analysis software.

Lecturers' Suggested Interventions to Reduce Undergraduates' Involvement in Cyber-Fraud

The study explored the intervention strategies proposed by lecturers to curb students' involvement in cyber-fraud. Three main themes emerged from their suggestions:

1. **Educational Programmes**
2. **Cybersecurity Awareness**
3. **Rehabilitation, Enforcement, and Punishment Approaches**

These themes and their corresponding sub-themes are systematically presented and discussed in the following sections.

Fig. 1: Summary of mapping three intervening approaches to reducing undergraduates' involvement in cyber-fraud.

The study explored intervention strategies proposed by lecturers to curb students' involvement in cyber-fraud, revealing three key approaches: Educational programmes would integrate digital ethics and literacy into the curriculum, equipping students with knowledge to avoid fraudulent activities. Cybersecurity awareness campaigns and workshops would inform students about the risks and consequences of cyber-fraud, fostering responsible online behaviour. Lastly, a blend of legal enforcement and rehabilitation programs was suggested to deter offenders while offering corrective measures for reintegration. These approaches aim to holistically address and reduce cyber-fraud among students.

Educational programmes

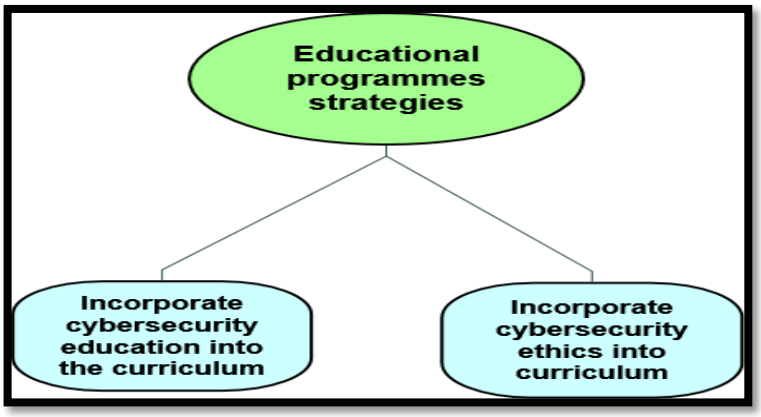


Fig.2:Thematic Mapping of educational programs strategies

All participants emphasised that education is key to development and solving societal problems, including cyber-fraud. Addressing such issues superficially offers only temporary relief, whereas tackling the root causes through education provides a lasting solution. Therefore, the participants unanimously proposed that quality education can significantly reduce cyber-fraud among Nigerian students.

The uniqueness of this study lies in its proposal to integrate cybersecurity education specifically within the General Studies (GNS/GSE) curriculum of tertiary institutions. This

approach not only emphasises the broad and interdisciplinary nature of General Studies but also introduces cybersecurity education as a foundational element for all students, regardless of their major. Unlike previous research, which may have focused on isolated training or awareness programmes, this study advocates for a comprehensive, curriculum-based strategy that empowers students by embedding cybersecurity knowledge and ethical considerations directly

into their academic journey.

By incorporating cybersecurity education into the GNS/GSE framework, students will gain exposure to the causes, consequences, and risks associated with cyber-fraud, helping them to develop critical thinking, analytical, and ethical decision-making skills. This method stands out as a proactive, long-term solution for curbing cyber-fraud, addressing the issue at its root by educating students before they potentially engage in such activities. Furthermore, the integration of mandatory cybersecurity courses and regular workshops not only enhances student awareness but also extends the reach of cybercrime prevention to the larger community, fostering a culture of digital responsibility and safety.This innovative approach aligns with the findings of Levi, Doig, Gundur, Wall, and Williams (2017), who emphasise the importance of security education as a tool for reducing cybercrime. However, the study distinguishes itself by presenting a structured, institutionalised framework for delivering cybersecurity education across disciplines, which could lead to a more sustained and widespread impact on reducing cyber-fraud among students. Participants in this study unanimously supported the infusion of cybersecurity education into the curriculum, recognising it as a vital strategy to raise awareness, prevent cyber-fraud, and promote ethical behaviour among students, thereby contributing to a more secure digital environment.

Cybersecurity Awareness Approach

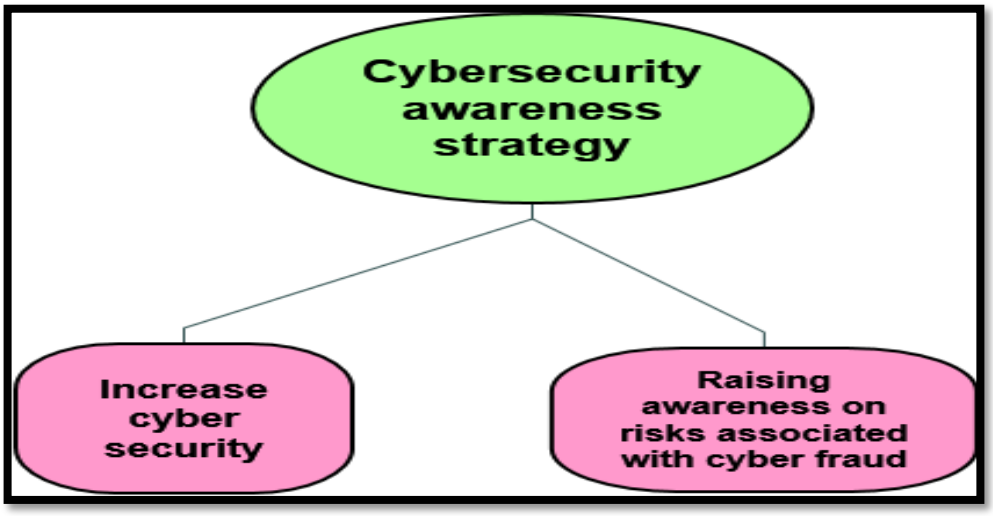


Fig.3. Thematic Mapping of Cybersecurity Awareness Strategy

Cybersecurity awareness encompasses the collective knowledge, attitudes, and behaviours adopted by individuals and organizations to safeguard against cyber threats. It goes

beyond technical know-how to include a broader understanding of risks, best practices, and the ability to make informed decisions regarding digital security (Dunn, 2018). In this context, digital literacy programs, particularly those focused on cybersecurity, play a pivotal role in equipping students with the skills necessary to navigate the online world responsibly. By fostering critical thinking, students can evaluate online information, recognize risks, and make well-informed decisions, which aligns with Jones and Brown's (2021) emphasis on the importance of digital literacy in preventing cybercrime.

In this study a detailed exploration of cybersecurity awareness as a comprehensive strategy for preventing cyber-fraud among Nigerian undergraduates. While existing literature highlights the importance of cybersecurity, this study uniquely combines personal cyber hygiene practices, institutional policies, and cryptographic techniques to present a holistic approach to curbing cyber-fraud. Participants identified the need for educational institutions and businesses to enforce strong password policies and increase the security of digital platforms. This approach acknowledges that limiting access to passwords and improving security measures can discourage hackers from compromising systems.

Moreover, cryptography, suggested by 53 participants, emerged as a key component in raising awareness about the risks associated with cyber-fraud. Cryptographic techniques, particularly encryption, offer robust protection by transforming sensitive data into unreadable code, making it difficult for hackers to exploit vulnerabilities. This proactive defense mechanism, if implemented in educational, financial, and business institutions, can significantly reduce unauthorised access and cyber-fraud activities such as identity theft.This study also highlights the importance of cybersecurity awareness campaigns, which should focus on both the negative consequences of cyber-fraud and the positive opportunities available online. Participants emphasised that proper education and awareness campaigns are crucial to informing individuals about the risks and consequences of cybercrime. By combining these varied intervention strategies,strong password policies, cryptographic methods, and comprehensive awareness campaigns,this study presents an innovative approach to fostering a more secure digital environment for students and institutions alike.

Rehabilitation, Enforcement and Punishment

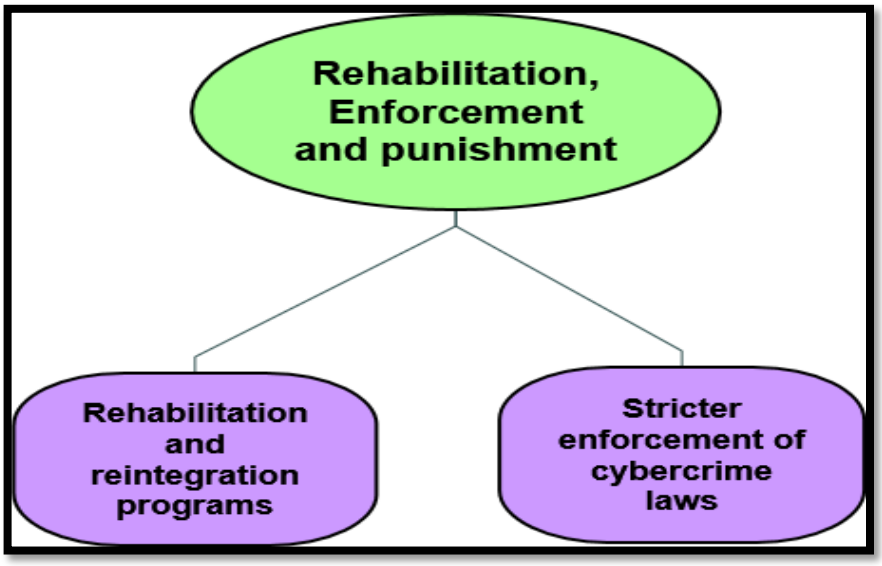


Fig.4: Thematic Mapping of the need for Rehabilitation, Enforcement and Punishment

All respondents agreed that rehabilitation, enforcement, and punishment are essential strategies for combating undergraduate involvement in cyber-fraud. Each element plays a critical role in addressing the root causes, deterring potential offenders, and fostering a culture of cybersecurity awareness.

