

**EFFECT OF INSTRUCTION IN METACOGNITIVE STRATEGY ON
FEAR OF FAILURE AMONG POSTGRADUATE STUDENTS OF
EDUCATIONAL PSYCHOLOGY, AHMADU BELLO UNIVERSITY
ZARIA, NIGERIA**

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ABSTRACT

The study investigated the effects of instruction in metacognitive strategy on fear of failure among postgraduate students of Educational Psychology, Ahmadu Bello University Zaria, Nigeria. Quasi-experimental research design involving pre-test and post-test only without control group was adopted and used for the study. The population of the study was all 2018/2019 registered postgraduate students of Educational Psychology in the University. The sample of the study comprises of 28 students who were identified with fear of failure using a checklist. The sample of the study was randomly assigned into two groups of 14 each for the study. An instrument tagged Performance Fear of failure Appraisal Inventory (PFAI) developed by Conroy was adopted and used for the study. Mean, standard deviation, t-test and Analysis of Covariance (ANCOVA) statistics were used to analyze the data. The findings revealed that postgraduate students exposed to metacognitive strategy had a reduced fear of failure and that both male and female students exposed to instruction in metacognitive strategy had a reduced fear of failure. Based on the findings of the study, it was concluded that metacognitive strategy was effective in managing fear of failure for both male and female postgraduate students of Ahmadu Bello University, Zaria. The study recommended among others that Psychologists and counselors should expose postgraduate students in the universities in the country to instructions in metacognitive strategy in handling fear of failure during their stay in the universities.

Keywords: Metacognitive strategy, Fear of failure, Postgraduate students, Educational Psychology

INTRODUCTION

Fear of failure in learning also known as academic anxiety, academic phobia or failure avoidant has been defined as “persistent and irrational anxiety about failing to measure up to the standards and goals set by oneself or others” (APA, 2007, p. 369).

Failure fearers tend to be anxious, high in self-doubt, and are uncertain about their ability to avoid failure or achieve success (Bartel & William, 2011). Fear of failure is “a tendency to appraise threat and feel anxious during situations that involve the

possibility of failing” (Bartel & William, p.12), individuals who have fear of failure, often avoid or attempt to avoid situations where failure is a possibility and may opt to avoid goals in which failure is an option. Such individuals are frequently depressed, anxious, confused, or angry; they also lack confidence, and may have low self-esteem or increased conflict in their relationships with significant others (Efklides, 2011; Conroy, 2010; Honey, 1968).

Fear of failure may be divided into two separate and broad categories. The two categories are fears that have to do with failing on an interpersonal level and those that affect failing in educational goals or scholarly pursuits (Elliot & Sheldon, 1997). These two categories are often related as it can be seen that persons who fear failure in their academic pursuit may also fear failure in their personal lives. Students that have fear of failure may work hard and also achieve, however, they have a tendency to be adversely affected by setback that tend to confirm their doubts about their ability and their uncertain control (Covington, 1992; Martin & Marsh, 2003). Many a times, students who have fear of failure, may sabotage their chances of success through procrastination, leaving tasks until the last minute, or putting in little effort so that they have

an excuse if they fail. This excuse serves a protective purpose in that they can blame their poor performance on their procrastination, for example, rather than a possible lack of ability (Covington, 1992; Martin, 2010).

Psychological theory about fear of failure has its origin from Atkinson’s achievement motivation research and Need Achievement theory. The theory defined Fear of failure as an “avoidant motive which was aroused by debilitating anxiety” (Atkinson, 1959; p359). From a need achievement perspective, students vary in terms of their motive to avoid failure and approach success (Atkinson, 1957). Based on a need achievement model of motivation, students can be characterized in terms of three types: those that are success oriented, those that are failure avoidant, and those that are failure accepting. Failure-avoidant students are the classic failure fearers. Theory and research have separated many failure fearers into two groups: the first group are students who deal with their fear of failure by working hard and/or succeeding – referred to as perfectionists or over-strivers and the second group are students who deal with their fear of failure through counterproductive activity that is aimed more at self-protection than attaining success. (Martin, 2010;

Martin & Marsh, 2003; Covington; 1992). The risks inherent in this form of failure fearing are two-fold. First, it renders the academic journey as somewhat unpleasant – fraught with anxiety, perceptions of low control, and unstable self-esteem (Martin, 2010). Secondly, when perfectionists do not succeed, failure is seen as proof of suspected incompetence and this increases the risk of falling into the second and more counter-productive form of failure avoidance-self-protection. The self-protector does not aim so much to avoid failure but to avoid the implications of failure (Covington, 1992). They avoid the implications of failure through strategically maneuvering in ways to protect their self-worth. In doing so, they are able to mitigate the extent to which failure reflects poorly on their ability and consequent self-worth (Covington, 1992). They do this in a number of ways which include self-handicapping and Defensive pessimism. Self-handicapping includes the strategic reduction of effort, engaging in little or no preparation for upcoming tasks, procrastination, or the choice of performance debilitating circumstances (Covington, 1992; Martin, 2010; Martin & Marsh, 2003).

In the event of failure, the student has a ready excuse. For example, the lack

of effort is seen as the cause and not the student's lack of ability. Defensive pessimism involves setting unrealistically low expectations prior to events in which one's performance is to be evaluated (Norem & Cantor, 1996). In the event of failure, the student has cognitively and affectively "steered" him or herself for the outcome (Norem & Cantor, 1996) and so in this sense, Defensive pessimism is self-protective. Moreover, setting lower, and possibly safer, expectations can reduce the threshold for satisfactory performance or serve to set performance standards that are less difficult to achieve (Martin & Marsh, 2003).

Setting lower and safer standards against which one's ability is judged reduces the likelihood that it will be judged as inadequate in a way that would call into question one's self-worth. Equally, individuals with low self-confidence or feelings of self-worth often dwell on their perception of personal failures. These individuals have a tendency to ruminate over their own perceived deficiencies and have a more fatalistic and negative life view than those persons with higher feelings of self-belief (Martin, 2010).

Extensive research has linked self-belief, monitoring of self,

determination, effort and meta-cognitive strategies to accomplishment of set goals (Martin, 2010). Studies in Nigeria show that most postgraduate students do not have effective study strategy that could improve achievement and reduce test anxiety (Eze, 2007), instead, they adopt rote learning methods which have been found to be ineffective for learning complex tasks. Efforts have been made at improving the achievement of postgraduate students including the use of learning strategies such as elaborative interrogation, advance organizers, concept mapping and group activity strategies (Umaru et al, 2015; Umaru, 2010).

Studies on these methods have focused mainly on determining their efficacy on facilitating achievement across subject areas. Enough attention seems not to have been paid to the effect of these constructivist strategies in reducing fear of failure. Postgraduate students require higher order thinking/writing skills and meta-cognitive strategies to equip them with skills in problem solving thereby enabling the learners to assume responsibility for their own learning. When learners take charge of their own learning, they develop confidence in themselves and pursue learning with greater vigour (Balzan & Galletly, 2015).

Meta-cognitive strategy (MCS) is based on the notion of meta-cognition. According to Flavell, (1999). meta-cognition refers to one's knowledge of his or her own cognitive processes and products and anything that is related to them, such as learning-relevant properties of data or other useful information. Meta-cognition has been referred to as a person's awareness of his or her own level of knowledge and thought processes which is regarded as a higher level of cognition (Akpur, 2017; Algharaibeh, 2017). In education, it has to do with students' awareness of their actual level of understanding of a subject area. As students become more skilled in using metacognitive skills, they gain confidence and become more independent as learner Umaru, et al. (2015).

Meta-cognitive strategies are successive processes to manage or regulate cognitive activities, thus ensuring that a cognitive goal will be gained. These processes contribute to regulation and managing of learning, and include planning and monitoring cognitive activities, as well as evaluating the outcomes of those activities. Similar to meta-cognitive knowledge, meta-cognitive regulation or "regulation of cognition" involves three important skills: planning, monitoring and

evaluating. (Swanson, 1990 & Umaru, 2010).

Brown (1987) believed that metacognition is the kind of knowledge about cognitions executive processes of decision making that the human being must perform both in cognitive process and their development (Rangi et al, 2014).

The metacognitive approach empowers individuals to free themselves from the mechanisms that cause maladaptive processing of worry, threat monitoring and maladaptive self-control, and through flexible emotion processing training, it can guide thinking and behaviour in the face of treats and perceived harm in the future (Aljaberi & Gheith, 2015). Research findings have shown that metacognition has a significant and strong relationship with cognitive decline (Alogleh & Teh, 2019; Somesaree et al, 2019). Studies using metacognitive therapy for people with psychosis showed that metacognitive therapy reduces cognitive biases and increases one's insight. Such studies found that metacognitive therapy was significantly effective in reducing the severity of delusions, enhancing clinical insight, and improving cognitive function (Hong et al, 2016; Balzan & Galletly, 2015).

This study therefore focuses on determining the effect of instruction

in meta-cognitive strategy (MCS) on fear of failure among postgraduate students of Educational Psychology, Ahmadu Bello University Zaria, Nigeria.

Objectives of the study

The specific objectives of the study are to:

1.determine the effect of meta-cognitive strategy on fear of failure among postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria.

2.investigate whether gender difference exists in the effect of MCS on Fear of Failure among postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria.

Research Questions

1.What is the effect of meta-cognitive strategy on fear of failure among postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria?

2.What is the gender difference in the effect of MCS on Fear of Failure among postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria?

Research Hypotheses

1.There is no significant difference in the effect of MCS on fear of failure among postgraduate students of

Educational Psychology of Ahmadu Bello University, Zaria

2. There is no significance difference due to gender in the effect of MCS on fear of failure among postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria.

METHODOLOGY

Research Design

The study adopted Quasi experimental design involving pre-test/post-test only in which participants were randomly assigned into each of the experimental and control groups. Pre-test and post-test were conducted to measure changes in fear of failure among postgraduate Educational Psychology students in the treatment groups. The population were the entire (2018/2019 academic session) Postgraduate Students of Educational Psychology of Ahmadu Bello University Zaria, Nigeria.

Participants

The participants of the study consist of 28 postgraduate Educational Psychology students identified with fear of failure using Performance Fear of failure Appraisal Inventory (PFAI) by Conroy's (2003). They were made up of 12 males and 16 females who were randomly assigned into experimental and control groups of 14 each.

Instrumentation

This study employed Conroy's (2003) Performance Failure Appraisal Inventory (PFAI) measures the strength of an individual's beliefs in five areas of failing. The 25-item inventory is measured on a five-point Likert scale to evaluate five-order beliefs about the consequences of failure and one higher order factor yielding scores on a general fear of failure.

The first-order scales include (a) fears of experiencing shame and embarrassment; (b) fear of devaluing one's self-estimate; (c) fear of having an uncertain future; (d) fear of important others losing interest; and (e) fear of upsetting important others. Students rated themselves on how often they believe each statement is true on statements such as "when I am failing, important others are disappointed" and "when I am failing, I worry about what others think about me." The range of scoring ranged from 0 (do not believe at all), to 4 (Believe 100% of the time). According to Conroy (2003), the scores on these five first-order factors are moderately to strongly correlated with one another and common variance represents a general fear of failure. General fear of failure may be interpreted as the strength of a person's belief that failure is associate with negative, internal consistency,

external validity, and predictive across groups and across time.

Validity and Reliability of Instrument

The PFAI was face validated by a specialist each in Educational Psychology, Measurement and Evaluation, and Guidance and Counselling sections for critique and inputs. They were asked to check for the clarity of the language and also check if the instruments were measuring what they were supposed to measure. The inputs of these specialists were used to modify and improve the instruments.

The PFAI was trial tested using 10 postgraduate students of Guidance and Counselling of Ahmadu Bello University Zaria. The internal consistency reliability estimate of the instrument was determined based on the result of the trial testing. The internal consistency reliability was determined using the Cronbach alpha method and the reliability estimate of 0.72 was obtained. In order to determine the stability of the PFAI over time, a test-retest analysis using Pearson correlation method was conducted and a Pearson's $r = 0.70$ was obtained for PFAI. This was necessary since the items in the PFAI were reshuffled and used for the post-test.

The researcher developed an instructional programme with the help of other experts in Educational Psychology and Guidance and Counselling sections of the department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria. The purpose was to develop an instructional programme that would facilitate the teaching of meta-cognitive strategies to the experimental group. In developing this instructional programme, the researcher identified and stated in behavioural terms the objectives to be achieved, the activities of the instructor and the subjects, the instructional materials, strategies and the evaluation techniques to be utilized. The instructional programme was designed to last for a period of six weeks and each session lasted for thirty-five minutes. The instructional programme was face validated by two experts in Educational Psychology. The objectives, activities, evaluation techniques, time limits and the number of sessions were provided to serve as a guide for their comments. The suggestions of the peer reviewers were used to restructure and improve the programme.

The face validated meta-cognitive instructional programme was trial tested by the researcher with the help of two trained research assistants. The

aim was to ensure that the programme would be adequate in achieving the objectives of the study. It was also done to ensure that the training programme was clear enough and well understood for easy implementation. The instructional programmes were used in instructing the postgraduate students in Educational Psychology by the researcher. Meta-cognitive strategies such as monitoring, use of journaling, scaffolding, attentional modification / revising and evaluation using examples of metacognition from literature, were applied to those in experimental group. All these were done through the following procedure for Data Collection.

Treatment Packages/Sessions

Week 1: Introduction and establishing rapport and cordial relationship with the participants.

Week 2: **Monitoring of fear of failure through contemplation:** Concentrating on a question or some kind of contradiction without letting the mind wander and worrying about the past or future

Week 3: **Use of a Journalling:** write down thoughts and ask oneself questions such as, what am I really afraid of, who am I fighting for, what is the worst that could happen, and what if I succeed? The answers to

such questions are expected to prompt different ways of thinking.

Week 4: **Scaffolding:** An expert/mentor gives guided practice by offering support in the form of suggestions, guidance, planning and being trusted.

Week 5: **Attentional Modification:** Changing attention pattern of the students.

Week 6: **Termination:** Application of the experiences acquired during the sessions and applying them during the students' normal daily routine. After the treatment sessions, post-test was conducted to compare the pre-test and post-test scores to measure the effect of metacognitive strategy on fear of failure.

Procedure for Data Analysis

The data collected were analyzed using mean scores and standard deviation, t-test and Analysis of Covariance (ANCOVA) were used to test the null hypotheses at 0.05 levels of significance.

RESULTS

Hypothesis One: The null hypothesis states that there is no significant effect of MCS on fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria.

Table 1: Differences between Pretest and Posttest on Effect of MCS on Fear of Failure among Postgraduate Students of Educational Psychology

Variables	Treatment	N	Mean	SD	SD	Df	t-calculated	p
Fear of Failure	Pretest	14	38.57	14.53	3.88	13	5.217	0.000
	Posttest	14	20.36	10.12	2.7			

Significant at $p < 0.05$

Table 1 above shows Paired Sample t-test on differences between the Pretest and Posttest on Effect of MCS on Fear of Failure among Postgraduate Students of Educational Psychology. The results of the paired t-test statistics showed significant effect of MSC on fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria. This is evidenced the calculated p-value of 0.000 which is lower than the 0.05 alpha level of significance at $df = 13$. Similarly, the computed mean scores of fears of failure for pre-test and post-test were 38.57 and 20.36 respectively with a mean difference

of 18.21. This implies that the fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria has considerably reduced at the post test. Therefore, the null hypothesis which stated that, there was no significant effect of MCS on fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria is hereby rejected.

Hypothesis Two: There is no significant difference due to gender in the effect of MCS on fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria.

Table 2: MCS on Fear of Failure among Postgraduate Students of Educational Psychology

Source	Type III sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2528.464 ^a	3	842.821	5.221	.006
Intercept	24072.429	1	24072.429	149.113	.000
Gender	34.714	1	34.714	.215	.647
Tests	2100.000	1	2100.000	13.008	.001
Gender - Tests	171.429	1	171.429	1.062	.313

Error	3874.500	24	161.348
Total	30711.000	28	
Corrected Total	6402.964	27	

R Squared=.395 (Adjusted R Square=.319)

Table 2 above shows Statistical analysis of MCS on fear of failure data among Postgraduate students of Educational Psychology using analysis of covariance (ANCOVA). Results of the Analysis of covariance (ANCOVA) indicated that there was no significant gender difference in the effect of MCS on fear of failure among Postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria. This is because in the gender difference test, the calculated p value of 0.313 was higher than the 0.05 alpha level of significance. This showed that both male and female postgraduate students had their fear of failure level reduced equally in their post-test as a result of exposure to MCS. Therefore, the null hypothesis which states that there is no significant gender difference in the effect of MSC on fear of failure among postgraduate students is hereby accepted and retained.

Discussion

The findings of this study reveal that the postgraduate students of Educational Psychology of Ahmadu Bello University, Zaria identified

with fear of failure and exposed to metacognitive strategies (MCS), had a reduced fear of failure. Exposure to MCS enabled the post graduate students of Educational Psychology identified with fear of failure to monitor, contemplate and concentrate on some kind of contradiction that creeps up without letting the mind wander and worry about the past or future and thereby reducing their fear of failure and improving on their academic work and self-confidence. Exposure to MCS also enabled students with fear of failure to write down their thoughts and ask themselves questions where the expected answers prompted different ways of thinking. Scaffolding and guided practice by mentors through suggestions and planning enabled such students to apply the strategies to their normal daily routine which changed the attention patterns of the students that reduced fair of failure, increased self-confidence, not worrying about upsetting significant others and improved their academic performance. The findings of this study are in agreement with the findings of Bartel and William, (2011), Conroy, et al (2010) and

Elliot & Sheldon, (1997) who found MCS to be effective in reducing fear of failure, which enhance academic achievement, goal attainment and enjoyment of chores or duties. The findings similarly agree with that of Parastoo, et. al (2015) who found metacognitive strategies to be effective in alleviating exam anxiety, and meta-anxiety among university students.

The findings also revealed that both male and female postgraduate students of Educational Psychology, exposed to Metacognitive Strategies (MCS), had no significant gender difference in the effect. The findings agree with that of Umaru, Y. et. al, (2015) and Elliot & Sheldon, (1997) who found instruction in MCS to be effective in reducing fear of failure, among both male and female subjects exposed to MCS. However, the finding does not agree with that of Abdulwaheed (2020) and Mohsen and Mansoor (2009) who found the use of metacognitive strategies to more effective in reducing male students' level of test anxiety than that of the female student thereby leaving the female students with high level of test anxiety. This is probably due to the fact that the subjects' level of education is not the same. The current study was carried out on post graduate students who were much more matured than secondary school

students. While secondary school students are at a developmental stage that is associated with worry and anxiety, especially for girls, post graduate students are, both male and female are in a stage where they are at par and ready to find solutions to their personal problems.

CONCLUSION

From the findings of this study, it was deduced that postgraduate students of Educational Psychology exposed to instruction in metacognitive strategies such as planning, monitoring and evaluation had a reduced fear of failure and that both male and female postgraduate Educational Psychology students of Ahmadu Bello University exposed to treatment had a reduced fear of failure.

RECOMMENDATIONS

Based on the findings of the study, it was recommended that:

1. Postgraduate students of Educational Psychology should be exposed to instructions in metacognitive strategy in handling fear of failure.
2. A course titled learning and study strategies be considered at all post graduate courses of the faculty of Education of Ahmadu Bello University so that all post graduate students

in training to be teachers could be exposed to the use MCS

3. Educational workshops and training classes on the use of MCS be arranged by psychologists and counsellors in collaboration with policy makers for serving teachers to enable teachers address fear of failure among both male and female students thereby helping the students to become active and independent recipients of information in their learning environment.

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CURRICULUM INTEGRATION IN SOCIAL STUDIES AT THE BASIC EDUCATION LEVEL: THE NIGERIA PATHWAY TO PROMOTING 21ST CENTURY LEARNING

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ABSTRACT

Social Studies is an educational tool adopted by the government to enhance quality citizenship in Nigeria. Effective citizenship demands taking responsibility in a multicultural and global space with skills to apply education to real life situations. However, this may not be possible without exposing the “Gen Z” (teenagers) students to the interconnectedness of social issues. This qualitative study employed content analysis with the aid of secondary data, to assess nature of curriculum integration in Social Studies for Basic 7-9 in Nigeria. Also, the paper reviewed the adequacy of the integration suggesting a pathway relevant to learning in 21st century. The study’s findings established the fusion-multidisciplinary approach as type of curriculum integration in Social Studies as it is in the harmonised National Values Education curriculum. The fusion approach was found to be inadequate due to misconceptions generated by splitting the subject into themes, taught separately by teachers. Recommendations were made for the return of Social Studies to its original, holistic, trans-disciplinary nature where themes are blended together. Workshops should also be organized teachers to enhance their effectiveness delivery of integrated curriculum including skills to switching roles and providing students with rich learning opportunities for acquisition of experiences in 21st century skills.

Keywords: Curriculum, Curriculum integration, Social studies, Basic education, 21st Century, learning.

INTRODUCTION

The 21st century education demands innovations in learning processes to support students’ independence to thrive in the world of technological advancement and changed perception on social issues. Many teenagers seem confused, challenged with poor self-identity, low quality decision

making and there is rise in social menace among teenagers in Nigeria. The menace includes bullying, abusive drug and alcohol use, internet fraud, among others (Dagogo et al., 2022). These behaviours may be connected with teenagers’ inability to

connect school lessons and consequences of their ill actions in real life events to guide actions. Possibly, this may be why some teenagers viewed schooling as a scam due to increasing lack of interest in schooling. Fomunyan (2020) pointed at the political class in Nigeria for lack of interest in addressing educational issues that limit the development of human capital.

The 21st-century is a knowledge explosion and globally connected era with people of diverse cultures interacting through fast technology. The century's significant shifts in ideologies, technological and educational discoveries have unique impacts on young people. (Drake & Reid, 2018; Dimock, 2019; University of the People, 2022). Also, the 21st century witnessed the births of different generations categorized as the Millennial (Generation Y), the Generation Z and the Alpha Generation (Dimock, 2019). Agwu in Drake and Reid (2018) and Fomunyan (2020) described 21st-century as a knowledge economy that requires students' practical demonstration of learning. It is a period of creative and applied knowledge rather than abstract knowledge as a mere end. Educational knowledge therefore, must be broad beyond single-subject line limitations if it will be effective

in solving actual world situations. Students born in the 21st-century may become confused and ill-equipped to responsibly contribute to the society. Therefore, this paper examined the type and adequacy of curriculum integration embedded in Social Studies curriculum.

Research Questions

- i. What are the reasons for advocating change in organising educational learning?
- ii. What benefits are inclusive in curriculum integration for Social Studies?
- iii. What are the various approaches to curriculum integration?
- iv. Which approach of curriculum integration was embedded into Social Studies curriculum at the Basic 7-9 level in Nigeria?
- v. How adequate is the curriculum integration approach adopted in organising Social Studies learning at the Junior Secondary School (Basic 7-9) in Nigeria?

Need for Educational Reforms

The Centre for Educational Research and Innovation [CERI] under the Organization for Economic Co-operation and Development [OECD] (2008) stated that educational reforms must reflect on learning. Reflecting

on learning helps to determine the direction of change a country desire and to solve complex issues through creativity and critical thinking. A reform of an educational system therefore, is beyond making changes to structures and organization of education in a nation. Therefore, policy makers need to reflect on kinds of learning and how learning is to take place. Knowledge must be integrated for usability in the 21st-century. Conversely, it was observed that knowledge presented in separate, single- compartments favour facts-memorization, followed routine procedures and students become weak to continue learning on their own. The Programme for International Student Assessment [PISA] (2003) found out that school systems failed to adequately prepare students with lifelong learning abilities and skills, hence advocating for curriculum integration.

A keen focus on learning, according to OECD (2008), changes the one-size-fits-all approach to organising school knowledge. The reasons necessitating improved 21st century approaches to learning are: desires to enhance personalized learning for students to become lifelong learners beyond the school in coping with changes in the world, having in-depth knowledge for wide range application to different issues and contexts; and

the social changes precipitated both by technology and population diversity called for changing roles by teachers and learners. Thus, CERI acknowledged that digital technologies affected young school learners.

The 21st-Century Learning

The Partnership for 21st-Century Learning (P21) in Battelle for Kids (2019) described the 21st-century learning as a blend of knowledge content, vital skills, including proficient experiences necessary for students' success at work and life. It is a truism that technological advancement is "changing the way we work, live, play, and learn" (CISCO Systems, 2008). The P21 focused on preparing students with knowledge and skills to navigate the unprecedented changes around them for global impacts. P21 framework suggested using subject knowledge and vital skills as foundation for developing 21st-century learning in students. The subjects will be effective when there are pillars supporting it such as the subject's standards, curriculum and instruction, assessment, professional trainings, and learning environment. The essential 21st-century skills students are to learn include the four Cs (4Cs) namely critical-thinking, communication, creative innovation (problem solving), and collaboration.

The 4Cs skills promote learning and innovation that ensures success in diverse aspects of life and career. Effective learning in 21st century will make the students to be well engaged in learning, thinking globally and act locally for impactful contributions to their society.

Battelle for Kids (2019) identified nine key subjects for schooling through which the interdisciplinary themes of the 21st century can be weaved in. These subjects are English language, Arts, Mathematics, Economics, Science, Geography, History, World languages, Government and Civics. Specifically, education in civic literacy will inform and promote students' understanding of governmental processes, equip students for effective participation in a democratic society and empower students to exercise their rights and duties as citizens of the society. Civics also will enable the students to understand the implications of decisions taken both on the immediate and global environments. To therefore survive and make impacts in the 21st-century, students need abilities to be: productive, accountable, flexible (adaptable) to frequent changes occurring in the world; take initiatives for independent decision making and have cross-cultural skills to maintain peaceful relationships socially.

Developing students' abilities in these areas will enable young learners to take responsibility in leading meaningful changes around them, while living locally to make global impacts (OECD, 2008; CERI, 2008).

Curriculum Framework **Integration**

Curriculum Integration (CI) is not just activities some teachers and researchers did for a specific period of time. It is not thematic teaching that focuses on specific topics as an end. CI is neither purely child-centred nor entirely prescribing learning areas. It is not just rearranging lessons to create overlaps among many subjects (Fraser, 2000; Drake & Reid, 2018). The above statements indicate challenges to curriculum integration. CI is the most confusing topic among educators (Fraser, 2014). The confusion includes different names, approaches taken and weak interpretation limiting effective use and scope of curriculum integration. Thus, Fraser concluded that any curriculum type can be poorly designed and executed and without grooming teachers on how to carry out cross curriculum planning, there will be challenges moving teachers from theme (topic) teaching into CI. Curriculum integration is an issue-driven approach to organizing education in a responsive way that is relevant to the students' needs

realistically. Topics may be employed but as means to creating solutions issues and not an end to itself. CI, therefore, promotes inclusive negotiation in learning with teachers leading the skillful delivery of curriculum while students take responsibility for influencing how they learn. Also, CI allows learning areas to unfold with issues identified while students learn realities around them in open-minded way (Fraser, 2014; Drake & Reid, 2018)). CI is viewed therefore, as an approach (Beane, 2005), a design (Fraser, 2014), a pathway (Lake, 1994; Drake & Reid, 2018) and a process (Wall & Leckie, 2017) that focuses on broad learning which abolishes strict content-area demarcation of subjects.

Beane (2005) defined CI as a democratic educational approach to organizing learning around critical issues to ensure deep meanings for the students. Wall and Leckie (2017) described CI as exploratory and integrative process to organizing learning for young learners in relevant and meaningful manner. Shoemaker in Lake (1994) explained CI as a holistic pathway of organizing education to cut-across several subject matters in reality. Fraser (2014) concluded that CI is a seamless way to organise learning using the natural connections among learning areas. This process opens solid pathways to learning.

Beauties of Curriculum Integration

The central focus of Curriculum Integration is to promote students' enthusiasm to aid active learning. As a pathway to organising education, CI uses broad approach that makes student's learning relevant to the world (Lake, 1994; Fraser, 2014; Drake & Reid, 2018; Dillon & Boyd, 2022). Lake (1994) supported by Drake & Reid (2018) highlighted CI creating knowledge link which provides a new model for understanding 21st-century world with skills for knowledge application. Fogarty (1991) stated gains of CI as motivation, building common attitudes and skills as students connect the interrelationships among separates subjects. Students are active through its inclusive nature and able to use information competently (Fraser 2000& 2014; Drake & Reid, 2018). Therefore, Dillon and Boyd (2022) recommended CI as a dogged solution to fixing the border-line limitations hindering transfer of knowledge, created in both elementary and secondary education. Therefore, there is a holistic unity among several subject area through curriculum integration.

Curriculum Integration as a Continuum

The curriculum developers or instructional designers are responsible for crafting the curricula

(Dillon & Boyd, 2022). The approach to move from a single subject approach to CI is a continuum with many styles or patterns (Fraser, 2014; Schumacher, 2016; Drake & Reid, 2018). For instance, Vars (1987) cited in Schumacher (2016) listed three approaches (correlation, fusion and core/broad). Fogarty (1991) listed ten steps including fragmented, connected, nested, sequenced, shared, webbed, threaded, integrated, immersed, and networked integration on the continuum. Schumacher (2016) revealed five steps which are departmentalized, reinforcement, complimentary, webbed and integrated themes. Drake & Reid (2018) listed four fusion, multidisciplinary, interdisciplinary and trans-disciplinary types of integration. Dillon and Boyd (2022) however, narrowed curriculum integration into two basically as multidisciplinary and interdisciplinary. On the other hand, Beane (2005) suggested strategies to integration using social, experiences, design and knowledge to weave cross meanings into educational curriculum.

Basic Education in Nigeria

According to the Nigerian Educational Research and Development Council [NERDC] cited by Ogunode and Nasir (2021) and Babajide and Smith (2022), basic

education in Nigeria comprises of Lower Basics 1-6, [Primary School] and the Upper Basics 7-9, [Junior Secondary School (JSS)]. NERDC adopted a 9-Year Universal Basic Education (UBE) in 2006 and became operational in 2008. The Basic Education Curriculum (BEC) was further updated in 2015 (Olateru-Olagbegi, 2015). The curriculum harmonized the subjects resulting in a reduced number of subjects to comply with global best practices. The review process also eliminated repetitions within and across subjects to reduce content overloads (Fomunyan, 2020; Babajide & Smith, 2022).

A curriculum generally represents the total experiences gained by learners in the school (Ogunode & Nasir, 2021; Babajide & Smith, 2022). The curriculum document shows the contents, performance objectives, activities (teachers and learners), learning and teaching materials, and assessment guide. A curriculum is an open, dynamic and ever-changing document. The curriculum changes are often necessitated based on people's aspirations, the needs and challenges the society is confronted with (Babajide & Smith, 2022). Olateru-Olagbegi (2015) stated the objectives of a curriculum as the provision of knowledge, skills, values and attitudes for learners to live successfully in the society. Olateru-

Olagbegi citing John, et al., pointed at inadequacy of the former secondary school curriculum to train students to apply technology and serve as sub-professionals as leading cause for the curriculum.

Fomunyan (2020) advocated therefore, for a curriculum that reflects real-life situations to create a pathway for education's relevance to student's and employers' needs in Nigeria. The Battelle for Kids (2019) proposal for a 21st-century curriculum and instruction emphasized teaching 21st-century skills within subjects using interdisciplinary themes. Also, students should be provided learning opportunities to gain skills using competency-based approach that cuts across curricula. The teacher integrates innovative learning methods using problem or issues-based, inquiry and higher order thinking approaches to sustain student's motivation and participation in learning.

The related subjects from the previous curriculum were restructured and realigned providing students with ten subjects at the Basic Level. The subjects are English Studies, Mathematics, Basic Science and Technology, Religion and National Values; Cultural and Creative Arts; Business Studies, Nigerian Languages, Pre-Vocational Studies, French, and Arabic

languages. The BEC also addressed national issues such as human rights, family life, HIV/AIDS, critical thinking, and entrepreneurship and life skills (Olateru-Olagbegi, 2105). Fomunyan (2020) judged the review as best practice because education requires a general overhauling of the curricula holistically. However, Dillon and Boyd (2022) identified the projection of education in separate compartment as a major challenge to mastery of knowledge and its effective use to solving social issues. Thus, summarising the whole of primary and secondary education subjects into four separate knowledge areas termed M.E.S.S. representing Mathematics, English, Social Studies and Science.

Nature of Social Studies

According to the National Council for Social Studies (NCSS), the characteristics and power of Social Studies is found within its nature and understanding of its purposes (Annenberg, 2017). The University of the People (UoP, 2022) affirmed NCSS' position of Social Studies as an integrative school subject that equips students to make reasoned decisions in promoting common good in a democratic society. Social Studies' core purpose is citizenship education, that is, to make students active participants contributing to the good of their society (Annenberg,

2017; Kumar, 2018; UoP, 2022). Other benefits include promotion of responsibilities and quality values in students, cultural understanding, critical-thinking and skills to deal with actual world events as they unfold (UoP, 2022).

To effectively impart the students with comprehensive education, Social Studies integrated many social sciences, humanities and natural science knowledge areas into its curriculum. The relevant single-subject areas integrated include history, geography, law, religion, mathematics, philosophy, economics, technology, political science, among others. These facts showed that Social Studies does not offer knowledge in a separate, compartment form to the students but rather broadens students' perspectives to make reasoned decisions. Therefore, the core purpose and nature of Social Studies are the two vital distinguishing features of the subject (Annenberg, 2017; Kumar, 2018; UoP, 2022). In essence, a purposeful Social Studies in 21st-century, according to the UoP (2022), must be integrative, while promoting promote democratic values. However, the approach and level of integrating the Social Studies curriculum differs from one country to another and among institutions (Annenberg, 2017).

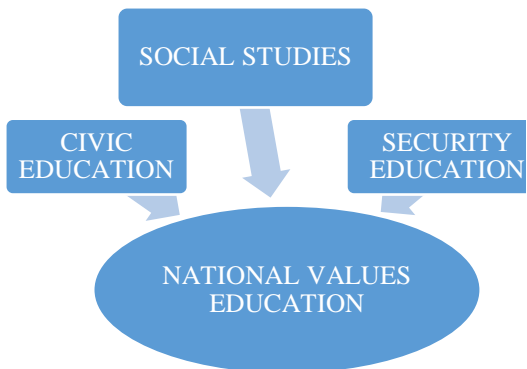
Curriculum Integration Approach Embedded in Social Studies

Initially, Social Studies was grouped under the Religion and National Values (RNV) comprising of five subjects. These subjects are Christian Religious Studies, Islamic Studies, Civic Education, Social Studies and Security Education. The RNV title subsumed the previous separate subjects to become themes after that. Eight vital, national values focused in the RNV include honesty, justice, discipline, courage, national consciousness, right attitude to work, and regards for the interest of others (Babajide & Smith, 2022; Ogunode & Nasir, 2021). Providing a single definition for Social Studies creates challenges to understanding the subject beyond other humanities subjects (Annenberg, 2017). The approach often employed to teaching this unique, trans-disciplinary subject also constitutes another burden.

In 2014, misconceptions trailed the RNV that could spark a religious crisis with several complaints from religious bodies and concerned parents' bodies, leading to the two religious studies' separation from RNV (Aluko, 2018). The subject's title changed to National Values Education (NVE) with Social Studies, Civics and Security Education as themes. This results into the fusion approach to CI as stated by (Drake &

Reid, 2018). The NVE integration depicted three themes as follows:

Figure 1: Nigeria’s Fused, Multidisciplinary Approach to Curriculum Integration of Social Studies at the Basic Education Level for NVE



Source: Adeduntan (2022)

Adequacy of Curriculum Integration Approach in Social Studies at Basic 7-9 Level

In Nigeria, the implementation of the harmonized, BEC poses considerable difficulties to the stakeholders especially, teachers, students, religious bodies, and parents at large. Olateru-Olagbegi earlier posited that inadequate teachers, lack of professional pedagogy with poor learning environment are critical concerns to the harmonized Basic Education Curriculum. There found it hard to translate the curriculum harmony effectively. Some are confused on strategies to implement the three-in-one (NVE) curriculum coupled with unqualified personnels teaching Social Studies. This brings

setbacks due to poor understanding of the themes in NVE as one curriculum. The separate presentation of textbooks as main instructional material on NVE further complicates the subject status as integrated. The poor monitoring of teachers and schools, and evaluation of change during implementation made the challenges to continue (Babajide & Smith, 2022; Ogunode & Nasir, 2021).

Nigeria Pathway to 21st Century Learning: Policy Implications and Observed Gaps

Technological advancement of 21st century has changed how people work, live, play, and learn (CISCO Systems, 2008). The subject knowledge content basically is the foundation to transmitting 21st-century learning. This Civics is identified as a component of Social Studies (UoP, 2022).

Social Studies by name, nature, approach and purposes for the study clearly depicted the subject as involving curriculum integration. According to Drake & Reid (2018), and UoP (2022), Social studies is integrative. UoP (2022) established the subject to be multidisciplinary while Drake & Reid (2018) termed it as trans-disciplinary. Social Studies core purpose is to develop civic competence; therefore, many subject areas were blended (multidisciplinary

content) to resolve issues confronting the nation as a group of many societies. The integrative (well blended themes and content), multidisciplinary and trans-disciplinary (holistic, problem-focused approach with collaboration for creative solutions) nature come from blending the social sciences, humanities, natural science and technology fields to create one meaningful curriculum. Establishment of Social Studies which hinged essentially on removal of single-subject border-lines purposely to solving societal problems is the best practice of trans-disciplinary nature of learning that is fully integrated. The University of Dayton (2018) emphasized collaborative approach that integrates multiple disciplines but presented concepts in an innovative way without compartmentalizing learning (Carrillo, 2022).

Curriculum integration can be differently labelled and implemented through diverse approaches (Drake & Reid, 2018). Although, there are many benefits in an integrated curriculum (Beane, 2005; Dillon & Boyd, 2022; Fogarty, 1991; Lake, Drake & Reid, 2018), however, it is still possible to fail at the design and implementation of CI and messed up the benefits. If teachers are not groomed to use integrated curriculum

skillfully the benefits of the curriculum will be hindered (Fraser, 2014).

RESULTS

The Basic Education Curriculum as harmonised by NERDC to reduce subjects and content overload listed Social Studies as a theme in the NVE curriculum. Also, the subject-themes were presented separately and viewed separately way by teachers thus indicating a fusion-multidisciplinary approach to CI (Babajide & Smith, 2022; Olateru-Olagbegi, 2015). This separate grouping is anti-natural and not a higher order of CI (Annaberg, 2017; UoP, 2022). Thus, approach in NVE is the weak process adding to erroneous conceptions of Social Studies as a single subject (Beane, 2005; Drake & Reid, 2018; Fraser, 2014). Dillon and Boyd (2022) unequivocally, had listed Social Studies as a critical part of the four main subject groupings in primary and secondary education but Nigeria's harmonised curriculum failed to present the subject so. Teaching civics and security issues independently from Social Studies can be compared with removing the engine, battery and tyres of a car for separate use which cannot function well unless all parts are fixed together into a whole vehicle for the ultimate movement and speed desired.

Also, the NVE harmonised curriculum segmented the subject, thus defeating the purpose of developing harmonization and curriculum integration. The knowledge and competencies were not naturally connected to stimulate students' motivation. Teacher's roles were not switched with little learning opportunities for learners to gain practical experiences and to take responsibility for application of their education (Carrilo, 2022). The emphasis on parts rather than the whole is against Social Studies design, nature and core purpose (Annenberg, 2017; Drake & Reid, 2018; UoP, 2022). The NVE harmonised curriculum depicts imbalance and faulty approach that cannot sustain student's 21st-century learning.

CONCLUSION

Curriculum integration is undoubtedly a democratic approach to seamlessly organize 21st-century learning, with capacity to enable students to create solutions. Nigeria's harmonised, NVE curriculum however, adopted a low-level approach to CI thus using the fusion-multidisciplinary type. This weakens Social Studies thus violating the nature and internal purpose (two vital distinguishing power) of Social Studies. Also, the fusion-multidisciplinary approach displayed

in the NVE curriculum contradicted the overall intention to the harmonization and integration goal of reducing subjects and content overloads for the students at the Basic Education level generally. Therefore, NERDC harmonizing BEC is a positive step to regular reform and overhauling education as global best practices to serve an ever-changing society. However, the NVE approach used by NERDC designated Social Studies into segments again and can be considered inadequate to aid effective citizenship in 21st century.

RECOMMENDATIONS

1. The government should return Social Studies to its holistic, integrated approach for a seamless curriculum integration beyond the current fusion-multidisciplinary posture the NVE suggested. The pathway to 21st-century learning is in resolving the dichotomy of compartments in NVE by NERDC.
2. Social Studies teachers should be exposed to workshop that will enhance a skillful, artistry delivery of integrated curriculum. This could be promoted by the Social Studies Educationist Association of Nigeria [SOSAN] with relevant government agencies (NERDC) to ease teachers switch of roles.

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ADOPTION OF QUICK RESPONSE CODE IN UNIVERSITY LIBRARIES: A SURVEY OF LIBRARIANS' ATTITUDE

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ABSTRACT

The study investigated the levels of awareness, attitudes, and adoption of quick response codes among librarians working in university libraries located in Delta and Edo states, Nigeria. The research methodology was a descriptive survey design with a correlational approach. The study's population/sample consisted of 124 librarians, and the complete enumeration sample technique was selected to enable the examination of the entire population. Data collection was facilitated through the utilization of a structured questionnaire as the primary research instrument. The study employed statistical measures such as frequencies, percentiles, means, and standard deviations to answer the research questions, while Pearson Product Moment Correlation was used to test hypothesis. The findings indicated that the affective, conative, and evaluative attitudes of librarians towards QR codes in university libraries located in Delta and Edo States, Nigeria, are favorable. The study revealed that the librarians in university libraries located in Delta and Edo States, Nigeria, exhibit positive attitudes towards QR codes, as evidenced by their affective, conative, and evaluative responses. Also, findings indicated that the integration of QR codes in academic libraries is deemed crucial, and it is postulated that the perceptions of librarians may influence their adoption. It was suggested that it would be beneficial for university library management to promote the utilization of QR codes in their services, as librarians exhibit a favorable disposition towards them and are inclined to implement them.

Keywords: Attitudes, Adoption, Librarians, QR codes, University libraries

INTRODUCTION

The Quick Response Code, commonly known as QR Code, is a

2D bar code that facilitates the storage and retrieval of information

that can be scanned and interpreted by digital devices (Rouse, 2020). Today, for libraries to perform effectively, quick response technology usage is more important than ever. Academic libraries all around the world have adopted these codes not only to enable access to their information resources but also to efficiently improve the delivery of their services. Quick response codes have proven beneficial to libraries in several ways. They are used to give directions to library users, provide brief information to users, provide orientation for new students or users, promote and market library services and resources, and provide swift access to the library's resources (Parabhoi et al., 2017).

A QR code, often known as a 2D barcode, is a matrix barcode that can be scanned by smartphone cameras. The information it carries may appear as a URL, phone number, SMS message, V-card, or any other type of text, and the code frequently resembles a little white square with black geometric designs (Ateka & Kwanya, 2019). According to Naik et al. (2015), QR codes are a much easier way to access information because smartphones have built-in QR scanners. Users do not need to memorize the critical web addresses.

They are found in magazines, on websites, embedded in a page of text, on a handout or flyer, as a bookmark, or even on video information screens. They are usually square-shaped code pictures with a black pattern against a white background. When the code is scanned by a camera that has been loaded with the appropriate scanning software, the search will produce a link that, when clicked, can send a user to a website embedded in the code that includes expanded or additional information about the good or service an organization wants to promote (Massis, 2011). When a user scans a QR code, it directs them to a specific URL, expanding the meaning of the code and displaying it as a representation of the service (in this case, additional information about the URL) hidden inside. They make use of low-level but cost-effective technologies that can be applied to support diverse library functions given that virtually all academic library users have mobile phones (Ateka & Kwanya, 2019).

However, it is important to consider how librarians in Nigeria feel about the use of QR code technology in libraries. As per the American Heritage Dictionary of Business (2020), the psychological tendency to respond positively or negatively towards a particular idea, object, individual, or circumstance is

commonly referred to as an attitude. To a considerable extent, attitude affects a person's choice of action and how they react to an idea or scenario (Tsukahara et al., 2016). The adoption of QR codes in university libraries is significantly influenced by the attitudes of librarians. If individuals exhibit a favorable disposition towards it, they are likely to readily embrace and utilize it for enhancing their services and resources. Conversely, individuals who exhibit a pessimistic attitude towards technology may demonstrate a reduced inclination towards incorporating codes into their libraries as a means of improving their services and resources.

Therefore, librarians' attitudes (whether favorable or negative) may play a significant role in determining whether or not QR codes are adopted and used in academic libraries. Personal interactions with librarians in the university libraries in the states of Delta and Edo, Nigeria, have shown that none of the university libraries have adopted QR codes for the enhancement of their services and resources; this study seeks to determine whether the adoption of QR codes in university libraries may be influenced by certain variables, such as librarians' attitudes.

A reasonably persistent arrangement of attitudes toward socially relevant things, organizations, events, or symbols includes beliefs, sentiments, and behavioral tendencies (Hogg & Vaughan, 2005). According to Cherry (2020), attitude can be seen as a set of emotions, beliefs, and behaviors towards a particular object, person, thing, or event. In most cases, they are an exhibition of a person's experience and upbringing, which influence their behavior. According to McLeod (2018), attitudes can be broken down into three categories. The affective aspect is concerned with how a person feels or behaves about a thing or an idea. While the evaluative component is concerned with how a person's beliefs or knowledge shape his attitude toward an item, the behavioral (or conative) component focuses on how our attitudes affect how we act or behave. Employeepedia (2020) stated that employee attitude includes characteristics such as interest in the job, working without constant supervision, taking a positive dimension of things, and being always ahead of the game, which may lead to an employee's willingness to contribute.

Libraries akin to numerous other establishments, have historically utilized quick response codes in various domains, including library

marketing, to endorse information resources and services. Ashford (2010) observed that the major justification for deploying QR codes in university libraries is mainly because the number of smartphones and Internet-enabled cell phones globally is increasing rapidly (Ashford, 2010). Numerous studies have documented the implementation of QR technology in libraries. For example, Dani and Patil (2020) discussed the importance of QR code-based library management systems that work in real-time, provide easy access, and reduce the burden on the librarian by tracking the books available and issued to any book, and the total number of books. Odibbo and Echedom (2020) did a detailed review of the concept of the 2D barcode and described the practice of reading and generating the codes. Their paper attempts to explain the basic concept and structure of the 2D barcode, the types, and forms, and how to generate the code. Das and Das (2021) succinctly captured the QR Code's effectiveness and applications on library services, particularly those that could be rendered during the COVID-19 pandemic, while discussing the concept. In a recent study, Kadli (2020) sought to elucidate the affordability of QR codes as a mobile-based technology that libraries can adopt. Additionally, he

discussed the key function of the QR code and how it quickly improves the library's services. Gopala (2019) examined several practical uses for QR in libraries and showed how the technology might be integrated into library services, including all of its benefits and drawbacks.

The study conducted by Ogbomo and Omorodion (2019) investigated the level of knowledge and readiness of librarians in Nigerian academic libraries to utilize QR codes. The examination of the data indicated a limited understanding among librarians regarding the utilization of QR codes. Despite the absence of QR code readers in the academic libraries being examined, the research findings suggest that librarians expressed a willingness to adopt them for various services. Aiyebilehin et al. (2017) conducted a study inquiring about the perspectives of librarians in Edo State regarding the utilization of information and communication technologies (ICTs) for the provision of services. The findings indicate that librarians hold a favorable perception of the utilization of Information and Communication Technology (ICT). According to Ateka and Kwanya's (2019) assertion, a significant number of systems librarians employed in academic libraries in Kenya lack familiarity with QR code technology. The research findings indicate that the

employment of QR codes is currently limited to only four academic libraries in Kenya. QR codes are perceived as a promising tool for advertising and promoting services and products by libraries. Rabu et al. (2019) conducted an additional investigation concerning the perceptions and attitudes of students in higher education regarding the utilization of QR codes. The research revealed that students exhibit favorable dispositions towards the utilization of QR codes for academic purposes, which consequently influences their inclination to adopt the technology. Gummesson's (2016) research corroborated the notion that a favorable attitude towards QR codes can facilitate their utilization as a swift means of knowledge dissemination in woodwork classrooms. This, in turn, renders the PIMEX videos efficacious, astute, and proficient.

Objectives of the Study

The main objective of the study is to examine awareness, attitude, and adoption of quick response codes by librarians in university libraries in Delta and Edo states, Nigeria. The specific objectives of this study are to:

1. investigate the nature of the attitude of librarians in Delta and Edo States towards the

adoption of QR codes in academic libraries.

2. determine if there exists any relationship between librarians' attitudes and the adoption of the QR code.

Research Question

What is the nature of librarians' attitudes toward QR codes in academic libraries?

Research Hypothesis

There is no significant relationship between librarians' attitudes and the adoption of the QR code.

METHODOLOGY

Research Design

The present investigation utilized a descriptive survey design with a correlational approach. According to Kalla (2020), a correlational study is a method used to establish the existence of a relationship between two variables. The objective of this research is to investigate the correlation among awareness, attitude, and adoption of QR Codes within university libraries located in Delta and Edo states. Given the focus of this investigation on establishing the relationship between variables, the correlational research design

represents the most appropriate approach for this study.

Participants

The study sample comprises 124 librarians who are affiliated with 14 university libraries located in the Nigerian states of Edo and Delta. The study's sample comprises 124 librarians working in university libraries located in Delta and Edo States, Nigeria. The research employed the total enumeration sampling method, also referred to as the census sampling method, due to its capacity to investigate the complete population. Australian Bureau of Statistics (2013) affirmed that the census sampling technique provides a true measure of the population by eradicating sampling errors, benchmark data may be obtained for future studies via the census sampling technique and detailed information about small sub-groups within the population is more likely to be available using the sampling method.

Instrumentation

Data were collected from the participants through the utilization of a questionnaire that was designed by the researcher. The questionnaire utilized in this study was named "Attitude Towards Adoption of Quick Response Code in University Libraries Questionnaire."

(AAQRCULQ)." The instrument consisted of three sections. Section A-C. Section A focused on the demographic characteristics of the respondents, such as the name of the institution, gender, academic qualification, and ownership of the university library. Section B measured librarians' attitudes toward the codes, and it was designed on a four-Likert scale. Section C assessed the extent to which librarians have implemented QR codes in their academic libraries, utilizing a four-point Likert scale. The researchers, aided by a research assistant, manually disseminated the instruments to multiple university libraries and promptly retrieved the completed instruments.

Validity and Reliability of the Research Instrument

The validity of the instrument was assessed through both face and content validation. To establish the face and content validity of the questionnaire, expert senior lecturers from the Department of Library and Information Science at Delta State University, Abraka were provided with copies of the questionnaire. These experts conducted a comprehensive review and verification of the instrument to confirm the relevance of the questionnaire items to the study. The feedback provided by the participants

facilitated the elimination of redundant information and ensured that solely inquiries pertinent to the examination of librarians' awareness, attitude, and adoption of quick response codes in university libraries were assessed.

The study utilized the split-half method, involving a sample of 30 librarians from the University of Nigeria, Nsukka Library, which was deemed beyond the study's purview. The procedure involved a singular administration of the instrument to the participants, followed by the division of their responses into two distinct sets of data based on odd and even numbers. The assessment of the instrument's reliability was conducted through the utilization of Pearson's Product Moment Correlation Coefficient r . The reliability of the entire test was obtained through the utilization of the Spearman-Brown prophecy formula (Step-Up) individual sections and overall, reliably were assessed. The study reports high-reliability coefficients for various sections, including Section B, which measures the awareness of librarians towards the concept of QR codes in university libraries, with a coefficient of 0.97. Similarly, Section C, which assesses librarians' attitudes toward QR codes in university libraries, has a reliability coefficient of 0.92. Section D, which

measures librarians' willingness to adopt QR codes in their university libraries, has a reliability coefficient of 0.73. Section E, which evaluates the perceived benefits of the adoption of the QR code, has a reliability coefficient of 0.90. Finally, the study reports a high overall reliability coefficient of 0.92. Pearson's Product Moment Correlation Coefficients exhibited values exceeding 0.50, indicating a dependable and suitable measure for employment in the investigation.

Procedure for Data Collection

The researcher administered the questionnaire to librarians in the various universities under study in collaboration with a research assistant in the libraries within the scope of the study. This method was to ensure that every librarian was allowed to receive and complete the questionnaire. A total of 124 questionnaires were distributed, and 101 (81%) copies were returned, which is considered adequate.

Data Analysis

The collected data underwent analysis through the application of descriptive statistics, specifically utilizing frequency, mean, and standard deviation, to auto-search inquiries. Additionally, Pearson's product-moment correlation coefficient was employed to test the

hypothesis. The mean criterion was established at a value of 2.50, and the hypothesis was assessed at a significance level of 0.05.

RESULTS

Table 1: Respondents by Educational Qualifications

Qualification	Freq	%
Diploma	2	2.0
B. Sc/BLIS/B. Ed	41	40.6
MLS/M. Sc/M. Ed	45	44.6
Ph.D.	13	12.9
Total	101	100.0

Table 1 displays the educational attainment of the participants. The data reveals that a significant proportion of the respondents, specifically 44.6%, possess an MLS/M.Sc./B.Ed. degree.

Additionally, 40.6% of the respondents hold a B. Sc/BLIS/B. Ed degree, while 12.9% of them possess a Ph.D. degree. A small proportion of the respondents, specifically 2%, hold a Diploma certificate. The findings of this study suggest that a significant proportion of the participants from university libraries in Delta and Edo states possess either an undergraduate or postgraduate degree in library science.

Table 2: Respondents by Gender

Gender	Frequency	Percentage
Male	58	57.4
Female	43	42.6
Total	101	100.0

From Table 2, it can be seen that there are 58(57.4%) males, while there are 43(42.6%) females. This implies that there are more male librarians than female colleagues in the university libraries in Delta and Edo states that participated in this study.

Table 3 presents the distribution of librarians across various university libraries. The data indicates that the majority of librarians, comprising 27.7%, are affiliated with the Delta State University Library. The John Harris Library and the Benson Idahosa University Library each have 9.9% representation, while the Federal University of Petroleum University Library has 8.9%. The Ambrose Alli University Library, Novena University Library, and Wellspring University Library each have 5.9% representation. The aforementioned data reveals that a proportion of the surveyed sample obtained their information from various academic libraries, including Admiralty University Library and Michael and Cecilia Ibru University Library, which accounted for 5%

each. Additionally, Igbinedion University Library and Nigerian Maritime University Library constituted 4% each, while Edwin

Clarke University Library and Edo State University Library accounted for 3% each. Lastly, Western Delta

Table 3: Name of Libraries

Name of Library	Frequency	Percentage
Ambrose Alli University Library, Ekpoma, Edo State.	6	5.9
Edwin Clarke University Library, Kiagbodo, Delta State.	3	3.0
John Harris Library, University of Benin, Benin City, Edo State.	10	9.9
The Admiralty University of Nigeria Library, Igbuzor, Delta State.	5	5.0
Igbinedion University Library, Okada, Edo State.	4	4.0
Nigerian Maritime University Library, Okerenkoko, Gbaramatu, Delta State.	4	4.0
Delta State University Library, Abraka, Delta State.	28	27.7
Novena University Library, Ogume, Delta State.	6	5.9
Michael and Cecilia Ibru University Library, Agbarha-Otor, Delta State.	5	5.0
Wellspring University Library, Benin City, Edo State.	6	5.9
Edo University Library, Iyamho, Edo state.	3	3.0
Federal University of Petroleum University Library, Effurun, Delta State.	9	8.9
Benson Idahosa University Library, Benin City, Edo State.	10	9.9
Western Delta University Library, Oghara, Delta State.	2	2.0
Total	101	100.0

Table 3 presents the distribution of librarians across various university libraries. The data indicates that the majority of librarians, comprising 27.7%, are affiliated with the Delta State University Library. The John Harris Library and the Benson Idahosa University Library each have 9.9% representation, while the Federal University of Petroleum University Library has 8.9%. The Ambrose Alli University Library, Novena University Library, and Wellspring University Library each have 5.9% representation. The aforementioned data reveals that a proportion of the surveyed sample obtained their information from various academic libraries, including

Admiralty University Library and Michael and Cecilia Ibru University Library, which accounted for 5% each. Additionally, Igbinedion University Library and Nigerian Maritime University Library constituted 4% each, while Edwin Clarke University Library and Edo State University Library accounted for 3% each. Lastly, Western Delta University Library contributed 2% to the overall data. This implies a greater number of librarians affiliated with the Delta State University Library were involved in the aforementioned investigation.

Research Question: What is the nature of librarians’ attitudes toward QR codes in academic libraries?

Table 4: Librarians’ Attitude towards the Adoption of QR Code

Affective Attitude to QR Code	SA	A	D	SD	Mean
I feel joyful using QR Code whenever I can					
I feel QR Code are very easy to use	29	71	0	1	3.27
I feel QR Code will change the way librarians are promoting their services	24	75	1	1	3.21
I feel the codes can give directions to users	28	71	0	2	3.24
I feel the codes are good for library reference and information services	18	81	1	1	3.15
Sub-Mean	28	72	0	1	3.26
Conative Attitude to QR Code					3.23
I believe the codes are a cost-effective technology					
I will require little training to be able to use QR Code	30	58	1 2	1	3.16
I know the codes will be easy for users to explore	24	62	1 4	1	3.08

I believe users will be willing to scan QR Codes and meet their needs	17	83	0	1	3.15
I think the codes can help save users' time.	33	67	0	1	3.31
I can encode valuable information using QR Codes	28	72	0	1	3.26
I can inform users of the benefits of the codes	35	60	3	3	3.26
I can create QR Codes to incorporate the library Webpage	23	74	2	2	3.12
I believe the codes can be used for library routines	22	71	6	2	3.12
Sub-Mean	36	63	0	2	3.32
Evaluative Attitude to QR Code					3.20
My experience of the use of the codes has been seamless					
Scanning of Codes is easy which will make routines faster	18	75	5	3	3.07
Users can meet their needs independently by scanning QR Codes	37	58	3	3	3.28
There will be no issues if my library adopts QR Codes	36	59	2	4	3.26
Sub-Mean	33	64	0	4	3.25
Aggregate Mean					3.22
Criterion Mean					3.21
					2.50

According to the data presented in Table 4, the librarians' attitudes (including affective, conative, and evaluative aspects) towards QR codes in university libraries located in Delta and Edo States, Nigeria, are positive. This conclusion is supported by the aggregate mean of 3.21, which exceeds the criterion mean of 2.50. The mean response for each of the

attitude measurement aspects was found to be high.

Hypothesis: There is no significant relationship between librarian attitude and their adoption of QR codes in university academic libraries.

Table 5: Relationship between Librarians' Attitude and the Adoption of QR Code

Variable		Willingness to Adopt QR Code	Attitude toward QR Code
Willingness to Adopt QR Code	Pearson Correlation	1	.503
	Sig. (2-tailed)		.000
	N	101	101
Attitude toward QR Code	Pearson Correlation	.503	1
	Sig. (2-tailed)	.000	
	N	101	101

According to Table 5, the Pearson correlation coefficient is $r = 0.503$. Based on the statistical analysis, it can be inferred that a positive and significant correlation exists between the adoption of QR codes by librarians in university libraries and their attitude toward this technology. This conclusion is supported by the fact that the Sig.2-tailed value obtained from the analysis is less than the standard alpha level of 0.05. The aforementioned suggests that a rise in librarians' dispositions towards QR codes could result in a commensurate surge in their implementation within academic libraries situated in the Delta and Edo states of Nigeria.

Discussion

The research discovered that the affective, conative, and evaluative attitudes of librarians towards the implementation of QR codes in

academic libraries located in Delta and Edo States, Nigeria, are favorable. Upon initial examination of the various components utilized to assess the attitudes of librarians, it was observed that the evaluative component of attitude exhibited the most elevated mean score of 3.22. This denotes the librarian's assessment of the utilization of QR codes. The affective aspect of attitude also produced a high mean score, showing that librarians' feelings towards QR codes are also positive. Lastly, librarians' constructive attitude towards QR shows how much they believe in the usefulness of adopting QR in their academic libraries. The present discovery corroborates the outcome documented by Ogbomo and Omorodion (2019) which indicates that librarians exhibit a favorable disposition towards the implementation of QR codes in the

provision of library services. The present discovery aligns with the outcome reported by Aiyebilehin, Ikenwe, and Okpetu (2017) which indicates that the attitudes of librarians toward utilizing various information and communication technologies (ICTs) to provide services in Edo State are favorable.

The research revealed a noteworthy correlation between the disposition of librarians and the implementation of QR codes by librarians in academic libraries, as supported by statistical analysis. This result implies that an increase in librarians' attitudes toward QR codes will lead to a corresponding increase in their adoption in the university libraries in Nigeria's Delta and Edo states. Employeepedia (2020) rightly projected that employee attitude, which includes characteristics such as interest in the job, working without constant supervision, and taking a sensitive dimension of things, relates to the employee's willingness to contribute to the success of the organization. Positive attitudes among students towards QR code utilization for course-related activities ultimately determined their intentions to accept this technology. Gummesson's (2016) research corroborates the notion that a favorable disposition towards QR codes can facilitate their utilization as

a rapid means of knowledge dissemination in woodworking classrooms, thereby rendering PIMEX videos a viable, astute, and efficacious tool. The discovery aligns with Adekunle et al.'s (2008) observation that favorable attitudes among librarians are crucial characteristics for the effective implementation and utilization of various information technologies in Nigerian libraries.

CONCLUSION

The utilization of QR Codes for facilitating access to information resources and promoting the services of university libraries is progressively gaining popularity. The adoption of QR codes in academic libraries has been widely acknowledged as essential. However, it is also posited that the attitudes of librarians may play a role in their acceptance and implementation. This study examined the attitudes of librarians and their correlation with the adoption of QR codes. Consequently, the research concludes that librarians exhibit a favorable disposition towards the implementation of QR codes, and a noteworthy correlation exists between the integration of these technologies in academic libraries situated in Delta and Edo States, Nigeria.

RECOMMENDATIONS

The study's results have led to the formulation of the subsequent recommendations.

1. To maintain the positive attitude of librarians, it is recommended that management provide regular sponsorship for conferences, workshops, and seminars. This will facilitate their professional development and enable them to stay up-to-date with the latest up-skilling techniques.
2. To increase the adoption of QR Codes in libraries among librarians, it is recommended to implement additional awareness strategies.
3. Given the favorable disposition of librarians towards QR Codes and their readiness to implement their use, it is recommended that the university library administration promote the integration of QR Codes in the library services for the benefit of students.

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PSYCHOMETRIC ASSESSMENT OF DEPRESSION ANXIETY STRESS SCALE (DASS-21) AMONG SECONDARY SCHOOL STUDENTS IN DELTA STATE: IMPLICATIONS FOR EMOTIONAL COUNSELLING

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ABSTRACT

Mental health problems are becoming a major concern among Nigerian secondary school students, hence the need for relevant and dependable metrics for evaluating these problems. The psychometric qualities of the DASS-21 scale must be assessed in this population to ensure its utility. The study validated the scale's dimensionality, item fit, suitability of answer categories, and reliability using Rasch Model. Participants included 950 secondary school students from different schools across the three senatorial districts of Delta State, Nigeria. The scale showed a single dimension (unidimensionality), indicating that the items are moderately difficult and appropriate for the target population. The scale is sensitive to differences in emotional distress levels among respondents. Also, the person reliability value was 0.806 and the item reliability value was 0.9315, indicating that the Rasch model reliably measured the latent trait of interest in the amongst of secondary school students in Nigeria. The study recommended that the DASS-21 scale can be used as a valid tool for the assessment of mental health problems in secondary school students in Nigeria.

Keywords: Psychometric properties, DASS-21 scale, Rasch model, Secondary school students, Mental health

INTRODUCTION

Amongst Nigerian secondary school students, mental health problems such as anxiety, depression, and stress are becoming a major concern (Adewuya & Oladipo, 2020; Esan et al., 2019; James et al., 2017; Obiechina & Isiguzo, 2016; Frank-Briggs & Alitcor, 2010). Hence, having

relevant and dependable metrics for evaluating mental health problems in this group of students is essential. The Depression Anxiety Stress Scales (DASS-21) (Lovibonds & Lovibond, 1996), which has been extensively utilized in academic and therapeutic settings, is one such measurement

(Priya et al., 2020; Saricam, 2018; Rao & Ramesh, 2015).

To ensure its utility, its psychometric qualities must be assessed in the Nigerian environment. There is little study on the psychometric qualities of the DASS-21 scale among youths in Nigeria, despite the fact that it has been used extensively in a variety of groups in Nigeria (Awotidebe et al., 2022; Igbokwe, 2020). There is a dearth of research on the application of the Rasch model in the psychometric analysis of DASS-21 in Nigeria, despite the fact that the Rasch model has been used in validating the DASS-21 in several countries in Europe (Cowles & Medvedev, 2022), and Australia (Parkitny et al., 2012; Belvedere & Morton, 2010). This knowledge gap emphasizes the need for more study on the application of the Rasch model to the psychometric evaluation of mental health measures, which might assist to increase the validity and reliability of these scales.

A contemporary psychometric technique called the Rasch model enables the evaluation of rating scale quality, item fit, and the reliability of the underlying concept being assessed by the scale (Alordiah, 2015; Belvedere & Morton, 2010). This study uses the Rasch model to assess the psychometric qualities of the

DASS-21 scale among secondary school students in Delta State, Nigeria. The results of this study will be helpful in understanding the psychometric characteristics of the DASS-21 scale and how well it may be used to assess mental health problems in Nigerian secondary school students. Also, the study will help in the creation of efficient counselling therapies to deal with mental health difficulties in this group. . Further, this study will add to the body of knowledge on the psychometric characteristics of the DASS-21 scale and its applicability in identifying mental health problems in Nigerian secondary school students.

Anxiety, depression, and stress are becoming more common among teenagers and young people across the world (Merikangas et al., 2022; Karyotaki et al., 2020; Auerbach et al., 2018; Kessler et al., 2015; Sahoo & Khess. 2010). According to the World Health Organization (WHO), half of all mental diseases start before the age of 14, and one in six persons in the world between the ages of 10 and 19 have a mental problem (WHO, 2022). Nigeria, where the prevalence of mental disease is high and the mental health system is poor, is not an exception to this trend (Lund et al., 2019). In Nigeria, secondary school students' mental health difficulties are especially concerning since they

might negatively impact their academic performance, social interactions, and future chances (Nkoma, 2020; Nwadinigwe & Azuka-Obieke, 2012). Thus, it is critical to have relevant and reliable metrics to evaluate mental health concerns in this group.

A popular self-report tool that evaluates the intensity of depression, anxiety, and stress symptoms is the Depression Anxiety Stress Scales (DASS) (Lovibond & Lovibond, 1995). The DASS has been adapted for usage in several languages and cultural contexts (Henry & Crawford, 2005; Osman et al., 2012). The DASS has proven to have strong psychometric qualities after being evaluated in several populations throughout the world (Thiyagarajan et al., 2022; Saricam, 2018; Tran et al., 2013). The DASS has been used in a few studies in Nigeria among a variety of demographics, including medical professionals and undergraduate students (Sekoni et al., 2022; Olatunji et al., 2014; Oladiji et al., 2009). The psychometric features of the DASS-21 among Nigerian secondary school students, however, have received less attention from researchers.

Due to its capacity to deliver reliable measurement data and statistical analysis, the Rasch model is a

psychometric technique that has grown in popularity in recent years (Linacre, 2002). The Rasch model offers data on a scale's dependability, dimensionality, item fit, and general rating scale quality (Zile-Tamsen, 2017). The DASS and other measures' psychometric qualities have been evaluated in studies using the Rasch model (Suryadi et al., 2020; Tabatabaee-Yazdi et al., 2018; Amin et al., 2012). The DASS-21's psychometric characteristics among Nigerian secondary school students The current study sought to assess the psychometric qualities of the DASS-21 scale among secondary school students in Delta State, Nigeria, using the Rasch model. To the best of our knowledge, this is the first study to evaluate the DASS-21's psychometric features among Nigerian secondary school students using the Rasch model.

The term "dimensionality" describes how well a scale's elements reflect a single underlying notion (Alordiah, 2022). Previous research has looked at the DASS-21 factor structure and found that it has strong factor validity (Le et al., 2017; Randall et al., 2017). To our knowledge, no study has looked at the dimensionality of the DASS-21 among secondary school students in Nigeria. To ascertain how much each item on a scale contributes to measuring the construct being

evaluated, item fit analysis is utilized (Alordiah, 2022). Research have used the Rasch model to analyze the item fit of the DASS-21 in a variety of groups, including clinical samples and university students, and the findings have shown that the item fit is generally good (Thiyagarajan et al., 2022; Saricam, 2018)). Nonetheless, it is crucial to assess the DASS-21's item fit among Nigerian secondary school students in order to make sure that the scale's items are measuring the intended construct and to spot any problematic ones that would need to be revised. Using rating scale analysis, you may check how well the rating scale categories work and make sure that respondents are using and interpreting them consistently (Alordiah, 2022). Studies have shown that the four categories of the DASS-21's four-point rating scale are effective across a range of demographics (Le et al., 2017; Tran et al., 2013). To make sure the DASS-21 rating scale is operating as intended, it is crucial to assess the categories of the rating scale among Nigerian secondary school students. The Wright Person Map is a visual representation of the distribution of people and things on a similar scale that shows where people are in respect to the level of the construct that is being assessed (Boone, 2016). The Wright person map may be used to locate any out-of-place objects or

people and to determine the degree of difficulty of the objects. The Wright person map has been beneficial in finding groups of persons with comparable values of the construct being evaluated in earlier investigations (Bond et al., 2020). The Wright person map will be used in this study to show the distribution of people and things on the same scale and to spot any out-of-place people or things.

The consistency of a scale in measuring a construct is referred to as reliability, and it may be calculated using a variety of techniques, such as Cronbach's alpha and the Rasch model (Bond et al., 2020). Research utilizing both Cronbach's alpha and the Rasch model have shown the DASS-21 to have high reliability estimates (Saricam, 2018; Parkitny et al., 2012). In this study, the Rasch model will be used to assess the DASS-21's reliability.

Objectives of the Study

The broad objective of this study was to assess the psychometric qualities of the DASS-21 scale among secondary school students in Delta State, Nigeria, using the Rasch model. Hence, the specific objectives of this study are to:

1. Determine is the fit statistics of the DASS-21 for Rasch Model

2. Examine the dimensionality and local independence of the DASS-21
3. Measure the (difficulty index) of the items in the DASS-21
4. Order the response option thresholds of the DASS-21
5. Determine the reliability of the DASS-21

Research Questions

1. What is the fit statistics of the DASS-21 for Rasch Model?
2. What is the dimensionality and local independence of the DASS-21?
3. What is the Measure (difficulty index) of the items in the DASS-21?
4. What is the ordering of the response option thresholds of the DASS-21?
5. What is the reliability of the DASS-21?

METHODOLOGY

Research Design

The research design for this study is the instrumentation design. Instrumentation design refers to the process of developing and selecting appropriate tools and measures for collecting data in a research study. It involves identifying and designing instruments, such as surveys, questionnaires, or observation protocols, that accurately capture the

variables of interest, ensuring data reliability and validity for the study's objectives. We used Instrumentation design to ensure that the data collection tools, such as surveys, tests, or observation protocols, are well-designed, reliable, and valid, allowing the researcher to gather accurate and meaningful data to address their research questions or hypotheses.

Participants

The population of this study was the 465 public secondary schools in Delta State, Nigeria. Through multistage sampling technique, one Local Government Area (LGA) was chosen from each of the three senatorial district in the state. From each of the three LGA, seven schools were selected. Fifty students were randomly selected from the senior classes (SS1 – SS3) from each of the 21 public secondary schools. The sample size came to 1050 students. However, due to the response rate of 90.5%, the sample size was reduced to 950, consisting of 390 (41.6%) males and 550 (58.4%) females. The students were from different schools across the three senatorial districts of Delta State, with 303 (32.4%) students from Delta South, 271 (28.8%) from Delta Central, and 366 (38.8%) from Delta North. In terms of school type, more participants attended public schools (53.7%) than

private schools (46.3%). Regarding class level, the highest number of participants were in SS3 (40.7%), followed by SS2 (31.5%) and SS1 (27.8%). The mean age of the participants was 15 years with a standard deviation of 4.7

Instrumentation

The Depression Anxiety Stress Scale (DASS-21) was used to assess the psychological distress of the students. The DASS-21 is a 21-item self-report questionnaire that measures the three dimensions of emotional distress: depression, anxiety, and stress. Each sub-scale has seven items. The likert scale used for this scale ranges from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The total score for each of the sub-scale ranges from 0 to 21. The higher the scores, the higher the levels of depression, anxiety, and stress.

Procedure/Ethical approval

Ethical approval was obtained from the relevant authorities before the commencement of the study. The students were informed about the purpose of the study and were given the option to participate voluntarily. They were assured of the confidentiality of their responses and were allowed to withdraw from the study at any time. The students completed the DASS-21 questionnaire during school hours

questionnaire that measures the three dimensions of emotional distress: depression, anxiety, and stress. Each sub-scale has seven items. The likert scale used for this scale ranges from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The total score for each of the sub-scale ranges from 0 to 21. The higher the scores, the higher the levels of depression, anxiety, and stress.

under the supervision of trained research assistants.

Data Analysis

The data were analyzed using the Rasch model to determine the psychometric properties of the DASS-21 scale. The Rasch model is a one-parameter logistic model that is used to analyze the responses to a questionnaire on a dichotomous or polytomous scale. The model estimates the location of each item and the ability of each participant on a single dimension, allowing for the estimation of item difficulty and person ability. The model fit was evaluated using the infit and outfit statistics, and items with poor fit were removed from the scale.

Statistical Package for Social Sciences (SPSS) version 25 and RStudio were used for the data analysis. Descriptive statistics were

computed to describe the demographic characteristics of the participants.