Rehabilitation, according to the participants, involves understanding the motivations behind students' engagement in cybercrime, such as financial pressures, lack of ethical education, or thrill-seeking behaviour. By addressing these underlying factors, authorities and educators can design tailored interventions. Educational programs focusing on cybersecurity awareness, ethical hacking courses, and mentorship initiatives were suggested as effective ways to reshape students' perspectives, redirecting their technical skills into positive, lawful avenues. Additionally, mental health support was emphasised, as some students may turn to cybercrime due to personal struggles. Access to counselling services would provide emotional and psychological support, steering students toward more constructive choices.

Regarding enforcement, participants highlighted the importance of strengthening both societal and institutional legal frameworks. They emphasised that cybercrime laws must be comprehensive, clearly defined, and rigorously enforced to prevent cybercrime. Establishing specialised cybersecurity task forces that can investigate and prosecute cyber offences was recommended by 98% of the participants. These units could collaborate with educational institutions to identify and address threats originating from within student communities.

Punishment, as proposed by participants, serves as a deterrent to potential offenders. Communicated consequences, such as fines, probation, or imprisonment for severe offences, would discourage students from participating in cyber-fraud. Publicising legal actions taken against cybercriminals could further deter future offences. Additionally, academic sanctions, including penalties or suspension, would reinforce the importance of ethical behaviour within the academic environment.The findings is uniquely demonstrated in the comprehensive integration of rehabilitation, enforcement, and punishment as a unified strategy to address cyber-fraud. Unlike prior studies that focused on individual aspects, this research presents a holistic approach, emphasising that combining these elementseducational programmes, mental health support, robust enforcement, and proportionate punishment,can create a sustained impact. By fostering ethical behaviour, legal compliance, and cybersecurity awareness, educational institutions can not only address the immediate issue of cyber-fraud but also work toward preventing future instances. This strategy supports the development of a secure, responsible, and informed student community.

Conclusion

The study underscores the urgent need for a proactive stance against cyber fraud in educational institutions. By integrating cybersecurity education into the curriculum and promoting awareness, institutions can empower students to make informed decisions online. Furthermore, the combination of legal enforcement and rehabilitation strategies is essential to deter potential offenders and foster a culture of accountability. Based on this, it was recommended that:

a. Educational institutions should incorporate cybersecurity education into their General Studies curriculum to ensure all students receive foundational knowledge on digital safety and ethics.
b. There is a need for the school management to organise regular workshops and campaigns to raise awareness about the risks of cyber fraud and the importance of personal cyber hygiene practices.
c. School management must develop and enforce robust cybersecurity policies, including strong password protocols and access controls, to protect sensitive information.
d. Tertiary institutions should collaborate with law enforcement agencies to establish clear legal frameworks and rehabilitation programmes for offenders, promoting a culture of cybersecurity awareness and responsibility.
e. Ongoing research should be conducted to assess the effectiveness of implemented strategies and adapt to the evolving landscape of cyber threats.

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INFLUENCE OF MOBILE LEARNING APPS ON STUDENT ENGAGEMENT AND COMMUNICATION IN TERTIARY INSTITUTIONS IN ANAMBRA STATE

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ABTRACT

The study is on the influence of mobile of learning apps on student engagement and communication in tertiary institutions in Anambra state. It adopted the descriptive survey design. The study was guided by three basic objectives. Consequently, three research questions and one hypothesis were formulated. Students and lecturers from NnamdiAzikiwe University and OdimegwuOjukwu University in Anambra state formed the population. A sample of 300 respondents (150 respondents from each of the two universities) was drawn using the convenience sampling technique. Data were elicited by means of a researcher-designed questionnaire tagged Mobile Learning App and Student Engagement and Communication Questionnaire (MOLASECQ). The instrument was validated by three lecturers from Anambra State University and was pilot-tested with a sample of 20 respondents which yielded a Cronbach-alpha reliability of 0.82. The data collection process was by direct delivery method and lasted for 10 days. Data analysis was conducted by the application of mean and standard deviation (SD) for the research questions and Chi-Square for the hypothesis. Results indicated that mobile learning apps helped to improve student engagement through increased interest and group work. Similarly, the study found that communication was improved as students received immediate feedback from lecturers regarding their work due to the application of mobile learning apps. It was recommended among other things that the authorities of tertiary institutions should harness their resources to provide befitting mobile learning apps for use, and that some challenges observed, such as technical hitches, should be addressed to maximise the benefits of mobile learning apps.

Introduction

In recent years, the landscape of education has undergone significant transformations, particularly with the advent of technology. In Nigeria, tertiary institutions are increasingly recognising the importance of student engagement and communication as critical components of effective learning. However, poor student engagement and communication remain pervasive issues that can have detrimental effects on academic performance and overall student satisfaction. Poor student engagement often leads to a lack of motivation and interest in academic activities. When students are not actively involved in their learning processes, they are less likely to participate in discussions, collaborate with peers, or seek help from instructors. This disengagement can result in lower academic performance, increased dropout rates, and a general sense of isolation among students (Hwang &Tsai,2021). Furthermore, ineffective communication can exacerbate misunderstandings between students and educators, leading to frustration and a negative learning environment. The consequences of these issues are particularly concerning in the context of Nigeria's educational system. Disengaged students may struggle to develop critical thinking and problem-solving skills, which are essential for success in the 21st century. Additionally, poor communication can hinder the development of interpersonal skills, making it difficult for students to navigate professional environments after graduation (Gillies, 2022).

Various initiatives have been implemented to enhance student engagement and communication in Nigerian tertiary institutions. Traditional methods, such as face-to-face interactions and group discussions, have been employed, but these approaches have not consistently yielded the desired results. Many students still report feeling disconnected from their peers and instructors, indicating that more innovative solutions are needed. Moreover, the COVID-19 pandemic has further highlighted the limitations of conventional teaching methods, as institutions were forced to pivot to online learning. While this shift provided some opportunities for engagement through digital platforms, many students faced challenges related to access and familiarity with technology, which hindered effective communication and collaboration (Tyurikov, 2021).

In light of these challenges, mobile learning applications present a promising solution for enhancing student engagement and communication in Nigerian tertiary

institutions. The ubiquity of smartphones among students allows for greater accessibility to educational resources and communication tools. Mobile learning apps can facilitate interactive learning experiences, enabling students to engage with course materials and collaborate with peers in real-time, regardless of their physical location (Pechenkina, 2017). Furthermore, the interactive nature of mobile apps can foster better communication between students and educators, promoting a sense of community and support that is crucial for academic success. It is based on the foregoing that the researcher is motivated to take up the study to examine how the application of mobile apps will help to improve student engagement and communication in higher institutions in Anambra state.

Statement of the Problem

There has been an increasing recognition of the critical role that student engagement and communication play in academic success. However, despite the increasing awareness, many tertiary institutions in Nigeria, including Anambra state, continue to struggle with low levels of student engagement and communication. Poor engagement often manifests as a lack of participation in academic activities, which contributes to declining academic performance and increased dropout rates. Additionally, ineffective communication between students and educators exacerbates feelings of isolation and disconnection, creating a negative learning environment that hampers collaboration and support.

Current efforts to enhance student engagement, such as traditional face-to-face interactions and workshops, have not yielded the desired results. Many students still feel unmotivated and unsupported in their learning journeys, indicating a pressing need for more innovative and effective solutions. The transition to online learning during the COVID-19 pandemic highlights significant gaps in technology access and familiarity, further complicating the issue.In this context, the potential of mobile learning applications to foster greater student engagement and improve communication remains largely untapped. As these applications become increasingly prevalent in the digital age, there is a need to explore how they can be effectively integrated into the educational landscape of Nigeria to address the challenges of disengagement and communication breakdown. Consequently, the study aims to investigate the impact of mobile learning

apps on enhancing student engagement and communication in tertiary institutions in Anambra State, Nigeria.

Objectives of the Study

The study is designed to:

1. Assess the impact of mobile learning Apps on student engagement in tertiary institutions in Anambra state
2. Investigate the role of mobile learning apps in enhancing communication in tertiary institutions in Anambra state
3. Identify barriers to effective mobile App implementation in tertiary institutions.

Research Questions

1. What is the impact of mobile learning App on student engagement in tertiary institutions in Anambra state?
2. How do mobile learning Apps on student communication in tertiary institutions in Anambra state?
3. What factors militate against the effective implementation of mobile learning Apps in tertiary institutions in Anambra state?