RESULTS

Table 1: The Fit Statistics of DASS-21

Items	Infit	Outfit
A7 I was aware of dryness of my mouth	0.924	0.920
A6 I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0.973	0.973
A5 I experienced trembling (e.g., in the hands)	0.921	0.918
A4 I was worried about situations in which I might panic and make a fool of myself	0.858	0.858
A3 I felt I was close to panic	0.910	0.908
A2 I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0.965	0.960
A1 I felt scared without any good reason	0.901	0.894
D7 I couldn't seem to experience any positive feeling at all	0.976	0.972
D6 I found it difficult to work up the initiative to do things	0.852	0.848
D5 I felt that I had nothing to look forward to	1.016	1.019
D4 I felt down-hearted and blue (sad)	0.978	0.976
D3 I was unable to become enthusiastic about anything	1.050	1.050
D2 I felt that life was meaningless	1.110	1.107
D1 I felt I wasn't worth much as a person	1.040	1.038
S7 I felt that I was rather touchy	1.282	1.278
S6 I was intolerant of anything that kept me from getting on with what I was doing	1.186	1.192
S5 I found it difficult to relax	1.144	1.147

S4 I found myself getting agitated	1.199	1.203
S3 I felt that I was using a lot of nervous energy	1.081	1.082
S2 I tended to over-react to situations	1.098	1.104
S1 I found it hard to wind down	1.145	1.149

Research Question One: What is the item fit of the DASS-21 for the Rasch Model?

Table 1 presents the summary statistics of the item fit for the Rasch model. The measures in the table are the mean square fit statistics, which are used to evaluate the degree of fit of the items to the Rasch model. The infit and outfit mean square statistics are measures of the degree of fit between the observed responses and the model predictions. These measures assess the extent to which an item functions as expected based on the model's assumptions. An infit mean square value between 0.5 and

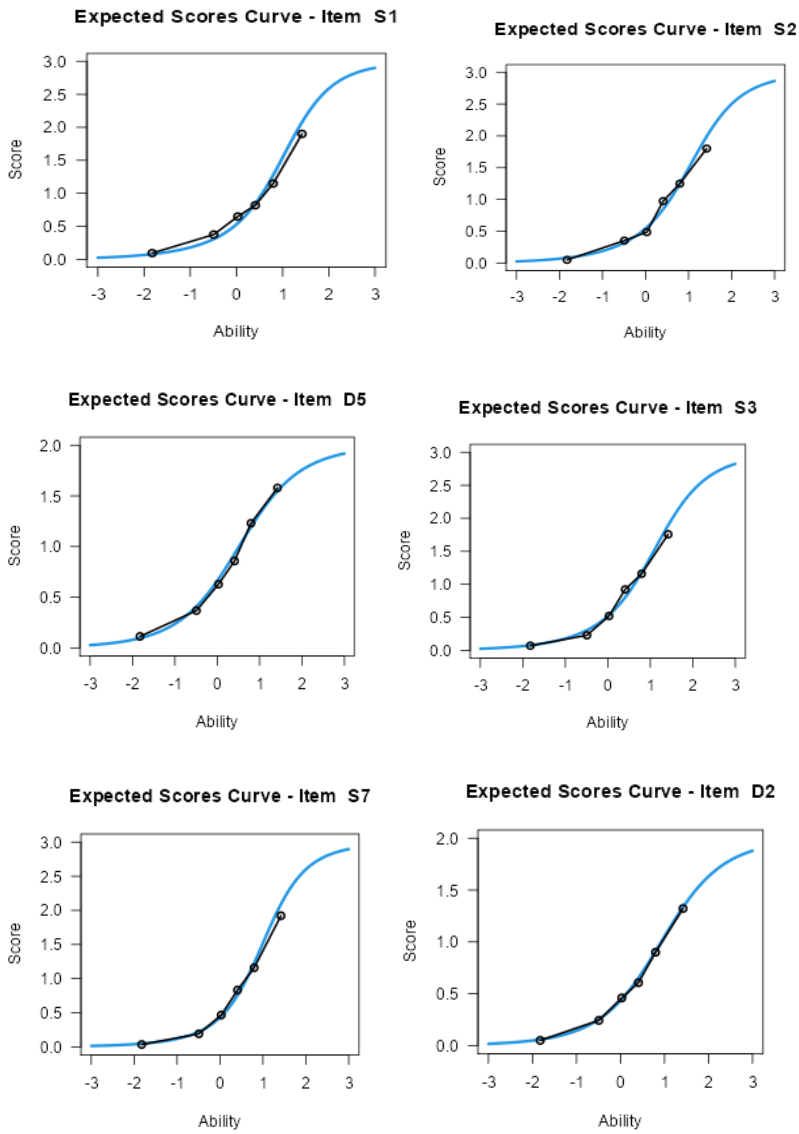
The ICC for the nine items in figure 1 is good examples of a fit items. All the items in the DASS-21 have good

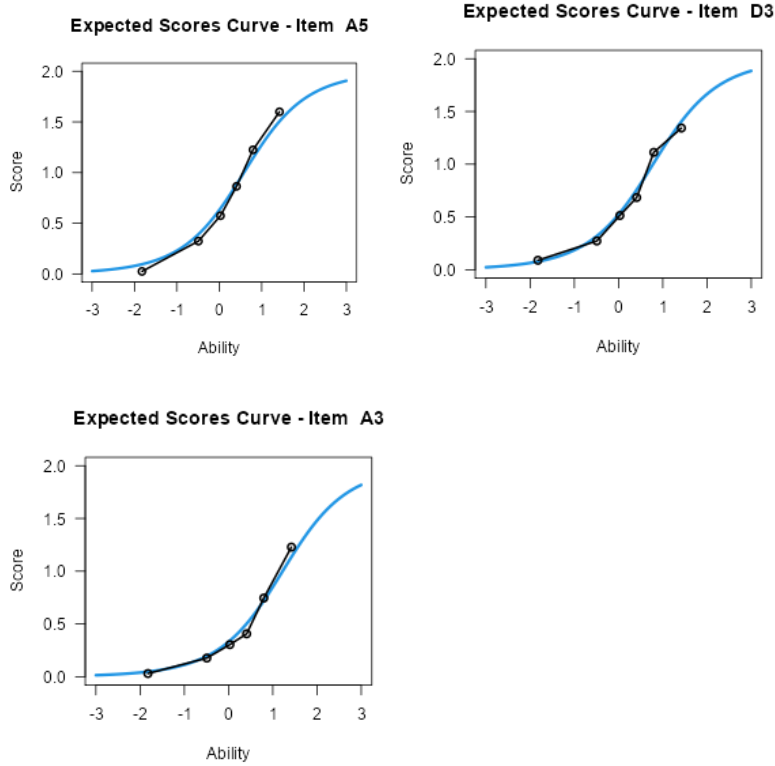
1.5 indicates a good fit, and values outside this range indicate misfit. In

Table 1, all the infit mean square values fall within this range, indicating that all the items fit the Rasch model well. Similarly, an outfit mean square value between 0.5 and 1.5 indicates a good fit, and values outside this range indicate misfit. In Table 1, all the outfit mean square values fall within this range, indicating that all the items fit the Rasch model well. The infit and outfit mean square statistics indicate that the items fit the Rasch model well and that the model is a good fit for the data

fit. The closer the line with the dots is closer to the smooth curve (ICC), the better the fit.

Figure 1: ICC of Nine Items in DASS-21





Research Question Two: What is the Measure (difficulty index) of the items in the DASS-21?

Table 2: Measure and Category Thresholds

S/N	Measure	Threshold		
		1	2	3
A7 16	0.958	0.4344	0.941	1.501
A6 21	0.840	0.2341	0.735	1.292
A5 07	0.759	0.1226	0.623	1.180
A4 06	0.679	0.0248	0.525	1.082

S/N	Measure	Threshold			
		1	2	3	
A3	17	0.928	0.4055	0.906	1.463
A2	14	0.973	0.4650	0.966	1.522
A1	13	0.727	0.2268	0.727	1.284
D7	04	0.789	0.3299	0.830	1.387
D6	05	0.681	0.1555	0.656	1.213
D5	08	0.557	-0.0222	0.478	1.035
D4	11	0.532	-0.0457	0.455	1.012
D3	19	0.614	0.0623	0.563	1.120
D2	09	0.673	0.1438	0.644	1.201
D1	18	0.373	-0.1783	0.322	0.879
S7	01	0.702	0.2552	0.756	1.313
S6	10	0.661	0.1854	0.686	1.243
S5	12	0.645	0.1891	0.690	1.246
S4	03	0.791	0.3247	0.825	1.382
S3	15	0.733	0.2414	0.742	1.299
S2	02	0.683	0.2035	0.704	1.261
S1	20	0.649	0.1988	0.699	1.256

Note. The Thurstonian threshold for a score category is defined as the ability at which the probability of achieving that score or higher reaches 0.50.

The measure column in Table 2 represents the estimated level of emotional distress (i.e., the construct being measured by the DASS-21 scale) associated with each item on the scale. The measure is expressed in

logits, which is a unit of measurement used in item response theory (IRT) to quantify the relationship between the respondent's ability level and the probability of endorsing a particular response category. In this case, the

measure reflects the emotional distress level that is required to endorse a particular response option (e.g., "Never," "Sometimes," "Often," or "Almost always") for each item on the DASS-21 scale. For example, for item A6, the measure is 0.840 logits, indicating that respondents with a level of emotional distress greater than or equal to 0.840 logits are equally likely to endorse the response option "Sometimes" as they are to endorse the response option "Never." The measure column is important because it allows researchers to compare the difficulty level of different items on the scale and to estimate the level of emotional distress associated with different response options. This information can be used to improve the validity of the DASS-21 scale and to ensure that it accurately measures emotional distress in the target population. In general, however, the difficulty level of the items should be such that respondents with a range of emotional distress levels can provide

Research Question Three: What is the ordering of the response option thresholds of the DASS-21? Table 2 shows the partial credit model, which is a type of Rasch model that allows for different thresholds for each category. The table presents the thresholds for each category, measured on the latent trait

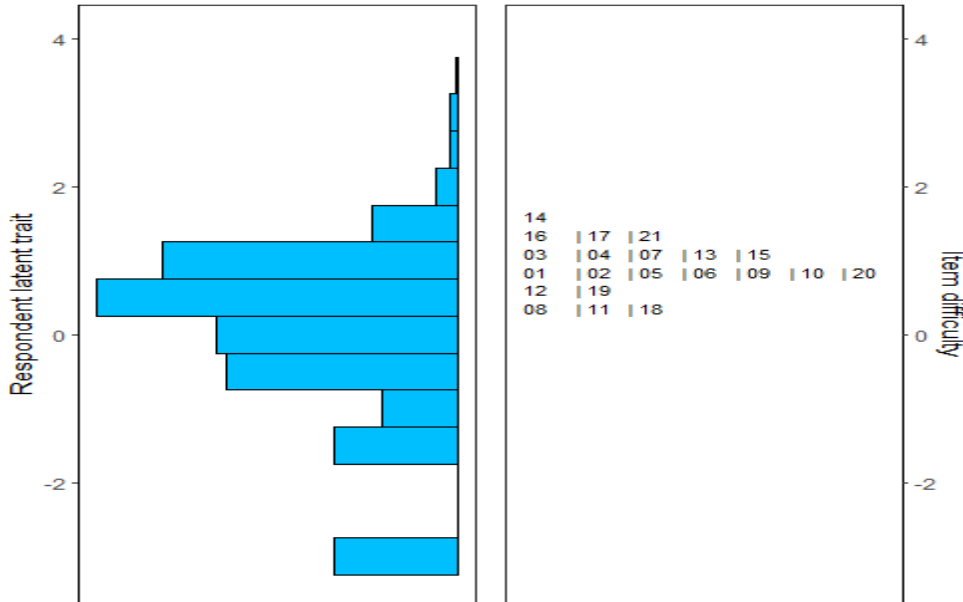
meaningful responses. If the items are too difficult, many respondents may be unable to provide an answer or may be forced to guess, which could reduce the accuracy of the scale. If the items are too easy, they may not provide enough information to differentiate between respondents with different levels of emotional distress. In Table 2, the item measures range from 0.373 to 0.973. This range indicates that the items are moderately difficult, with some items being more difficult than others. Therefore, we can conclude that the items are not too difficult or too simple overall. The most difficult item in the DASS-21 scale is item A2 with a measure of 0.973. The simplest item on the DASS-21 scale is item D1 with a measure value of 0.373. Based on the information provided in Table 2, it appears that the difficulty level of the items on the DASS-21 scale is appropriate for the target population of secondary school students in Delta State, Nigeria (see figure 1).

continuum. The thresholds show the ability level at which the probability of achieving a particular score category is 0.50 or higher. For example, the threshold for category 1 of item A6 is 0.840, which means that the probability of achieving category 1 or higher is 0.50 or higher at an ability level of 0.840 or higher. In

Table 2, the threshold refers to the probability level above which the model will predict a positive outcome (i.e., 1) for the target variable, and below which it will predict a negative outcome (i.e., 0). For example, if the threshold is set at 0.5, then any predicted probability greater than or equal to 0.5 will result in a positive prediction, and any predicted probability less than 0.5 will result in a negative prediction. In the context of Table 2, it appears that the model has been evaluated at different threshold levels (ranging from 0.1 to 0.9) to assess the impact on its performance measures (such as accuracy, sensitivity, and specificity). This helps to identify the optimal threshold level that maximizes the model's overall predictive power.

Generally, the choice of threshold depends on the specific needs of the problem at hand, and may involve balancing the trade-offs between different performance measures. For example, a higher threshold may result in fewer false positives (i.e., cases where the model predicts a positive outcome when it should be negative), but at the expense of increased false negatives (i.e., cases where the model predicts a negative outcome when it should be positive). The threshold values are well-spaced and the measures cover a wide range of emotional distress levels, which suggests that the scale is sensitive to differences in emotional distress levels among respondents.

Figure 2: Wright Map of DASS-21



Research Question Four: What is the reliability of the DASS-21?

Table 3: Reliability of the DASS-21

	Person Reliability	Item Reliability
DASS-21	0.806	0.9315

Table 3 reports the model fit statistics for the Rasch model used in this study. The Person Reliability value is 0.806 and the item reliability value is 0.9315 which indicates that the Rasch model was able to reliably measure the latent trait of interest (in this case, psychological distress) in the sample of secondary school students in Nigeria. This value should be

between 0.70 and 0.90 for the model to be considered acceptable.

Discussion

The results of this study offer significant new understandings of the DASS 21 scale's psychometric characteristics among secondary school pupils in Delta State, Nigeria. The Rasch model was employed to

examine the scale's dimensionality, item fit, category functionality, Wright person map, and reliability.

The Scale's Dimensions

The DASS 21 scale is a unidimensional scale that assesses a scale using the Rasch model (Henry & Crawford, 2005; Lovibond & Lovibond, 1995). Good Fit All items on the DASS 21 scale fit the Rasch model well, according to item fit statistics, with infit and outfit mean square (MNSQ) values falling within the permissible range of 0.6 to 1.4, which is inline with previous studies (Thiyagarajan et al., 2022; Parkitny et al., 2012). This shows that the scale's components effectively measure psychological distress.

Category Operation

According to the category functioning analysis, the four-point with the majority of them falling within the moderate range of discomfort. This shows that the DASS 21 scale can distinguish between the individuals' various levels of psychological distress. This result is in line with Parkitny et al., (2012) study.

Reliabilities of the DASS-21 item and person have a good level of dependability. This suggests that the scale can distinguish accurately between the individuals' various

single construct, namely the degree of psychological distress felt by the participants but with three factors, according to the findings of the Rasch analysis. This result is in line with other studies that examined the dimensionality of the DASS 21. The Likert scale employed in DASS 21 scale functioned effectively and was able to distinguish between the participants' various levels of psychological distress. Nevertheless, the research also showed that certain of the answer categories, especially the extreme reaction categories, were underused. This implies that some participants could have found it challenging to use the response scale or might have been reluctant to support extreme replies. Wright Map of Person The Wright person map showed that participants were evenly distributed over the psychological distress continuum, levels of psychological discomfort. The indexes of the reliabilities found in this study was similar to that of previous studies (Sarican, 2018; Parkitny et al., 2012). In all, the DASS-21 was found to be valid. This finding is in line with that of previous research (Thiyagarajan et al., 2022; Sarican, 2018; Tran et al., 2013).

Although the study's use of the Rasch model to examine the psychometric features of the DASS 21 scale among secondary school students in Delta

State, Nigeria, sheds light on how to measure and assess mental health outcomes in this group, there are certain limitations that should be noted because the research sample was restricted to one state in Nigeria, it is possible that it is not typical of secondary school students in all of Nigeria. The findings' capacity to be generalized is thus constrained. Only self-report measures were utilized in the study, which makes them vulnerable to response biases such as social desirability bias.

The study failed to evaluate any confounding factors that can affect the results in terms of mental health, such as socioeconomic status or academic success. Future research might take these elements into account to better comprehend the intricate interactions between mental health and other issues. Only one kind of statistical analysis—Rasch modeling—was utilized in the study to look at the psychometric characteristics of the DASS 21 scale. While Rasch modeling is a frequently used tool for examining measurement characteristics, other statistical methods like the 2-parameter and 3-parameter model of Item Response Theory may offer more information about the accuracy and dependability of the scale.

Counselling Implications for Policy and Emotional Counselling

1. The DASS-21 Scale's validation can aid teachers in better comprehending the emotional and mental health requirements of their students. Educators can identify children at risk of experiencing emotional or mental health issues using the DASS Scale and offer them the necessary tools and help.
2. The DASS-21 Scale's validation can assist administrators in delegating resources to meet the mental health needs of students. It may also guide the creation of regulations and initiatives to enhance students' psychological and emotional health.
3. Measurement and assessment specialists may be able to better understand the psychometric characteristics of the DASS-21 Scale through factor analysis in its validation. The instrument may be improved using this data to ensure it accurately and consistently measures secondary school students' emotional and mental health.
4. The DASS-21 Scale can be used by school counsellors to identify students who are at

risk of experiencing emotional or mental health issues. With this knowledge, tailored treatments and support may be given to delaying the beginning of mental health problems.

5. The findings of the DASS-21 Scale can assist school counsellors in choosing the best interventions to meet the mental health needs of their pupils. The tool enables counsellors to customise their treatments by revealing the areas where a kid may be having difficulty.
6. Students undergoing interventions or therapy for emotional or mental health difficulties can have their progress tracked using the DASS-21 Scale. Counsellors can monitor students' mental health changes and modify their treatments using routine instrument administration.
7. The DASS-21 Scale may be used to assess the success of mental health initiatives in educational settings. School counsellors can determine a program's efficacy and make necessary modifications by monitoring changes in students' mental health conditions before and after program implementation.

CONCLUSION

This study assessed the psychometric qualities of the Depression Anxiety Stress Scales (DASS-21) among secondary school students in Delta State, Nigeria, using the Rasch model. The results showed that the DASS-21 is a unidimensional scale that assesses a single construct, psychological distress, with good fit to the Rasch model. The item difficulty levels were appropriate for the target population, and the scale was sensitive to differences in emotional distress levels among respondents.

RECOMMENDATIONS

The study's findings have important implications for school counselors and teachers, who can use the DASS-21 Scale to identify and support students at risk of experiencing emotional or mental health issues. The tool also enables counselors to customize their treatments to address areas where a student may be struggling, monitor progress, and evaluate the effectiveness of mental health initiatives in educational settings. Overall, the study contributes to the body of knowledge on the psychometric characteristics of the DASS-21 Scale and its applicability in identifying mental health problems in Nigerian secondary school students.

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ASSESSING CONTENT COVERAGE AND ADEQUACY OF INSTRUCTIONAL MATERIALS FOR THE IMPLEMENTATION OF NIGERIA CERTIFICATE IN EDUCATION HAUSA LANGUAGE CURRICULUM IN COLLEGES OF EDUCATION IN NIGERIA

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ABSTRACT

This study assessed the extent of content coverage of NCE Hausa language curriculum, determine the adequacy of instructional materials utilized by the Hausa language lecturers in the implementation of NCE Hausa language curriculum in the northwest geopolitical zone of Nigeria. Ex-post facto research design was employed for the study. The population of the study included all teachers and students offering NCE Hausa language in Colleges of Education in Northwest geopolitical zone of Nigeria numbering 196 lecturers, and 10,149 students. Multi-stage sampling technique was used to select the sample comprising 360 students and 108 lecturers from both Federal and State Colleges of Education respectively; Stratified random sampling technique was used to select 6 out of 10 (Colleges of Education in the Northwest geopolitical zone. The data were analyzed using frequencies, percentages, and Chi-square statistical techniques. The findings revealed that there was a significant content coverage of the NCE Hausa curriculum. However, available resource/instructional materials in Colleges of Education were not adequately available for the implementation of Hausa language curriculum. The study concluded that there was a significant content coverage of NCE Hausa language curriculum and the instructional materials for Hausa language curriculum implementation were not adequately available It was recommended that government should make NCE Hausa language lecturers sufficient, and they should use differentiated instructional strategies to address students' learning needs in Colleges of Education in the country.

Keywords: Content coverage, Implementation, Instructional material, NCE Hausa curriculum, Adequacy

INTRODUCTION

Hausa language, the most important indigenous lingua franca in West and Central Africa, spoken as a first or second language by about 40–50 million people. It belongs to the Western branch of the Chadic

language superfamily within the Afro-Asiatic language phylum. Hausa people lie on both sides of the border between Niger, where about one-half of the population speaks Hausa as a first language, and

Nigeria, where about one-fifth of the population speaks it as a first language. The basic word order is subject–verb–object (SVO). Hausa is a tone language, a classification in which pitch differences add as much to the meaning of a word as do consonants and vowels. The tone is not marked in Hausa orthography. In scholarly transcriptions of Hausa, accent marks indicate tone, which may be high (acute), low (grave), or falling (circumflex). According to the Spectator Index, there are 150 million speakers of Hausa language all over the world, two million more than speakers of Punjabi (mainly in India) and 21 million more than German speakers (Yahiya, 2002).

Hausa language is both the vehicle of knowledge, world view and the shortest route to a child’s conception and comprehension of concepts (National commission for Colleges of Education, NCCE, 2012). The policy on language education in Nigeria dates back to the colonial era when the Phelps – Stokes Commission of 1922 emphasized the importance of indigenous languages in the school system. The British Advisory Committee on Native Education in tropical African recommended in 1927, that the native languages should serve as medium of instruction in the lower years of primary education.

The Richard's constitution of 1947 reinstated English as the official language in Nigeria while Hausa was recommended as an additional legislative language in northern Nigeria. In addition, the 1954 constitution recognized domestic and regional languages. In its article 114 (1), it recommended the use of English as a national official language and as the regional official language in the south, with Hausa as the regional language of the North with the provision that when conflicts in interpretation occurred, documentation done in English language is regarded as valid (Fafunwa, 2004).

In Nigeria, Hausa language is used as the medium of instruction in the primary as set out by the Federal Government of Nigeria (FRN) (2009) thus: “the medium of instruction in the primary school is initially the mother tongue (MT) or the language of the immediate community and, at a later stage English” (p.4). The National Policy on Education has also made Hausa a mandatory subject for Senior Secondary School Certificate Examination (SSCE) for National Examination Council, (NECO) West African Examination Council (WAEC) and National Business and Technical Examination Board (NABTEB) along with two other Nigeria languages (Igbo and Yoruba).

Therefore, according to Federal Government of Nigeria, (FRN, 2009), it is a core subject and compulsory for senior secondary school students in the northwest geopolitical zone of Nigeria.

The objectives of teaching Hausa language in Secondary schools include among others to; (a) enable candidate speak, read and write completely in Hausa and communicate effectively with their neighbors, (b) familiarize them with the sound system and grammatical structures of Hausa, (c) expose candidates to their culture, customs and institutions, and (d) acquaint them with the necessary tools needed for creative writing and appreciation of Hausa language and literature (National Education Resource and Development Council NERDC, 2011).

The Minimum Standards for Languages (Hausa) prescribed the requirements in NCE Hausa programme which include adequate facilities; Classrooms, Laboratories/Studios/Museums, Staff Offices, Books in the Library, Equipment; Personnel (academic and others); Mode of Teaching and Graduation Requirement; among others (NCCE, 2012). The efforts of the governments and colleges' management towards implementation

of the new Hausa curriculum for the colleges of education have yielded little or no dividends due to issues which are inherent in the implementation of the curriculum. This study, therefore took a critical look at content coverage and adequacy of instructional materials for the Implementation of Hausa Language Curriculum in Colleges of Education in the Northwest, Nigeria.

Objectives of the Study

The study was set out to achieve the following objectives to:

1. examine the extent to which Hausa language curriculum is being implemented in Colleges of Education in Nigeria.
2. assess the adequacy of instructional materials for the implementation of Hausa language curriculum in Colleges of Education in Nigeria.

Research Questions

The study sought to answer the following research questions:

1. To what extent is Hausa language curriculum in Colleges of Education in Nigeria being implemented?
2. How adequate are the instructional materials for the implementation of Hausa language curriculum in Colleges of Education in Nigeria?

Hypotheses

To guide the conduct of this study, the following hypotheses were formulated as follows:

1. There is no significant difference in the students and lecturers' perceived extent of implementation of Hausa language curriculum in Colleges of Education in Nigeria
2. There is no significant difference in the students and lecturers' perceived adequacy of instructional materials for the implementation of Hausa language curriculum in Colleges of Education in Nigeria.

METHODOLOGY

Research Design

The study adopted ex-post facto or after-the-fact research design. It is a method of research which is conducted using events that have already taken place. (Alreck, & Settle, 1995, Bartlett, Kotrlik, & Higgins, 2001). This design was therefore considered appropriate because the study involved studying and describing the existing

documents (NCCE new minimum standard for languages (Hausa) in the area of implementation of NCCE's Minimum Standard for Languages (Hausa) Strauss & Corbin, 1990).

Participants

The population of this study comprised all lecturers and students in the institutions offering programmes leading to the award of Nigeria Certificate in Education (N.C.E) Hausa in ten (10) conventional colleges of Education in the North West geopolitical zone, Nigeria. There are seven states in this zone. These are: Kano, Kaduna, Katsina, Jigawa, Zamfara, Sokoto and Kebbi. The population of the study consisted of 196 Hausa language lecturers in the ten (10) Colleges of Education in the zone. The Ten colleges had a total enrolment of 64,567 students in the schools of Languages. Of these, 10,149 which formed the target population were studying NCE Hausa programme. The breakdown of the target population is shown in the table below.

Table 1: Population of Students and Staff in Hausa Departments of the Colleges of Education

S/N	Colleges of Education	No. of Students	No. of Staff
1	Federal College of Education, Kano	1540	25
2	Isa Kaita College of Education, Dutsin Ma, Katsina	507	22
3	Kaduna State College Of Education, Gidan Waya	458	18

4	Sa'adatu Rimi College of Education, Kumbotso, Kano	2,350	28
5	Federal College of Education, Katsina	952	21
6	Federal College of Education, Zaria	761	23
7	Adamu Augie College of Education, Argungu	1,320	20
8	Zamfara State College of Education, Maru	887	18
9	Jigawa State College of Education, Gumel	652	15
10	Shehu Shagari College of Education, Sokoto	722	17
TOTAL		10,149	196

Source: National Commission for Colleges of Education, 2023

The sample for the study comprised of 468 respondents, made up of 360 students who were enrolled to study NCE Hausa and 108 lecturers from 6 selected Colleges of Education. The choice of the sample size was based on the recommendation of Roscoe (1975) who said that for any given population that is more than 1000, a sample size of between 30- 500 respondents may suffice. The multi-stage sampling technique was therefore used to select the sample. Using this method of sampling, the population was first stratified into two categories namely: Federal Colleges and State Colleges of Education respectively. Three Colleges were drawn from each of these strata using

purposive sampling technique. This resulted in the selection of a total of six colleges. At the next level of sampling, the proportionate stratified random sampling technique was used to draw 360 students (across levels) and 108 academic staff from the Federal and State Colleges of Education respectively. From each of the selected institutions, proportionate number of students was selected using the proportional stratified sampling technique. A total of 360 students were selected in all. Also, 108 lecturers teaching Hausa courses participated in the study. Table 2 gives details of the Colleges of Education, number of students and the number of staff sampled for the study.

Table 2: Distribution of Samples by Colleges of Education in the Northwest Geopolitical Zone

College	students	Sample	Staff	Sample
Federal College of Education, Kano	1,540	74	25	19
Sa'adatu Rimi College of Education, Kumbotso, Kano	2,350	114	28	21
Isa Kaita College of Education, Dutsin-Ma	507	24	22	17
Federal College of Education, Katsina	952	46	22	17
Adamu Augie College of Education, Argungu	1,320	64	23	17
Federal College of Education, Zaria.	761	38	23	17
Total	7,430	360	143	108

Instrumentation

Instruments used in this study were questionnaire for students and another for staff. The lecturers' and students' questionnaire on Hausa language curriculum content coverage had two sections covering biodata, content coverage (consisting of 20 items). Another questionnaire for lecturers on methods of teaching utilized by the Hausa language lecturers.

Validity and Reliability the Instrument

In determining the validity of the questionnaires, the researcher sought for the assistance of the experts in research instruments who made some comments and suggestions, the

questionnaires were fine-tuned to achieve the purpose of the study. The modified questionnaires were then trial tested at Jigawa State College of Education, Gumel and Federal College of Education, Potiskum (the colleges were not part of the study sample). The Cronbach's reliability coefficient was used to determine the reliability of the research instruments. Consequently, reliability co-efficient of .927 was obtained for staff questionnaire and 0.795 was obtained for the students' questionnaire. The reliability co-efficient values were considered adequate for the internal consistencies of the instruments.

RESULTS

Table 3: Response of Teachers and Students on the NCE Hausa language Curriculum Content Coverage in Colleges of Education in Nigeria

S/N	Variables	Covered		Not covered	
		F	%	F	%
1	History and Development of Hausa Language	207	44.00	259	56.00
2	Hausa grammar	308	66.00	158	34.00
3	Use of Hausa	212	46.00	254	54.00
4	Introduction to Hausa oral and written literature	227	48.70	239	51.30
5	Hausa prose	196	42.10	270	57.90
6	Hausa people and their culture	220	47.20	246	52.80
7	Methodology of Teaching Hausa 1	203	43.60	263	56.40
8	Introduction to general Linguistic	226	48.50	240	51.50
9	Hausa phonetics/ phonology	242	52.00	224	48.00
10	Methodology of teaching Hausa 11	213	45.70	253	54.30
11	Hausa Morphology	239	51.30	227	47.70
12	Hausa syntax	258	55.40	208	44.60
13	Hausa Research method	241	51.70	225	48.30
14	Hausa Translation	200	43.00	266	57.00
15	Hausa oral Literature	208	44.60	258	55.40
16	Hausa occupation and Craft	209	44.80	257	55.20
17	Hausa Advanced Orthography	255	54.70	211	45.30
18	Hausa Drama	245	52.60	221	47.40
19	Hausa Poetry	240	51.50	226	48.50
20	Varieties of Hausa	200	43.00	266	57.00
Percentage mean				49.80	
50.20					

In table 3 above, the overall average percentage means of the respondents that responded positively on the implementation NCE Hausa language curriculum content in Colleges of Education were 49.80% and those that responded that most courses were not fully implemented was 50.20%. This

indicated that the Hausa language curriculum was not fully implemented.

Research Question 2: How adequate are the instructional materials for the implementation of Hausa language curriculum in the Colleges of Education in Nigeria?

Table 3: Response of Teachers on the Adequacy of instructional materials for the implementation of NCE Hausa Language Curriculum in Colleges of Education in Nigeria

S/N	Variables	Adequate		Not Adequate	
		F	%	F	%
1	Qualified Lecturer	50	46.29	58	53.70
2	Textbooks	62	57.40	46	42.59
3	Office facilities	50	46.29	58	53.70
4	Language laboratories	48	44.44	60	55.55
5	Cultural rooms	42	38.88	66	61.11
6	Cultural villages	48	44.44	60	55.55
7	Computers	50	46.29	58	53.70
8	Internet Facilities	47	43.51	61	56.48
9	Video/DVD/CD	38	35.18	70	64.81
10	Tape recorders	42	38.88	66	61.11
11	Auditorium	59	54.62	49	45.37
12	Lecture Theatres/classes	37	34.25	71	65.74
13	Projectors	49	45.37	59	54.62
14	Film strips/Slides	28	46.29	80	53.70
Total Percentage means				44.40	
55.60					

Table 3 revealed the teachers' responses on the adequacy of instructional materials. It is clearly indicated in table that instructional materials necessary for Hausa language curriculum implementation are not adequate, because out of the 14 variables only 2 variables are said to be adequate as responded by the respondents (Lecturers), as against 12 variables which the respondents indicated that they are inadequate. Textbooks, 62 (57.40%) respondents and auditorium 59 (54.62%) respondents responded that they are adequate. Majority of the respondents

indicated that the instructional materials are grossly inadequate. For instance, the following responses said not to be adequately available were qualified lectures 58 (53.70%), office facilities 58(53.70%), Language laboratories 60 (55.55%) and cultural room 66 (61.11%). Other instructional material that the respondents responded that they were not adequate included; cultural village 60 (55.55%), computers 58 (53.70%), internet facilities 61 (56.48%) and video/DVD/CD 70 (64.81%). The respondents further indicated that other items not

adequately available in the Colleges of Education were; Tape recorder 66 (61.11%), lecture theatres/classes, 71 (65.74%), projectors 59 (54.62%) and filmstrips/slides which 80 respondents representing 53.70% believed that they are grossly inadequate. On the whole, the table revealed that most (12 out of 14(85%) of the instructional materials/resources for the implementation of NCE Hausa Language curriculum were grossly inadequate in the college of Education in Nigeria.

Hypotheses Testing

The research hypotheses were tested and the following results were obtained. All the hypotheses were tested using nonparametric statistics in form of chi-square at 0.05 level of significance.

Hypothesis One: There is no significant difference in the opinion of respondents (teachers and students) on the implementation of Hausa language curriculum in colleges of education in Nigeria.

Table 4: Implementation of Nigeria Certificate of Education Hausa Language curriculum in Colleges of Education in Nigeria

Variable	Total Frequency of coverage	Total Frequency Not covered	Df	X ² computed	X ² Critical	P	Remarks
NCE Hausa language curriculum content coverage	4549	4771	19	119.48	30.144	0.00	Significant coverage

X² computed > X² critical at df 19

Table 18 above results of the chi square statistics above showed that NCE Hausa language curriculum content coverage in Colleges of Education in Nigeria, is significant. This is because the computed chi square value of 119.475 is higher

than the chi square critical value at df 19, and the calculated p value of 0.000 was found to be lower than the 0.05 alpha level of significance. The total frequency of coverage is 3549 and the frequency of not coverage is 4771 that was about 49.80% and

50.20% respectively. Therefore, the null hypothesis which state that the responses of teachers and students that NCE Hausa language curriculum content coverage in Colleges of Education in Nigeria, is not significant, is hereby rejected. And the alternate hypothesis which state that NCE Hausa language curriculum content coverage in Colleges of

Education in Nigeria, is significant is accepted.

Hypothesis Two: There is no significant difference in the opinion of respondents on the adequacy of instructional materials for the implementation of Hausa language curriculum in colleges of education in Nigeria.

Table 4: Adequacy of Instructional Materials Necessary for the Implementation of Nigeria Certificate in Education Hausa language Curriculum in Colleges of Education in Nigeria

Variables		Adequate	Not Adequate	Total	df	χ^2 Value	Prob.
Adequacy of resources/instructional materials	F ₀	44	64	108	1	3.704	.054
	F _E	54.0	54.0				

χ^2 Value=3.704, df 1, (p<0.05); χ^2 crit=.3.841

Table 4 showed that chi-square (χ^2) is conducted to determine the adequacy of resources/instructional materials in Colleges of Education for the implementation Hausa language curriculum. The result revealed that 44 (40.74) of the respondents responded that the resources/instructional materials is adequate, while 64 (59.25) responded that the materials are not adequate. However, the statistical computation indicated that the χ^2 value of 3.704, df 1(P>0.05) was obtained. This means, there is no adequate resources/instructional materials for

the implementation of Hausa language curriculum in College of Education and therefore null hypothesis is retained.

Discussion

The analysis of the data collected for this study provided valuable information on the factors that are prerequisite for implementation of NCE Hausa curriculum. The first objective of the study is to examine the extent to which NCE Hausa language curriculum is

implemented in Colleges of Education in Nigeria. Majority of the respondents (108 teachers, 354 students) were of the opinion that the contents of the NCE Hausa language curriculum were not fully covered in the Colleges of Education in Nigeria. The null hypothesis was therefore accepted that there is no significant difference in the coverage of NCE Hausa curriculum content coverage in Colleges of Education in northwest geopolitical zone of Nigeria.

The finding agreed with the studies conducted by Huang (2004) who pointed out that the reason for difficult curriculum implementation is broad aims and unclear objectives of the curriculum content, and Morris and Scott (2003) believed that many policies failed to be implemented because they were ambiguous or insufficiently specific. Also, Desimone (2002) believe that policy makers need to formulate clear, specific and consistent directives with helpful procedures so that the policy would be more likely to be executed as intended.

The results further agreed with finding of the findings of Giard, Girolametto, Weitzman and Green burg (2011), Fuligni, Howes, Lara Cinisomo and Karoly (2009) Giard et al, (2011) found out that difficulty in implementing curriculum conceit have connection between professional development on the teachers' role of facilitating s role of facilitating peer interaction and the implementation of these strategies in the classroom.

While the result by Fuligul et al, (2009) showed an association between professional development experiences and teacher's beliefs and practices and suggested high levels of formal training for enhancing quality of teacher /student interaction Furlliermore and Mitchell (1999), Schmidt et al. 2001), Boscandin (2005) provide further support for this finding. They believed teacher's expertise was highly related to student achievement and further maintained teacher's professional development and curriculum implementation are not separable. Teachers' qualification and over-crowded classroom setting were identified as serious

impediment to effective implementation of curriculum content. This fact is obviously justifiable, as many teachers were not professionally competent.

However, the results are not in agreement with the findings of Australian, Primary Principal Association (APPA) (2008) and UNESCO (2003) further agreed with the above finding, APPA (2008) maintained that when curriculum is overloaded, if there are too much to teach within the valuable instructional time, low coverage of curriculum may be resulted. UNESCO (2003) believed that an overloaded/overcrowded curriculum was blamed for low levels advisement among students and delays in the development of critical competencies and the coverage of an extensive subject matter tended to take priority in depth learning, given the relatively letter time provided for implementing the curriculum.

The result of this study showed that most of the respondents (Teachers) indicated that there are no adequate instructional materials necessary for implementation of NCE Hausa language curriculum in

Colleges of education in Nigeria. Hence the null hypothesis is retained. The finding agreed with the findings of Onyeyegbu (2006) and Uzodimma (2008) who conducted a study on the availability, adequacy and utilization of instructional materials and resources. The result of their studies showed that only print materials were adequate for curriculum delivery while the other listed new technological resources were not sufficiently adequate.

The study also showed that there was no significant difference on the responses of the respondents on the adequacy of these technological resources in both Federal and Universities. Though, their study is slightly differed with the current study as it was focused on federal colleges and universities while the current study is on States and Federal Colleges of Education. The finding that new technological resources are not sufficiently adequate in teaching is not surprising as some university or college lecturers are not committed to their duties and responsibilities. They exhibit non-challant attitude towards

the utilization of new technological and other instructional resources. Other studies that support this finding are Okoli and Osuafor (2008) and Ifeakor (2008) who reported a similar situation on the state of material resources in secondary schools. From their respective studies they found out that resources are poorly provided and underutilized by teachers in secondary schools.

This in fact, hinders curriculum implementation by such implication affect the performance of students in our schools. Other studies that related to the finding are Ntikudem (2005) observed that the supply of typewriters and computers to business education departments is limited considering the increase in students' enrolment. The computers, typewriters and other equipment in the laboratories of business education are far below standard. This is not good for a skill subject/course like business education. The instructional materials for curriculum implementation are grossly inadequate and, in some cases, not available and unutilized. This could have a

bearing with the assertion of Ndinechi (2001) who posited that shorthand is one of the trees in the forest of titles under business education rubric, it has grown steadily over many years and now is dying a slow aimless death caused by rotting pockets of irrelevance. However, this position is disturbing since shorthand is still in the curriculum of business education at the NCE level and especially in the secondary school level. Most of the Hausa language studio visited are deserted and covered by dust. Colleges of education should be guided by NCCE specifications since it is the regulatory agency.

This finding is in conformity with the lamentation of Filani (2006) who remarked that it is very disturbing to note that teaching of business education programmes in schools is very much retarded in terms of technological and modern equipment. Study showed that most of the new technological resources were not available in the Federal and State universities. The study by Ifeakor and Okoli (2010) showed that print materials, computer and its gadgets, intranet connections and audio

and video tapes were the few new technological resources available in the Colleges of Education. But the other new technological resources such as over-head projectors, digital video disc, Interactive CD-ROM, Television, radio, fax machine, Internet connectivity, Extranet wide Area Network (WAN), Satellite broadcast, World Wide Web (www) and computer software programmes were among the new technologies that were not sufficiently available in the universities.

The findings of hypothesis one also revealed that there was no significant difference on the responses of the respondents on the availability of these new technological resources in both Federal and State universities. This result is indicative of the underfunding of the universities in Nigeria by the Federal and State governments; hence there is dearth of new technological resources in Nigerian universities. Uzodimma (2008) buttressing this point stated that the amount of money available to higher institutions in Nigeria for procurement of quality instructional, learning and research facilities and their

maintenance is grossly inadequate and not utilized.

CONCLUSION

The study concluded that the prescribed requirements in NCE Hausa programme which included adequate facilities; Classrooms, Laboratories or Studios/Museums, Staff Offices, Books in the Library, Equipment; Qualified personnel (academic and others); Mode of Teaching and Graduation Requirement. These Qualified personnel (academic and others) instructional materials were not fully available and therefore inadequate and this affects the mode of teaching for effective curriculum implementation. And there is no concerted effort from the governments and colleges' management toward providing the needed qualified lecturers and instructional materials for implementation of NCE Hausa curriculum in the Colleges of Education. It is unarguably clear that these inherent problems; under funding, inadequate classrooms, shortages of instructional materials, and underutilization of these where they exist hinder curriculum implementation of NCE Hausa language curriculum in

Colleges of Education in Nigeria.

RECOMMENDATIONS

Based on the findings from the research, the following recommendations were made:

1. The number of lecturers should be made commensurate with students' size; it will enhance their effectiveness and guarantee their efficient curriculum implementation.
2. Opportunities should be provided for the lecturers to attend seminars, workshops and conferences on techniques and methodologies of teaching.

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AN APPRAISAL OF THE IMPLEMENTATION AND IMPACT OF TERTIARY EDUCATION TRUST FUND (TETFUND) INTERVENTION IN THE NORTH-WEST NIGERIA TERTIARY INSTITUTIONS

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ABSTRACT

One of the problems facing Education sector in Nigeria has been funding or financing which among other things has led to the establishment of an Agency called Tertiary Education Trust Fund (TETFund). Therefore, this Study examined the impacts and contributions of TETFund intervention in the North Western zone of Nigeria. Using stratified sampling techniques, 10 Universities, 5 Colleges of Education and 5 Polytechnics were selected as samples across different States of the Federation. A descriptive research design which employs Questionnaire and Structured Interviews were adopted for data collection while the data was analyzed using frequency count, percentage and mean to answer the research questions. Thereafter, One-Way Analysis of Variance (ANOVA) statistics was used to test the hypotheses generated in the study. The findings revealed that the TETFund as an agency has significantly immensely contributed to all institutions in all the four areas of interventions examined, but needs improvements in some areas like overseas staff training, increment of funds to cater for changes in Dollar exchange rate. However, there was no significant difference in the opinions among different categories of variables examined except between Federal and State-owned institutions. Recommendations were made in those areas that are considered very essentials towards improving the services rendered by the agency.

Keywords: Intervention, Impact, Academic staff training, Physical and Infrastructural development, Tertiary institutions

INTRODUCTION

Nigeria as a country has good planners and experts who could put their heads together to come up with meaningful things, the problem has always been in the area of implementation of policy and making use of research findings and recommendations for developmental

purposes (Bamiro & Adedejo, 2012). It can be argued that education opens doors for all citizens to participate in developmental activities and when citizens are denied education or access to any part of the programme, they are directly or indirectly excluded from the social, political

and economic development of that country. UNESCO (2002). To make funds available for use in the education sector the Federal Government created an agency called TETFund.

It will be recalled that the Federal Government of Nigeria under the Nigerian Education Tax Act No. 7 of 1993 established the Tertiary Education Trust Fund now called TETFund. It was amended by act No. 40 1998 with the objectives of funding and managing school projects in order to improve the Quality of Education in Nigeria. The TETFund (2017) commission was created from a report submitted by the Longe Commission. Which recommended the imposition of two percent (2%) higher education tax on the profits declared in Nigeria. Since then, the Federal Government accepted the recommendation, such that deduction of tax collected is used on education sector (Education tax decree no 7 of 1993).

According to TETFund (2015) and Halidu (2015), the purpose for the Establishment of the Agency are to: (i) Provide funding for educational facilities and infrastructural development; (ii) Provide creative and innovative approach to educational learning and service; (iii) Stimulate, support and enhance

improvement activities in the educational foundation areas, like Teacher Education, Teacher Practice, Library Development, and Special Education Programmes; and (iv) Champion new literacy enhancing programmes such as scientific, information and technological literacy.

It must be mentioned here that the introduction of TETFund signals the Federal Government's commitment to improve funding of education at all levels, starting from primary to tertiary institutions (Bogoro, 2015). In support of the above Njoku (2004) and Halidu (2015) carried out studies on human resources availability and funding in higher institutions of learning; they found out that only 46% had First degree with only 14% having Postgraduate Certificates. This accounted for one of the reasons why TETFund emphasized staff training as part of its Intervention programme. Few years back Eno-Abasi (2015) found out that Staffing conditions in some institutions are broad-based or bottom heavy with more Junior Academic staff with only first degree than senior staff, thus affecting productivity of staff in the education sector. Of course, that accounted for part of the reasons, why there was problems of half-baked teaching staff and poor performance of the students generally in schools.

Also, Onwuchukwu (2016) studied human resources and influence of TETFund intervention in education programme in Nigerian Universities using data from NUC Accredited Programmes. The t-test statistics revealed among other things that human resources/academic staff strength by number, qualification and experience had a non-significant value. Meaning that availability of qualified academic staff in the past years was significantly low across the tertiary institutions in Nigeria. Besides that, it was argued that some universities partially have articulated staff training without consideration for its human and material resources. An agency that has assisted many institutions greatly in providing funds for developmental purposes in education sector is TETFund. In fact, some institutions are referred to as “TETFund Universities” because most of the Infrastructural developments in those institutions wouldn’t have been there if not through the funds made available by the TETFund. This implies that the Agency is doing its best according to the mandate given to it, but perhaps is faced with some internal problems which require urgent attention to improve on their services. In fact, many institutions couldn’t pass accreditation conducted by NUC because of inadequate qualified staff, inadequate infrastructural facilities,

laboratories and current text books and journals for research purpose (Nwachuku 2000 & Eno-Abasi 2015). With all the above, it is believed that the Commission will take proper care of funds and its distribution having with teaching and learning in education sector namely: Staff Training, Infrastructures, Facilities & Equipment, Conference attendance, Research and Innovation, to mention only a few.

It must be noted that in the distribution of the Funds, 41% goes to the University, 30% to the Polytechnics while 29% goes to the Colleges of Education. As earlier mentioned, the TETFund was established at a critical period when Education sector had suffered neglect by successive governments. According to the Guidelines for accessing the interventions, 2% of the Education Tax collected from the registered companies in Nigeria are to be shared for educational development in the country (TETFund, 2015). Although the agency has been working towards meeting the mandate or meeting objectives. There are indications however that some institutions could not assessed the Fund regularly for not been able to meet the established conditions set by the TETFund. In addition, some academics who accessed both Research and Training

grants reported to have used part of the money to take care of their personal needs. Besides that, some institutions are still having problems not completing the building projects on schedule.

The importance of having information for decision making cannot be over-emphasized as there is need for periodic evaluation of how well an organization or agency is doing according to the objectives or the mandate for its establishment. According to Oloyede (2017) and Halidu (2015), information through data collection is an essential ingredient in moving any organization or agency forward, to perform its duties or function effectively and to be more productive. At every stage, evaluation or appraisal is necessary to detect flaws or see the area of strength or weakness with a view to making changes or maintaining the status quo. The gap identified from the literatures indicated the absence of a detailed research study in the Northern part of Nigeria and studies generally which examines or appraises the implementation and contribution of TETFund using interview as an instrument along with questionnaire. On the basis of the above, this study aimed at finding out the impact and the extent to which the objectives of the Agency are been

achieved within the North-western region of Nigeria.

The importance of this study cannot be over emphasized. It provided assessment of the level of preparedness of the commission and the achievements made so far. Staff training and the level of achievement made and whether or not there is need to review the approved list of foreign institutions. Level of Utilization and completion of the available projects on site. It will reveal the success or achievements recorded in the last 5 years by the Commission with a view for a review where necessary for their condition for assessing the fund. Examine the opinion of Academics as regard limiting Education Academic staff training to local institution instead of attending programmes in overseas countries as those in other areas of discipline. Identify areas of difficulty for some institutions not to been able to assess the funds. Provide data for the Federal Government, policy makers and Tertiary Institutions on the way forward for a successful utilization of the funds.

Objective of the Study

The main objective of this study is to determine the impact and contributions of TETFund with respect to Academic Staff Training and Development, Conference Attendance, Physical and

Infrastructural Development and Research and Innovation.

Research Questions

1. What are the levels of achievements made in accordance with the mandate or objectives for the establishment of the Commission on staff training?
2. What are the problems faced by some institutions in accessing or benefitting from the fund?
3. Are there positive level of commitment as well as problems faced by the Staff at the TETfund office in Abuja?
4. What is the level of the utilization and completion of these facilities or infrastructure for effective teaching and learning in the selected universities and colleges?

Research Hypotheses

1. There is no significant difference between the opinions of male and female respondents on the impact and adequacy of mandate of TETfund.
2. There is no significant difference between the opinions of the respondents

on the basis of location of the institutions (Urban/Rural).

3. There is no significant difference between the opinions of respondents among the Federal and State-owned institutions.
4. There is no significant difference between the opinions of respondents based on the types of institutions (University/Collage of Education/Polytechnic).

METHODOLOGY

Research Design

Descriptive research using both questionnaire and structured interview were used for data collection and it is considered the best means to provide adequate information on the impact of TETfund on Tertiary Institutions in the North western part of Nigeria.

Participants

The target population for the study is all Tertiary institutions both University, Polytechnic and Collages of Education in Northern Nigeria. Using stratified sampling techniques. Only Ten (10) Universities, five (5) Collages of Education and Five (5) Polytechnics were used which cut across many states in the federation.

The structured interview was carried on Forty (40) respondents, including some Staff of the Agency at the main Office in Abuja. In all the sample used consists of one hundred and four (104) respondents.

Instrumentation

The questionnaire used was designed by the researchers, which has two sections. Section A sought demographic data such as Sex, Location of the institution (Urban/Rural), Type of the institutions (University/Polytechnic/Collages of Education) and Ownership of the institutions (Federal/State). While the Section B contains statements reflecting the impacts of TETFund on some selected interventions (Staff training, Infrastructural developments, Conferences, and a host of others). There after a structural interview was conducted to authenticate the opinions held or for further information on the areas examined in the questionnaire.

Validity and Reliability of the Instrument

The questionnaire used was subjected to face and content validity. Three experts including an expert in the area of measurement and evaluation were requested to scrutinized items used in the questionnaire and structured

interview. The reliability of the questionnaire was determined using a test-retest approach. The reliability coefficient of the instruments was found to be 0.70. The two instruments were assumed to be valid and reliable.

Method of Data Collection

This study is limited to the Academic Staff in those Tertiary institutions selected for the study, (be it University, Polytechnic and Colleges of Education). At initial stage, only few staff were available to fill the Questionnaire because of the 8 months ASUU strike in 2022. The research Assistants were made to make a revisit so that more questionnaire was returned. The interview was conducted the same day or there after within a week of the return of the questionnaires when they feel chanced to honor the interview. The visit to the TETFund main Office at Abuja was done to get first-hand information in addition to that information collected in the structured interview conducted among the staff of the institutions.

Procedure for Data Analysis

In an attempt to analyse the data, the responses on the Likert Scale were assigned scores as follows: Strongly Agree (2) Agree (1) Disagree (-1) and Strongly Disagree (-2). The scores for each category examined was

computed and percentage, mean and standard deviation determined. Analysis of variance (ANOVA) was used to answer the research questions and the hypothesis raised. Using appropriate computer package, Analysis of Variance (ANOVA) was done to compare the mean scores of the categories as reflected in the Hypotheses, while the percentage was used to answer research questions generated. The hypotheses were tested at 0.05 level of significance.

RESULTS

In Tables 1-4 attempt was made to summarize the frequency distributions of the respondent’s opinions using frequency count and percentage. For simplicity, the scores and percentage for Strongly Agree and Agree were matched together while that of Disagree and Strongly Disagree matched together and the average percentage reported to

answer the research questions in the study.


Table 1: Categories of Respondents

Variables	Category	Number	(%)
Sex	Male	62	59.6
	Female	42	40.4
Location	Urban	65	62.5
	Rural	39	37.5
Ownership	Federal	44	42.3
	State	60	57.7
Type of Institution	Universities	40	38.5
	Polytechnics	34	32.7
	Collages of Education	30	28.8



Table 1 showed that there are more male (59.6%) Academic Staff across the institutions in Nigeria with many of the institutions located in the urban areas. It also revealed that over 50% of the Universities and Colleges of Education in the country are owned by the State governments.

Table 2: Respondents on Impact and Achievement on Mandate

SN	ITEMS	SA (%)	A (%)	U (%)	D (%)	SD (%)
	A. MANDATES AND CONTRIBUTION					
1	TETFund as an intervention agency is doing its best in terms of its mandate.	31 (30)	50 (48)	1 (2)	- -	22 (20)
2	My institution is able to access all the funds allocated annually.	25 (24)	69 (66)	10 (10)	- -	- -
3	All TETFund interventions are directed at meeting National goals and reducing	46 (44)	54 (52)	2 (2)	2 (2)	- -

	funding problems in institutions of learning.					
4	Without TETFund many staff in my institution wouldn't have been able to have Higher Degree.	36 (34)	32 (31)	- -	21 (20)	15 (15)
5	I have personally benefitted from TETFund interventions.	- -	68 (65)	- -	26 (25)	10 (10)
Average Percentage:		85.2%			12.0%	
						
		Agree			Disagree	
Table 3: Respondents on Academic Staff Training and Development						

	A. ACADEMIC STAFF TRAINING AND DEVELOPMENT	SA (%)	A (%)	U (%)	D (%)	SD (%)
6	Many Staff in my institution possessed Higher Degree through TETFund	54 (52)	45 (43)	3 (3)	2 (2)	- -
7	TETFund Academic Staff training programme provides enough opportunity for in-service training and human development.	35 (34)	32 (31)	- -	21 (20)	16 (15)
8	TETFund helps to solve problems of inadequate qualified and well-trained personnel for teaching in higher institutions.	33 (32)	59 (57)	9 (9)	3 (2)	- -
9	TETFund promote efficient service delivery by the lecturers, thus promote student academic achievements in school.	33 (32)	63 (60)	5 (5)	3 (3)	- -
10	Recent pronouncement on Non-science bias sponsorship for overseas training for <u>Education</u> and <u>Humanities</u>	66 (63)	10 (10)	7 (7)	21 (20)	- -

	Academic staff is not good and fair to those lecturers in those field.					
Average Percentage		82.8%			12.40%	
						
		Agree			Disagree	
Table 4: Respondents on Conference Attendance						



	B. CONFERENCES & ATTENDANCE	SA (%)	A (%)	U (%)	D (%)	SD (%)
11	TETfund special programme on conferences provides for personnel service delivery in terms of lecturers teaching.	31 (30)	47 (45)	- -	21 (20)	5 (5)
12	TETfund assist in updating knowledge, skill acquisition and innovations.	42 (40)	31 (30)	- -	21 (20)	10 (10)
13	Conferences is good for some Academic staff but consideration should always be given first for more experienced and dedicated staff for in house training to be conducted for other staff after returning from the conference	52 (50)	31 (30)	- -	21 (20)	- -
14	Overseas conferences should be promoted for wider experiences and exchange of ideas.	73 (70)	26 (25)	- -	5 (5)	- -
15	More money should be allocated or increase for overseas conferences in view of the current foreign exchange	52 (50)	31 (30)	- -	21 (20)	- -
Average Percentage		80.0%			20.0%	
						
		Agree			Disagree	

Table 5: Respondents on Infrastructural Development

	C. PHYSICAL & INFRASTRUCTURAL DEVELOPMENTS	SA (%)	A (%)	U (%)	D (%)	SD (%)	
16	My school wouldn't have enough Lecture Halls and other infrastructure without the assistance of TETFund intervention.	31 (30)	52 (50)	- -	16 (15)	5 5	
17	Some of the TETFund projects are either delayed or abandoned in my institution.	47 (45)	36 (35)	16 (15)	5 (5)	- -	
18	No enough supervision and monitoring done during the construction of the facilities in my institution.	21 (20)	63 (60)	- -	10 (10)	10 (10)	
19	When compared to other institutions in my State my school is not having enough facilities for teaching and learning.	10 (10)	5 (5)	5 (5)	21 (20)	62 (60)	
20	Most of the facilities infrastructures and modern equipment are made available through TETFund	36 (35)	47 (45)	- -	5 (5)	16 (15)	
Percentage		Average			67.0%		29.0%
				Agree		Disagree	

Table 6: Respondents on Research Funding

	D. RESEARCH FUNDING & INNOVATION	SA (%)	A (%)	U (%)	D (%)	SD (%)
21	TETFund provide enough funds for research and innovation for staff in my institution.	52 (50)	31 (30)	- -	21 (20)	- -
22	The guidelines and rules make it difficult for many academic staff to access the fund.	31 (30)	26 (25)	- -	21 (20)	26 (25)
23	The 60% of the grant given for takeoff is not adequate for efficiency and easy completion without having to be indebted.	42 (40)	36 (35)	- -	21 (20)	5 (5)
24	The money for all the researches including IBR should be increase in view of the current inflation in the country	52 (50)	37 (35)	- -	10 (10)	5 (5)

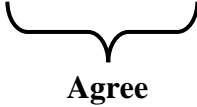



25	Research findings when made available should widely publicized.	63 (60)	10 (10)	- -	31 (30)	- -
Average Percentage		73.0%			27.0%	
		 Agree			 Disagree	
Table 7: Respondents on Problems and Challenges						
	E. PROBLEMS & CHALLENGES	SA (%)	A (%)	U (%)	D (%)	SD (%)
26	Rules and Guidelines for accessing the funds is very challenging and needs to be reviewed or updated with the current situation.	73 (70)	16 (15)	- -	10 (10)	5 (5)
27	It is evidence that there is some form of discrimination or bias in selection of Academic staff for staff training conference and Research funds in my institution.	10 (10)	52 (50)	- -	26 (25)	16 (15)
28	Some institutions never put up Notice or information on time for most staff to put in their applications.	16 (15)	52 (50)	- -	26 (25)	10 (10)
Average Percentage		70.0%			30.0%	
		 Agree			 Disagree	

Table 2 on Mandate and Impact revealed that the Agency is meeting up with its mandate with 85.2% in agreement that it has impacted on them with many having benefitted from some of its interventions (Item 5). From Table 3 on Academic staff training and development more than 40% indicated that Academic staff now have access for in-service training through TETFund with 82.8%

as against 12.4% where in agreement that TETFund has impacted positively on training and retraining of staff thus promote students' academic achievement in tertiary institutions. Table 4 on Conferences Attendance (Item C) most of the respondents 80% were in agreement that the Agency is trying its best, however 80% were of the opinion that more funds should be allocated for staff overseas in view of

the current foreign exchange. More importantly it was suggested that consideration should be given to the most senior and more experienced staff who will in turn be able to offer in-house training to others, on their return from the overseas trip. Table 5 showed that TETfund has tried in Infrastructural development with 70% as against 30% in agreement that most of the facilities, infrastructures and modern equipment were made available through TETfund interventions. Table 6 on Research funding and Innovation has revealed that TETfund provide funds. However, 76% of the respondents were of the opinion that money for IBR and other researches should be increased in view of the fluctuation in

Naira/Dollar exchange rate. Table 7 on summary of the challenges and problems facing staff, more of the staff expressed concern on the Rules and Guidelines for assessing various funds, the discrimination in some institutions in selection of staff for Conference Attendance and staff training. Using appropriate computer package analysis of variance were run to compare mean scores of different categories when their opinions were quantified in order to test the 4 hypotheses.

Hypothesis One: There is no significant difference between the opinions of male and female respondents on the impact and adequacy of mandate of TETfund.

Table 8: ANOVA on the respondents mean scores with respect to Adequacy of Mandate and Contributions of TETfund

	Variables	Sum of Squares	Mean Squares	F-value	Decision
Sex	Male	12.30	11.40	1.25	NS
	Female				
Location	Urban	0.06	0.07	0.01	NS
	Rural				
Ownership	Federal	43.60	44.50	3.80	NS
	State				
Type of Institution	Universities	18.61	18.62	2.05	NS
	Polytechnics				
	Colleges of Education				

Table 8 showed that there is no significant differences between the

opinions of male and female respondents on the adequacy of

mandate of TETfund as calculated value of 1.25 is less than table value of 3.94.

Hypothesis Two: There is no significant difference between the opinions of respondents on the basis

of the location of the institutions (Urban/Rural). With the calculated value of 0.65 as against table value of 3.95, the result shows that location of the institutions has no significant differences in the opinion of the respondents.

Table 9: ANOVA on the respondents mean scores with respect to Academic Staff Training and Developments

	Variables	Sum of Squares	Mean Squares	F-value	Decision
Sex	Male	2.22	2.30	0.20	NS
	Female				
Location	Urban	14.62	15.56	0.65	NS
	Rural				
Ownership	Federal	68.47	68.56	4.32	S
	State				
Type of Institution	Universities	16.85	16.96	1.30	NS
	Polytechnics				
	Colleges of Education				

Table 9 showed that there was no significant difference in the opinion of the respondents with regards to location on staff training and development.

Hypothesis Three: There is no significant difference between the opinions of respondents among the Federal and State-owned institutions.

Table 10: ANOVA on the respondents mean scores with respects to Infrastructural facilities and equipment

	Variables	Sum of Squares	Mean Squares	F-value	Decision
Sex	Male	2.23	2.30	0.20	NS
	Female				
Location	Urban	14.84	15.62	0.80	NS

		Rural			
Ownership	Federal	70.40	69.45	4.54	S
	State				
		Urban			
Type of Institution	Universities	17.30	16.80	1.20	NS
	Polytechnics				
	Colleges of Education				

Table 10 revealed that the calculated value of 4.54 is greater than the *F* value of 3.94 indicating that ownership has significant influence on the opinion of the respondents meaning that state owned institutions felt the impact of TETfund

interventions more than the Federal institutions.

Hypothesis Four: There is no significant difference between the opinions of respondents based on the types of institutions (University/Collage of Education/Polytechnics).

Table 11: ANOVA on the respondents mean score with respect to Conference Attendance

	Variables	Sum of Squares	Mean Squares	F-value	Decision
Sex	Male	11.45	11.46	1.27	NS
	Female				
Location	Urban	18.61	18.63	2.15	NS
	Rural				
Ownership	Federal	18.61	18.50	2.40	NS
	State				
Type of Institution	Universities	44.60	44.62	4.82	S
	Polytechnics				
	Colleges of Education				

Table 11 showed that there is a significant difference in the opinion between the three types of institutions.

As per the interview and the area requesting for mentioning the problems and way forward for the TETfund to be able to render

meaningful services to the Public Higher Institutions:

Structured Interview

Below is the summary of the responses:

1. Insufficient funds allocated to IBR and International Conference Attendance in view of the Dollar Exchange rate.
2. Poor or inadequate monitoring and supervision of Infrastructural or Building Projects.
3. Delay in convening approval from the TETFund Office to the institutions.
4. In study fellowships overseas, there is no enough justification for excluding Faculty of Education from overseas training. There is need for Comparative Education training so that people can learn and have ideas between two or more countries.
5. On Research Funding and Innovation, in all the items the majority of the respondents (73%) were of the opinion that the Agency has been doing very well, however (45% item 22) indicated that the guidelines and rules for assessing various funds have to be made clear and readily available to the staff.

In solving some of the problems above, the respondents offered the following suggestions:

1. Need for increase in the amount allocated for IBR intervention.
2. Prompt and thorough supervision and monitoring of the projects from the beginning to the completions of the Building Projects.
3. Need to consider other media, like use of Email to convey approval before the actual release of the funds to the institutions.
4. Guideline and procedures for assessing various interventions should be communicated early enough for all the staff in each institution for compliance.
5. To help solve problem of Discrimination and the Head Office in Abuja should always ensure that no individuals enjoy conference and IBR interventions twice yearly to allowed other staff to benefit or the abuse of the Fund.

Discussion

A common phenomenon in the past was that many Academic Staff in higher institutions were observed to be stagnant for a long period of years without promotion or advancement

because they are unable to further their education as a result of financial constraints. For any lecturer to perform effectively, he or she needs not only have the required qualification, they need to further their studies till they acquired a Ph.D., the highest level which was assumed will affect their output and the students' academic performance.

This study revealed that many Academic Staff were able to further their studies through TETfund and this is in agreement with Ibrahim (2023) and Udu and Nkwede (2014) who argued that having additional training and retraining is essential in tertiary institutions, in view of the new innovations and technological development. Besides that, the inadequate funding to conduct meaningful research and problems of deteriorating infrastructure in higher institutions have been reduced to minimal as a result of funds made available to different categories of higher institutions unlike the past. According to Okebukola (2004), Nigeria is now competing favorably with the outside world in terms of Research output.

As shown in this study the impact of TETfund is mostly felt among the State owned institutions for many state owned institutions wouldn't have gotten to the level they are today

in terms of infrastructural facilities, capital projects and availability of instructional materials (Udu and Nkwede 2014). In addition to that the finding in this study is also in agreement with that of Agbe (2010) and Bogoro (2015) who discover that there is a relationship between staff training and economic growth of a country. They argued that training and manpower development together with research enhances workers job productivity and organizational performance. The result in this study also showed that although TETfund has immensely improved all the category of Tertiary institutions they still need improvements in some areas. From the interview conducted some of the TETfund officials were of the opinion that the Agency is overloaded with many responsibilities which at times causes delay in communicating approval to some institutions.

CONCLUSION

The major findings revealed that TETfund interventions do have impact in all the areas examined and this is more pronounced in the State-owned institutions. However, there is need for improvements in certain areas to avoid discrimination in the selection of staff to benefit from the fund. The head office at Abuja has a good structural organization but

should look inward in solving some of the internal crisis or problems.

RECOMMENDATIONS

On the basis of the findings, the following recommendations are offered:

1. The Agency need to constantly strategize on how best to manage the available resources with several demands from various level of education in the country.
2. Since some institutions reported having problems in accessing the funds, due to inability to meet the laid down Rules and Conditions, the Agency should either reduce the conditions to minimal or communicate the same well ahead the period of submission of their proposal.
3. It is bitter to know that some Academic staff were reported to spend part of the money given for other things other than the purpose of which the money was meant for. Any staff found in this act should be made to make a refund within a month and should be ban for a period of 3 years.
4. Government policy: government laws and directives should reflect the present situation of things in

Nigeria so that there is increase percentage of Tax deduction from 2% to 5%.

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IMPACT OF SELF-CONTROL AND SOCIAL LEARNING THERAPY ON ADOLESCENTS' BEHAVIOUR DISORDER IN EHIME-MBANO LOCAL GOVERNMENT AREA: THE NEED FOR COUNSELLING INTERVENTIONS

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ABSTRACT

This study determined the impact of self-control and social learning therapy on behaviour disorders amongst adolescents in Ehime-Mbano Local Government Area of Imo State, Nigeria. Descriptive survey research design was adopted in the study. The population for the study was all adolescents from Ehime-Mbano L.G.A. Imo State, Nigeria. The total sample was 185 out of 250 participants randomly selected from ten autonomous communities for the study. Data were collected using the instrument "Adolescents Behaviour Disorders Inventory (ABDI)". Independent t-test and Chi-square statistics were used to analyse the data. The results showed that there was a significant impact of self-control and social learning strategies on managing adolescent behaviour disorders. Also, that self-control and social learning therapies do not significantly affect managing behaviour disorders in adolescents. It was concluded that Self-control therapy improves adolescent motivation and preparedness to combat behaviour disorders. The study, therefore recommended that, since adolescents in the Ehime-Mbano Local Government Area of Imo State, Nigeria, exhibited a variety of behavioural disorders, there is a need for organized group counselling for the adolescents in the area.

Keywords: Self-control, Social learning, Behaviour disorders, Adolescents, Counselling services

INTRODUCTION

Disorderly behaviours are considered inappropriate and have the most severe consequences for adolescents and their environment. Numerous factors may influence adolescents' disorderly behaviours. Investigations have revealed a link between exposure to domestic violence and

children's dysfunctional lifestyles and maladjustment issues. Due to marital conflicts, children are negatively affected by the absence of a conducive emotional environment at homes. Family factors, such as structure, interaction, and influences, significantly impact students'

academic success or failure and the development of adolescents' behaviour in all its manifestations, according to research on emotional and behavioural disorders (Makinde, 2007).

Some authorities have revealed that most adolescent acts of violence and deviant behaviour can be traced back to learned and enduring childhood behaviour disorders (Makinde & Oparaduru, 2018). Even though the term 'behaviour disorders' is difficult to define concretely, researchers agree that behaviour disorders involve actions intended to harm others. They can be categorized as physical and verbal aggression, rage, and hostility, among other manifestations.

Domestic violence has been found to increase aggression, anxiety, and ineffective social functioning among friends, family, and authorities (Carrell & Hoekstra, 2019). According to Anwana and Akpan (2007), cited in Ukwueze (2013), some problems encountered in the Nigerian school system are inappropriate behaviours such as truancy, deviance, delinquency, aggression, and aggression loitering in the streets during the hours that children should be in school studying. Denga (1983), cited in Ukwueze (2013), identified truancy, vandalism, gang warfare, theft, and lying as

prevalent forms of inappropriate behaviour among adolescents. Korir (2008) believes that adolescent behaviour disorders are manifestations. Domestic violence has been found to increase aggression, anxiety, and ineffective social functioning among friends, family, and authorities (Carrell & Hoekstra, 2019). According to Anwana and Akpan (2007), cited in Ukwueze (2013), some problems encountered in the Nigerian school system are inappropriate behaviours such as truancy, deviance, delinquency, aggression, and aggression loitering in the streets during the hours that children should be in school studying. Denga (1983), cited in Ukwueze (2013), identified truancy, vandalism, gang warfare, theft, and lying as prevalent forms of inappropriate behaviour among adolescents. Korir (2008) believes that inappropriate behaviours among adolescents manifest in the lateness of teachers to school or class, poor communication skills, and poor teaching. Other factors, according to Korir (2008), include; child abuse at home, overindulgence, parenting style being tough, parents not being interested in their children's education, parents condoning whatever their children are doing, lack of discipline in the house, lack of behavioural control, and keeping bad friends. United Nations Educational,

Scientific and Cultural Organization UNESCO (2000), as cited in Ukwueze (2013) identified stealing, truancy, disobedience, insubordination, lying, fighting, cheating, lateness, rudeness, destructiveness, sex offenses, cruelty, smoking, and alcohol consumption as prevalent behaviour problems among boys and girls in schools.

When adolescents reach adolescence, they know the expected acceptable and unacceptable behaviours. Nonetheless, adolescents misbehave frequently for a variety of reasons. They may need to assert their autonomy or wish to test the boundaries imposed upon them. Occasionally, adolescent misbehavior results from internal distress, anger, frustration, disappointment, anxiety, or despair. There are some adolescents whose consistent behaviour is cause for concern. The adolescent's behaviour disorders fall outside what is considered normal or acceptable. Perhaps most alarming is that many adolescents show no remorse, guilt, or comprehension of the harm and suffering they cause others through their disorderly conduct (O'Brien, 2013).

Adolescence, therefore, occurs between the beginning of sexual maturation (puberty) and the beginning of adulthood. During this

stage of psychological development, an individual's behaviour becomes "adult-like." According to Makinde (2007), adolescence begins with the onset of physiologically normal puberty and ends with accepting an adult's identity and behaviour. According to the definition of adolescence, this development period occurs roughly between the ages of 10 and 19 (Oparaduru, 2017). Omoegun (2005) defined adolescence as a lengthy developmental stage that typically lasts from the ages of eleven (11) to twenty-one (21).

According to research, behaviour disorders are more likely to manifest during the adolescent period of growth and development. Teenagers with behaviour disorders may exhibit disruptive and violent behaviour and have trouble following prescribed rules (Makinde, 2007). At some point in their development, adolescents frequently encounter behaviour-related issues. However, behaviour disorders are categorized as conduct disorders when they are persistent and violate the rights of others. Therefore, this study investigated the various types of behaviour disorders among adolescents and how self-control and social learning therapy could reduce the prevalence of these disorders.

Objectives of the Study

This study aims to determine the effect of self-control and social learning therapies on adolescent behaviour disorders in Ehime-Mbano L. G. A. Specifically, the objectives are to:

- i. Identify the forms of behaviour disorders among adolescents.
- ii. Examine the extent to which self-control and social learning therapies reduce the level of behaviour disorders among adolescents.

Research Questions

The following research questions were formulated to guide this study.

- i. What are the forms of behaviour disorders among adolescents?
- ii. To what extent do Self-control and social learning therapies impact adolescents' behaviour disorders?

Hypotheses

The following null hypotheses were formulated to guide this study.