Hypothesis

1. There is no significant influence of mobile learning Apps on student engagement and communication in tertiary institutions in Anambra state.

Literature Review

Conceptual Framework

Mobile Learning and Mobile Learning App

Many authors have posited different definitions of a mobile app. For example, Sharples et al. (2023) defined mobile learning as the processes of coming to know through conversations across multiple contexts among people and personal interactive technologies. This definition emphasises the social and contextual aspects of learning facilitated by mobile devices. Similarly, Baran (2024)describes mobile learning as a method that intersects mobile computing and e-learning, focusing on the use of mobile

technology to achieve anytime, anywhere, and ubiquitous learning. This definition underscores the flexibility and accessibility that mobile learning applications provide. Moreover, Chikere (2017) posited that mobile learning is a natural evolution of e-learning, emphasising the mobility of learners and the personalised nature of learning experiences that mobile applications can offer. This perspective highlights the adaptability of mobile learning to individual learning needs.

Sequel to the foregoing definitions, mobile learning can be defined as the process of learning that takes place using mobile devices such as smartphones, tablets or laptops. It allows learners to access educational content and resources anytime and anywhere, making it flexible and convenient. This approach to learning often includes apps, online courses and digital materials that support learning on the go. Mobile learning allows for interactivity among learners, promotes flexibility, convenience and allows for personalised learning experiences, accommodating various learning styles and preferences.

On the other hand, a mobile learning app is a software application that facilitates educational experiences and learning opportunities (Akpan-Atata&Enyene, 2020). These apps allow users to access courses, tutorials, quizzes and other educational resources anytime and anywhere in the world. They are digital platforms designed to facilitate education and training through mobile devices such as smartphones, tablets and laptops. These apps provide users with access to a wide range of educational resources, courses, and interactive learning experiences, enabling users to learn without any barriers. According to Kumar and Chand (2022), key features of mobile learning apps include accessibility, interactivity, personalised learning experiences, offline access, progress tracking and collaboration and social learning among others.

Student Engagement

Student engagement can be defined in various ways. Fredrick et al (2024) describe it as "the psychological investment that students make in their learning," emphasising the emotional and cognitive aspects that influence students' involvement in educational activities. Similarly, Zira (2018) characterises student engagement as a construct that identifies what students do, think about, and feel when learning, as well as

how teachers can enhance these experiences in instructional settings. This definition highlights the dynamic relationship between students and educators in fostering an engaging learning environment.

From the premises above, student engagement encompasses three primary dimensions: behavioural, emotional, and cognitive. Behavioural engagement refers to students' participation in academic activities, such as attending classes, completing assignments, and interacting with peers and instructors. Emotional engagement involves students' feelings towards their learning experiences, including their sense of belonging and motivation, while cognitive engagement pertains to the mental effort students invest in understanding and mastering the material (Fredricks et al., 2024). Engagement is not merely about attendance or participation; it reflects a deeper connection to the learning process. Engaged students are more likely to take ownership of their learning, seek out additional resources, and develop critical thinking skills, making this active involvement crucial for fostering a positive learning environment and enhancing overall educational outcomes.

The importance of student engagement cannot be overstated. Engaged students tend to achieve higher academic performance, demonstrate improved retention rates, and exhibit positive attitudes towards their education. Engagement is linked to various positive learning outcomes, including enhanced academic achievement, improved retention rates, and the development of critical skills. Students who are engaged are more likely to excel academically because they invest time and effort into their studies (Gunuc&Kuzu, 2015). Additionally, higher levels of engagement correlate with lower dropout rates; students who feel connected to their learning environment are more likely to persist. Engagement also fosters the development of essential skills such as critical thinking, problem-solving, and collaboration, which are vital for success in both academic and professional settings (Tan & Hew, 2016). Conversely, the absence of student engagement can lead to several detrimental outcomes. Disengaged students often experience lower academic performance, as they are less likely to perform well academically, leading to poor grades and a lack of understanding of the material (Fredricksset al., 2024). Moreover, disengagement is a significant predictor of dropout rates; students who feel disconnected from their learning environment are more likely to

leave school prematurely. Furthermore, a lack of engagement can foster feelings of apathy and disinterest in learning, which can have long-term effects on students' educational and career aspirations (Zira, 2018).

Communication

Communication is the process of exchanging information, ideas, thoughts, and feelings between individuals through verbal, non-verbal, and written means (Dusu, 2024). It is also seen as an interactive process that involves sharing knowledge and understanding, which is essential for effective teaching and learning (Asrar, 2018). In an educational setting, communication transcends mere transmission of information; it is a dynamic process that involves interaction between educators and students. Effective communication facilitates knowledge transfer, enhances understanding, and fosters a collaborative learning environment. This process encompasses various forms, including verbal communication (spoken or written), non-verbal cues (like body language and gestures), and visual aids (such as charts and diagrams), all of which together create a comprehensive learning experience (Fashola, 2017).

Effective communication in student learning is essential. First, it enhances understanding by helping students grasp complex concepts and ideas, making learning more accessible and effective. Furthermore, when educators communicate effectively, students are more likely to participate actively in discussions, ask questions, and express their thoughts, which leads to a more engaging learning environment.In addition, good communication enhances positive relationships between educators and students, creating a supportive atmosphere that encourages learning and personal growth. Moreover, effective communication allows for timely feedback, which is essential for students to understand their progress and identify areas needing improvement (Fashola, 2017).

In recent years, mobile learning applications have significantly enhanced communication in educational settings. These tools facilitate real-time interaction between students and educators, allowing for immediate feedback and support. Features such as discussion forums, instant messaging, and collaboration tools within mobile apps enable students to communicate effortlessly with their peers and instructors, fostering a sense of community and engagement. Mobile learning apps often include multimedia elements, such as videos and interactive content, which can help clarify complex

concepts and encourage discussions (Kumar & Chand, 2022). This increased connectivity and accessibility promote a more collaborative and participatory learning environment.

Factors Militating Against Effective Implementation of Mobile Learning Apps In Tertiary Institutions

The implementation of mobile learning apps in tertiary institutions holds promise for enhancing education, but several barriers hinder their effective use. Some of the challenges are discussed in the succeeding paragraphs.

a). **Lack of Adequate Infrastructure**: Many institutions face insufficient technological resources, such as unreliable internet and limited access to devices, which restrict students' ability to utilise mobile learning apps effectively (Alhassan&Andrew, 2020).

b).**Insufficient Training for Educators**: Some institutions often lack the skills to integrate mobile learning apps into their teaching. This gap leads to underutilization of technology, as lecturers and students may feel unprepared to use these tools effectively (Baker,2021).

c). **Resistance to Change**: Some lecturers and students resist adopting new technologies due to comfort with traditional methods or fear of the unknown. Overcoming this resistance requires fostering a culture that embraces innovation (Hwang, 2020).

d).Technical Issues: Problems' such as software bugs and compatibility challenges can frustrate users and diminish engagement with mobile learning apps. Institutions sometimes do not prioritise reliable applications and provide ongoing technical support, which limits the use of mobile learning apps(Alhassan&Andrew, 2020).

e).**Lack of Institutional Support**: Effective mobile learning implementation requires strong administrative commitment, including funding and strategic planning. Sometimes the needed support is not given, which often leads to fragmented approaches to mobile learning (Baker, 2021).

f**).Varying Levels of Digital Literacy**: Students and lecturers possess different levels of digital skills, which can create disparities in learning experiences. Institutions that do not assess and support students' digital competencies to ensure equitable access to mobile learning will normally suffer setbacks in mobile learning apps usage(Hwang, 2020).

Theoretical Framework

Constructivist Learning Theory

The constructivistLearning theory was propounded by Piaget (1954) and Vygotsky (1978). Constructivist Learning Theory posits that learners construct knowledge through experiences and reflections, emphasising the active role of the learner in the learning process. This theory suggests that learning is more effective when students are actively involved in their learning rather than passively receiving information. Going by the theory definition, mobile apps can facilitate constructivist learning by providing interactive and engaging content that allows students to explore, experiment, and collaborate with peers. Features such as discussion forums and collaborative projects within mobile learning apps promote social interaction and knowledge sharing, which are critical to the constructivist approach. By encouraging students to take ownership of their learning, mobile apps enhance engagement and communication, allowing learners to construct knowledge meaningfully.

Self-Determination Theory (SDT)

Self-determination theory was propounded by Deci and Ryan (1985).The Self-Determination Theory emphasises the importance of intrinsic motivation and the psychological needs for autonomy, competence, and relatedness in facilitating optimal learning and engagement. Based on the theory, mobile apps can support the principles of Self-Determination Theory by offering personalised learning experiences that empower students to make choices about their learning paths (autonomy), challenge them to develop their skills (competence), and foster connections with peers and instructors (relatedness). When students feel their needs for autonomy, competence, and relatedness are met through mobile learning apps, their intrinsic motivation increases, leading to higher levels of engagement and effective communication in the learning process.