- H01: There is no significant difference due to gender in the forms of behaviour disorders among adolescents.
- H02: Self-control and social learning therapy do not significantly impact

adolescents' behaviour disorders.

METHODOLOGY

Research Design

The research design adopted for this study was survey research design. According to Ilogu (2005), the survey research design in which a group of people or items or objects is studied by collecting and analysing data from only a few people, items or objects considered to be exact representatives of the entire group. Given this, a survey research design was considered appropriate to investigate the impact of self-control and social learning therapies on behaviour disorders among adolescents in Ehime-Mbano Local Government Area of Imo State, Nigeria.

Participants

The population for the study comprised all the adolescents in Ehime-Mbano Local Government Area of Imo State, Nigeria. The target population consisted of adolescents from 10 autonomous communities from the Local Government area of the study. Ninety-eight females were randomly selected from five autonomous communities, and 87 males were randomly selected from another five autonomous communities by their respective community leaders using simple random technique. The pilot study for

the ten communities was conducted differently than the main study. In total, 185 individuals participated in the study.

Instrumentation

The instrument that was used for the research was designed by the researcher and it was titled "Adolescents Behaviour Disorders Inventory (ABDI)." The questionnaire is divided into two sections; A and B. Section A of the instrument sought information on the respondents' biodata. Sections B and C sought the respondents' perceptions on the various forms of behaviour disorders and the impact of Self-control and Social learning therapies in the treatment of Behaviour Disorders among adolescents, with three response categories: A=Agree, Undecided=UD, and D=Disagree, which were assigned 3, 2, and 1 point, respectively. Like Section B, Section C has three response categories: Agree=A, Undecided=UD, and Disagree=D, which were assigned 3, 2, and 1 points, respectively.

Validity and Reliability of the Research Instrument

Content validity for the instrument was assured by expert in Measurement & Evaluation and Guidance and Counselling in the Department of Educational

Foundations. Twenty adolescents from Ezeoke Nsu who were not a part of the study were administered the final version of the instrument twice, two weeks apart, on two separate occasions. Cronbach Alpha analysis was performed on the scores, and a value of 0.88 was obtained to attest to the instrument's reliability.

Procedure for Data Collection

The questionnaire forms were personally administered to the target audience with the help of two research assistants trained on administering the instrument.

Data Analysis

The statistics used for the study are Descriptive Statistics (min, max. and mean value) to answer the research questions where a value of fewer than 2.5 means rejection, and a value of 2.5 and above means acceptance of the item as a form or proximate cause of behaviour disorders among adolescents in Ehime-Mbano Local Government Area. Similarly, the research hypotheses were tested at a 0.05 (5%) level of significance using the t-test statistics and chi-square test for H01 and H02, respectively.

RESULTS

The study results after detailed analysis are presented in Tables 1 to 4.

Table 1: Form of Behaviour Disorders among Adolescents

S/N.	ITEMS	RESPONDENTS				Decision
		Female		Male		
		Mean	Std.	Mean	Std.	
1	Destruction of publicly owned properties.	2.43	0.86	2.10	0.91	Rejected
2	Loitering in "prohibited" areas.	2.15	0.95	2.27	1.12	Rejected
3	Stealing of other peoples` properties.	2.93	1.24	2.51	0.97	Accepted
4	Bullying of younger and weaker ones.	2.45	0.78	2.12	0.96	Rejected
5	Violent disruption of communities.	1.76	0.87	1.72	1.16	Rejected
6	Refusal to obey the traditional rulers	2.25	0.79	2.35	1.02	Rejected
7	Burgling of houses.	1.55	0.58	2.18	0.98	Rejected
8	Destroying religious houses.	2.42	0.65	2.00	1.18	Rejected
9	Insulting the elders.	2.55	0.97	2.50	0.98	Accepted
10	Eating while moving on the roads.	2.97	0.90	2.56	0.89	Accepted
11	Cheating in school	2.56	1.12	2.64	1.20	Accepted
12	Jumping ques.	2.64	0.95	2.64	0.96	Accepted
13	Making unnecessary noise.	3.00	1.11	2.87	1.03	Accepted
14	Immoral advances towards the opposite sex.	1.65	0.77	1.91	1.16	Rejected
15	Writing dirty things on walls.	2.73	1.25	2.59	1.47	Accepted
16	Collecting church offerings.	1.61	1.16	1.82	1.11	Rejected

S/N.	ITEMS	RESPONDENTS				Decision
		Female		Male		
		Mean	Std.	Mean	Std.	
17	Telling lies.	2.09	0.96	2.61	0.87	Accepted
18	Fighting.	2.09	1.00	2.52	0.83	Accepted

Source: Research Compilation, 2022

The data in Table 1 indicate that adolescents steal other peoples` property, insult elders, eat while moving along the roads, cheat in school, jump in queues, make unnecessary noise, write dirty things on the walls, tell lies, and fight.

Results from the table showed that the forms of behaviour disorders among adolescents are replicated in females and males in all the communities randomly selected from the Local Government Area.

Table 2: Level of Agreement on the Extent Self-Control and Social Therapy Reduce Level of Behaviour Disorders

S/N	Statements	A (3)	U D (2)	D (1)	Total	Mi n	Max	Mean Value	Decision
1	When individuals are very stubborn, I use insults to soften the stubbornness	10 5.6 %	25 13.5 %	150 80. 9%	185 100 %	1	3	0.41	Disagree with the Statement
2	Self-control and social skills training helps adolescence to learn how to regulate their frustration	135 71.9 %	35 19.1 %	15 9.0 %	185 100 %	1	3	2.50	Agree to the Statement

3	When I am able to control my behaviour disorders, I improve my social problem-solving skills.	146 78.6 %	25 13.5 %	15 7.9 %	185 100 %	1	3	2.12	Agree to the Statement
4	Self-control therapy enhances my desire and readiness to curb behaviour disorders.	136 73.5 %	40 21.7 %	9 4.8 %	185 100 %	1	3	2.55	Agree to the Statement
5	Through the social learning skills program, I am more engaged in activities that keep me away from behaviour disorders.	115 62.1 %	30 16.2 %	40 21.7 %	185 100 %	1	3	2.41	Agree to the Statement
6	Self-control and social learning therapies significantly impact managing adolescents' behaviour disorders.	146 79 %	31 16.8 %	8 4.2 %	185 100 %	1	3	2.68	Agree to the Statement

Source: Research Compilation, 2022

The results in Table 2 addressed how self-control therapy and social skills

training can reduce the prevalence of behavioural disorders among

adolescents in Ehime-Mbano. The following subthemes were statistically assessed.

First, with a mean score of 0.41, respondents disagreed with the notion that when they encounter extremely stubborn individuals, they use insults to soften their stubbornness. With a mean score of 2.50, respondents concurred that self-control therapy and social skills training assist adolescents in learning how to regulate their frustration. However, when adolescents can control their behavioural disorders, their social problem-solving abilities improve with an average of 2.12. Similarly, with a mean score of 2.55, the target population agreed that self-control therapy increases adolescents' desire and readiness to curb behaviour disorders. Moreover, with a mean score of 2.41, most respondents agreed that the social learning skills program had increased my

engagement in activities that keep me away from behaviour disorders. With a mean score of 2.68, participants agreed that self-control and social learning therapies significantly impact the management of adolescent behaviour disorders.

Test of Hypotheses

Independent t-test statistics and Chi-Square were employed were used to test the hypotheses. These statistical tools were necessary to determine the disparity's significance between the dependent and independent variables. The hypotheses were tested using data collected from questionnaires.

Hypothesis One: There is no significant difference due to gender in the forms of behaviour disorders among adolescents.

Hypothesis Two: Self-control and social learning therapies do not significantly impact adolescents' behaviour disorders.

Table 3: Difference in the Forms of Behaviour Disorders among Adolescents

Respondents	Number	Mean	Std	Df	Sig.	Decision
Females	98	41.12	4.67	183	0.7	Significant
Males	87	40.76	4.23			

Table 3 showed that the degree of freedom (183) had a significance level of (0.73). This result refutes the null hypothesis that there was no

significant difference in the types of behaviour disorders among adolescents. Adolescents in the Ehime-Mbano Local Area of Imo

State, Nigeria, exhibit considerable variation in their behaviour disorders.

Table 4: Self-Control and Social Learning Therapy Impact on Adolescents' Behaviour Disorders

Variables	Impact on adolescents' behaviour disorder			Total	X ² . Cal	p-value
	Agreed	Undecided	Disagreed			
Self-Control	146	31	8	185	60.89	0.9
Social learning therapy	153	23	9	185		
Total	299	54	17	370		

Therefore, the critical, x^2 value at a 5 percent significance level with 4 degrees of freedom is 9.48. Therefore, we reject the claim that self-control and social learning therapies do not significantly affect managing behaviour disorders in adolescents.

Discussion

It is essential to note that behaviour disorders are fundamental problems in human society. Today, the prevalence of maladaptive behaviours among young children increases as they mature into adults. This study found that children do not destroy publicly owned property at various community levels. In addition, loitering in restricted areas, bullying of younger and weaker individuals, violent disruption of communities,

refusal to obey traditional rulers, housebreaking, destruction of religious buildings, immoral advances towards the opposite sex, or collection of church offerings were not found among them. However, they also engaged in various other forms of behavioural disorders. This study contradicts the findings of Anwana and Akpan (2007), Korir (2008), and Ukwueze (2009). (2013). Supported the work of Oparaduru (2017), which concluded that secondary school students, who could also be called adolescents in this context, exhibit maladaptive behaviours.

The study also revealed that adolescents steal other peoples' property, insult elders, eat while moving on the roads, cheat in school,

jump ques, make unnecessary noise in public gatherings, write dirty things on walls, tell lies, and fight. This assertion is supported by Oparaduru's (2017) work, which concluded that adolescents exhibit maladaptive behaviours. This discovery is also consistent with the positions of Uwakwe and Nwagwu (1999), UNESCO (2000), and Ukwueze (2013), which, in addition to the aforementioned maladaptive behaviours, also include disobedience, tardiness, impoliteness, and cruelty as children age.

The second hypothesis asserts that self-control and social learning therapies do not significantly affect adolescent behaviour disorders. The statistical analysis of hypothesis two revealed that self-control and social learning therapies substantially impact the treatment of adolescents with behaviour disorders. This study indicates that adolescent behaviour disorders cannot be wholly eradicated; however, self-control and social learning therapies are used to combat them. This study demonstrates that adolescent behaviour disorders cannot be eliminated; however, self-control and social learning therapies are used to fight them. Consistent with the views of Gladding (2009), cited by Oparaduru (2017), self-control is a set of techniques used to identify and

confront negative thought patterns and to help people understand that these thoughts are ineffective or disruptive, with the ultimate goal of altering negative behaviour.

Need for Counselling Interventions

Counselling is a relationship of assistance. It is the process of assisting people in dealing with life challenges (Olayinka & Omoegun, 2003). It is a relationship of trust in which a specialist counsellor helps an individual in evaluating himself and his opportunities, making a viable choice in light of his unique characteristics and opportunities, accepting responsibility for his will, and initiating a course of action consistent with his choice (Olayinka & Omoegun, 2003). At the elementary school level, counselling focuses on identifying adolescents' developmental needs and identifying and modifying their behaviour disorders (Federal Ministry of Education, 2000). The Federal Ministry of Education (2000) defines the scope of adolescent counselling as including the provision of opportunities for socialization skills, the counselling of parents, the prevention of behaviour disorders, and the presentation of methods for coping with adjustment challenges through individual and group counselling techniques; role-playing and modelling.

Based on these findings, adolescents in the Ehime-Mbano Local Government Area of Imo State, Nigeria, have diverse counselling needs. Numerous factors predispose adolescents in other local government areas to multiple behavioural disorders. Therefore, counsellors should view saving these adolescents from being destroyed by their disorderly behaviours as an urgent responsibility and a call to professional duty.

This counselling intervention could be accomplished through referral services, interaction with parents and adolescents during the public symposium and conference programmes, orientation, and assisting adolescents in adopting the acceptable attitudes, norms, values, and behaviours required for adaptable growth and social development. Numerous adolescents are still in their early years and, as such, are susceptible to being duped by any observed behaviour. Counselling becomes crucial and proactive in preventing individuals from developing maladaptive behaviour disorders.

CONCLUSION

Behaviour Disorders are as old as humanity and are deeply ingrained in the larger society. This study revealed

the effect of self-control and social learning therapies on adolescent behaviour disorders in the Ehime-Mbano Local Government Area. Training in self-control and social skills teaches adolescents how to control their anger, thereby enhancing their social problem-solving skills. Self-control therapy improves adolescent motivation and preparedness to combat behaviour disorders. Due to social learning programs, teens are more engaged in activities that prevent them from developing behaviour disorders. Self-control and social learning therapies substantially impact the management of behaviour disorders in adolescents. Self-control therapy assists adolescents in coping with their problems (behaviour disorders) by altering how they conduct themselves in the presence of others.

Due to the inevitability of adolescent behaviour disorders, schools should incorporate self-control and social skills training into their curricula so that adolescents can overcome these disorders. When most adolescents can control their behavioural disorders, their ability to solve social problems improves. This approach reinforces their determination to eradicate all forms of behavioural disorders. In addition, most respondents agreed that they are more involved in activities that prevent them from

developing any behaviour disorder due to social learning skills programs.

RECOMMENDATIONS

In light of this, the following are the recommendations of this study:

1. Adolescents in the Ehime-Mbano Local Government Area of Imo State, Nigeria, exhibited a variety of behavioural disorders. Based on this, there is a need for organized group counselling for the area's adolescents.
2. The prevalence of behavioural disorders among adolescents in Ehime-Mbano Local Government Area, Imo State, Nigeria, is reduced by self-control and social skills therapies.

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USING DICTOGLOSS STRATEGY TO DEVELOP EFL WRITING SKILLS AMONG SECONDARY SCHOOL STUDENTS IN NIGERIA

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ABSTRACT

This study investigated the effectiveness of dictogloss technique to develop the English foreign language (EFL) writing skills of Nigerian secondary school students in Nigeria. The study applied a quasi-experimental research design. One hundred and twenty (120) students were selected to participate in the study. Both experimental and control groups consisted of two intact classes of sixty (60) students each. The instrument titled “EFL writing skills test” was designed by the researcher and used to collect data in the study. The data were analyzed using a t-test for independent samples. The results showed that EFL writing skills of the students improved as a result of applying dictogloss strategy. The study concluded that dictogloss has positive impacts towards improving EFL writing skills of secondary school students in Nigeria. It was recommended that curriculum planners use dictogloss technique to prepare the secondary school students curriculum in order to ensure students’ exposure to the materials and activities for the facilitation of writing skills performance through dictogloss in secondary schools in the country.

Keywords: Dictogloss strategy, EFL writing skills, Dictogloss learning, Nigeria

INTRODUCTION

Language teaching and learning have gone through transition processes because of its world over recognition and acceptance. It has reached the point that more communicative approaches and techniques are used. English is an international language spoken in many countries in the world. In Nigeria, English language is an official and lingua franca that is accepted nationally and used as a means of instructions in schools

(Richard, 2019). The main objective of teaching and learning English language in school is for learners to communicate well either internally or externally (Cook, 2007).

Robert (2010) regarded writing as an effective learning activity that is used to transmit information, clarify thinking, and acquire new ideas, knowledge and information. Isleem (2012) viewed writing as crucial for

EFL learners because it enables them to be able to communicate fluently and express their level of creativity in the various fields of endeavour.

Dictogloss was first introduced by Wajnryb (1990) as a substitute method of teaching grammar (Vasiljevic, 2010). Dictogloss is a classroom dictation method where learners are asked to listen to a passage (usually, a short one) that is being dictated by the teacher and the learners reconstruct the passage in their words (Cardoso, 2010). Dictogloss is a strategy to be used to the high school students, but it can also be utilized for use with the all level of education. It is most especially effective and efficient with EFL learners because it's focuses on fluent academic language and supports learners in listening, writing and recalling good English language models (Gibbons, 2015; Asrobi & Amni, 2017).

Writing skill is an essential skill that has been regarded differently by various scholars. For instance, Graham et al. (2013) viewed writing as a goal that is obtained and self-supporting mental activity needed artful management of the situation, the difficulty of the topic, the intent of the writer, and the ways, in addition to knowledge and skills involved in organising. Robert (2010) regarded

writing as an effective learning activity that is used to transmit information, clarify thinking, and acquire new ideas, knowledge and information. Agustiniingsih (2014) explained that writing is the process of transferring verbatim or oral language into written language. Al-Awadi, (2012) regarded writing as a crucial skill in English language pursuit ranging from the fact that it helps to promote grammatical structure and vocabulary, in which teachers use to teach their students. EFL students by extension need enough time to develop their writing skill. Some of these sub-skills are vocabulary, grammar, organization, mechanics, coherence, and cohesion.

Two approaches for teaching writing were provided by El Ashri (2013) and Kaoud (2015). They are: The first is product-focused approach: This approach involves learners producing their texts by model imitations and the evaluation centres on the syntactic structure and the grammar of the language. The second is called process-focused approach which deals with the skill of processing and facilitating ideas and supported repetition exercises.

Farid et al. (2017) conducted a study to investigate how Dictogloss storytelling enhances the learners' writing ability. The results of this

study showed that the application of Dictogloss storytelling led to the enhancement of students' writing performance in terms of its schematic structure, content, choice of words and language. They wrote narrative schematic structure in a better organization. The content in their writing after applying dictogloss method was enhanced, in which learners were able to write detail events in a proper order. In terms of the use of language, errors in grammar, vocabulary, spelling and mechanics, had not been observed frequently as in students' pre-test writing. The result also showed that the learners enjoyed learning activities using Dictogloss storytelling technique. Therefore, this study shows the positive impact of dictogloss on writing skill of students.

Retnowaty (2017) investigated a study on the effectiveness of dictogloss technique to improve students' writing skill in expository text so as to determine whether or not the teacher's use of dictogloss strategy managed to assist learners in improving their narrative text writing skill. This experimental research involved dividing the subjects into two groups; experimental and control group. After the pretest was administered and treatment was carried out, it was discovered that the experimental group outperformed

their counterpart in control group in the posttest. Thus, it was revealed that the application of dictogloss technique enhances students' narrative writing skill. Therefore, dictogloss has positive impact on improving students' performance in writing skills.

Based on the reviewed literature above, it can be understood that dictogloss is more effective than direct instruction in teaching writing skill. The present study differs from the researches above in the following areas: a) It is the first research on dictogloss that was conducted in the study area; b). Most researches on dictogloss in Nigeria were conducted on preparatory stage students and the present study was conducted on the second-year secondary stage students. Therefore, this research investigated the impact of dictogloss strategy on enhancing EFL writing skills of secondary stage students in Nigeria and their motivation towards learning.

Objectives of the Study

1. Examine the features of dictogloss strategy that enhance EFL listening sub-skills of Nigerian secondary school students.
2. Examine the effectiveness of dictogloss strategy in improving motivation towards learning EFL

listening sub-skills of Nigerian secondary school students.

Research Questions

1. What are the features of the dictogloss programme for enhancing second year secondary school students' EFL writing skills?
2. How effective is dictogloss strategy in improving EFL secondary school students' writing skills?

Hypotheses

The following hypotheses were tested for this study:

1. There is no significant difference between the mean scores of the experimental group and control group on the post administration of the EFL writing skill test.
2. There is no significant difference between the mean scores of the pre and post administrations of the EFL writing skill test on the experimental group.

METHODOLOGY

Research Design

The quasi-experimental research designed was employed to investigate

the impact of dictogloss strategy to develop EFL writing skills of secondary stage students in Nigeria.

Participants

One hundred and twenty (120) participants were chosen randomly from the second-year secondary classes to serve as control and experimental groups. Two intact classrooms of sixty (60) students each were used. Both groups comprised of sixty (60) participants.

Instrumentation

The EFL writing skills test was prepared and administered basically to discover the pre and post-performance of the control and experimental groups before and after the experiment was given.

Validity and Reliability of the Research Instrument

In order to establish the validity and reliability of the test, a group of jury consisting of sixteen specialists in English language and methodology, experienced supervisors and teachers in schools were presented with the test. The purpose of this exercise was to ascertain whether the test accurately measured the intended construct, as agreed upon by fourteen out of the sixteen jurors. This indicates a high level of agreement among the jurors, with a percentage of agreement of 87.5%. The juror's

opinions and modifications were checked and implemented to the test. They suggested some modifications that were considered in the final version of the test.

To examine the validity of the internal consistency of the test, it was calculated after applying it to a random sample of (30) EFL second year secondary school students in Nigeria. Results showed that all the values of the correlation coefficients were positive and a function at the (0.01) level of significance. Values of the correlation coefficients between each skill with the total score of the writing test ranged from (0.773) to (0.858). This indicates a strong correlation between the degree of each skill and the total score of the writing test.

To establish the reliability of the test, it was administered to a pilot sample of thirty students at the second-year secondary school students (Other than the main population of the study). The researcher calculated the reliability coefficient of the test using Cronbach's alpha formula. The results indicated that Cronbach's Alpha value of the skills ranged between (0.723) and (0.812). Also, the Cronbach's Alpha value of the test as a whole was (0.800), which are high and statistically acceptable reliability values. This high reliability value

shows that the writing test is considerably reliable.

The researcher used Spearman-Brown for split-half, and by calculating the correlation coefficient between the ranks of the paired items and the ranks of the individual items of the writing test, it was found that the correlation coefficient was (0.807). By substituting in the prediction equation of Spearman Brown, it was found that the reliability coefficient for the writing test as a whole was (0.893). Based on the foregone, it is clear that the writing test as a whole has a degree of validity and reliability that permits the researcher to use it in the present study.

Procedure for Data Collection

The data for this research were collected after administering the instrument of the research titled EFL writing skills test to the sampled population. They were required to write an essay of one paragraph on the topic "Technological literacy is a necessity for surviving in the 21st century". And, a three paragraphs essay on the topic "Since the inception of social media in Nigeria, there has been a rise in cyber bullying and the distribution of the fake news.

Data Analysis

The independent t-test was employed to analyze the data collected for the study.

statistically significant difference at the 0.05 level between the mean score of the experimental group and control group on the post administration of the EFL writing skill test in favour of the experimental group. To examine this hypothesis, a t-test was applied. Table 1 presents the results:

RESULTS

Hypothesis One: The first hypothesis stated that: There is a

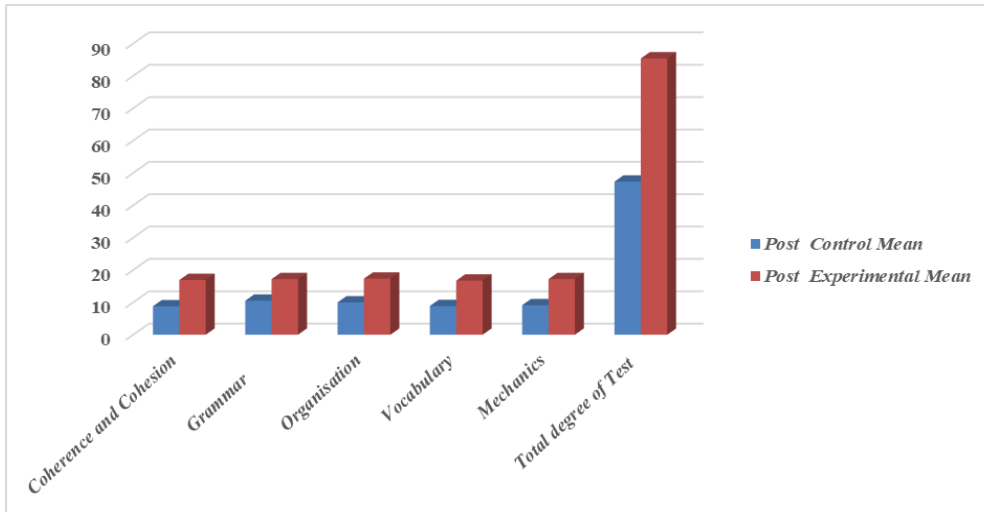
Table 1: Comparing Performances of Control and Experimental Groups on Post-Administration of EFL Writing Skill Test

Writing Sub-Skills	Groups	N	Mean Scores	SD	Df	T-cal.	Sig.
<i>Coherence and Cohesion</i>	Control	60	8.80	3.668	118	14.225	0.01 Sig.
	Experimental	60	16.93	2.483			
<i>Grammar</i>	Control	60	10.53	3.605		12.344	0.01 Sig.
	Experimental	60	17.20	2.122			
<i>Organisation</i>	Control	60	10.00	4.000		12.170	0.01 Sig.
	Experimental	60	17.33	2.405			
<i>Vocabulary</i>	Control	60	8.87	2.954		14.723	0.01 Sig.
	Experimental	60	16.73	2.899			
<i>Mechanics</i>	Control	60	9.13	2.561		17.930	0.01 Sig.
	Experimental	60	17.20	2.364			
<i>Total degree of Test</i>	Control	60	47.33	6.836		36.704	0.01 Sig.
	Experimental	60	85.40	4.219			

Table 1 illustrated that there are statistically significant differences between the mean scores of the experimental and control groups in all sub-skills of the writing and the total score of the test in the post administration in favour of the experimental group (higher average), where all the values of (t) were statistically significant at the level of Significance (0.01) and degree of freedom = 118. This result confirms the validity of the third hypothesis and was accepted. The researcher attributes these differences due to the application of dictogloss method. In addition, the above differences in the performance between the two groups are the effect of using dictogloss teaching method. This explains that there has been a significant development in the EFL writing skills, as a result of applying dictogloss teaching method on experimental students.

Based on the results above, it is clear that teaching writing skills through dictogloss with its different writing tasks and activities assisted the students to improve their writing level. It was understood that before studying through dictogloss, they were having hard time to write coherently, but after being taught with dictogloss, their level was developed. This is as a result of the tasks that the students partake on during dictogloss learning like collaborating and sharing ideas in team work, writing key word and organizing their notes for reconstruction. Thus, using dictogloss activities and steps such as initiation, input, interdependent, performance and reflective led to creating a conducive environment for effective learning to take place. Differences between the experimental group and that of control group mean score in all sub-skills of the post administration of the post writing skills test are clarified in figure 1:

Figure 1: Mean Scores of Experimental and Control Groups in the Post Administration of the Writing Test



Hypothesis Two: The second hypothesis stated that: There is statistically significant difference at the 0.05 level between the mean score of the pre and post administrations of the EFL writing skill test on the

experimental group in favour of the post administration. To investigate this hypothesis, a t-test was employed and the results of analysis are presented in Table 2.

Table 2: Comparing Experimental Group Performance on the Pre and Post Administration of Writing Skill Test

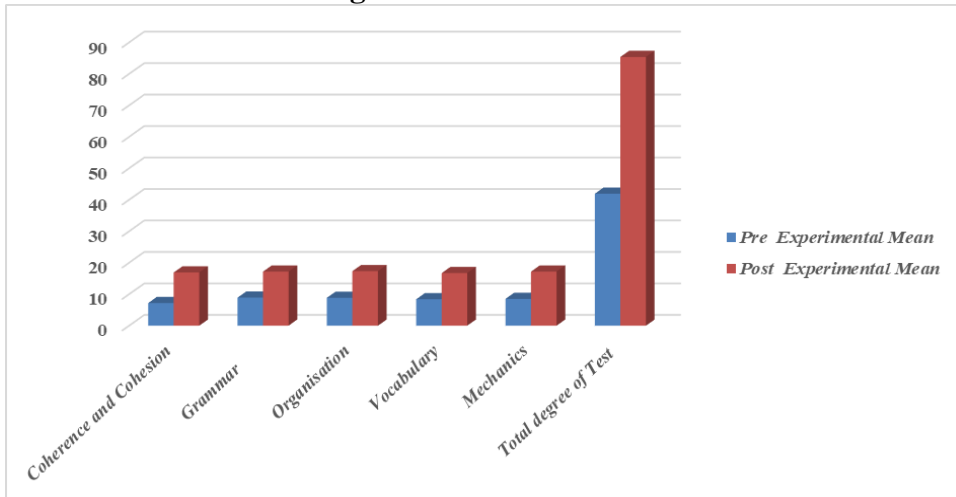
Skills	Application	No	Mean Scores	SD	Df	T-cal.	Sig.
<i>Coherence and Cohesion</i>	pre – test	60	7.20	2.927	118	21.646	0.01 Sig.
	post – test	60	16.93	2.483			
<i>Grammar</i>	pre – test	60	8.93	2.979		21.828	0.01 Sig.
	post – test	60	17.20	2.122			

Organisation	pre – test	60	8.87	3.972		17.778	0.01 Sig.
	post – test	60	17.33	2.405			
Vocabulary	pre – test	60	8.40	3.010		22.414	0.01 Sig.
	post – test	60	16.73	2.899			
Mechanics	pre – test	60	8.53	2.143		26.133	0.01 Sig.
	post – test	60	17.20	2.364			
Total degree of Test	pre – test	60	41.93	7.949		41.312	0.01 Sig.
	post – test	60	85.40	4.219			

The table 2 showed that there were statistically significant differences between the mean scores of the experimental group in the pre and post administration in all writing test skills and the total score in favour of the post administration (higher average), where all the values of (t) were statistically significant at the level of Significance (0.01) and degree of freedom (59). These :

results are consistent with the validity of the fourth hypothesis and the hypothesis was accepted. The researcher attributes these differences to the application of dictogloss strategy. Differences between the experimental group scores in the pre-post administration of the writing test in the overall sub-skills of the test can be shown in the figure 2 below

Figure 2: Comparing Experimental Group Performance on Pre and Post Administration of Writing Skills Test



To calculate the effect of the dictogloss strategy regarding the difference between the experimental group’s pre- and post-administrations of the writing test, eta

square (η^2) and effect size were determined after calculating the t-value. The results of the analysis are presented in the Table 3.

Table 3: Effect Size of the Treatment on Enhancing the Writing Test of the Experimental Group

Skill	η^2	Effect size
<i>Coherence and Cohesion</i>	0.888	High
<i>Grammar</i>	0.89	High
<i>Organisation</i>	0.843	High
<i>Vocabulary</i>	0.895	High
<i>Mechanics</i>	0.92	High
<i>Total degree of Test</i>	0.967	High

Table 3 showed the strength of the effect of the dictogloss technique on the

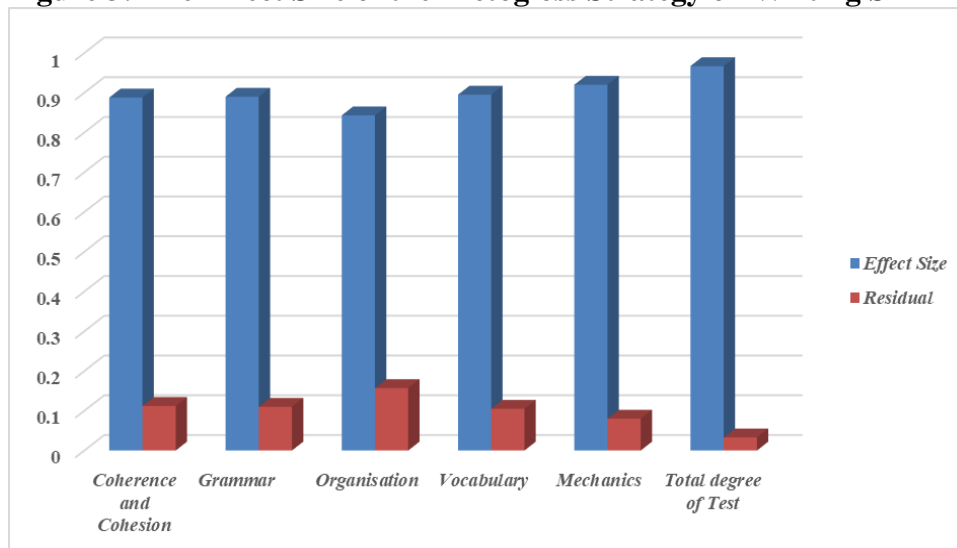
academic achievement of the experimental group students in the five

sub-skills of the writing test and its overall score. Thus, the values of (η^2) in each skill and in the total score of the test ranged between (0.843, 0.967). This clearly indicates that 96% of the variance in experimental group students' performance in writing can be associated to the independent variable (dictogloss). This is regarded as high percentage that shows a high variance level.

The overall significant difference between the both groups clarified in Table 3 in addition to effect size results exemplified in Table 3 confirm the effect

of the dictogloss program on improving students' writing performance. This shows that the experimental group outperformed their counterpart in control group as a result of using dictogloss method. During applying dictogloss strategy, the researcher observed that the students were active, encouraged, collaborative and interactive with the activities and environment where writing tasks took place. The effect size of the dictogloss strategy on the writing level of the experimental group students in the five sub-skills of the EFL writing test and its overall score were revealed in figure 3

Figure 3: The Effect Size of the Dictogloss Strategy on Writing Skill



Discussion

Results indicated that there was a statistically significant difference between the experimental group and their counterparts in the control group in the

variables under study in favour of the experimental one. These results revealed the development in the experimental group students' EFL writing skills on the post administration of the tests. Such

development could be attributed to the effectiveness of employing the dictogloss strategy on experimental students.

The results of the study also revealed that the students in the experimental group were more active and aware of the writing skills, and their motivation improved. Thus, this is attributed to the activities and tasks that were involved in the proposed program which motivated and encouraged the participants to interact and collaborate using the focused skills. Moreover, students who studied writing through dictogloss strategy became more willing and encouraged to participate in writing activities. This, as a result, it was revealed that administering the dictogloss strategy of the present study led to developing the experimental students' writing skills than their counterparts of the control group. In addition, the results also showed that the dictogloss strategy is more efficient than the regular method. This resulted to enhancing the EFL writing skills of second year secondary stage students in Nigeria. This is in accordance with the findings of Retnowaty (2017) and Setyarini et al. (2017) respectively. Consequently, the positive impacts of dictogloss strategy can be attributed to its peculiarities that resulted to the following reasons: (i) Dictogloss promotes communicative and collaborative participation of EFL students in writing tasks with the assistance of a teacher serving as a

facilitator, guide, instructor and director. In addition, it creates interactive teaching method that encourages students to interact and learn positively; (ii) The strategy involved writing activities that focused the needs and interests of those students. The dictogloss provides students with good opportunities to freely as individual and in group during independent and interdependent stages of the strategy. These stages evidently have contributed to developing students' attitudes towards learning EFL writing skills; (iii) It makes students to become more aware of the necessary writing skills and the criteria according to which their writing was evaluated; (iv) It provides unique blending of teaching writing skills; and (v) During writing activities, students were motivated to use extra ability and intelligence that could helped them to get clear understanding and background about the topic they were supposed to write through various stages of dictogloss strategy.

CONCLUSION

The findings of the research accounted for empirical evidence that dictogloss strategy assists EFL secondary school students improve their writing skills. Many more researches on the topic in language methodology found similar results.

RECOMMENDATIONS

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

1. Teachers of English are recommended to be aware of the relevance of applying dictogloss method in teaching writing skills to their students. It improves their EFL students' ability to learn writing effectively.
2. Teachers of English are recommended to believe that their roles changed from being the only sources of knowledge to guides, monitors, facilitators, collaborators and consultants to their students.
3. Government should organize seminars, workshops and trainings to equip its teachers to know how to use dictogloss strategy in teaching writing skills.
4. Course designers are encouraged to include dictogloss method in teaching English language writing skills.

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ASSESSMENT OF PRIVATE SECONDARY SCHOOLS' ADMINISTRATION EFFECTIVENESS IN KWARA STATE, NIGERIA, 1999-2022

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ABSTRACT

This study assessed private secondary schools' administration effectiveness in Kwara State, Nigeria from 1999 to 2022. The target population comprised all private secondary schools in Kwara State, while the accessible population was 188 private secondary schools registered under the Kwara State Ministry of Education and Human Capital Development. The historical research method was adopted in the study. Purposive sampling technique was used to select 760 participants including Proprietors, Principals, experienced teachers, Parent-Teacher Association (PTA), Officials of the Ministry of education and its agencies. Questionnaire and structured interview were used as instruments to collect the data. Thematic analysis and percentage were used to answer the research questions in the study. The findings revealed that all private secondary schools in Kwara State were majorly administered by the proprietors of the various schools, through the principals, vice-principals, heads of departments, teachers and non-teaching staff, subject to the monitoring and supervision of the government. Based on the findings, it was concluded that private secondary schools were funded via proprietors' personal money, school fees, levies, and other charges paid by the students, voluntary donations from private individuals or organisations. Likewise, it was recommended that proprietors should continue to provide adequate funds for their schools and always maintain mutual relationship with parents, guidance, members of the public, corporate organisations and government to accrue more funds to the school via donations, PTA and loans from either banks or government to facilitate effective operation which would help to actualise the stated goals.

Keywords: Administration, Private secondary schools, Funding, Teachers' qualifications

INTRODUCTION

Administration is an essential factor in the school system. It involves general supervision in the schools, supervision of instruction and curriculum planning, financial

management, public and human relations, provisions and maintenance of school facilities as well as the equipment. School administration is a broad umbrella comprising a number

of processes such as planning, coordinating, controlling and being involved in other management processes and contribute to formulation of policies. Nwankwoala (2016) stated that school administration is the system of identifying, mobilising and utilising scarce human and material resources relevant in education for the purpose of achieving specific educational goals. This process involves a careful and systematic use of methods, principles, plans and procedures necessary to achieve the educational objectives.