Empirical Review

Al-Emran, Mezhuyev and Hamad's (2019) study was on the "Effectiveness of Mobile Learning Apps in Enhancing Student Engagement". The study investigated the impact of mobile learning applications on student engagement in higher education. The researchers developed a mobile app that included interactive features such as quizzes, discussion forums, and multimedia resources. Results revealed that students who used the

mobile app demonstrated significantly higher levels of engagement compared to those who relied on traditional learning methods. The app's interactive features encouraged active participation and collaboration among students. Additionally, the study found that the use of mobile applications positively influenced students' motivation and satisfaction with their learning experience. It was suggested that there is a need for further research to explore long-term impacts on academic performance and retention. The reviewed study highlighted the potential of mobile learning apps to enhance student engagement through interactive features. By fostering collaboration and active participation, mobile apps can create a more dynamic learning environment.

Similarly,Kearney and Maher(2020) studied the "Impact of Mobile Communication Tools on Student Collaboration". The empirical study examined the role of mobile communication tools in facilitating collaboration among students in a blended learning environment. The researchers focused on a mobile application that allowed students to engage in group discussions and share resources. Results indicated that the use of mobile communication tools significantly improved students' collaboration and engagement. Students reported feeling more connected to their peers and more willing to participate in group activities. The study also identified that real-time communication capabilities were crucial for enhancing collaboration, as they allowed students to coordinate effectively and share insights instantly. The study under review underscores the importance of mobile communication tools in fostering student collaboration and engagement. The findings suggest that mobile apps can bridge communication gaps, particularly in blended learning environments. However, the study calls for additional research to examine the effects of different types of mobile communication features on various aspects of student engagement.

Methodology

The study is a descriptive survey conducted in Anambra State. It was designed to examine the impact of mobile applications on student engagement and communication in educational settings. The descriptive survey method allows for the collection of quantitative data from a diverse group of participants, providing a comprehensive understanding of their experiences and perceptions. The target population for this study includes undergraduate students enrolled in various programmes at

NnamdiAzikiweUniversityand OdimegwuOjukwu University in Anambra state. A sample size of 300 respondents, comprising 30 lecturers and 270 students, was drawn from the two tertiary institutions using a convenience sampling technique. Data were elicited by means of a self-designed structured questionnaire tagged Mobile Learning App and Student Engagement and Communication Questionnaire (MOLASECQ). The questionnaire consists of sections A and B. SectionAfocuses on personal data of the respondents, and Section Bdeals with the specific objectives of the study. The instrument was validated by three lecturers from Anambra State University and was pilot-tested with a sample of 20 respondents, which yielded a Cronbach-alpha reliability of 0.82. The data collection process involved distributing the questionnaire to participants using the direct delivery method, and it lasted for 10 days. Data obtained were analysed using the mean and standard deviation (SD) for the research questions as well as Chi-Square for the hypothesis.

RESULTS

Research Question 1: What is the impact of mobile learning App on student engagement in tertiary institutions in Anambra state?

Table 1: Impact of Mobile Learning Apps on Student Engagement in Tertiary Institutions

S/N	Statement	SA	A	D	SD	∑Fx	N	$\bar{X}$	Std	Remark
1.	Mobile learning apps make students interested in the lessons	148	126	17	09	957	300	3.19	.224	Agree
2.	Students enjoy the interactive features provided by mobile learning apps	147	149	02	02	1041	300	3.47	.536	Agree
3.	The apps encourage students in class discussions	156	126	13	05	1053	300	3.51	.315	Agree
4.	Students learn more and better using the apps than traditional mode	165	128	05	02	1026	300	3.42	.663	Agree

5.	The use of mobile apps enhances students' group work	159	126	10	05	1100	300	3.67	.321	Agree

Criterion Mean: 2.50 **Cumulative Mean: 3.42**

Table 1 reveals that mobile apps havea positiveimpact on student engagement. This is seen as all the items have a mean value above the criterion mean of 2.50. Notable among the impacts is the fact thatmobile learning apps encourage students in class discussions with a mean score of 3.47.

Research Question 2- How do mobile learning Apps impact student communication in tertiary institutions in Anambra state?

Table 2: Influence of Mobile Learning Apps on Communication in Tertiary Institutions

S/N	Statement	SA	A	D	SD	∑Fx	N	$\bar{X}$	Std	Remark
1.	Mobile learning apps enhance the communication of students with lecturers	143	120	20	17	906	300	3.02	.425	Agree
2.	Students easily share ideas with their mates via the apps	135	141	15	09	861	300	2.87	.430	Agree
3.	Mobile learning apps enhance group work and communication.	178	117	03	02	942	300	3.14	.432	Agree
4.	The use of mobile apps facilitates immediate feedback from lecturers.	168	116	11	05	990	300	3.30	.470	Agree
5.	The apps help to improve students' communication skills.	129	141	26	04	882	300	2.94	.392	Agree

Criterion Mean: 2.50 **Cumulative Mean: 3.12**

Evidences in Table 2 show that mobile learning apps positively influence communication. This is typified by the fact that all the items are valid, as each has a mean

value above the 2.50 criterion. In the same vein, Table 2 also shows that the use of mobile apps facilitates immediate feedback from lecturers with a mean of 3.30among others.

Research Question 3- What factors militate against the effective implementation of mobile learning Apps in tertiary institutions in Anambra state?

Table 3: Factors Militating Against Effective Implementation of Mobile Learning Apps in Tertiary Institutions

S/N	Statement	SA	A	D	SD	∑Fx	N	$\bar{X}$	Std	Remark
1.	Poor access to internet connectivity	143	120	23	14	906	300	3.02	.425	Agree
2.	Poor digital literacy on the part of lecturers and students	135	141	15	09	861	300	2.87	.430	Agree
3.	Technical hitches with some apps hinder effective use	169	127	03	01	952	300	3.17	.432	Agree
4.	Poor support from the school regarding the use of the apps in pedagogy	158	130	10	02	990	300	3.30	.470	Agree
5.	Resistance to change hinders the effective use of some apps in schools	119	145	25	11	882	300	2.94	.392	Agree

Criterion Mean: 2.50 **Cumulative Mean: 3.05**

Table 3 reveals that poor support from schools regarding the use of the apps in pedagogy (3.30) and technical hitches with some apps hinder effective use (3.17) are the leading factors that impede effective use of mobile learning apps in tertiary institutions. All other factors are equally valid, as each has a mean score above the 2.50 criterion mean.

Hypothesis One: There is no significant influence of mobile learning app on student engagement and communication in tertiary institutions in Anambra state**.**

Table 4: Chi-Square Summary of the Influence of Mobile Learning App on Student Engagement and Communication in Tertiary Institutions

Variables	Fo	Fe	(Fo-Fe)^2	$\frac{(Fo-fe)^2}{Fe}$	Df	A	X^2 cal	X^2 table
Engagement	185	150	1225	8.167	**1**	**0.05**	**16.334**	**3.84**

Communication	115	150	1225	8.167
Total	**300**	**300**	**2450**	**16.334**

Data in Table 4 show that our calculated X^2 value of 16.334 is greater than table value of 3.84 at 0.05 level of significance, and as such the null hypothesis is rejected. This means that there is a significant influence of mobile learning apps on student engagement and communication in tertiary institutions in Anambra state.

Discussion

The study is on the influence of mobile learning apps on student engagement and communication in tertiary institutions in Anambra state. The essence was to examine if the use of mobile apps in instructional pedagogy would positively impact student engagement and communication. The analysis of research question one on mobile apps and student engagement found that the application ofmobile learning apps enhances student engagement. This is because the mobile app makes lessons interesting and facilitates group work, among other benefits. These findings align with Gunuc and Kuzu(2015), who asserted that students who are engaged are more likely to excel academically because they invest time and effort into their studies due to interest derived.

In the same manner, it was gathered that mobile learning apps enhance communication. Students who are exposed to mobile learning apps were able to communicate better and faster and they received immediate feedback from lecturers. These findings are supported by the notion ofFashola(2017), who stated that effective communication allows for timely feedback, which is essential for students to understand their progress and identify areas needing improvement. The study equally identified some factors that pose threats to effective implementation of mobile learning apps to include resistance to change, varying levels of digital literacy, among others. These findings are in agreement with Hwang (2020), who noted that long-term adoption of the traditional mode of instruction has made many students and lecturers fear adapting to the new normal in education, which is the use of technology in the instructional process. The resistance, which is rooted in fear, often makes them lose interest in exploring the benefits of the application of mobile learning apps in education.

Conclusion

The study examined the influence of mobile learning apps on student engagement and communication in tertiary institutions. From the findings, it was gathered that the application of mobile learning apps helps in improving student engagement due to the fact that mobile learning apps make lessons interesting and facilitate students' involvement in group work. Also, the study found that communication was enhanced through the application of mobile learning apps in instructional processes, as students received immediate feedback about their work from lecturers and students were better able to share ideas and engage in group discussion without distance barriers. Finally, some of the threats to effective implementation of mobile learning apps in tertiary institutions include resistance to change, technical hitches, and varying levels of digital literacy, among others.

Recommendations

Sequel to the findings from the study, the following are recommended:

1. The study found that the use of mobile learning apps helped in student engagement; therefore, it is recommended that the authorities of tertiary institutions should harness their resources to provide relevant mobile learning apps in their institutions to support student engagement.

2. The use of mobile learning apps was found to improve communication; consequently, it is suggested that students and lecturers should imbibe the use of mobile learning apps to enhance communication.