In the Constitution of the Federal Republic of Nigeria (1999) as amended in (2011), the administration of secondary schools in Nigeria is in the concurrent lists of the Federal and State Governments. Therefore, the state governments play an intermediate role in the provision, management and control of education in the country because the administration of secondary school is directly under the state government. They perform this role through the agency of the Ministry of Education and other bodies at the state level. The State Ministry of Education is headed by a Commissioner appointed by the State Governor. The Commissioner is responsible for the formulation of policies and decision making in the Ministry while the head of

administration in the Ministry is the Permanent Secretary.

The State Ministry of Education handles planning, administration, supervision and other fundamental functions relating to schools. The State Ministries of Education have different departments or sections entrusted with various functions to ensure the achievement of goals of secondary education. They administered, supervised and controlled all the activities of public and private schools in the state. Moreover, The Teaching Service Commission in the states are also charged with the responsibilities of appointment, promotion, confirmation of appointment, posting, discipline and payment of salaries of teaching and non-teaching staff in secondary schools and other functions as delegated to them by the States Ministry of Education (Constitution of Federal Republic of Nigeria, 1999). Nakpodia (2010) specified that Teaching Service Commission in various states in Nigeria was established as a result of the Federal Government acceptance of Asabia's commission recommendations that a Teaching Service Commission should be established to serve as the employer of all teachers in secondary schools and that all traces of disparity should be eliminated.

It is therefore, significant to note that the regulatory agencies that involved in secondary school administration in Nigeria, particularly in Kwara State are the State Ministry of Education, Teaching Service Commission (TESCOM) and the State Universal Basic Education Board (SUBEB). However, since the return of democracy in Nigeria in 1999 and the introduction of the Universal Basic Education (UBE) programme in 1999, more secondary schools were established in Kwara State. Accordingly, it could be understood that the year 1999 was a major landmark in the history of secondary education in the State. Thus, this informs the commencement date of this study, while the termination year (2022) of the study was chosen because of its significance to Kwara State secondary schools administration in terms of schools restructured.

Generally, in Kwara State from 1999 to 2022, there are 564 secondary schools including the junior secondary schools jointly administered by the Teaching Service Commission (TESCOM) and the State Universal Basic Education Board (SUBEB). Out of these 564 secondary schools, 374 schools were directly under the TESCOM and SUBEB, while two were Federal

Government Colleges, under Federal Ministry of Education and the remaining 188 were private secondary schools. This number, 188 private secondary schools show an expansion in the secondary school compared to 41 private secondary schools that available in the State in 1999 (Kwara State Ministry of Education and Human Capital Development, 2022). Adepoju (2003) pointed out that management of staff records for smooth running of schools is one of the activities of Teaching Service Commission and the Universal Basic Education Board who are in charge of both senior and junior secondary schools. Thus, at secondary school level, there are line and staff. Line officers are those who are directly involved in the teaching-learning process while the staff are those rendering support service to complement the line. These are principals, vice-principal academics, vice-principal administrations, vice-principal special duties, head of departments, bursars, secretaries, typists, guidance and counsellors, health staff and the clerical officers.

However, in practical terms and according to Saidu (2009), all public secondary schools in the State are jointly administered by the Kwara State Ministry of Education and Human Capital Development, State Teaching Service Commission

(TESCOM) and State Universal Basic Education Board (SUBEB), while private secondary schools in the State are majorly administered by the proprietors of the respective schools in line with the standards set by the agencies of government. In addition, Abolade (2010) submitted that private secondary schools were administered by the proprietors and principals of the various schools in terms of appointment, promotion, posting, discipline and payment of staff salaries. The proprietors were the major financiers of all private schools, though their efforts were sometimes aided by the Parent-Teacher Association of the various schools.

Similarly, Odeleye and Oyelami (2012) are of the view that the proprietors of private secondary schools find money by all means to provide all necessary resources for their schools to ensure smooth running and administration of their schools. Moreover, Obe (2009) stressed that without adequate funding, the standard of education at any level could be tantamount to a mirage that is, building castles in the air. Money is very important in a school system because it is used to construct classroom buildings, purchase needed equipment, pay staff salaries and allowances, maintain the plants and keep the services going,

among several other things. Consequently, Ayeni (2016) viewed that the involvement of the private sector in education industry gives room for the proprietor to establish a school business and employ teachers with different qualifications for the purpose of training students to acquire the necessary knowledge, skills and values for useful living. Hamilton-Ekeke (2013) emphasised that one of the most important factors in the teaching process is a teacher qualification. Hence, teacher's qualification is one of the critical factors that drive students' academic performance. A qualified teacher is the one who holds a teaching certificate and/or licensed by the state, owns at least a National Certificate in Education or Bachelor's Degree from a four-year institution and well qualified in his/her area of specialization (Olaleye, 2011).

The perspective of teachers' qualifications can go a long way to bring about students' higher academic achievement. Teachers' qualifications connect to competence in instruction, management of students and materials in the classroom. This shows that teachers are the fulcrum on which the lever of educational system rests on. They are the largest and most crucial input of educational system who influence to a great extent, the quality of

educational output. Thus, this study assessed private secondary schools administration effectiveness in Kwara State, Nigeria from 1999 to 2022. Against this background, this study investigated how the private secondary schools in Kwara State administered, the major sources of funding and the level of qualification of teachers on the staff pay-roll of private secondary schools in Kwara State from 1999 to 2022. Further, there is a tremendous increase in the number of private secondary schools established by different private individuals, communities, cooperate bodies and religious organisations in Kwara State and this has created a great concern for the stakeholders, educators and the general public, because it appears that some of the proprietors of the schools did not have enough money to fund their schools, in terms of construction of classroom buildings, purchasing of teaching resources and pay staff salary as at when due. In fact, some neglected the minimum standard approved by the government for the establishment, staffing and administration of private schools. They employed secondary school and national diploma certificate holders as teachers and paid them little amount of salary so as to make maximum profits into their purse which eventually affect the smooth running and effective administration

of the schools as a result of inadequate funds and unqualified teachers. Thus, this study assessed the private secondary schools' administration effectiveness in Kwara State from 1999 to 2022.

Objectives of the Study

The main objective of this study was to assess private secondary schools' administration effectiveness in Kwara State, Nigeria from 1999 to 2022. In order to achieve this goal, the specific objectives of this study are to:

1. investigate the administration effectiveness of private secondary schools in Kwara State from 1999 to 2022;
2. assess the efficiency of the sources of funding private secondary schools in Kwara State from 1999 to 2022; and
3. examine the qualifications of teachers on the staff roll of private secondary schools in Kwara State from 1999 to 2022.

Research Questions

The following research questions were answered in this study:

1. How were the private secondary schools in Kwara State administered from 1999 to 2022?
2. What were the sources of funding private secondary

- schools in Kwara State from 1999 to 2022?
3. Were the teachers on the staff roll of private secondary schools in Kwara State from 1999 to 2022 qualified?

METHODOLOGY

Research Design

This study adopted an historical research method which involves the process of questionnaire selection, interview, data collection and analysis. The thematic analysis and the percentage were used to explain responses of the participants on the variables used in this study.

Participants

The target population of this study consisted all private secondary schools in Kwara State, while the accessible population was 188 private secondary schools that registered under the Kwara State Ministry of Education and Human Capital Development and 45 officials in charge of private secondary schools in the Ministry of Education and its agencies. Stratified sampling technique was adopted to group the

participants into three. These were policy makers, implementers and beneficiaries. The purposive sampling technique was used to select 4 officials of Kwara State Ministry of Education and Human Capital Development, 2 officials of Kwara State Teaching Service Commission (TESCOM) and 2 officials of Kwara State Universal Basic Education Board (SUBEB), who were connected with private secondary schools. Moreover, purposive sampling technique was used to select all the 188 private secondary schools in Kwara State and from the schools, purposive sampling technique was used to select all the proprietors and principals of the schools; 1 official from the Parent-Teachers Association (PTA) and 1 experienced teacher from each of the 188 private secondary schools which equal to 760 participants for the study. Purposive sampling technique was considered and suitable for this study because the technique is in line with the Patton (2002) who asserted that purposive sampling technique can be used to select the participants when there is attribute of interest in the target population. The Table 1 shows the participants group.

Table 1: Participants for the Study

Participants Group	Number of Sample
Policy Makers:	
Ministry of Education and Human Capital Development	4
Teaching Service Commission	2
State Universal Basic Education Board	2
Implementers:	
Proprietors	188
Principals	188
Experienced Teachers	188
Beneficiaries:	
PTA Chairman	188
Total	760

Source: Field Study, 2023

Instrumentation

The research instruments used in this study were questionnaire and structured interview. A researcher-constructed questionnaire titled "Assessment of Private Secondary Schools Administration Questionnaire (APSSAQ) was used to collect information from participants. Also, structured interview was used to obtain information from some key personalities such as Directors, Deputy-Directors and Officers in charge of private secondary schools in the Kwara State Ministry of Education and Human Capital Development, Kwara State Teaching

Service Commission (TESCOM) and Kwara State Universal Basic Education Board (SUBEB) in the State. All these served as primary sources for the study. Relevant textbooks, journals, articles, reports and encyclopedias were used as secondary sources of information for this study.

Validity of the Instruments

The instruments were validated by two lecturers in the Department of Arts Education and two experts in the field of Test and Measurement, Faculty of Education, University of Ilorin, Nigeria based on historical methods. This contained the process

of external criticisms. According to Alabi (2017), external criticism of historical source establishes the authenticity of the data collected. It concerns itself with determining either the document is a genuine one or otherwise.

Reliability of the Instruments

The reliability of the instruments involved internal criticism. Thus, internal criticism establishes the reliability, accuracy, originality and worth of the data obtained (Alabi, 2017). In order to establish the reliability, the researcher compared primary sources which include structured and oral interview as well as secondary sources in order to ascertain the real facts. Where there were different opinions on secondary sources, the researcher established the fact that was correct on the basis of the overall plausibility that formed the standpoint of internal consistency, general compatibility and agreement with other known and accepted facts.

Procedure for Data Collection

Questionnaires were distributed to the participants of the sample schools with the help of three research assistants in order to ensure high rate of returned. The effective administration of questionnaires was also aided by cooperation of colleagues and friends in the sample schools. Moreso, interview was

conducted to obtain information from officials of Kwara State Ministry of Education, TESCO and SUBEB. The respondents were assured of concealment and confidentiality of their responses. This method facilitated on the spot collecting of the completed instrument and hundred percent retrieval.

Data Analysis

Thematic analysis was used to answer the research questions 1 and 2. This involved presenting the facts and interpreting the available evidence with the researcher based on the research questions formulated for the study. While, the percentage was used to answer the research question 3 in the study.

RESULTS

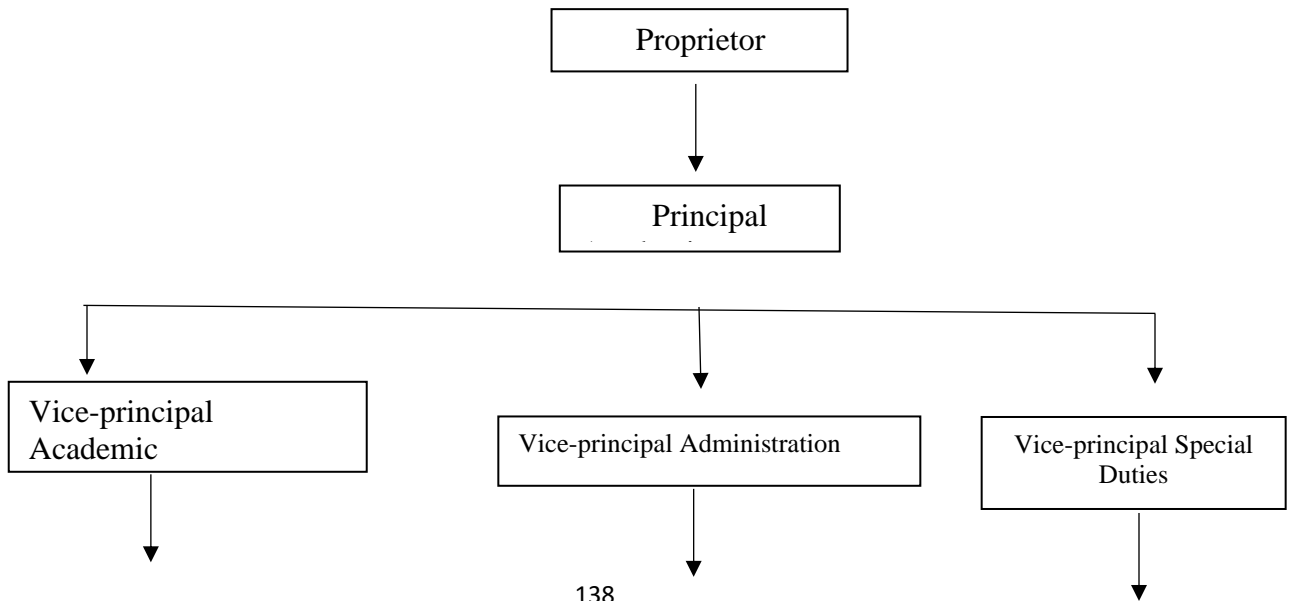
Research Question One: How were the private secondary schools in Kwara State administered from 1999 to 2022?

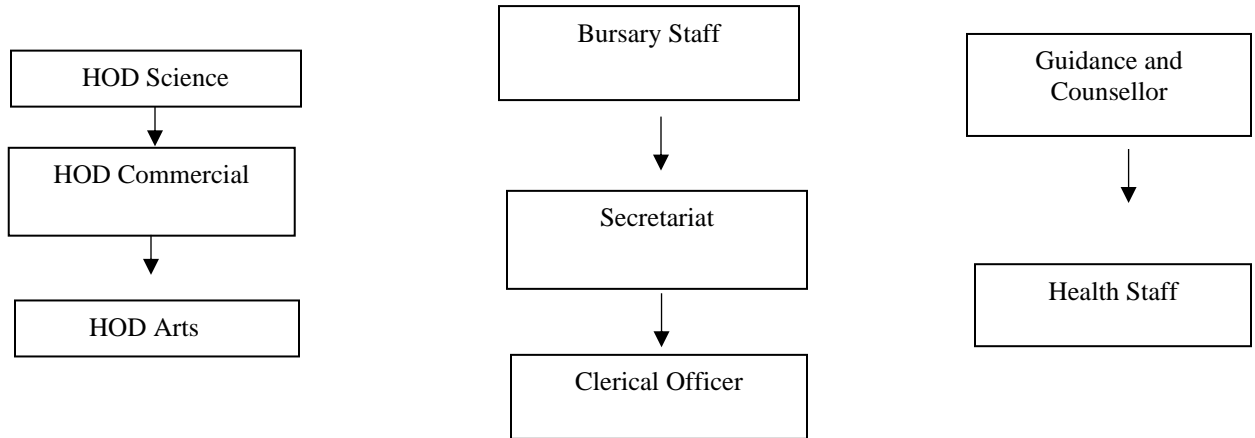
Based on the data collected and analysed, private secondary schools in Kwara State were administered by the proprietors, through the principals who ensure smooth activities of the schools on daily basis, with the help of vice-principals, heads of departments, teaching and non-teaching staff. The principal is an administrative head that plans, directs and coordinates all the staff and student affairs in the school. He

assigns duties to the teachers and supervises them in order to achieve the school objectives. The vice principal helps the principal in his daily administration of the school and deputises him whenever he is not present in school. The vice principal vets teachers' lesson plans and assists the principal to maintain adequate discipline among the teachers and the students. He is also in charge of school records such as duty roster, school register, and examination timetable. The head of department coordinates numerous activities of the teachers in his department. He goes through the lesson plans of the teachers in his department whenever such power is delegated to him by the principal or the vice-principal.

Moreover, the teacher is responsible for the academic activities of students. He can also serve as a class teacher together with the subject he teaches in the class as well as in charge of the head of department. Non-teaching staff such as bursar takes care of the financial matters of the school. He prepares salary, keeps financial expenses, cash or grants received and so on. The secretary keeps all school documents such as minutes of the staff meetings, memo and types examination questions. The clerical officers on the other hand, run errands for the principal, vice principal, teachers and secretary respectively. Figure 1 shows the organogramme of private secondary schools.

Figure 1: Organogram of Private Secondary School Administration





However, the organogram indicates how private secondary schools' administration structure should be, but this is not followed in most private secondary schools in Kwara State. The proprietors did not employ the service of three Vice-principals because of the money they would pay to them, instead they employed one Vice-principal to carry out the job in order to save their money and this affected smooth running of the academic programme in schools. In addition, as contained in the guidelines of Kwara State Ministry of Education and Human Capital Development on the administration of private secondary schools in the state, the Ministry of Education is charged with the responsibility of making educational policies and monitoring the various educational decisions in the state. There is a Quality Assurance Bureau in the Ministry of

Education which oversees the activities of the private schools via inspection. But, based on the information gathered through the interview of the Quality Assurance Team Leader for Ilorin West Local Government Area, the inspection of private secondary schools in the State was done twice in a year. Not only that, Teaching Service Commission (TESCOM) and Universal Basic Education Board (SUBEB) in the State were also involved in the implementation of the various educational policies of the government at both public and private secondary schools.

Research Question Two: What were the sources of funding private secondary schools in Kwara State from 1999 to 2022?

The major sources of funding private secondary schools in Kwara State, according to most of the proprietors had always been through the following ways:

- a. school fees, levies, and other charges paid by students;
- b. donations;
- c. appeal fund/launching; and
- d. grants from voluntary individuals, organisations, government in some cases such as interest-free loan made available to the private school proprietors during Covid-19 period.

a. School Fees, Levies, and Other Charges paid by Students: Money accrued to the purse of the proprietors through school fees, levies and other charges paid by students every term was used for the payment of teachers' salaries and allowances, building of more classrooms, provision of instructional materials, chairs and tables as well as maintenance of the facilities.

b. Donations: In some cases, they received donations from old students' Association of the school, philanthropists or corporate organisations. These include physical facilities such as class rooms building, toilets, libraries, chairs and tables, and sometime school buses in

order to ease the movement of both students and teachers.

c. Appeal Fund/Launching: This was also an avenue through which the proprietors realised money from parents, individuals and corporate organisations to fund the schools.

e. Grants from Voluntary Individuals, Organisations or Government: Grants were also realised from individuals, organisations to run the schools or at times government, like interest-free loan provided for private secondary schools during Covid-19 period to enable them operate the schools smoothly. Thus, based on the results of the study, it is significant to note that the proprietors of the respective schools used their personal funds, donations, appeal funds, grants from voluntary individuals, organisations, government, school fees, levies, and other charges paid by students to run their schools which are not sustainable enough to run the schools.

Research Question Three: Were the teachers on the staff roll of private secondary schools in Kwara State from 1999 to 2022 qualified?

The proprietors and the principals of the schools sampled for this study submitted that, most teachers in their schools were qualified. According to

them, 60% of the teachers in their schools possessed Bachelor's Degree in education such as B.A. (Ed), B.Sc. (Ed) and B. (Ed). Also, 25% were Higher National Diploma (HND) with Post Graduate Diploma in Education (PGDE) holders and 10% of the teachers had Nigeria Certificate in Education (NCE), while 5% possessed Master's Degree in Education. This indicates that private secondary schools in Kwara State were staffed with qualified teachers. Table 2 shows the teachers qualification as obtained from the respondents.

Table 2: Teachers' Qualification in Private Secondary Schools in Kwara State (1999 – 2022)

S/N	Teachers' Qualifications	%
1.	Bachelor's Degree in Education (B. A. Ed., B. Sc. Ed., B. Ed.)	60%
2.	HND with PGDE	20%
3.	NCE	15%
4.	M.Ed.	5%
	Total	100%

Discussion

The finding of this study revealed that all private secondary schools in

Kwara State were administered by the proprietors of the respective schools, through the principals who ensured the smooth running of school activities on daily basis, with the help of vice-principals, heads of departments, teachers and non-teaching staff; while the control and supervision of the schools remained as the responsibility of the government. This showed that private secondary schools were majorly administered by the proprietors of various private schools in Kwara State, subject to the monitoring and supervision of the government through the Ministry of Education and its agencies. This is in line with the submission of Abolade (2010) that in practical terms, the private secondary schools were administered by the proprietors through principals of the various schools in Nigeria. It also tallies with the finding of Saidu (2009) that all the public secondary schools in the State were jointly administered by the Kwara State Ministry of Education and Human Capital Development, State Teaching Service Commission (TESCOM) and State Universal Basic Education Board (SUBEB), while private secondary schools in the state were majorly administered by the proprietors of the respective schools.

This study showed that proprietors of all private secondary schools in

Kwara State had been the major source of funding their schools through personal money, school fee, levies and other charges paid by the students; however, their efforts were sometime aided by the Parents-Teacher Association (PTA) of their various schools via voluntary donations, launching and grants from voluntary individuals, organisations or government in some cases such as interest-free loan made available to private schools during Covid-19 period. This finding confirms the submission of Ayeni (2016) that the involvement of the private sectors in education enterprise give room for the proprietors to establish a school business for the purpose of training students to acquire the necessary knowledge, skills and values for useful living. They see opportunity from the motivational factors and translate the business ideas into school enterprise through the operational factors that ensure creativity in education delivery and fulfillment of quality learning outcome for students in secondary schools.

The outcome of the finding indicated that teachers in private secondary schools in Kwara State, within the period covered by this study, were qualified. This is because 60% of teachers in private secondary schools possessed Bachelor's Degree in

education such as B.A. (Ed), B.Sc. (Ed), B. (Ed). Also, 20% were HND with PGDE holders, and 15% had NCE, while 5% of the teachers possessed M. (Ed) that is, Master's Degree in Education with Teacher Registration Council of Nigeria (TRCN). This corroborates the view of Hamilton-Ekeke (2013) that one of the most important factors in the teaching process is the qualification of the teachers because it relates to the competence in instruction, management of students and materials in the classroom.

CONCLUSION

Based on the findings of this study, it was concluded that from 1999 to 2022, all private secondary schools in Kwara State were majorly administered by the proprietors of the respective schools, subject to the monitoring and supervision of the State Government through the Ministry of Education and Human Capital Development and its agencies. Also, they were funded via proprietors' personal money, school fees, levies, and other charges paid by the students and voluntary donations from private individuals or organisations. Moreover, private secondary schools in Kwara State, within the period covered by this study, were staffed with qualified teachers.

RECOMMENDATIONS

1. The proprietors should continue to provide adequate support to the principals while the principals should properly coordinate and encourage others staff to achieve the school goals. Also, the Ministry of Education and its agencies should intensify efforts in making educational policies and assiduously working towards its effective implementation through periodic inspection to sustain the established standards.
2. Proprietors should also continue to provide adequate funds for their schools and always maintain mutual relationship with parents, guidance, members of the public, corporate organisations and government to accrue more funds to the school via donations/launching, PTA and loans from either banks or government to facilitate effective operation which would help to actualise the stated goals.
3. Proprietors should not compromise the standard they have been sustaining by ensuring that only the qualified applicants are recruited into their schools as

teachers so as to facilitate effective realisation of the set goals.

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INVESTIGATING ADEQUACY AND UTILIZATION OF SPECIFIC NEEDS OF PHYSICALLY CHALLENGED STUDENTS IN JUNIOR SECONDARY SCHOOLS IN KATSINA METROPOLIS: IMPLICATION FOR INCLUSIVE COUNSELLING

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ABSTRACT

This study investigated whether the specific needs of physically challenged students as being utilized are adequate in junior secondary schools in Katsina metropolis with implications for inclusive counselling. The study adopted a descriptive survey design. The population of the study consisted of all the public Junior Secondary School (JSS) with a total number of 345 teachers in Katsina metropolis. The sample for this study was drawn from the entire population of the study. 235 participants comprised the sample in the study. A researcher-constructed questionnaire was used for data collection. The data were analyzed using frequency counts, percentages, mean and standard deviations. The findings showed that 88.7% of specific needs of the physically challenged students were not adequate and 84.2% needs of the physically challenged students were not at all utilized. It was concluded that specific needs of the physically challenged students were not adequate as their available needs were not fully utilized in Junior Secondary Schools in Katsina, Katsina state. Also, the study recommended that government should train more resource persons for physical disability from primary education level to higher level of education.

Keywords: Adequacy, Utilization, Physically Challenged Students, Inclusive Counselling

INTRODUCTION

Inclusive education is a system of education that cater for the special needs of pupils and students with visual, auditory and hearing

impairment, mental retardation, emotional disorder, physical and health impairment and learning disabilities. Ajuwon (2008) describe inclusion or inclusive education as the

philosophy and practice for educating children with special needs in general education settings.

Nigeria as a nation supports the operation of inclusive education in its national policy. The National Policy of Education (NPE) (2014) stated that: Access to education shall be provided and inclusive education or integration of special classes and unit into ordinary/public schools under UBE scheme. Persons with special needs and learning disabled shall be provided with inclusive education service in school which normal persons attend, in age-appropriate general education classes directly supervised by general teachers (p65). Inclusive education is a philosophy for attaining equity, justice and equality in education for all children who have been excluded from education for the reason of disabilities (Christopher & Elizabeth, 2012). In another development NPE (2014) maintained that every Nigerian child shall have a right to educational opportunities irrespective of any real or imaginary disability.

Inclusive education can provide a range of academic and social benefits for students with disabilities, such as high achievement in language and mathematics, improved rate of high school graduation, and more positive relationship with non-disabled

individuals (Isuwa & Lengnen, 2014). Implementation of inclusive education in Nigerian schools involves making learning environment conducive for learning disabled and individuals with special needs, equipping learning resource centers with learning materials, training and retraining teachers on how to identify and handle disabled individuals in a regular classroom, specialist to screened individuals with special needs and learning disabilities should be positioned in designated centers in each Local Governments in the country.

As a result of political instability, Nigeria was unable to formulate a coherent national policy on education, especially the education of children with special needs until 1999 when a democratic system of government began to take root again; following three decades of military dictatorship. In 1999 the Universal Basic Education (UBE) policy was adopted and enacted into law in 2004 as the UBE Act which makes a provision of 2% of its Consolidated Revenue Fund (CRF) to finance the UBE program. Thus, the compulsory free Universal Basic Education Act, 2004, provides a legal framework within which the Federal Government supports states towards achieving uninterrupted nine-year compulsory Universal Basic Education for all

children in primary and junior secondary school levels throughout the country. However, the actual provision for funding of the education of children with special needs, as a National Education Policy under the UBE Act, was not put into effect until 2008 (Ajuwon, 2008).

This was when the policy of Inclusive Education was officially and formally adopted as an integral part of the UBE policy. Section 7 of the revised National Policy on Education (2014) explicitly recognizes that children and youth with special needs shall be provided with inclusive education services. The commitment is made to equalize educational opportunities for all children, irrespective of their physical, mental, psychological or emotional disabilities. Undoubtedly, these are lofty goals intended to improve the quality of special education services, but much more is needed to translate the goals into concrete action.

Federal government in an effort to upgrade and improve efficiency of the educational system stated that, not less than 2% of its consolidated revenue fund (CRF) as intervention to states for the implementation of UBE, pre-primary (5%), primary (6%) and junior secondary (35%), (Anubuze & Okwo, 2013). A cursory analysis into the 1999 and 2001 budgetary

provision for education should be that; 16.77 percent and 4.08 percent of the budget went for education in 2011, it got 10.24 %, while in 2013 budget it represents 8 percent, from the 2011 appropriation (Afolayan, 2014).

According to United Nations Educational, Scientific and Cultural Organization (UNESCO) (2005) inclusive is: Recognition of the right to education and its provision in non-discriminatory ways, a common vision which cover all people, a belief that schools and other places of learning have a responsibility to educate all children, a continuer process of addressing and responding to the diversity of needs of all learners. Okwudwu and Okechukwu (2008) viewed inclusive education as the progressive increase in the participation of students in reduction of the exclusion from the culture, curricula and committee of local schools. Inclusive embodies the values, policies and practice that support the right of every infant and young child and his or her family, regardless of ability to participate in a brand range of activities and contexts as full member of families, community and society (Odebiyi, 2016).

Omede (2016) opined that the challenges facing inclusive education

in Nigeria include expense, misinformation, lack of qualified personnel, inaccessibility of the programme by students, lack of co-operation among teachers, community and government. Okroma (2003) assessed the effective implementation of the UBE programme (inclusive education included) revealed significant inadequacy in the implementation efforts. Among the constraints that impede effective implementation are inadequate qualified teachers, insufficient funds, inadequate teaching and learning facilities, poor motivation of teachers and lack of guidance and counseling services.

Universal Basic Education Board (UBE) observed that children with special needs do not access education due to the followings; lack of equipment and facilities, misappropriation of fund, lack of trained specialists, and lack of accurate data (Isuad & Akinmosire, 2010). Inclusion implementation means more funds, additional experience to deal with new challenges, extra work, being abreast of recent information, willingness to work in collaboration with other professionals (Adetoun, 2003). Andrew (2016) stated that schools should accommodate children with physical, intellectual, social, emotional, linguistic or other

disabilities, gifted children, streets and working children, nomadic population, ethnic or cultural minorities and children from other disadvantage or marginalized groups. Students with physical disability need to be recognized as equal to the normal individual if inclusive education in Nigeria is to succeed. And adequate implementation of inclusive education in Nigeria embodied making school accessible to individuals with special needs, removing the negative attitudes of teachers towards the learning of physically challenged individuals, providing adequate equipment and funding to cater for the needs and interest of physically challenged students.

World Health Organization (WHO) estimated approximately 19,000,000 (Nineteen Million) disabled people living in Nigeria. This figure is equivalent to 20% of Nigeria's total population. Nigeria cannot afford to ignore persons with disabilities because of their high population and because of their inalienable right to education. The Nigerian National Policy on Education though laudable, but has not translated into adequate inclusive educational opportunities for physically challenged students. The policy implementation needs to be assessed from time to time, this is because the researchers observed that

for inclusion to be successfully practiced support staff, disability friendly environment, appropriate facility and equipment for teaching/learning process, curriculum modification, early identification, positive attitude, awareness of what inclusion is all about and accurate census of physically challenged students are central factors that would ensure appropriate inclusive education in Nigeria. Thus, the researchers aimed to survey the adequacy and utilization of inclusive education policy implementation on specific needs of physically challenged students in junior secondary schools in Katsina metropolis: implication for counselling.

Objectives of the Study

The objectives of the study are to:

1. determine the adequacy level of specific needs of the physically challenged students in Junior Secondary Schools in Katsina, Katsina state.
2. investigate the level of Utilization of needs challenges of physically challenged students in Junior Secondary Schools in Katsina, Katsina state.

Research Questions

To guide the study, the following research questions were raised:

1. What is the adequacy level of specific needs of the physically challenged students in Junior Secondary Schools in Katsina, Katsina state?
2. What is the level of utilization of needs challenges of physically challenged students in Junior Secondary Schools in Katsina, Katsina state?

METHODOLOGY

Research Design

This study adopted a descriptive survey method. Descriptive research design is used as a strategy that enable the investigator to describe the occurrence of variance and it also involve assessing attitude or opinion of individuals, organization or events. A descriptive survey research is the one in which a group of people or items are studied by collecting and analyzing data from few people and the items are considered to be representative of the entire group (Nworgu 2006:55). A descriptive survey of adequacy and utilization of specific needs of physically challenged students in junior secondary schools in Katsina metropolis: implication for counselling.

Participants

The population of the study consisted of 13 Public Junior Secondary School

(JSS) with a total number of 345 teachers in Katsina metropolis. The sample for this study was drawn from the population of teachers in the study area. Purposive sampling technique was used to select all the thirteen public senior secondary schools in Katsina metropolis. This was appropriate to this research because the researcher find it more appropriate and convenient. Purposive sampling also referred to as judgmental sampling technique is a technique to be used for this study based on the assumption that with good judgment, one can handpick element of cases in a population, which are satisfactory in relation to one’s needs. Fraenkel and Wallen in Abdulkadir (2019) opined that purposive sampling is a non-random sample used when those to be selected have the requisite information, Nworgu (2006) noted that purposive sampling specifies element which satisfy some predetermined criteria for selection, for example, possessing certain characteristics relevant to the study.

The sample size was drawn from the population of 345 teachers. This was achieved through the aid of Isreal (2013) table for determining sample size to simplify and justify the work and a sample size of 235 participants was determined. Thereafter, the sample of 235 teachers was proportionately selected across the 13 schools. The proportionate sampling technique was used to select corresponding numbers from the various institutions to ensure equal or proportional representation (Creswell, 2008). With proportionate sampling method, the researcher does not leave the representativeness of the sample entirely to chance. It ensures that the sample is similar to the population in certain respects, or matches the population on certain key variables (Mitchell & Jolley, 2007).

In selecting teachers to represent the sample in each school, the researchers used simple random sampling to select the final participants. The number of respondents selected in each school was presented in Table 1.

Table 1: Sample Size for the Study

S/N	Schools	No. of Teachers	Sample Size
1	Government Day Secondary School K/Yandaka	45	29
2	Government Day Secondary School Natsinta	32	26
3	Government Day Secondary School D/Safe	13	9
4	Government Day Secondary School Kamarawa	32	21

5	School of the Blind	19	12
6	Sir Usman Nagoggo College of Arabic and Islamic Studies (SUNCAIS)	44	28
7	Government College Katsina (GCK)	23	15
8	Katsina College Katsina (KCK)	31	20
9	Dikko College Katsina (DCK)	19	12
10	Hassu Iro Inko Girls College (WTC)	36	23
11	Family Support	12	8
12	Government Day Pilot Secondary School K/Sauri	18	12
13	Government Day Secondary School K/Kaura	21	14
	Total	345	235

Instrumentation

A researcher designed Questionnaire tagged: "Inclusive Education Policy Implementation for Physically Challenged Students Questionnaire" (IEPIPCSQ). The questionnaire has two major sections; Section A, elicit personal information of the respondents. Section B contained 10 items on needs of physically challenged students while Section C contained 10 items on utilization of needs challenges. Altogether, there was 20 items on the questionnaire.

Validity of the Instrument

To determine the validity of the instrument, the questionnaire was given to experts in the Department of Educational Foundations, Faculty of Education, Ahmadu Bello University Zaria and Department of Psychology/Guidance and Counselling, School of Education, Federal College of Education, Katsina to vet. At the end,

observations and suggestions were raised were implemented by the researchers before the production of the final copies. Thus, the independent judgment of the experts adjudged the face and content and validity of the instrument.

Reliability of the Instrument

To determine the reliability of the instrument. The researchers subjected the instrument to a test-retest reliability measure. The questionnaire was administered to 15 teachers at interval of three weeks between the first and second administration. The scores were then subjected to Pearson Product Moment Correlation statistics and a reliability index of 0.84 was obtained. Hence, the instrument was adjudged to be reliable and usable for the study.

Data Analysis

The data collected in this study were subjected to frequency counts, percentage, mean and standard

deviations to answer the research questions in the study.

Research Question 1: What is the adequacy level of specific needs of

Table 2: Adequacy Level of specific needs of the physically challenged students in Junior Secondary Schools

Responses	Frequency	Percentage	Mean	Standard Deviation
Not Adequate	160	69.9		
Fairly Adequate	43	18.8		
Adequate	18	7.9	1.45	.785
Very Adequate	8	3.5		
Total	229	100		

Table 2 revealed that 160(69.9%) of the respondents indicated that specific needs of the physically challenged students were not adequate, 43(18.8%) of specific needs of the physically challenged students were fairly adequate, 18(7.9%) of specific needs of the physically challenged students were adequate and 8(3.5%) of specific needs of the physically challenged students were very adequate. This implies that 88.7% of specific needs of the physically challenged students were not adequate in Junior

RESULTS

the physically challenged students in Junior Secondary Schools in Katsina, Katsina state?

Secondary Schools in Katsina, Katsina state. Also, a close interpretation of these responses indicated a (M=1.45, SD=.785) thus, revealed the adequacy level of specific needs of the physically challenged students in Junior Secondary Schools in Katsina as not adequate.

Research Question 2: What is the level of Utilization of needs challenges of physically challenged students in Junior Secondary Schools in Katsina, Katsina state?

Table 3: Utilization of needs Challenges of Physically Challenged Students in Junior Secondary Schools

Responses	Frequency	Percentage	Mean	Standard Deviation
Not at All	143	62.4		
Rarely	50	21.8		

Occasionally	22	9.6	1.59	.896
Always	14	6.1		
Total	229	100		

Table 3 revealed that 143(62.4%) of the respondents indicated the level of utilization of needs challenges of physically challenged students as not at all, 50(21.8%) of utilization of needs challenges of physically challenged students as rarely, 22(9.6%) of utilization needs of the physically challenged students were occasional and 14(6.1%) of utilization needs of the physically challenged students were always. This implies that 84.2% needs of the physically challenged students were not at all utilized in Junior Secondary Schools in Katsina, Katsina state. Also, a close interpretation of these responses indicated a (M=1.59, SD=.896) thus, revealed the utilization level of specific needs of the physically challenged students in Junior Secondary Schools in Katsina as not at all utilized.

Discussion

The study revealed that 88.7% of specific needs of the physically challenged students were not adequate in Junior Secondary Schools in Katsina, Katsina state. This finding was in agreement with the study conducted by National Council on Disabilities (2002) revealed that learning environment for people with disabilities requires buildings and

facilities designed, constructed or altered with federal funds to meet federal physical accessibility standards such as reserved parking spaces and passenger-loading zones for vehicles carrying disabled homeless clients are ample and well-marked. Also, entrances are protected from the weather by a canopy or roof overhang, buildings with stairwells have elevators, ramps or lifts, automatic door openers, and lowered counters for non-ambulatory persons. Barriers to entrances, hallways, restrooms, waiting areas and examination rooms are removed. Rooms are large enough to accommodate persons in wheelchairs and other assistive devices. Consequently, corridors are at least 36 inches wide for wheelchair mobility.

Research question two revealed that 84.2% needs of the physically challenged students were not at all utilized in Junior Secondary Schools in Katsina, Katsina state. This finding was in agreement with the study conducted Howell (2000) gave the evidence that the initiatives and structures in place at the various institutions vary considerably in what work they do and the services they

offer. In many cases the higher learning institutions experience resource constraints that limit the nature and extent of services that they can offer. Most importantly, support services to students with disabilities, where they do exist, tend to operate separately from or have limited collaboration with broader teaching and learning support initiatives at the

Implication for Inclusive Counselling

Inclusive counselling is one form of counselling service that does not distinguish between regular students and those with special needs both physical, intellectual, social, emotional, and linguistic. Thus, the counselling implication of this study is that the basic principles of

RECOMMENDATIONS

In view of the above findings, it is recommended that:

1. Government at all levels should supply all necessary equipment to students with physical disabilities in junior secondary schools such as wheel chairs, computers, projectors, sound systems and books so as to assist disabled students to reach their academic and social needs
2. Government should plan to train enough expertise for physical disability to be used from primary education level to higher level of education

institutions. Where links do exist, the collaboration is mostly with student counseling services rather than those dealing directly with teaching and learning. The structural separation of learning support for disabled students from other learning support is criticized and an integrated approach is seemingly preferred.

implementing inclusive education in Junior Secondary Schools must accommodate the physically challenged students by providing adequate and making available facilities and infrastructure, formulating a flexible curriculum and involving stakeholders so that education services run optimally.

CONCLUSION

The study concluded that specific needs of the physically challenged students were not adequate and available needs of the physically challenged students were not at all utilized in Junior Secondary Schools in Katsina, Katsina state.

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THE SCHOOL VARIABLES AND TEACHERS' JOB SATISFACTION IN PUBLIC SECONDARY SCHOOLS IN ILORIN WEST LOCAL GOVERNMENT AREA, KWARA STATE, NIGERIA

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ABSTRACT

This study investigated whether relationship existed between school variables, leadership, facility, location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area of Kwara state, Nigeria. The study adopted correlational research design. The population comprised of 2,205 teachers in the entire 42 public secondary schools in the area. Random sampling technique was used to select 21 schools, while 20 teachers were randomly selected from each of the sampled schools. School Variables Questionnaire (SVQ) and Teachers' Job Satisfaction Questionnaire (TJSQ) were used to collect data for the study. Pearson product-moment correlation statistical technique was used to test the hypotheses. The findings revealed that there was a significant relationship between school variables and teachers' job satisfaction; between leadership and teachers' job satisfaction; between school facility and teachers' job satisfaction, between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area of Kwara state, Nigeria. The study concluded that school variables played a significant role in enhancing teachers' job satisfaction in public secondary schools in the state. It was recommended that government should continually intensify efforts in making sure that school variables are given priority to improve teachers' maximum job satisfaction in the course of discharging their duties throughout the country.

Keywords: School variables, Leadership, Location, Teachers' Job Satisfaction

INTRODUCTION

School is an environment where teaching and learning takes place for the purpose of realising the stated goals. For a school to realise the established goals, its variables such as location, leadership and facilities have to be in a condition that can trigger teachers' job satisfaction and consequently facilitate their smooth job performance. School variables refer to all the parts that make up a school as a system. These variables, are in no doubt, to a large extent, determine not only the job satisfaction of teachers but also the success or failure of any educational institutions. They include, but not limited to facilities (classrooms, laboratories, library, offices, hostels, toilets, sick bay, workshops, chairs, tables, instructional resources, chairs, electricity, water supply and the likes), leadership, location, teaching and non-teaching staff and financial resource.

According to Agwu and Aja-Okorie (2021), school variables consist of all the components of the school system that help in achieving effective teaching and learning. They cover all improved school conditions, such as usable and functional facilities, availability of competent teaching and non-teaching staff, and existence of the well-equipped classrooms, laboratories, library and the likes, and

right quality and quantity of teaching materials. Arul-Laurence (2012) stated that school variables cover all the physical, psychological, and social and factors influencing the teachers and the activities they carry out in schools. Obineli (2013) believed that good condition of school variables gives teachers physical and social comfort and boost their morale. Contrarily, poor conditions of these variables could lead to frustration and discomfort and eventually a high sense of dissatisfaction on the job. Olanipekun (2010) posited that school variables which assist in realising teachers' job satisfaction consist of facilities, location, students' population and interpersonal relationship the leadership and teachers.

Job satisfaction refers to how employees are happy with all the factors which are connected to the job they do. Dabo and Azi (2016) elucidated job satisfaction refers to the ability of employers to make available for employees, the conditions that would make them more effective and active in their organisations, with a view to boosting the level of their productivity. Okoye (2011) defined job satisfaction as the way an individual is contented with his or her work. Obineli (2010) referred to employee's job

satisfaction as an affective or emotional reaction to the various facets of an individual's job. Msuya (2016) observed that in school system, teachers' job satisfaction is among the factors necessary for achieving the school goals.

Facilities are non-human resources which provide support to teachers and students in educational institutions, in order to archive the instructional objectives and overall school goals. They are consisted of classrooms, library, workshops, laboratories, chairs and tables, computers, offices, toilets, school vans, water, power supply, textbooks, teaching aids, projectors and internet service. According to Akinkuade and Oredein (2021), in some public secondary schools in Nigeria, some staff are not convenient in their offices with inadequate chairs and tables, tattered floors, destroyed windows and dilapidated school structures crying for maintenance. This situation might be affecting teachers' job satisfaction. Uduak (2018) stated that for teachers to operate in educational institutions and optimally derive satisfaction in the discharge of their official duties, the school facilities need to provide them enabling working environment. Garba (2020) believed that school facilities are vital instruments for not only executing educational

programmes but also actualising teachers' job satisfaction.

Location connotes an environment where an educational institution is situated. This is an important factor in education, because it could make or mar teachers' job satisfaction. Arop and Owan, (2018) explained location as the area where a school is built or sited; it could be sited in a rural area (less city) or urban area (main city). Nsa et al. (2014) maintained that stakeholders in education need to make efforts towards locating school sites in a friendly and warming environment, as there is a significant nexus between school location and teachers' job satisfaction. Akinkuade (2019) lamented that the sites of some schools have proximity to mosques, industrial areas and churches; and while some are located nearby markets. Non-conduciveness of the location of an educational institution, due to disturbance arising from air, water or noise pollution could hinder effective teaching and learning, pose serious challenges to teachers' health and eventually lead to their job dissatisfaction. Okoh (2001) asserted that teachers in schools that are sited in places where there is noise from industrial machines or traffic are likely to experience job dissatisfaction, because the noisiness of the areas would hinder students from concentrating while the business of teaching and learning is going on.

Njiru (2014) stressed that employees are always conscious and interested in their personal comfort which their organisational location would give them, this also constitutes a great factor which determines their job satisfaction as well as work efficiency.

Leadership is very essential in any formal organisation, schools in no exemption. If the leadership of a school is upright, it would find it easy to manage teachers in such a way that would enhance their job satisfaction, vice versa. Usman (2021) defined leadership as the basis of education, as it encompasses guidance and control of efforts of a group of employees towards actualising the stated goals. Iszatt-White and Sounders (2014) referred to leadership as an effort that is based on influence, by exercising power, behaviours and actions over others in an organisation. Day and Sammons (2014) posited that in educational institutions, there has been a paradigm shift from administration to management and more recently to leadership. This is because there have now been convincing evidences that school leadership is seen as a key element in realizing effective operation of schools, which could have an impact on teachers' job satisfaction. Uzoigwe (2013) stated that school leadership is very

important, this is the reason each secondary school is appointed a principal by the government. In providing effective leadership, it is imperative that the principals effectively plan, organise, supervise, evaluate, coordinate and maintain school facilities. Principals are also required to ensure staff and student discipline, improvement of their welfare and manage school finances and accounts. Shamaki (2015) opined that the success of an organisation either formal or informal, to a large extent, depends on how a leader operates it. Hence, the success of any school is hinged on the capability of the principals in providing effective leadership. Usman (2019) believed that poor principals' leadership could be affecting job satisfaction of teachers in public senior secondary schools in Kogi East Education zone, Kogi State. The effect of the this could be reduction in the teachers' morale and consequently ineffective and inefficient job performance.

As observed by the researcher and information derived from some teachers and community members in Ilorin West Local Government Area, Kwara state, Nigeria, many teachers in public secondary schools in this area have not been well-satisfied with their job, because of the worrisome situation of the school location, facilities and leadership. Some

schools in the area are seriously disturbed by noise and air pollution due to closeness to markets, viewing and gambling centres and factories. The stress which some teachers experience while going to and from schools on daily basis, because of the bad conditions of the roads leading to their school locations is of serious concern, let alone the accidents which some do have, due to the muddiness of the roads to their places of work, especially during the rainy season. The facilities in some schools do not make teachers satisfied with their job as classrooms are dilapidated; floors tattered; and environment becomes bushy, waterlogged and muddy during the rainy season. Staff offices, apart from lacking ceilings which expose teachers to excessive heat, are also suffering from leaking roofs, insufficiency of chairs and tables, lack of fans to bring cross ventilation when the weather is sunny. Also, there is a problem of dearth or inadequacy of textbooks, teaching aids needed to effectively support instruction passage to students, computers and internet service for more researches on the topics to teach students. In addition, the leadership of some schools is not effective, as the principals do not have adequate managerial skills in planning, organising, coordinating, directing, motivating, supervising, warmly

relating and helping teachers for more professional development.

Many researchers had conducted various researches related to this study. For instance, Akinkuade and Oredein (2021) conducted a study on the influence of secondary school infrastructural facilities on teachers' job satisfaction and performance in Ibadan Metropolis, Oyo state, Nigeria. Akpan (2015) investigated school variables and teachers' productivity in secondary schools in Akpabuyo Local Government Area, Cross River state, Nigeria. Usman (2021) examined the relationship between principals' leadership styles and teachers' job satisfaction in public senior secondary schools in Kogi East Education Zone, Kogi state, Nigeria. Obineli (2013) investigated teachers' perception of the factors affecting job satisfaction in Ekwusigo Local Government of Anambra state, Nigeria. Ntagahali (2016) carried out a study on the influence of working condition on teachers' job satisfaction (the case of Kisarawe district, Tanzania). However, all the above previous studies are germane to this study, but none of them focused on school variables and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.

Hence, this was the gap which this study filled.

Objectives of the Study

The objectives of the study were to:

1. examine the relationship between school variables and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
2. determine the relationship between school leadership and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
3. investigate the relationship between school facilities and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
4. examine the relationship between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.

Research Hypotheses

The following null hypotheses were formulated.

1. There is no significant relationship between school variables and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
2. There is no significant relationship between school leadership and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
3. There is no significant relationship between school facilities and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.
4. There is no significant relationship between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.

METHODOLOGY

Research Design

This study adopted correlational research design. According to Tan (2014), a correlational research design refers to a research design that investigates the relationship between two or more variables. However, the researcher used correlational research design because the study investigated the relationship between two variables, that is school variables (independent variable) and the teachers' job satisfaction (dependent variable).

Participants

The population for the study comprised 2,205 teachers in all the 42 public secondary schools in the area. Random sampling technique was used to select 21 (50%) schools out of the 42 in the area, while two hundred and twenty teachers were also randomly selected from each of the sampled schools, to make a total of 220 participants.

Instrumentation

The instrument used for collecting data for this study was questionnaire tagged School Variables Questionnaire (SVQ) and Teachers' Job Satisfaction Questionnaire (TJSQ). School variables were measured, using leadership, facilities and location; while some items were

used to measure teachers' job satisfaction. Each measure of the SVQ and TJSQ had 10 items each.

Validity and Reliability of the Research Instruments

School Variables Questionnaire (SVQ) and Teachers' Job Satisfaction Questionnaire (TJSQ) were validated by three experts in the Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, Nigeria. Twenty teachers, outside the sample of the study, were used for pilot-testing the instruments; and through the use of Cronbach's Alpha, the data collected were analysed and found reliability coefficients of .75 and .82 for SVQ and TJSQ respectively. This shows that the instruments were reliable to be used for the study. Pearson Product-Moment Correlation Statistic was used to test the hypotheses at .05 level of significance.

Procedure for Data Collection

In collecting data for the study, the researchers shared the 21 sampled schools among themselves and personally visited the schools. The researchers gave the school principals an introductory letter for documentation's sake. Adequate explanations were given to the participants before the copies of the questionnaire were administered to them. The researchers distributed the

copies of the questionnaire to the participants and collected back immediately after filling.

Data Analysis

The data collected for the study were analysed using Pearson Product-Moment Correlation Statistic. The researchers chose this statistical tool because the study was based on correlation, that is, it determined the relationship between an independent variable (School variables) and a dependent variable (Teachers’ Job Satisfaction). Likert rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) scored as 4 points, 3 points, 2 points and 1 point respectively was used for scoring. All the analyses

were done using Statistical Package for Social Sciences (SPSS). Out of the 220 copies of the questionnaire distributed, only 205 were retrieved and used for analysis.

RESULTS

All the hypotheses were tested, using Pearson Product-Moment Correlation Statistical method at 0.05 level of significance.

Hypothesis One: There is no significant relationship between school variables and teachers’ job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria

Table 1: Relationship between School Variable and Teachers’ Job Satisfaction

Variable	N	\bar{X}	SD	r-cal.	p-value	Decision
School variable	205	2.50	.66	.592	.011	Hypothesis Rejected
Teachers’ job satisfaction	205	2.09	.72			

Table 1 shows calculated r-value (.565) and the the p-value (.011) which is less than the significance level (0.05). Therefore, hypothesis which stated that there is no

significant relationship between school variables and teachers’ job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara state,

Nigeria is rejected. This shows that there was a significant relationship between school variables and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.

Hypothesis Two: There is no significant relationship between school leadership and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria

Table 2: Relationship between School Leadership and Teachers' Job Satisfaction

Variable	N	\bar{X}	SD	r-cal.	p-value	Decision
School leadership	205	2.61	.54	.583	.003	Hypothesis Rejected
Teachers' job satisfaction	205	2.09	.72			

Table 2 shows the calculated r-value (.583) and the p-value (.003) which is less than the significance level (.05). Therefore, hypothesis which stated that there is no significant relationship between school leadership and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria is rejected. This means that there was a significant relationship between

school leadership and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara state, Nigeria.

Hypothesis Three: There is no significant relationship between school facilities and teachers' job satisfaction in secondary schools in Ilorin West Local Area, Kwara state, Nigeria

Table 3: Relationship between School Facility and Teachers' Job Satisfaction

Variable	N	\bar{X}	SD	r-cal.	p-value	Decision
School facility	205	2.83	.96			
				.531	.025	Hypothesis Rejected
Teachers' job satisfaction	205	2.09	.72			

Table 3 shows the p-value (.531) and the p-value (.025) which is less than the significance level (.05). Therefore, hypothesis which stated that there is no significant relationship between school facilities and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria is rejected. This connotes that there was a significant

relationship between school facilities and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria.

Hypothesis Four: There is no significant relationship between school location and teachers' job Satisfaction in public secondary schools in Ilorin West Local Government, Kwara state, Nigeria

Table 4: Relationship between School Location and Teachers' Job Satisfaction

Variable	N	\bar{X}	SD	r-cal.	p-value	Decision
School location	205	2.07	.48			
				.528	.001	Hypothesis Rejected
Teachers' job satisfaction	205	2.09	.72			

Table 4 shows the calculated r-value (.528) and the p-value (.001) which is

less than the significance level (.05). Therefore, hypothesis which stated

that there is no significant relationship between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara State, Nigeria is rejected. This depicts that there was a significant relationship between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara State, Nigeria.

Discussion

The findings of the study revealed that there was a significant relationship between school variables and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara State, Nigeria. This means that good condition of school variables assists in realising teachers' job satisfaction. This finding is in tandem with the submission of Akpan (2015) that, school comprises some variables that make it effective, consistent and conducive for teaching and learning. These variables, as a system, interrelate with one another to not only create an enabling environment for teaching and learning, but also an avenue for the actualisation of teachers' job satisfaction.

The findings of the study showed that there was a significant relationship between school leadership and

teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara State, Nigeria. This finding is in consonance with the position of Shamaki (2015) that the influence of school leadership on teachers' job satisfaction cannot be underrated. Job satisfaction of teachers could be affected, if the leadership of the school conflicts with the tasks or role of the teachers. The manner in which a school principal exhibits his leadership such as the way he maintains school discipline, relates, inspires and handles teachers' professional development could determine their job satisfaction.

The findings of the study revealed that there was a significant relationship between school facilities and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara State, Nigeria. This signifies that school facilities are very essential in school system. If they are in good condition, it would aid effective teachers' duties discharge, thereby enhancing their job satisfaction. This finding supports the position of Nakpodia (2011) that teachers in some Nigerian public secondary schools are dissatisfied, due to poor status of the facilities. This is because their offices are not well-equipped; teaching aids are poorly available; school building are dilapidated and

not well-ventilated with broken window panes, defective walls, leaking roofs; and muddy and sandy floor. This situation needs to be properly addressed to make teachers more satisfied on the job.

The findings of the study revealed that there was a significant relationship between school location and teachers' job satisfaction in public secondary schools in Ilorin West Local Government Area, Kwara State, Nigeria. This connotes that if a school is located in an environment that is conducive for effective for teaching and learning, it would help enhance job satisfaction of teachers. This finding supports the submission of Ajayi and Akinsanya, (2016) that the environment where an educational institution is located could not only facilitate teachers' job satisfaction but also the overall actualisation of the school goals. A school location that is polluted or noisy could make teachers develop poor job satisfaction and consequently poor job performance, because the surroundings are harmful and injurious to their health.

CONCLUSION

The study concluded that:

- i. school variables played a significant role in enhancing teachers' job satisfaction in public

- ii. secondary schools in Ilorin West Local Government, Kwara State, Nigeria;
- iii. school leadership determined teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara State, Nigeria;
- iv. school facilities played a significant role in achieving teachers' job satisfaction in public secondary schools in Ilorin West Local Government, Kwara State, Nigeria; and school location and teachers' job satisfaction were significantly related in public secondary schools in Ilorin West Local Government, Kwara State, Nigeria.

RECOMMENDATIONS

The study recommended that:

- i. government should continually intensify efforts in making sure that school variables such as location, facilities, and leadership are always

- taken care of, in order to persistently give teachers maximum satisfaction while discharging their duties and consequently enhance effective actualisation of the school goals
- ii. school principals should intensify their effort in providing effective leadership for teachers by displaying improved human relations, continually motivating, sharing their feelings, giving adequate and effective professional support to them, in order to scale up their satisfaction on the job.
- iii. government should ensure that school facilities such as classrooms, library laboratories, staff offices, fans, chairs, tables, and instructional materials are adequately provided and well-maintained to serve the purpose for which they are provided, in order to trigger happiness in teachers and enhance their job satisfaction.
- iv. government should prohibit establishment of industries, factories or any ventures that could inflict noise or air pollution on schools; the existing ones which are constituting air and noise pollution to schools should be given an order to relocate; while the bad roads leading to these schools should be rehabilitated, in order to give teachers more motivation and intensify their job satisfaction.

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DISLOCATION, MIGRATION AND DIASPORIC EXPERIENCES IN LOLA AWORANTI-EKUGO'S LAGOS TO LONDON

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ABSTRACT

Man's continual struggle and quest for better opportunities and a more relaxed and fulfilled life have always been the reason for difficult decisions and disorienting relocations. In their uncertain and potentially perilous posture, some become stagnated in bleak-hued quagmires, a few succeed in transforming their lives to a better picture, while a large number continue their downward spiral to societal and financial doom. To this end, Lola Aworanti-Ekugo's *Lagos to London* was used to buttress this dislocation and in doing so, trauma theory was adopted as the tool to anchor the analysis. It was discovered that cultural difference, adaptation and adjustment posed a serious threat especially to African migrants who find themselves in the West with little or no knowledge of the background of their host country and at the end, some returned having seen that their home countries offered better opportunity than where they rushed to. It was concluded that majority of these migrants have no knowledge of the culture and background of where they travelled to. The study recommended that anyone who wished to travel must acquire a notable skill as this would add value to their lives and the host community.

Keywords: Migration, Dislocation, Trauma, Disappointment

INTRODUCTION

Migration involves movement of people into a nation or country which they are not from originally Arthur (2012). This movement is in line with intention of settling permanently or temporarily at a new location. Migration can be voluntary or force. While voluntary migration is based on the initiative and free will of the migrant as a result of social, political, economic factors, force migration is

associated with those fleeing natural disaster, war or political conflict. Human nature is dynamic and receptive to change; which could be voluntary or involuntary, therefore in its quest to ensure that basic needs are guaranteed, all efforts are deployed towards the achievement of these goals. Majority move to the extreme to ensure that their survival is achieved even if it means giving up a

particular uncomfortable location for another one which they perceive comfortable, it is therefore not surprising to find people moving from one location to another in order to fulfil their needs Muchiri (2013).

Many Africans find life increasingly difficult as they grapple with the challenges of postcolonialism. This is in terms of inadequate employment opportunities, poor access to quality education, poor governance, corruption and poverty. As a result of these, most of them flee their countries. For these Africans, while living in Africa, they dream of migrating abroad, especially to Europe and America. They see the developed West as the zenith of a journey of social mobility which should always bring immediate success on arrival. The challenge of their lives at this point is to become American or British citizens, if possible, to lose their cultural identity. They desire to integrate themselves in a world, in the global West, which they imagine will allow them to inhabit a new prosperous status Asika (2020).

Nevertheless, while migration to the developed West is sometimes a relief from the economic discomfort in Africa, it burdens the individual with psychological, spiritual and other problems which is referred to as

trauma in this study. The issue of African migrants has been a subject of great debate both at a local and global level. Although writers have written on ugly experiences of migrants, available data show that their remains an obsession to migrate to the West by Africans. This might probably be as a result of limited scholarly works that capture these experiences, especially as they affect the psyche of the migrants. While dreams in themselves are not harmful to the dreamer, the negative effect of the dream of a better life abroad, and its impact on the psyche of migrants give focus to this paper.

Trauma of Migration in *Lagos to London*

Lagos to London tells the story of two young people who embark on a journey to get an education, but who gain so much more. Going abroad to study is something that generations of Africans have been doing or have aspired to do. Some go with the aim of settling in foreign shores. However, some go for the sole aim to acquire an education and new experiences before returning home. Over the last decade, there has been a mass exodus of young people who are looking for a better quality of life, more secure and stable conditions and more options for their children. Most of these young people plan never to return to Africa. Ekugo tells the story

of Remi Coker a lady from a well to do Lagos family and Nnamdi Okonkwo a young man from a family who has experienced the vicissitudes of life, starting from a comfortable middle-class life in a well-heeled part of Lagos and ending up in a rougher part of the city.

Remi's parents are both lawyers and run a law firm that she is expected to work in and run one day. Her parents exemplify the typical ambitions upper class family who, with the best of intentions, end up pushing their children to achieve and do more. With Remi, they push her onto a path that she would not have chosen for herself. Boxed into a corner, Remi finds herself taking up university admission in London to study law, a course that she is ambivalent about. Like so many young people of this age, Remi is not quite sure what she wants to do with her life, but is almost certain that law is not it. Again, like so many young people, Remi has a talent that she has received numerous compliments about, but which she has disregarded because it is not a practical choice.

On the other side of the tracks, we have Nnamdi a young driven man, who knows to the tee type of life what he wants for himself. He knows that he wants to be a man who is in charge of his destiny and not capitulating to

defeat in the way he considers his father has. As he also moves to London for his university education, he is motivated by a sole desire to become a British citizen and create a better life for himself and his family. This leads him towards a path that threatens to compromise his values. Nnamdi's dilemma perfectly epitomises today's *japa* culture where young people want to leave Africa at all costs to carve a better life for themselves somewhere else. *Lagos to London* presents an alternative to the abroad to Mecca thinking: one where returning to Africa is an acceptable option after getting the degrees and experience overseas.

This particular option of returning to Africa especially in today's economic and political climate, is an unpopular and rare one among young Africans. Indeed, *Lagos to London* shows how choosing to make one's life overseas and returning to Africa are both perfectly viable options depending on what one wants from life. Migration issues in contemporary society have become the most trending, especially in Africa as many desire and seek greater opportunities abroad. The downfall of the economies of African continent has brought into existence another problem in the continent. Ekugo acquaints the reader of how persuasive Africans are over leaving their countries as Mrs Coker

admonishes her daughter Remi to see London as the best place for her studies immediately after secondary school as Remi was barely nineteen: Sensing that her daughter was not excited about the admission, Mrs Coker pressed. Don't you want to study at UNL? You could do exceptionally well if you read law. And UNL is a really good school. I am sure the people you meet there will make the experience memorable and you will enjoy it. Let's not forget how much of an opportunity and exposure it will bring you. Remi, you know your dad and I wouldn't take any decision that is not in your best interest Aworanti-Ekugo (2021, p. 46).

From all indications, Remi has no interest to study abroad as she is not sure of her comfort. She fights some common physical signs of trauma including poor concentration and a racing heartbeat. People are aware of loneliness abroad and this is what Remi hates. Mr Coker is also aware of this as he presents a Bible to Remi as a parting gift thus:

My dear, make sure you keep God close as you embark on this journey. I know you already have a Bible, but I am not sure you packed it. I bought this for you specifically for this journey. If you ever feel lost or lonely, go to this book. There is no

direction outside God Aworanti-Ekugo (2021, p. 46).

Remi's first day in school exposed her to true reality of loneliness in London. The concept abandonment within existentialism comes from the idea that humans are their only source of value as Kierkegaard (2014) portrays. She fights trauma as imagined as both an external agent that shocks the unprepared system and an internal action of defense against overstimulation. No one smiles or greets; everyone goes around his own way. This was strange for Remi as she complains, "Even in Ikoyi when I took some walks in the evening, total strangers would say hello with a smile" Aworanti-Ekugo (2021, p. 66). Remi does not know whether she should get used to the boredom, the loneliness or even the way she felt as if she was the only one in the world after the rapture.

Meanwhile, Remi's journey to London was traumatic. Barely two hours into their journey, passengers were jolted by a violent shake. They had encountered severe turbulence. Over the speakerphone, the pilot announced, "Fasten your seatbelts. All passengers are enjoined to stay in their seats now. Keep your seatbelts fastened" Aworanti-Ekugo (2021 p 66). Through the above statement, one imagines the psychological

impact this creates in these individuals who are on their journey to better fortune. Africans in their quest to leave Africa, engage in critical thinking on how to be successful and achieve their aim as anxiety often occurs when one becomes aware of the absurdity of life.

Nnamdi Okonkwo was not left out in this brain work. His family could not afford his journey abroad for studies but Nnamdi has made up his mind to meet his friend for assistance, One day, Nnamdi decided that one of the steps in his escape strategy was to share his problem with his older friend, Emeka. Though Emeka seems to be doing exceptionally well and has extended several invitations to Nnamdi to join his logistics business at home, Nnamdi refuses to see reasons with his friend as he has concluded that all he needs for his wellness is in abroad. On arrival to his land of hopes, London, Nnamdi realises the truism in the saying that all that glitters is not gold as the novelist informs the reader:

During his first month in London, Nnamdi scoped his studies well. He spent less than twenty hours in class every week. He was now looking for an on-campus job to make extra cash to support his pocket through the semester. He was not sure if it was the

recession, but he had not been successful so far, however, he was slowly running out on his upkeep money Aworanti-Ekugo (2021, p. 95).

Even least expected jobs, he could not get to support himself. This is against his expectations as the novelist stresses:

He had applied to retail stores and restaurants to widen his options, but the answer was the same. It was as if they all had internal memo which they were circulating whenever any company received his CV. He had even applied to the nearby fast-food joint thinking he was surely qualified for this, but also, they turned him down too Aworanti-Ekugo (2021, p. 96).

Caruth (1996) stated that trauma model figures which takes a particular interpretation of Freud's trauma theories to forward a larger poststructural concern with the referential limits of language and history are most prominent. Nnamdi's disappointment was next to nothing as he informs his friend Bayo of his present predicament, "I have been rejected again. I did not know I needed a PhD to flip burgers in London" Aworanti-Ekugo (2021 p 96). It was as difficult as that despite his dreams to make it great as he steps

his feet into London. Nnamdi needs more money to cover the cost of food item, clothing, some school items, and to help his family. He also has to save heavily to supplement his tuition and accommodation for the years ahead. One of the significant limitations of existentialism is the idea of responsibility. This explains Freud's view which states that trauma is an emotional response to a terrible event.

Racism is another issue that Africans abroad witness. European government restricts African students to work for specific period during school session as the novelist informs the reader, "During the school session, all registered full-time students were restricted by European government to working only for twenty hours weekly while during the holiday, they could ramp up their work hours to forty hours per week" Aworanti-Ekugo (2021, p. 96). The statement above challenges Kierkegaard's view that authenticity is about being genuine and making choices in a way that is fundamental to who you are regardless of external pressure. Freud states that the conflicts caused by trauma create traumatic neurosis which is a consequence of an extensive breach being made in the protective shield against stimuli. Everyone hopes for a better living hence, the urge for

migration at any slightest opportunity as Nnamdi holds unto his dreams. Unfortunately, United Kingdom seemed to be a place of endless opportunities. Initially, each of these migrants hopes to complete education in one of the best universities there and meet like-minded people. Graduate with a first class, get a white-collar job, send money back home to support his family, marry a beautiful girl his parents would love, and start a family. Perhaps, convince the parents to relocate to the United Kingdom. All these and many others are the dreams of Africans who on daily bases in their huge number, journey to Europe. This proves that an individual in the world struggles to attend to his needs consciously and unconsciously. Through Bayo, one of the characters, the novelist informs the reader thus:

One day mumsy was very sick. We could not afford the money to pay her hospital deposit. That was the day I made up my mind. The next day, I was at Yusuf's door, ready to do the job. On the D-day, I swallowed seventy pellets, 800g. At the Murtala Muhammed International Airport, I willed everything within me to act like a regular international traveller Aworanti-Ekugo (2021, p. 129).

This above action delves more into Freud (1913) complex trauma from

surviving to thriving to help survivors understand their coping mechanisms and reactions, and begin to work towards actions that may better serve them in their life and relationship as Bayo finally yields to Yusuf's terms to solve his immediate problem, joblessness. This singular act reveals the zeal and enthusiasm in man. Bayo's anxiety burns out of love he has for the mother hence, he engages in such deleterious act.

Africans go to any length for them to get into Europe successfully. No route is so easy but anyone who wants to migrate would go extra mile to achieve this. There are many ways to obtain United Kingdom's passport. It could be through hustling, studying and working, ending one course and starting another, ending a PhD and starting another just for him to stay in the United Kingdom for ten years without a gap. Another way is the worker route, one needs to be gainfully employed in the United Kingdom for five years. Others follow business route; one needs to have hefty capital to run a business. Majority would fall for the cheapest option. That is the love route, marry a British citizen for three years. All these are what migrants do to beat the traumatic experiences involved in migration to Europe. Africans would rather stay back in United Kingdom than return back to their country as

the novelist informs her reader through a discussion between two migrants, Remi and Ese thus:

When Remi asked why he Ese, decided to go back to school instead of using his first or second degree to work, he opted for more degrees to gain permanent residency in the United Kingdom through his academic career. This path would take ten years in total Aworanti-Ekugo (2021, p. 141).

It is absurd that despite Ese's first and second degrees obtained in the United Kingdom, he desires to remain and become a citizen of another country. this is the contradictions and irony of life. the concept of choice and responsibility as affirmed by the novelist as captured in these words that indicted Bayo and his intrusion on his way:

He had gone no farther than a few feet when he felt an arm quickly go around him. Before he had time to react, he felt a sharp kick to the back of his leg. He staggered, struggling simultaneously with the rope of the earpiece, which he instinctively yanked from his body. Bayo's head thrummed with a din; he was too shocked to react, even as everything happened in quick succession; a grab, a kick, voices, questions Aworanti-Ekugo (2021, p. 167).

The statement above gives an insight to part of the ugly experiences migrants face abroad. The concept abandonment within existentialists comes from the idea that humans are their only source of value. Could anyone believe there is insecurity abroad as Africans experience back home? Bayo after years of frustration in the United Kingdom decided to return back to his country in Africa as he speaks to his friend Nnamsi:

I want to move back home. I came to the United Kingdom because I wanted a better life for myself. I risked so much. Looking back, I am not sure it was worth it. And you know, if it was not for this, I doubt I would have had the guts to admit it to myself. Now more than ever, I am clear about what is more important to me. It is no longer about forced comfort but purpose-finding meaning Aworanti-Ekugo (2021, p. 179). Bayo finally builds wall of confidence around himself to return back to his country for good. A choice that gives him another life. He chose to go home to contribute his quota in the development of his nation.

CONCLUSION

This paper has looked at the issue of dislocation, migration and diaspora experiences in the novel of Lola Aworanti-Ekugo's *Lagos to London*. As stated earlier, migration is caused

by different reasons for instance in Nigeria, people often migrate as a result of poverty, unemployment, academic purpose, crime, and golden fleece. The level of corruption and mismanagement of funds led many citizens astray, as they remain unemployed for years and also poor academic facilities and structures made most wealthy parents and guardians to send their children abroad to receive qualitative education. Poverty is another major factor that causes migration; most young citizens of Nigeria try all possible means to travel overseas to make quick money as a result, they engage in various crimes to achieve this aim.

Migration can be curbed by good governance and economic boost in Nigeria. If our leaders would work selflessly by placing the society first before their own private needs by building factories, industries, infrastructures, in order to employ the youth then, unnecessary migration would cease and people would no longer be exposed to ill and dehumanizing treatment in foreign lands. Secondly, anyone who wished to travel must obtain necessary documents and follow the right channel to avoid unnecessary traumatic experiences abroad.

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FINANCIAL RESOURCE CONTROL SYSTEM AND ORGANIZATIONAL EFFECTIVENESS IN NIGERIAN COLLEGES OF EDUCATION

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ABSTRACT

This study examined the extent to which financial resource control system influenced organizational effectiveness in Nigerian Colleges of Education. The study adopted descriptive research design. The population comprised of all 76 public Colleges of Education in Nigeria. The target population consisted of 30 Colleges comprising of ten federal and 20 state Colleges selected through stratified random sampling technique. Purposive sampling technique was used to select 4,459 respondents for the study. A self-developed questionnaire and proforma titled: "Financial Resource Control System and Organisational Effectiveness Questionnaire (FRCSOEQ) was used to collect data for the study. Data were analysed using mean, standard deviation, ranking order and Pearson Product Moment Correlation statistical technique. The findings revealed that there was a significant relationship between financial resource control system and organizational effectiveness in Nigerian Colleges of Education. The study concluded that financial control assisted college administrators in safeguarding and evaluating the efficient and effective use of financial resources. It was recommended that there was a need for an increase in the provision of financial resources to Colleges of Education in the country.

Keywords: Financial resource, Control system, Organisational effectiveness, Budgeting process, College of Education

INTRODUCTION

Tertiary education is central to economic and political development, and vital to competitiveness in an increasingly globalizing knowledge society. In the case of Africa, tertiary education plays a critical capacity building and professional training role in support of all the Millennium Development Goals (MDGs). Recent

research findings indicated that expanding tertiary education may promote faster technological growth and improve a country's ability to maximize its economic output (Bloom, 2019).

A new range of competences, such as adaptability, team work,

communication skills, and the motivation for continual learning, have become critical. Thus, tertiary institutions are challenged to adjust their programme structures, curricula, teaching and learning methods to adapt to these new demands. In recognition of this challenge, greater attention is being focused on financial management as a critical factor in a bid to ensuring educational relevance (Bloom, 2019).

In order to achieve the objective of higher education in Nigeria, there has been agitation for adequate funding of higher education through the collective effort of the government, the private sectors, the local communities and few individuals. However, when funds are provided, it must be utilized for the intended purpose and necessary control must be put in place to ensure that the institutions provide adequate and transparent methods and organization to provide a reasonable assurance that organization funds are being used for the objectives set by the budgetary authority (Johnson, 2018).