3. Some factors, such as technical hitches, hinder effective implementation of mobile learning apps in tertiary institutions; therefore, it is advised that authorities of tertiary institutions should make efforts to address technical challenges by engaging the services of an expert to address such hitches.

4. Resistance to change was found as a major threat to effective implementation of mobile learning apps in tertiary institutions; therefore, it is imperative to conduct an orientation to all students and lecturers to enlighten them about the potential benefits of mobile learning apps and their efficacy in improving learning outcomes, especially in the twenty-first century.

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A DESCRIPTIVE ANALYSIS OF PLURAL FORMATION THROUGH REDUPLICATION PROCESS IN THE WARJI LANGUAGE

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ABTRACT

This paper explores a descriptive analysis of plural formation through the reduplication process in the Warji Language.Warji is a minor language of the West Chadic Family in the Afro-asiatic phylum. It is spoken in Bauchi and Jigawa states in northern Nigeria. It is a language with very few linguistic studies, and it is even less spoken. Warji native speakers are scattered across various places in northern Nigeria. The study adopts Beard's (1995) Lexeme-Morpheme Basic Morphology theory. It uses a simple random sampling technique and selects very few nouns for analysis. Descriptive method guides this work. The paper uses data from native speakers and a wordlist of the language through interviews and observations. It reveals that pluralisation exists through partial and complete reduplication. Partial reduplication is more productive as it comprises Internal Semi-Vowel Lengthening, Internal Vowel Lengthening, Reduplicative Prefixes and Reduplicative Suffixes derived through the verb-noun process. Complete reduplication consists of Cardinal Numbers and Quality Adjectives derived through the adjective-noun process.
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Background to the study

This paper intends to examine a descriptive analysis of plural formation through the reduplication process in the Warji language.Pluralisation is defined as a process of inflecting or deriving a singular noun to make an identity of two or more persons, things, ideas, concepts and entities. Pluralisation works to indicate the number of items (Crystal, 2008). Pluralisation is a linguistic universal presented variously among languages as a separate word, an affix or by other morphological signifiers such as stress or an implicit marker.

Warji is a minor language of the West Chadic Family in the Afro-asiatic phylum. It is spoken in Bauchi and Jigawastates in northern Nigeria. It is a language with very few linguistic studies and it remains less spoken. Warji native speakers are scattered across various places in Nigeria. The language is in Group 'B' West Chadic language family of the Afro-asiatic phylum. It is a minor and endangered language spoken in some localities such as Warji, Diri, Miya, Kariya, Katanga, Pa'a and other areas in Birnin Kudu and Gwaram of Jigawa State in north-eastern Nigeria. Warji people refer to themselves as Sirna and their language as Sirzakwai. The term Warji is used by Hausa and Western scholars to refer to Sirna or Sirzakwai and the area where they are found today (Blench 1998).Warji, Hausa, Karekare, Goemai and Bade, which are in the West Chadic group, have systems with two-level tones. Although some languages typically have sets of words distinguished only by tone, such as the following Bole from (West) and Margi (Central) have three tone Systems (Blench 2006).Warji, like other Chadic languages, is a tonal language that comprises three dialects known as Kikyadai, Rumbuna (rumba) and Zari (Schuh 1998).

Literature Review

Reduplication is found in a wide range of languages and language groups. Its level of linguistic productivity varies, and it is sometimes used interchangeably with repetition.

Repetition is a term which is used to indicate sounds and concepts that are repeated in one form or the other to provide reinforcement and emotional emphasis (Nadarajan (2006), Ghomeshi, (2004) refer to reduplication as child language amongst other definitions. They observe that the term is widely used as a poetic device which occurs when a sound, syllable, word, phrase, line, stanza or metrical pattern is repeated to make it the basic unifying device. Describing the features of repetition, Lausberg (1998) proposes that it has both informative and reinforcing functions. However, Wang (2005) insists that both repetition and reduplication have been used interchangeably because they overlap at some point in different languages as can be observed in Urhobo and Edo languages.According to Aziza (2007), reduplication is a morphological process in which a part or the whole of a stem is copied and attached to the stem. She identifies two types of reduplication which include partial and full which may be carried out on nouns or verbs in the Urhobo language. She adds that in some cases, semantic effect may be achieved.

Many investigations have been conducted on different languages in Nigeria on plural reduplications. Examples of studies conducted include Crystal (2008), which refers to reduplication processes as a form of repetition whereby the formed prefix/suffix reflects certain phonological characteristics of the root. He observes that the process involved in reduplication has been a particular focus of prosodic morphology. He distinguishes the base from the reduplicated form, which performs a certain grammatical context. In the same vein, Spencer (1991) sees reduplication as a morphological operation which is a species of affixation of a prosodic template to a stem, followed by copying that stem and in association with the template. Crystal (2008) refers to reduplication processes as a form of repetition whereby the formed prefix/suffix reflects certain phonological characteristics of the root. He observes that the process involved in reduplication has been a particular focus of prosodic morphology. He distinguishes the base from the reduplicated form, which performs a certain

grammatical context. In the same vein, Spencer (1991) sees reduplication as a morphological operation which is a species of affixation of a prosodic template to a stem, followed by copying that stem and in association with the template. Wang (2005) states reduplication is a morphological process in which the root or stem of a word or part of it is repeated. He says that in many languages, reduplication is used as inflexion to convey grammatical functions and as lexical derivations to create semantic forms. He adds that there is a general tendency among linguists to overlook its functions at the level of discourse. O'Grady, Archibald and Katamba (2011) agree that reduplication is a common morphological process in some languages. It functions as a grammatical or semantic contrast by repeating all or part of the base to which it applies.

Ekenerho (2014)andYakasai (2023) examine reduplication as a process that copies part or the whole of the stem and attaches it to the stem, either before or after it. She adds that nouns, adverbs and adjectives are derived through the process of reduplication in the Ika and Urhobo languages. Oyebade (2007) sees reduplication as an affixation process that copies materials from the stem into the affix. He says that reduplication is used to derive nouns in Yoruba and also functions as an intensifier. He adds that through the aid of tones, Yoruba uses idiophones to identify particular character traits. Broselow and McCarthy (1983) view reduplication to be more exotic, though it is a very unusual phenomenon of infixing, where a copy of some portion of the root appears inside the root itself. Although they say that reduplication is extremely rare in infixing languages but it is of great interest because of the challenges it poses. The essence of reduplication, according to Broselow and McCarthy (1983), suggests that reduplication is a special case of an ordinary affixational morphological process where the affixes are phonologically underspecified, receiving their full phonetic expression by copying adjacent segments. They argue that the dictionary entry of the morpheme includes specification of its semantic, syntactic, morphological and phonological

properties and that what is odd about reduplication as an affixation process is the fact that the skeletal CV template introduced by the affix is underspecified. They say that for the morpheme to be phonologically represented, a phonemic melody must be mapped onto every C and V slot in the morpheme template. This is achieved by copying a portion of the segmental representation of the base or even the entire base, to which the underspecified morpheme is attached.

Marants (1982), Yip (1982), Bell (1983) and Yakasai (2023) agree that the development in the works of reduplication is a special case of ordinary affixation morphology, where the affixes are phonologically underspecified, receiving their full phonetic expression by copying adjacent segments. Marants adds that the fundamental insight of theories into the application of reduplication is that reduplication is accomplished not by special and quite powerful copying transformations as in the Sounds Pattern of English (SPE) framework but rather by the normal morphological device of affixation whereby words are decomposable unto auto-segmental levels (tiers) that is, the skeleton, the CV, the phonemic melody etc. Phonologically, reduplication is described as reduplicated segments, such as sequences of vowels/consonants or reduplicated prosodic units, that is, syllables. Morphologically, it is described as the reduplication of linguistic constituents such as words, roots,stems or bases. Syntactically, it describes the lexical categories of the reduplicated word, and semantically, it tells the semantic effect of the reduplicated word. Because of the fact that reduplication interfaces among phonology, morphology, syntax and semantics, it involves a lot of theoretical approaches (Ghomeshi, 2004).

Frampton (2004) says that reduplication in Arabic is known as a means to indicate the occurrence of a word or an utterance more than one time in one context for the sake of emphasis, threat, glorification or praise. In other words, when you reduplicate a word in Arabic, it can stand for emphasis, threat, etc., depending on the context. Leonid (2003) posits

that reduplication is extremely rich and quite an intricate system of verbal formation in the oldest Indo-Aryan language. He identifies five verbal formation processes of reduplication; they include: perfect, present tense, causative, desiderative and intensive. We shall see data application in our empirical studies.

Rastall (2004) argues that most reduplication forms that appear in the media as ephemeral (short-lived) in the sense that they tend to appear as play words that do not remain with the language. He encouraged and stressed the need for studies to be done on reduplication beyond its lexical level. Raimy (2000) and Yakasai (2006) opine that the innumerable processes of reduplication have often been romanticised by providing a blueprint for language expressions. The important contributions of the work are in threefold: (i) its explicit formalization of precedence relationships in the phonology, (ii) its rejection of the reduplicant as the exponent of a terminal in the morphology and (iii) its characterization of over application and under application effects, analysed as the result of the ordering of phonological processes before transfer of the representation to the articulatory interface.

Gil (2005) says that reduplication appears to have various conventions: reinforcement, reiteration, recurrence or repetition, but it distinguishes one from the other in certain characteristics. He identifies three of these characteristics to include: (i) it is a mere morphological formation, (ii) its wider structure deals with the repetition of roots of individual words, and (iii) its repetitive elements are often juxtaposed.

Inkelas (2008) argues that the fundamental typological distinction about reduplication is that between phonological duplication and morphological doubling. Phonological duplication, which occurs for a phonological purpose such as providing an onset or nucleus for a syllable or filling in the featural content of an otherwise unspecified timing unit in the representation, is formally related to phonological assimilation. It obeys phonological locality conditions; a target phonologically defined constituent and is sensitive to phonological

markednessconsiderations. The morphological doubling which occurs for morphological purposes, such as making a change in meaning or creating a new stem/type, is the result of the doubling of a morphological category such as root, stem or affix. He observes that the morphological doubling via the double insertion mechanism is not derived by phonological correspondence and therefore is not subject to any of the phonological properties characteristic of phonological duplication. The two copies of related morphemes are semantically are phonologically independent.

Methodology

The method requiresthe collection, analysis, and interpretation of data. This paper employs a descriptive approach in an attempt to provide a concise description of the morphological analysis involved between singular and plural nouns through modification processes. This study adopts oral interviews as a method of data collection. The sources of data collection are primary and secondary. The Primary sourceis the Warji language native speakers. The secondary source comprises previous and present research relevant to the area of focus, such as books, journals, conferences, projects, Libraries and Departments of Linguistics. Concerning the population and sample size, according to Krjcie and Morgan (1960), in a list of numbered items, researchers can take eighty per cent (80%). In this paper, the researchers used a simple random sampling technique and selectedeighty per cent (80%) items for analysis

Theoretical Framework

This work adopts Beard's (1995) Lexeme-Morpheme Base Morphology (LMBM) theory. Lexeme-Morpheme Base Morphology (LMBM) is exclusively the domain of lexemes, which are defined specifically as noun, verb, and adjective stems and lexical categories (Number and Gender) which define them. Lexeme-Morpheme Base Morphology

(LMBM) is a theory of morphology based on the claim that lexical morphemes (lexemes) and grammatical morphemes (morphemes) are radically different linguistic phenomena. It sets out with this assumption based on the properties distinguishing lexemes and morphemes listed inthe definitions of the two categories are simple: lexemes are noun, verb, and adjective stems. These items in all languages are manifested without exception as sound-meaning pairings whose meaning refers to something in the real world. Any other meaningful linguistic phenomenon is a morpheme, hence must refer to a grammatical category and cannot be used about anything in the extra-linguistic world.

Data Analysis

Reduplicationisa common plural formation process, and it is very productive in the Warji language. The paper shows that low tones are marked differently from those of high tones.**Reduplicative Prefixes**

In Warji, verbs act and show plural strategies. This can be done through the reduplicationof the base, considering the examples below:

	Base Form	**Reduplicated form**	**Derived form**
1a	*bez*	***be*** *+ bez*	***be****bez*
	‘to close’	‘keep closing’	‘keep closing’
b-	*buj*	***bu*** *+ buj*	***bu****buj*
	‘totry’	‘keep trying’	‘keep trying’
c-	*be*	***be*** *+ be*	***be****be*
	‘toget’	‘keep getting’	‘keep getting’
d-	*buk*	***bu*** *+ buk*	***bu****buk*
	‘tomanage’	‘keep managing’	‘keep managing’
e-	*dagi*	***da*** *+ dági*	***dadagi***
	‘to hide’	‘keep hiding’	‘keep hiding’

Examples (1a-e), shows method of pluralization through prefixation process.The plurals are formed when the initial morpheme of the base is repeated. For instance, in example (1a), the verb base *bez* ‘to close’, derived the plural form*bebez* ‘keep closing’. This process is formed when a prenomina*be* repeated partially from the beginning, for instance *be + bez = bebez*.

Infixation

The study recognizes infixation as another feature that the Warji language speakers use for the production of their plural nouns. It also identifies only one bound morpheme is used as an infix plural sign, namely-*wi*-.

Infix -wi-

Morpheme-*wi*-isinserted within the middle of the singular noun and produces the plural noun. Here are some examples:

	Singular Form	Plural Form	Derived form
	*B**ú**ungúumà*	*búungúu+ **wi**+ mà*	*búungúu**wi**mà*
2a	'lizard'	'lizards'	'lizards'
B	*Báatúunà*	*báatúu+ **wi**+ nà*	*báatúu**wi**nà*
	'monkey'	'monkeys'	'monkeys'
C	*Círáanà*	*círáa+ **wi**+ nà*	*círáa**wi**nà*
	'moon'	'moons'	'moons'
D	*Gwáaráanà*	*gwáráa+**wi**+ nà*	*gwáráa**wi**nà*
	'rat'	'rats'	'rats'
E	*Vívínà*	*víví+ **wi**+ nà*	*víví**wi**nà*
	'mosquito'	'mosquitoes'	'mosquitoes'

Examples (2a-e), shows pluralization throughinfixation process.The plurals are formed when a prenomina is insertedin the middle of the singular base. For instance, in example (2b), the morpheme-*wi*-is a plural marker in the process of pluralization through infixation. This process is formed when a prenomina–*wi*-is placedin the middle of the singular form, for instance,*báatúu + wi +na=báatúuwinà*.

Cardinal Numbers

Adjectives are derived to show emphasis on a plural act. This happens when cardinal numbers are counted as noun numbers (plural). This can be done through reduplicating the base fully, as shown in the examples below:

	Singular Base	Reduplicated Form	Derived form
3*a*	*Dáala*	*dáala+ dáala*	*dáala-dáala*
	hundred	hundred each	hundred each

	Júb	*júb + júb*	*júb-júb*
B	ten	ten each	ten each
	kúsiyáa	*kúsiya+ kúsiya*	*kúsiya-kúsiya*
C	nine	nine each	nine each
	Maahaa	*maaha + máaha*	*máaha-máaha*
D	six	six each	six each
	wutii	*wuti + wúti*	*wúti-wúti*
E	one	one each	one each

In examples (3a-e), adjectives are reduplicated fully; the base form shows less emphasis, but when duplicated, the derivatives show more emphasis. In addition to this, the final vowels in the base forms are lengthened but when reduplicated, the derivatives change to a short final vowel. For instance, in example (3e),*wutii* 'one', the whole of thesingular base is repeated andplurals are formed as in *wuti-wuti* 'one each'.

Qualitative Adjective

There is a situation where qualitative adjectives are counted as plural. This can be done through the reduplicationof the base fully, considering the examples below:

	Singular Base	**Reduplicated Form**	**Derived form**
4*a*	***k****hir*	*khir + khir*	*khir –khir*
	small	small	small
b-	***kwaayaa***	*kwáaya + kwáaya*	*kwaaya- kwaaya*
	beauty	beauty	beauty
c-	*le****b***	*leb + eb*	*leb-leb*
	soft	soft	soft
d-	*nduwaa*	*nduwa + nduwa*	*nduwa-nduwa*
	old	old	old
e-	*zek*	*zek + zek*	*zek-zek*
	tall	tall	tall

In examples (4a-e),qualitative adjectives are reduplicated fully the final vowels in the base forms are lengthened but when reduplicated the derivatives change to short final vowel. For instance, in example (4a),*khir* 'small', the whole singular base is repeated andplural is formed as in *khir-khir*'more small' or smalls.

Colour Adjective

Colouradjectives count as plural inWarjithrough the reduplicating of the base partially:

	Singular Base	Reduplicated Form	Derived Form
5*a-*	*Fyaal*	*fyal*+ ***anshi***	*fyalanshi*
	white	whites	whites
b-	*Jiin*	*jin*+ ***anshi***	*jinanshi*
	black	black	black
c-	*Kúr*	*kúr*+ ***anshi***	*kuranshi*
	green	green	green
d-	*Raw*	*raaw*+ ***anshi***	*raawanshi*
	yellow	yellow	yellow
e-	*zeel*	*zel*+ ***anshi***	*zelanshi*
	red	reds	reds

In examples (5a-e),the bases are free morphemes before suffix is attached. The part of the base is repeated and a morpheme *'anshi'* - 'isattached at end of the base. The plurals of its kind are formed. For instance, in example (5c), the adjective *kuur* 'green', derived the plural noun as in '*kuranshi'* greens.

Internal Vowel Lengthening

	Singular Base	Reduplicated Form
6*a-*	*bim*	*biim*
	spread	keep spreading
b-	*ku**b***	*kuu**b***
	learn	keep learning
c-	*kur*	*kuur*
	throw	keep throwing
c-	*li**d***	*lii**d***
	fall	keep falling
d-	*tsal*	*tsaal*
	break	keep breaking
E	*ta*	*taa*
	give	keep giving

Nominal verbs form through the reduplicating base, partiallyshownin the examples below.

In (6a-e), verbs are reduplicated fully, the base form shows short vowel emphasis, but when duplicated, the derivatives show vowel lengthening emphasis. This means the

vowels in the base forms are shortened but when reduplicated, the derivatives change to long vowel. For instance, in example (6b),*kub* 'learn', thewhole base is repeated andplurals are formed as in *kuub* 'keep learning'.

Internal Semi-Vowel Alteration

A semi-vowel alteration shows emphasis on the pattern of pluralisation. This can be done through the reduplicationof the base partially, considering the examples below:

	Singular Base	**Reduplicated Form**
7*a*-	*dor*	*Dwor*
	sweep	keep sweeping
b-	*cu*	*Cwu*
	finish	keep finishing
c-	*kon*	*Kwon*
	tell	keep telling
d-	***k****i*	***Kyi***
	bite	keep biting
e-	*ver*	*Vyer*
	give	keep giving

In exa mples (7a-e), verbs are reduplicated partially, the base form shows short vowel emphasis, but when duplicated, the derivatives show more vowel lengthening emphasis. This means the final vowels in the base forms are shortened but when reduplicated, the derivatives change to lengthen the final vowel using vowel-like sound morphemes *'-w-'* and *'-y-'*. For instance, in example (7c),*kon* 'tell', derived plural kwon 'keep telling', and in example (7e),*ver* 'give' derived plural vyer 'keep giving'.

List of Findings

The findings reveal that thepluralisation in the Warji language exists through the use of the reduplication process, which consists of partial and complete reduplication. The study highlights partial and total plural reduplications in this language derived through verb-noun and adjective-noun. The study shows partial reduplication is very productive where verbs are derived to form a plural through vowel lengthening, semi-vowel alteration, reduplicative

prefixes and reduplicative suffixes.The paper reveals that under total reduplications, adjectives are derived to form plural strategies. This includes cardinal numbers, quality adjectives and colour adjectives.

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EFFECTS OF READING SKILLS ON SENIOR SECONDARY SCHOOLS' ARABIC STUDENTS IN LEARNING OF ARABIC READING COMPREHENSION IN KWARA STATE

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ABTRACT

Reading is a part of our daily lives. It is performed both for pleasure and information. Reading skills are important for the individual since they facilitate faster comprehension in reading. If the students do not have knowledge of reading skills, they cannot be expected to be successful readers. Thus, they cannot achieve the level of comprehension required to pass exams in their departments; for this reason, reading skills should be taught in Senior Secondary Schools for the students to be able to cope with comprehension problems. This case study aims to find out whether or not reading skills have an effect on Arabic Reading comprehension of senior secondary students in Kwara State. This study is both a qualitative and quantitative study, which lasted for a duration of weeks. Two groups were selected (experiment and control) among SSS1and SSS2 classes of some selected senior secondary schools in Kwara State. Both groups were administered a pre-test and questionnaire at the beginning of the study to find out if they were aware of Arabic reading skills. In addition, 10 students were chosen randomly for an interview. During the study, Arabic reading skills were infused into the curriculum through designing lesson plans by the Arabic language contents and topics for Arabic Students as determined by the curriculum planners of Nigeria. The lessons required the students to use reading skills before, during and post reading. At the end of the study the same question was re-administered. The students of Arabic were given the post-test and then interviewed. The quantitative data were analysed through descriptive statistics. The obtained data revealed that the students of Arabic enhanced their Arabic reading comprehension ability, provided that they were taught to use reading skills

Introduction

Teaching is the educational practice implemented by a teaching instructor aimed at transmitting ideas, attitudes, and educational information to a student/learner in the context of an educational setup. And this action is also an inter-relationship between the giver and receiver of educational information to achieve a certain goal, which is "newly useful information". The teaching comprises both the intricacy of the performance required and in the shifting nature of the cognitive activity that generates it, and it requires some level of selection and limitation be made by silencing specify classes of goals and ignoring some incoming information, (Gaea, 2019).

Arabic is known as major language to the Arab world, i.e. Egypt, Sudan, Libya, the North African countries – like(Tunisia, Morocco and Algeria- Saudi Arabia, Iraq, Jordan, the Gulf Countries,etc., and it is also the major language of non-Arab countries such as the Republic of Chad in Central Africa. And also this Arabic is a minority language in some other countries such as Nigeria, Iran and former Soviet Central Asia. It is also in wide use throughout the Muslim world as a second language (e.g Somalia, Pakistan, India, Indonesia) (Kaye, 2017).

Arabic is recognised as the fourth most used language on the internet, and this language has three main varieties:

a. Classical Arabic- (CA)

b. Modern Dialect Arabic(MDA)

c. Arabic Dialect(AD)

So, the MSA and AD could be written either in Arabic or in Roman Script (Arabic),which corresponds to Arabic written with Latin letters, numerals and Punctuation (Imane, Hauda, Faical, Billel and Damien, 2021).

The introduction of the 6 – 3 – 3 – 4 system of education in Nigeria was embodied by the Nigerian government in the National Policy on Education (NPE). It was published in 1977 but became effective in September 1981. The first six years of a child are spent in primary school. The first three years are spent in the Junior Secondary school, while the last three years are spent in the Senior Secondary, and the last four yearsare spent in the University or other Institutions of higher learning. In the education system, Arabic is directly learnt as the language of Art. It (Arabic) was also included in the curriculum for primary education, stated out by the government in the National Policy on Education (2004), and it is the goal of inculcating in Pupils permanent literacy and numeracy and ability to communicate effectively and giving them citizenship education as basis for effective participation and contribution to the life of the

society. It also says that the state government shall ensure the integration of the formal basic education curriculum in the Quran and Islamic Schools.

Arabic is also categorized as a non-prevocational elective under the modern Junior Secondary School Curriculum of the National Policy on Education. It is also among non-vocational electives in the Senior Secondary School core curriculum (FRN, 2013). Oladosu (2008) explains that, in Nigeria, a significant segment of the population accepts Islam as a faith and tends to abide by its principles. This group of Nigerians goes through the Arabic and Islamic systems of education in one way or the other. The researcher states further that Arabic is an elective subject at both the Junior and Senior levels. As a result of these developments, some colleges of education, polytechnics and Universities offer courses, diplomas, and graduate degree courses respectively, in Arabic language and literature and Islamic studies.

Even though Arabic is not a core subject, vibrant Arabic programs exist in some Nigerian Colleges of Education and Universities where students specialise in Arabic.

They are admitted every year. Employees who hold certificates in the Arabic language are also found in industries, large-scalebusinesses, local, state and national security officers, companies, hospitals for keeping records, advertisement and communication (Oladosu, 2012). It also aids communication across borders. It (Arabic) is among the languages of diplomacy as well as that of inter-ethnic communication; people who share some ethnic background use Arabic on formal occasions such as inaugural ceremonies, gatherings on Islamic issues, among others.

The reading is selected for practical and academic drill. This reading method is also suitable for teaching Arabic comprehension as an academic reason, for specific uses of the Arabic language. It is also selected as a method for teaching Arabic language comprehension as an academic reason, for specific uses of the Arabic language. It is also selected as a method for teaching Arabic comprehension for Arabic learners who do not have any opportunity (Jill Kerppr, 2006).

Comprehension plays an important role in learning a foreign language, and it is clear that Arabic is a foreign language and a subject in the Nigerian educational system. Comprehension is the ability to understand the meaning or importance of the knowledge acquired. The comprehension can be listening/oral comprehension or reading comprehension.

The listening/ oral comprehension is the way of listening to some passages that will be read to the listener or foreign students, and at the end of some questions will be asked based on the passage. One is expected to give correct answers to show that the learner listened to the passage and understood it (Ibileye, Oreoluwa, Ocheful, Attah & Ifeoma, 2018). There exist numerous studies on reading skills and comprehension. Alderson (2000)

Explains that the readers' knowledge affects what they understand through their reading. There are other factors which affect reading comprehension. Comprehension is a problem for many

learners/students when they read in Arabic; they tend to attribute the comprehension difficulties to the Arabic language. They may also feel that the problem is their own lack of ability. The problem may also is about their approach to a text. If the students understand how the information is presented in Arabic texts and are also aware of the cognitive processes, they will be better at Arabic reading comprehension.

Purpose of the Study

The purpose of this study was to determine the skills that students employ to interpret what they read using clues, and reflect on what the text does by making such remarks. It also looks into discovering how students look for clues in a text, understand the writer's meaning, and how their reading skills affect their comprehension ability. The scope of this study is based on schema theory. According to this theory, reading is an active process which cannot be achieved without background knowledge.

Research Questions

1. Can the students be trained and guided in terms of Arabic reading skills?

2. Are Students who are trained and guided on Arabic reading skills better at Arabic reading comprehension than those who are not?

Methodology

This study was designed as a case study, and the aim was to enhance the reading skills of the 150 Students in the Senior Secondary Schools in Kwara State. Qualitative and quantitative research designs were both used in the study. It presents data about the growth of Arabic reading skills of the Arabic Students and their perceptions and attitudes towards Arabic reading. The data was gathered through pretest and post-test, and an Arabic reading skills questionnaire, which was supported by oral interviews.

The respondents of the study were 250 Senior Secondary School Arabic Students in five Local Government Areas of Kwara State. The Arabic students are those in SSS one and SSS two classes from each school. Arabic students in SSS 1 were set as the control group, and SSS 2 Arabic Students as the experimental group. There were 100 Arabic Students in SSS 1 and 150 Arabic Students in SSS 2 at the time of study.

The Arabic Students were informed about the study at the beginning of the first term. The study lasted for 12 weeks. The experiment group received the treatment. The control group did reading classes as determined by the department of Arabic at each school. The experiment group received training for two hours a week. The researcher was the instructor of both groups.

The lesson plans were prepared by the researcher and checked by two other teachers of Arabic teachers. The classes included three stages: pre-reading, during reading and post-reading. The Arabic reading skills were involved, especially in the pre-reading and during reading stages.

The Arabic reading skills questionnaire was designed by the researcher, considering the skills used while reading by Lagan (1992) and Pirozzi (1995). It was conducted at the beginning of the study (before the training started) in order to find out if the respondents are aware of Arabic reading skills, and it so what Arabic reading skills they have. This questionnaire was also conducted at the end of the study to check if any difference occurred in the respondents' Arabic reading skills during the study. The questionnaire consisted of 18 Statements. The statements in the questionnaire were closed and scaled. And, there were five items: “Always”, “Usually”, "Sometimes”, “Rarely”, and “Never”. Each item was ratedfrom 1 (Never) to 5 (Always).

The other instrument employed to collect data for this study was the interview. The questions of the interview were prepared by the teacher. It was conducted both at the beginning.And at the end of the study, to find out whether or not the respondents used the Arabic reading skill efficiently.

The last instrument used in this study was the pre-test and the post-test. They were given to the respondents at the beginning and at the end of the study. The questions included Arabic comprehension questions and multiple–choice questions, as suggested by Alderson (2000).

The data collected for this study were analysed through a statistical program, SPSS (Statistical Package for Social Sciences) for Windows, version 15.0.The respondents’ responses to the Arabic reading skills questionnaire were analysed using the Wilcoxon Signed Rank Test. The pre-test and post-test were conducted in order to find out whether any meaningful difference occurred before and after the training. The data gathered from the related groups, experimental pre and post, for example, were analysed through t-test Statistics. The qualitative data (data from the interviews) were analysed qualitatively.

Findings

This section indicates research findings gathered from the pre-test and post-test, questionnaires, interviews and tests, respectively. The quantitative and qualitative data analysis techniques were administered in the analysis of the data collected by means of Pre-test and post-test, questionnaires, and quizzes. The pre-test administered at the beginning of the study consisted of 25 questions prepared to assess the predetermined reading skills. The skills were selected among those shown by Lagan (1992), Piozzi (1995) and Alderson (2000). The respondents were expected to display their knowledge of the reading skills. The post–test administered at the end of the study also consisted of 25 questions. The aim was to look into

whether or not a change occurred in the comprehension ability of theRespondents. The data gathered from the related groups, for example, experimental pre and post, were analysed through t-test Statistics.

Findings from the Arabic Reading Skills Questionnaire

The Arabic Reading Skills Questionnaire administered at the beginning of the study consisted of 20 items. The Arabic Students were directed to show their preferences on a five-point scale questionnaire as "Always", "Usually", Sometimes", "Rarely", and "Never". The same questionnaire was also administered at the end of the study in order to figure out whether or not there existed any changes in the preferences of the Table 3 shows the data obtained from the pre- and post–post-questionnaire of the experimental group.

Findings from the interviews

The interview questions were developed by the researcher. It was a semi-structured interview that consisted of 17 questions. The questions of the interview were developed with respect to the Arabic Reading skills mentioned in the study.

From the first interview

Excerpt 1

T: Does your background knowledge affect your understanding of an Arabic text?

S1: I mean, it does. There can be words related to it. It affects positively. It makes the Arabic text easier to understand.

From the Second Interview,

Except 2

T: Does your background knowledge affect your understanding of an Arabic text?

S1: It does if I know something about the Arabic subject beforehand.

In both interviews, the respondents reacted in a way that theyrecognised the role of background knowledge, or schemata, in affecting the level of understanding of an Arabic text.

From the First Interview Excerpt

2

T: Does your background knowledge affect your understanding of an Arabic text?

s1: It does if I know something about the Arabic subject beforehand.

In both interviews, the respondents reacted in a way that theyrecognised the role of background knowledge, or schemata, in affecting the level of understanding of an Arabic text from the first interview.

Excerpt3

T: Can you find out the main and supporting ideas in the Arabic text you read? S5: Generally, I can find them out.

In this interview, the respondent is not sure about the main and supporting ideas in the Arabic text. However, in the second interview, the respondent is aware of the importance of main and supporting ideas in a text.

From the Second Interview

Excerpt 4

T: Can you find out the main and supporting ideas in an Arabic text you read?

S4: I can find them out. The main idea is important. If you do not understand it, you read in vain from the first interview.

Excerpt5

T: Do you understand the information in an Arabic text that is not stated clearly? S9: I sometimes understand them

From the Second Interview:

Excerpt6

T: Do you understand the information in an Arabic text that is not stated clearly?

S9: I understand them, and I think they prettify the Arabic text. Irony, for example, is very interesting. It makes us think in both ways.

From the first Interview

Excerpt7

T: Can you find the meanings of unknown words in the Arabic text?

S4: It is difficult to understand an Arabic text if I do not know the meaning of unknown words, but I make guesses.

In the first Interview, it is obvious that the respondents are not aware of how to figure out the meaning of unknown words in an Arabic text. Conversely, the respondent is aware of the skill in the second interview.

From the Second Interview:

Excerpt 8

T: Can you find the meanings of unknown words in Arabic texts? S4:
Yes, I can, especially in the exams.
T: How?

S4: I read the Arabic text and try to find synonyms, antonyms or examples for the unknown words. It usually works.
From the first interview:

Excerpt9

T: Does the genre of an Arabic text affect your understanding?

S8: Teacher, it depends on the Arabic subject and the style of the Arabic writer.

From the Second interview:
Excerpt 10
T: Does the genre of an Arabic text affect your understanding?

S8: I can figure out the genre. It can be easily understood through the use of certain keywords. It says "Once upon a time …." for example, and it uses the past tense in Arabic.

Above are some excerpts selected from the interviews that we conducted with some respondents of the study. The responses of respondents show the level of their achievement in Arabic reading skills throughout the study.

Discussion

The aim of this study was twofold: (a) to find out whether or not Kwara State Students of Arabic were aware of Arabic reading skills, and (b) whether or not they could use appropriate Arabic reading skills if gained through Arabic reading comprehension.

The first research question of this study aims to find out whether or not the students of Arabic can be trained through teaching or Arabic reading comprehension. The data obtained from the pre- and post–test, Arabic Reading Skills Questionnaire, and interviews have shown that the students can be trained through teaching Arabic reading comprehension. And, before the students of Arabic used to complain about inadequate comprehension of reading text in the quizzes and exams, having been equipped with the Arabic reading skills and achieving proficiency, they have indicated that they enhanced their Arabic reading Comprehension Ability.

The second research question of this study seeks to answer the question of whether

students of Arabic who are taught through Arabic reading comprehension and better at reading skills than those who are not. Bedir (2000), Yilmaz (2013) and Ebru (2015) State that readers who do not possess the knowledge of the reading skills are more likely to fail when they read a text. Some other researchers, such as Carrell, Pharis, and Liberto (1989) and Nuttal(1996) and Canli (2013) also share this view. Similarly, Pani (2004) contends.

Students need training in terms of strategies so that they can become competent readers. According to Istifci (2009) and Celik, Akin, and Saricam (2014), the students understand more if they participate actively in the reading lesson by applying strategies.

From the findings, it is seen that the students of Arabic who are taught Arabic reading skills are better at reading comprehension than those who are not. For example, many of them lacked of reading skill required to find the main idea and supporting ideas in an Arabic text, but in the end, they gained the skill and accomplished the test. They realised that they did not have to decode every single word in a text to comprehend it.

Moreover, the data gathered through the interviews revealed that students of Arabic Started to feel more confident towards the end of the study. There was a meaningful change in the respondents' attitudes towards Arabic reading comprehension, being aware of Arabic reading skills and knowing how to use them correctly while dealing with Arabic texts; the respondents seemed to be more comfortable with the texts at the end of the study.

It is well known that there exists a relationship between language skills. A well-written Arabic text can be a good model for the students, for example, it can help the students to improve their Arabic writing skills. So, reading and writing are related to each other. Similarly, reading and writing are complementary acts. Students must become better at reading to become better at writing.

Conclusion

From the research questions of this study, a number of results revealed that the students of Arabic were not aware of their Arabic reading skills, and they could be taught Arabic reading comprehension to enhance their ability in Arabic reading. The trained students of Arabic (experimental group) performed better than the untrained (control group). So, the reading skills have positive effects on writing skills. Briefly, this study reveals that if the students are trained to gain the appropriate strategies which facilitate are trained to gain the appropriate strategies which facilitate understanding, they are likely to be more successful in Arabic reading comprehension. Thus, Arabic reading comprehension can be facilitated by enabling students to gain and use reading skills.

Further research could be conducted on the effect of gender, level or age on Arabic reading comprehension, or whether or not Arabic reading skills can be transferred to other language skills.

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