Financial control refers to the action performed by the management in terms of financial regulations, financial scale, financial planning, goals of capital movement or the daily financial activities, and cash flow, supervision and organizational

constraints, which all combine to ensure that the financial plan is strictly designed to achieve the organization objectives. For the organization to survive, the management must be capable of ensuring financial management through such basic functions as financial projections, financial decision-making, financial analysis and evaluation (Johnson, 2018).

The escalating costs coupled with reduction in government funding have made the Colleges of Education to manage their financial resources better. Financial accounting information remains the primary source of management information in many organizations, including higher education institutions. However, as Johnson (2018) observed, “today’s management accounting information, driven by procedures and cycles of the organization’s financial reporting system, is too late, too aggregated, and too distorted to be relevant for managers’ planning and control decision” (Johnson, 2018). Other management initiatives such as balanced scorecard and performance management can also be achieved through the knowledge of financial control system. Strategic financial management can provide vital information on financial and non-financial measures of performance to support the four perspectives

(financial, customer, internal business process, and learning and growth) of the balance scorecard project (Johnson, 2018).

Achieving excellence in higher education requires the critical evaluation of academic and support activities (Tatikonda & Tatikonda, 2017). However, higher education like other public sectors has a tradition of managing operations through budgetary control of cost centers. Financial performance is often measured by comparing actual and budgeted results, where most of the costs of a particular cost centre come from resources that have been committed in advance. This simple financial practice has led to higher education management not having accurate knowledge of the costs of the products or services that are provided or the cost of different student types enrolled (Tatikonda & Tatikonda, 2017).

In the light of the recent cuts in government funding and numerous other challenges facing Nigerian higher education sector, therefore, it is timely for the nation's higher education institutions and in particular Colleges of Education, to have accurate and precise knowledge of all their costs. This requires accurate and timely cost information on all of the activities in the college. The utilization of financial resources

allocated to education is of paramount importance for the performance of the system. This is because the allocated funds will be used for the implementation of education policies and programmes (Adeola, 2017).

Furthermore, an institution could use a control measure as a tool to match utilization of resources with faculty missions; obtain a better sense of the effectiveness of academic staff time and effort differentiation within faculties; discuss with deans and department heads the efficient and most effective allocation of resources to meet the needs of the faculty, department, and university; organize the information in a way that makes sense across units; and act as an essential public relations tool (Viola, 2019).

One reason for financial information and control system is the difficulty of coordinating and controlling the activities of members of organizations. A group of people constitute an organization only if there is some coordination among the activities they perform; some type of financial control in that organization. The coordination and order created out of the diverse interests and potentially different behaviours of members of organization is largely a function of control. Financial control of an organization and coordination

of its activities are impossible without information about what is occurring in that organization, thus, information systems are developed (Adeola, 2017).

In the process of utilization of the funds, necessary measures must be put in place in order to guide against fraud and mismanagement of funds. If financial resources allocated to education industry are properly utilized, this can lead to the achievement of the objectives for which education institutions were established. It is on the basis of the above exposition that the researcher intends to critically examine financial resource control system and organizational effectiveness in Nigerian Colleges of Education (Adeola, 2017).

It was generally agreed that financial resources in our institutions are short in supply, this why educational managers must design a strong control system so that educational programmes and policies would be adequately implemented. Small organizations typically do not have extensive and formalized financial control systems. Managers responsible for financial coordination and control often observe personally all the activities of their organization. As a result, these managers feel little need for a formal financial

information and control system. However, large organizations, with substantial specialization of functions, usually maintain formal financial information and control system. In this context, studies such as Adeola (2017), Ademola (2019), and Bassey (2018) have been carried out on resource utilization and organizational effectiveness in educational institutions. None of these studies has examined the extent to which financial resource control system can bring about organizational effectiveness in Nigerian Colleges of Education. This is why this paper was designed to examine the relationship between financial resource control system and organizational effectiveness in Nigeria Colleges of Education.

Objectives of the Study

The main objective of this study was to examine the extent to which financial resource control system influenced organizational effectiveness in Nigerian Colleges of Education. Thus, the specific objectives of this study are to:

- i. examine the financial resource control measures put in place in Nigeria colleges of education.
- ii. investigate the level of organisational effectiveness

in Nigeria colleges of education.

- iii. determine whether relationship exists between financial resource control system and organisational effectiveness in Nigerian colleges of education.

Research Questions

The following research questions were raised to guide the study:

- i. What are the financial resource control measures put in place in Nigerian Colleges of Education?
- ii. What is the level of organisational effectiveness in Nigerian Colleges of Education?

Research Hypothesis

A null hypothesis was postulated to guide the study:

H₀: There is no significant relationship between financial resource control system and organisational effectiveness in Nigerian Colleges of Education.

METHODOLOGY

Research Design

This study adopted the descriptive research of survey type to obtain the relevant and needed data on the study.

Participants

The population for the study comprised of all the 76 public Colleges of Education in Nigeria. The colleges of education were stratified on the basis of government proprietorship (Federal and State). This comprised of 49 states and 27 federal colleges of education in Nigeria. The target population consisted of 30 colleges comprising of ten federal and 20 state colleges chosen through stratified sampling technique. Purposive sampling technique was used to select 4,459 respondents comprising of Bursary staff, other non-academic staff and academic staff out of the 12,158 staff in the selected colleges. This represents about 36.7% of the total number of respondents in the selected colleges.

Instrumentation

A self-developed questionnaire tagged: "Financial Resource Control System and Organisational Effectiveness Questionnaire" (FRCSOEQ) was used for the study.

Validity of the Instrument

In order to ascertain the validity of the self-designed instrument, the draft of the instrument was given to three experts in the University of Ilorin, Ilorin, Nigeria for both face and content validity. Those that were

consulted are three lecturers: two from the Department of Educational Management and one from the Department of Test and Measurement in the Faculty of Education. Their opinions and suggestions were incorporated into the final instrument that was used for the pilot study and later on the respondents when it was found suitable.

Reliability of the Instrument

The test re-test reliability method was adopted in determining the reliability of the instrument. The coefficient correlation obtained from the test was 0.66.

Method of Data Collection

A letter of introduction was gotten from the department and the data was

collection with the help of three research assistants. In all, about 4,459 questionnaires were distributed while 4187 were returned. The percentage returned is 93.9%.

Data Analysis

The mean, standard deviation and ranking of variables in study were used to answer the research questions, while Pearson Product Moment Correlation statistical method was used to test hypothesis at 0.05 level of significance.

RESULTS

Research Question 1: What are the financial resource control measures put in place in Nigeria Colleges of Education?

Table 1: Mean Ranking Order of the Financial Resource Control Measures

S/N	Financial Resource Control Measures	N	X	SD	Rank Order
1	Internal Control System (Audit)	4187	3.48	.68	1 st
2	External Control	4187	2.58	.38	4 th
3	Budgeting Process	4187	2.89	.44	3 rd
4	Value for money audit	4187	3.23	.49	2 nd

Table 1 showed the financial resource control measures put in place in Nigeria colleges of education. The table revealed that internal control system (Audit) has the highest mean score of 3.48. This implies that internal control system (Audit) is the

most financial resource control measures put in place in Nigeria colleges of education. This is followed by “value for money audit” with mean score of 3.23. External control has the mean least score of 2.58.

Research Question 2: What is the level of organisational effectiveness in Nigeria Colleges of Education?

Table 2: Mean Ranking Order of the Organisational Effectiveness

S/N	Organisational Effectiveness	N	X	SD	Decision
1	Organisation of Control System (Audit)	4187	2.59	.62	Average
2	Management of Scare Resources	4187	2.45	.49	Average
3	Utilization of Available Resources	4187	2.25	.43	Average
Grand Mean			2.43	.51	

A study of Table 2 shows that organisation of control system, management of scare resources and utilization of available resources were found to be average with mean scores of 2.59, 2.45, and 2.25 respectively. In summary, the grand mean of 2.43 revealed that the level of organisational effectiveness in

Nigeria Colleges of Education was average.

Hypothesis One: There is no significant relationship between financial resource control system and organisational effectiveness in Nigeria Colleges of Education.

Table 3: Financial Resource Control System and Organisational Effectiveness

Variable	N	\bar{X}	SD	Df	r-cal.	p-value	Decision
Financial Resource Control System	4187	3.05	.50	4185	.648	.000	Ho Rejected
Organisational Effectiveness	4187	2.43	0.51				

***Significant, p < 0.05**

Table 3 showed the calculated r-value of .648 while p-value (0.000) is less than the significance level (0.05) given 4185 degree of freedom. Consequently, the hypothesis which states that there is no significant relationship between financial resource control system and organisational effectiveness in Nigeria Colleges of Education is rejected. The finding reveals that there is significant relationship between financial resource control system and organisational effectiveness in Nigeria Colleges of Education.

Discussion

The findings on research question one which states that what are the financial resource control measures put in place in Nigeria Colleges of Education revealed that internal control system (Audit) has the highest mean score of 3.48. This implies that internal control system (Audit) is the most financial resource control measures put in place in Nigeria colleges of education. This is followed by “value for money audit” with mean score of 3.23. External control has the mean least score of 2.58. This shows that financial resource control measures determine the level of effectiveness in an organization. The finding agrees with the Alex and Marcus (2019) opined that financial resource control measures are integral process that is affected by organisations management and personnel and is defined to address risks and to provide reasonable assurance that in pursuit of the organisations mission.

The findings on research question two which states that what is the level of organisational effectiveness in Nigeria Colleges of Education revealed that organisation of control system, management of scarce resources and utilization of available resources were found to be average with mean scores of 2.59, 2.45, and 2.25 respectively. The level of organisational effectiveness in Nigeria Colleges of Education was average. The finding agrees with the Adeyeye (2020) opined that the level of organisational effectiveness is that the performance of financial commitment of budgetary in colleges of education determines the level of academic performance of students at point of graduation.

The findings on research hypothesis one revealed that there is significant relationship between financial resource control system and organisational effectiveness in Nigeria colleges of education. This finding is in agreement with that of Bruner (2018) who opined that financial control involves the whole system of financial and other controls, including the organizational structures, methods, procedures and internal audit, established by management within its corporate

goals, to assist in conducting the business of the audited entity in a regular, economic, efficient and effective manner.

CONCLUSION

Based on the findings of this study, it can be concluded that there was a significant relationship between financial resource control system and organisational effectiveness in Nigeria Colleges of Education. Thus, this study has shown that the extent to which financial resource control system are put in place to safeguard the utilization of resources will help to a greater extent in the achievement of the goals of the institutions. The implication of this is when financial resources are provided to the institutions, in the process allocation and utilization; it must pass through control system identified in this study for it to be approved and spent in the provision educational facilities, equipment and pay personnel salaries. This will help students to learn better and improved in their academic performance.

RECOMMENDATIONS

Based on the outcome of this study, the following recommendations were made for policy formulation and decision making:

1. There is a need for an increase in the provision of financial resources to these Colleges. This could be done through in the monthly subvention to the Colleges by the government. Also, the colleges should look inwards to explore means of generating funds internally;
2. Financial resource control has been found to contribute more to organizational effectiveness, therefore the college administration must put in place an efficient and effective control system that will guide against any form of financial mismanagement and misappropriation;
3. Internal control in the colleges should be carried out by the Provost and its chief accountant. The chief accountant should keep the accounting books and carry out ex ante and ex post control of the financial accounting documents within the college;
4. The management should ensure that for any amount of money to be spent, approval must be sought from the legislature who appropriates the funds to check whether it is in line with what they have approved. The Accountant-General should also ensure that there is a valid reason for any expenditure before approval is given;

5. The College administrators should set up a budget implementation committee which should be saddled with the responsibility of notifying higher authorities if there is sharp practices between the chief executive and chief accountants; and

6. The College Management needs to scrutinize, to a greater degree, their spending and demonstrate that resources are being used effectively and efficiently. They must strive to work on controlling their spending while aggressively working to address academic and administrative productivity.

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QUALITY ASSURANCE AND SUSTAINABLE DEVELOPMENT DURING COVID-19 PANDEMIC IN DELTA STATE UNIVERSITY, ABRAKA NIGERIA

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ABSTRACT

This study investigated whether quality assurance contributes to sustainable development during COVID-19 pandemic in Delta State University Abraka. All lecturers in Delta State University constituted the population in the study. The sample comprised of 1500 lecturers, who were randomly selected through the multi-stage approach. A self-developed instrument called Quality Assurance and Sustainable Development during COVID-19 pandemic questionnaire (QASDFCPQ) was used for data collection. Simple regression statistics was used to analyze to test the hypotheses in the study. The findings revealed that there was no significant contribution between quality assurance and sustainable development during COVID-19 pandemic in Delta State University, Abraka. Also, there was a significant contribution between quality assurance and university education during COVID-19 pandemic in Delta State University, Abraka. It was recommended that government should ensure that the universities take the quality assurance system seriously as it will help in ensuring the future of university education in the country especially post pandemic era.

Keywords: Quality assurance, Sustainable development, COVID-19, Pandemic

INTRODUCTION

Nigerian Education is seen as a tool for national development and social change. It is vital for the enhancement of quality life. Nigeria aims at providing education that is qualitative, comprehensive, functional and relevant to the needs of the society (Nigeria's Annual Education Conference (NAEC) (2019). This calls for quality

education at all levels in the country to meet the aspirations of individuals and the society, especially in this era of a knowledge driven society with global competitiveness. The importance of education in the attainment of national goals and objectives cannot be over emphasized as it brings about the growth of the individual's cognitive, affective and psychomotor domains. Education can be referred to as a process, a product

and a discipline (Okorosaye-Orobite, 2005). As a process, it involves the process of preserving, developing and transmitting culture from one generation to another. As a product, it deals with change, whether overt or covert, implicit or explicit, which should be achieved from education. Therefore, to achieve all of this, has to be through giving quality education. Quality is a diversified concept, which encompasses how learning is organized and managed, the content of learning and the level of achievement in terms of outcomes and what goes on in the learning environment (Materu, 2007). Quality can also be defined as a moving target that processes product and services that can be improved upon continuously. Improving the quality of education is not an easy task but can be achieved with the proper use of quality assurance. Quality assurance on the other hand is a way of managing the procedures with which goods are produced or services are provided to ensure that they are kept at high standard.

Hayward (2006) defined quality assurance as a planned and systematic review process of an institution or programme to determine whether or not acceptable standards of education, scholarship and infrastructure are being met, maintained and enhanced. It also involves method of performing

and achieving goals in the accepted standard of accountability and integrity. Quality assurance is an important component for successful internationalization and mechanism for building institutional reputation in a competitive local and global arena and also provides a necessary foundation for consumer protection (National Universities Commission, 2013). Quality assurance in the tertiary institutions implies the ability of the institutions to meet the expectations of the users of manpower in relation to the quality of skills acquired by their outputs (Ajayi & Akindutire, 2007).

Also, Okebukola (2004) defined quality assurance in Nigerian universities as a continuous process of improvement in the quality of teaching and learning activities achieved through employing mechanisms that are internal and external to universities. In the same vein, Creech (2004) opined that quality assurance is the process of consistently meeting product specification or getting things right first time and every time. Furthermore, it connotes a before and during the event process concerned with preventing fault occurring in the first place (Salls, 2002). Quality assurance focuses on process and seeks to convince both internal and external constituents that an

institution has processes that produce high quality outcomes. It is a continuous, active and responsive process which includes effective evaluation and feedback mechanisms.

Quality assurance has to do with designing quality into the education system to ensure that products of the system meet quality standards. Also, from the different definitions it seems as if some Nigerian universities can get things right at all times, their usual panicky disposition towards accreditation exercise would be a thing of the past especially in this era of the covid-19 pandemic. Hence, there is need for quality assurance culture which is a proactive process. Quality assurance culture, therefore, can be seen as the ability of an institution to develop quality assurance implicitly in the operations of the institution that has to do with keeping aside periodic assessment to ingrained quality assurance system. With quality assurance system in higher institutions, sustainable development can be achieved during the COVID-19 pandemic.

It is only when proper arrangements are made to increase the number of literate people in a society that sustainable development can continually be achieved and the quality assurance system can be a gateway to achieving this. Education

for sustainable development allows every human being to acquire knowledge, skills, attitudes and values necessary to shape a sustainable future. The Brundtland Commission (1987) in Moses-Promise and Moses (2016) defined sustainable development as the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. This implies that sustainable development is the means of satisfying the desires of the present by not affecting the satisfaction of tomorrow's desire. Sustainable development is generally thought to have three components; environment, society and economy. The well-being of these three is intertwined, not separate. It is also an approach that combines the development needs and aspirations of the present without compromising the ability of the future while also maintaining ecological integrity (Osuji, 2004).

Sustainable development can also be seen as making assumptions for a better tomorrow in which the society will be developed and the needs of its citizens being met without depriving the society of its present development and achievement of the needs of its citizens. For sustainable development to be achieved, the quality assurance system must come to play mostly

during COVID- 19 pandemic. The outbreak of the COVID-19 Pandemic that was announced on the 30th of January, 2020, led to a public health emergency of international concern (Mahase 2020). The coronavirus pandemic has exposed the socio-economic inequalities of the Nigeria education system as many wealthy families in Nigeria send their children to private schools leaving the poor resources and facilities in public schools because of the increase in mismanagement of resources allocated to the education system (Jewell, 2021). The children in private schools might experience little disruption in their learning, because the authorities of most standardized private schools do ensure their schools are well equipped with ICT infrastructures and they can afford remote learning. Learners from vulnerable and disadvantaged communities without access to computers and other devices outside school will however be left struggling. In many cases, these students live in communities with poor or non-existent internet connectivity and epileptic power supply. It therefore means that if this digital innovative was the only alternative to switch to during the lockdown it will make worse learning disparities among these children because not many parents can afford an android phone talk less of other

sophisticated ICT tools used in aiding learning.

The concern for quality university education in Nigeria therefore is very important. In other words, as a result of what is being produced in the form of the moral standards of graduates, labour market outcomes and scholastic performance there is need to improve on the quality of university education in Nigeria and Delta state in particular. Due to the level of globalization, the introduction of social media and so on, universities have been opened up to international competitiveness and comparison. As a result of this development, there are international standards against which universities across the globe are now being measured (Babalola, 2011). At this level the importance of quality assurance cannot be overemphasized. From all indications, quality assurance has a relationship with sustainable development especially during COVID-19 pandemic.

Relatively, Asif and Raouf (2012) posited that quality assurance can contribute to sustainable development especially during COVID-19 as it helps schools to receive a feedback and to take actions based on the feedbacks received by setting collective priorities and disseminating good practices; it helps

to identify needs and resources, develop and implement action planning; it helps to monitor and evaluate every individual in the university; it helps to identify strengths and weaknesses in its work; it address staff needs for ongoing professional development and enhance their professionalism through regulation, self-regulation, and self-organized development. Quality assurance also creates an awareness as to where intervention is needed to make effective, sustainable and continuous improvements and it also helps to improve the quality of work and enhances the achievement of the intended outcomes of the work (Hou, 2012). With an effective quality assurance system, sustainable development can be achieved in our universities even during COVID-19 pandemic.

Any university that applies the quality assurance system stands to benefit a lot as it will help to develop a systematic, rigorous mentality or mindset towards effective planning, delivering and evaluating its work and doing this methodically and collaboratively; it conducts a systematic inquiry into the nature and impact of work of members of the university as academic, researchers and teachers; quality assurance has a clear formative agenda as it helps to understand the processes that led to

the outcomes, so that these can be improved where necessary (Garba, 2014). Quality assurance contributes to the ongoing processes of assurance and enhancement of quality in the university through its teaching, learning, student assessment, evaluation and student outcomes over and above the other mechanisms (Luckett, 2006). It reports cycles that may exist for reviewing and also improves, develop and ensure that the quality of the work undertaken is at the highest level and that the processes for this exist in the university and are impacting on the quality of the work undertaken. It also helps to establish whether there are appropriate and effective procedures and mechanisms for quality assurance and that these are working, to ensure that the intended features of the work of the university are being achieved, to serve accountability and to identify good practice within the university (Ene, 2016).

Therefore, quality assurance is a condition that leads to the achievement of transparency. It will ensure the quality of the academic (teaching, curriculum and so on) and structural (buildings, computers and so on) the provision of courses that will allow for an objective review of their quality.

The need for quality assurance in Nigerian schools cannot be overemphasized in order to ensure quality of teaching and learning. Quality assurance is the mechanism put in place to guarantee that education is fit for purpose. Quality assurance in the university system implies the ability of the institution to meet the expectations of the users of manpower in relation to the quality of skills acquired by their outputs. It can be said to be the ability of the universities to meet certain criteria relating to academic matters, staff-student ratios, staff mix by rank, staff development, physical facilities, funding, and adequate library facilities. It has been explained that adequacy of various inputs in the university system, in terms of quality and quantity, exercises tremendous influence on quality assurance in the university system, hence this study sought to investigate the extent to which quality assurance contributes to sustainable development during COVID-19.

Objectives of the Study

The following specific objectives provide further guide to the study:

- 1) To determine the extent to which quality assurance contributes to sustainable development during COVID-19 pandemic in Delta State University Abraka.

- 2) To examine the extent to which quality assurance contributes to university education during COVID-19 pandemic in Delta State University Abraka.

Research Questions

The following research questions were used to guide the study;

- 1) To what extent can quality assurance contribute to sustainable development during COVID-19 pandemic in Delta State University Abraka?
- 2) To what extent does quality assurance contribute to university education during COVID-19 pandemic in Delta State University Abraka?

Hypotheses

The following null hypotheses were used to guide the study:

H₀₁: There is no significant contribution of quality assurance to sustainable development during COVID-19 pandemic in Delta State University Abraka.

H₀₂: There is no significant contribution of quality assurance to university education during COVID-19 pandemic in Delta State University Abraka.

Research Design

The design for the study was the correlational design.

Participants

The population of the study comprised of all lecturers in Delta State University, Abraka.

Instrumentation

Data were gathered using a 4-point instrument designed after a modified Likert scale model, tagged quality assurance and sustainable development in the face of COVID-19 pandemic questionnaire (QASDDCPQ). Its reliability coefficient was computed at 0.78 and 0.75 using cronbach alpha method. 1500 copies of the questionnaire were administered to the lecturers with by the researcher and two trained research assistants.

Abraka using the multistage approach.

The sample of the study was 1500 lecturers drawn from the total number of lecturers in Delta State University

Data Analysis

Simple regression analysis was used to test the hypotheses at 0.05 alpha level of significance.

RESULTS

Hypothesis One: There is no significant contribution of quality assurance to sustainable development during COVID-19 pandemic in Delta State University, Abraka.

Table 1: Regression Analysis on the Extent Quality Assurance Contributes to Sustainable Development During COVID-19 Pandemic in Delta State University Abraka

Model	Unstandardized coefficients		Standardized coefficients	T	P-value (Sig.)
	B	Std. Error			
Constant	57.498	2.324		15.148	
Quality assurance	0.345	0.076	0.192	2.432	0.010

Table 1 showed the probability value to be 0.010 which is less than the alpha level of 0.05. Hence there was

no significant contribution between quality assurance and sustainable development during COVID-19

pandemic in Delta state university Abraka. Based on the above, the null hypothesis was rejected.

Table 2: Regression Analysis on the Extent Quality Assurance Contributes to University Education During COVID-19 Pandemic in Delta State University Abraka

Model	R	R Square	Adjusted R Square	Standard error of the estimate
1	0.264	0.070	0.069	4.37110

This shows that quality assurance contributes 70% to university education in the during COVID-19 pandemic in Delta state university Abraka. The remaining 30% cannot be accounted for by quality assurance. This simply means that quality assurance has contributed to university education during the

COVID-19 pandemic in Delta state university Abraka to a very high extent.

Hypothesis 2: There is no significant contribution of quality assurance to university education in the face of COVID-19 pandemic in Delta State University, Abraka.

Table 2: T-Test Associated with Simple Regression Analysis on the Extent Quality Assurance Contributes to University Education During COVID-19 Pandemic in Delta State University, Abraka

Model	Unstandardized coefficients		Standardized coefficients	T	P-value (Sig.)
	B	Std. Error	Beta		
Constant	57.498	2.324		15.148	
Quality assurance	0.345	0.076	0.192	2.432	0.010

Table 2 showed the probability value to be 0.12 which is higher than the alpha level of 0.05. Hence there was a significant contribution between

quality assurance and university education during the COVID-19 pandemic in Delta state university

Abraka. Based on the above, we fail to reject the null hypothesis.

Discussion

Firstly, the study revealed that there was no significant contribution between quality assurance and sustainable development during COVID-19 pandemic in Delta state university Abraka. In line with this, Hayward (2006) defined quality assurance as a planned and systematic review process of an institution or

enhances the achievement of the intended outcomes of the work.

Secondly, the study revealed that there was a significant contribution between quality assurance and university education during COVID-19 pandemic in Delta state university Abraka. In line with this, Lockett (2006) opined that quality assurance contributes to the ongoing processes of assurance and enhancement of quality in the university through its teaching, learning, students' assessment, evaluation and student outcomes over and above the other mechanisms. In support, Okebukola (2004) defined quality assurance in Nigerian universities as a continuous process of improvement in the quality of teaching and learning activities achieved through employing

programme to determine whether or not acceptable standards of education, scholarship and infrastructure are being met, maintained and enhanced. It also involves method of performing and achieving goals in the accepted standard of accountability and integrity. In support of this, Hou (2012) posited that quality assurance also creates an awareness as to where intervention is needed to make effective, sustainable and continuous improvements and it also helps to improve the quality of work an

mechanisms that are internal and external to universities.

CONCLUSION

Based on the findings of the study, it can be concluded that education is a very significant instrument needed for the development of the nation. A person is ready to adjust to social, political, technological and economic challenges through the efforts of the tertiary institutions. If the quality assurance system is being practiced, then sustainable development during COVID-19 pandemic is assured because students will be able to acquire the basic skills and talent with which to achieve academic development.

RECOMMENDATIONS

The following recommendations were highlighted based on the findings of the study.

1. The government should ensure that the universities take the quality assurance system seriously as it will help in ensuring the future of the education system is secured and not been disrupted after the COVID-19 pandemic.
2. The vice chancellors should employ experts in the area of ICT to introduce programs that will enhance the productivity of the education sector in order to compete with the outside world even after the COVID-19 pandemic.
3. The National Universities Commission (NUC) should mandate universities in Nigeria to establish quality assurance units and also provide quality assurance policy.

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EFFECT OF ART THERAPY ON EXAMINATION ANXIETY AMONG PUBLIC SENIOR SECONDARY SCHOOL STUDENTS IN JIGAWA STATE, NIGERIA

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ABSTRACT

The study examined social and psychological factors responsible for drug abuse behaviour among secondary school students in Oshimili South Local Government Area of Delta State, Nigeria. The study adopted survey research design. A self-developed 24-item questionnaire was used to gather information from 120 respondents made up of 70 males, and 50 female students drawn from the study area. The data collected were analysed using mean, standard deviation and One-Way Analysis of Variance (ANOVA) statistics. The findings revealed that there was no significant relationship between the causes of drug abuse and the behaviours of students; and there was no significant relationship between the influence of peer group and drug abuse behaviour of students. However, family background has a significant relationship in student's involvement in drug abuse behaviours and that no significant relationship existed between the personality type of students and their engagement in drug abuse. The study concluded that that students drug abuse behaviour is caused by social and psychological factors such as peer pressure (one of the most important causes), role-modeling or imitation, easy availability, conflicts (usually intrafamilial), social attitude, curiosity, social rebelliousness (disobedience), sensation seeking (feeling high), low self-esteem (anomie), poor stress management, childhood loss or trauma, as a relief from fatigue or boredom, to escape reality, lack of interest in conventional goals and psychological distress. It was recommended that stakeholders in the education sector should develop, implement and regularly review, in consultation with the school community and governing council, a school behaviour code which is consistent with the drug abuse policies.

Keywords: Socio-psychological factors, Drug abuse, Secondary school, Students

INTRODUCTION

Drug abuse in the real sense of the word is the act of making use of drugs all for the purposes that is beyond medical reasons. This eventually affects the person in a negative way (Kuria, 1996). Over the years, (precisely in the earliest times, there

was this rampart use of herbs, leaves and even plants in form of drugs, and these have been used to heal and control diseases. During this age, plants have been used for medicines and the prescriptions for various ailments were passed down through

oral history from generation to generation (Samuelsson, 2004). Talking about the use of plants for medicine, this is not only obtainable in ancient times. Even during this period of Covid-19 pandemics, there was this propaganda that herbs were more helpful; as such, many Africans fell back to the ancient times method of medication which is the use of plants for treatments and even prevention. During this period, plants like ginger, garlic, lemon grass and lemon juice, turmeric, et cetera became the order of the day. It must be noted here that the use of these different drugs does not pose any danger or health challenge. This is because drugs that are properly administered are highly beneficial to humankind. But on the other hand, if these drugs are used for different purposes other than how it was administered, it becomes an abuse. Sambo (2008), citing Falco (1988), in his opinion stated that, the abuse of substances is capable of causing irreversible damage to adolescents' physical and psychological development. Hence, the use of drug is either helpful or harmful. It all depends on the mode in which it is used. In all of these, one begins to wonder why some individuals especially students will deliberately make use of drugs in such a way as to harm themselves.

It has equally been noted that due to the increased rate of drug abuse, we now have equally the increased rate of violence among students both in the secondary school level and even the tertiary institution level. Common among these drugs used by undergraduates in schools are: cigarette, brewed alcohol, locally brewed alcohol, kola nut, aspirin, tramadol, marijuana, cocaine and cannabis (Essien, 2010). It must be noted that drug abuse has adverse effects on students because it ends-up changing their brain perception of difficulties and problems. Alan, (2003), opines that the number of undergraduates who make use of or abuse drugs have greatly increased in recent times. Some claim to be doing this because of their dissatisfaction with life. For them, life has not been fair to them, so, they are forced to anger, frustration boredom, and even academic failure and these leads them into the consumption of alcohol so as to fit in and serve as a consolation. Funny enough, this practice can be seen as pseudo consolation. This is because the consolation only comes when the drug is still in the body system; as soon as the drug leaves the person's system, the problem/ challenge remains as it was earlier.

Drug abuse has caused so much harm than good. It is responsible for lost wages, the destruction of properties in schools,

hospitals, soaring health care costs and even broken families/homes. This problem affects everyone in the society especially parents, children, teachers, government officials, tax payers and workers. We cannot equally rule out the socio-psychological factors responsible for drug abuse among undergraduates. Among these factors are the peer influence, individual personality issues among others. Cassandra, (2009), opined that, one of the reasons students abuse drugs is due to peer influence. This is to a great extent very correct. This is because, most times, despite the fact that parents do their very best to guide their children on the right part without them making mistakes, some children still go astray as a result of their giving-in to pressure and influence from their peers who are into abuse of drugs.

Finally, in order to curb these excesses, there was the need to set up agencies by the government, who will look into the matter. Among these agencies is *Nigerian National Drug Law Enforcement Agency (NDLEA)*. Their duty is to stem the tide of drug abuse in Nigeria; although this attempt has been faced with high/ stiff resistance by the users of these hard drugs across the nation. To this effect, there have been increased incidences of drug abuse across the globe especially among secondary school

students in Asaba, Delta State in particular. Despite the continued confiscation of illicit drugs by the constituted authorities, there is still rapid rise in the number of cases of drug abuse among youths whom are mostly students (Akinyemi, 2008). The aim of this study is therefore, to explore the social and psychological factors in drug abuse behavior among secondary school students with a focus on those in Asaba, Delta State so as to provide necessary measures to curb and reduce the spread of this menace and suggest how to deal with it.

Attempts have been made by the government, religious organizations and many other keen stakeholders to curb the problem of drug and substance abuse among undergraduates. However, despite these attempts, the case of drug abuse has not been eradicated, instead, it continues to escalate on a daily basis. Hence, (Ngesu, 2008), holds that, due to the increased cases of indiscriminate use of drugs among secondary school students, it is evident that this abuse has led to poor students' academic performance even in the classroom. It is highly pathetic that despite concern and education on the dangers posed by drugs on the health and wellbeing of students globally, most students have limited knowledge of how dangerous the

habit is. This has given room for so many school drop-outs and this eventually creates room for these drop-outs to engage in criminal activities. This furthermore, puts the lives of innocent people within that region in Asaba, Delta State at risk. The misuse of drugs has affected the youths of today so greatly especially undergraduates, to the extent that these undergraduates who have soaked themselves in drugs are unemployed. In other words, addiction to drugs leads to unemployment of youths and more still, lack of focus and concentration to undergraduates.

In all of these, the government continues to express concerns and move various campaigns against this vice called drug abuse among secondary school students. It must be stated clearly here that, there is this excessive use of illicit drugs in the societies. However, undergraduates have begun to fantasize with these drugs. These drugs have in no small measures affected the output of students. Thus, drug and substance abuse have so much threatened the productivity of students by demotivating them in learning and more still, ruining these school students who ought to be the future leaders. Today, drug abuse has posed as a threat to the lives of youths/undergraduates. It not only affects the academic performance of

the students, but also the mental health, and even causes physiological and psychiatric disturbances, physical health problem, poor finance, emotional problem, memory impairment, problems with family relationships and the risk factor for most chronic diseases. This study therefore seeks to look into the socio-psychological factors of drug abuse among students in Oshimili South Local Government Area of Delta State.

Objectives of the Study

The objective of this study is to investigate the socio and psychological factors of drug abuse behaviour among secondary school students in Oshimili South Local Government Area of Delta State, Nigeria. Specifically, the study seeks to:

investigate the causes of drug abuse and ascertain if peer group influence and family background contributes to drug abuse among secondary school students.

Research Questions

The following research questions were poised to guide this study

- i. What are the causes of drug abuse by secondary school students in Oshimili Local Government Area of Delta State?

- ii. Does peer group influence lead to drug abuse behaviour among students in Oshimili Local Government Area of Delta State?
- iii. Is there any relationship between family background and students' involvement in drug abuse?
- iv. Does the personality type of students influence their engagement in drug abuse behaviour among students?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- i. There is no significant relationship between the influence of peer group and drug abuse behaviour of students.
- ii. There is no significant relationship between family background and students' involvement in drug abuse.
- iii. There is no significant relationship between the personality type of students

and their engagement in drug abuse.

METHODOLOGY

Research Design

The survey design was adopted for this research. In adopting this design, the qualitative and quantitative approaches was combined and made use of for this research.

Participants

The population of study for this research work consist of 20 secondary schools in Asaba. This researcher employed both the probability sampling and non-probability sampling techniques. Thus, the stratified random sampling was used in selecting the samples. From the twenty (20) schools sampled, six (6) schools were selected for the exercise. The total sample of 120 teachers was used comprising of 20 teachers each from the six (6) selected schools.

Instrumentation

The research instrument used was the questionnaire titled "The Social and Psychological Factors in Drug Abuse Behaviour Among Secondary School Students in Asaba (TSPFDABASSSA) questionnaire. The questionnaire has two sections (A and B) with close ended items. Section A was mainly to generate background information of the respondent's demographic data while

Section B elicits relevant information on the respondent's opinion of the subject matter.

Validity and Reliability of the Research Instrument(s)

The test and re-test method was employed to determine the validity of the instrument. The instrument was administered to a section of 20 participant not included in the study area, while Cronbach Alpha was used to check for reliability coefficient of the data generated.

This chapter deals with the presentation and analysis of data collected in regard to the objective of the study on the social and psychological factors in drug abuse

Procedure for Data Collection

The researcher visited the selected secondary schools that were sampled to administer the questionnaire.

Data Analysis

The data collected was analyzed using mean and standard deviation to answer the four research questions. However, the three hypotheses were tested using Chi-square and Pearson Product Moment Correlation statistics at 0.05 level of significance.

RESULTS

behaviour among student in some selected government and private secondary schools in Asaba, Delta State.

Table 1: Demographic Variables of Respondents (N = 120)

S/N	Demographic Variables	Frequency	Percentage (%)
1	Sex		
	Male	70	58
	Female	50	42
	Total	120	100
2	Age		
	11-13	65	54
	13-15	35	29
	15-17	20	17
	Total	120	100

From table1 above, the study showed that 58% of the respondents are male and 42% were female. This shows that there are more male than female used for the study. Also, 54% of the

respondents are within the age bracket 11-13 years, 29% of the respondents within the age bracket of 13-15 years and 17% of the respondents are within the age

bracket of 15-17. This shows that there are more respondents within the age bracket of 11-13 years used for the study.

Research Question One: What are the causes of drug abuse by secondary school students in Oshimili Local Government Area of Delta State?

Table 2: Causes of Drug Abuse by Secondary School Students in Oshimili Local Government Area of Delta State

S/No	Item	Mean	SD	Remark
1	Family history of addiction/parental factor	3.42	.957	Agreed
2	Peer pressure	3.38	.735	Agreed
3	Alteration in perception of reality	2.72	1.231	Agreed
4	The loss of a loved one	2.87	1.170	Agreed
5	Mass or social media	2.83	1.285	Agreed
6	Self-medication	3.40	.990	Agreed

\bar{X} = Mean responses of 120 respondents and the mean criterion is 2.50

Source: Field work (2022)

The Table 2 above shows that items 1-6 all have calculated mean values ranging 2.72-3.42 which is above the mean criterion of 2.5. This means that all the respondents agreed to the statements that the causes of drug abuse by secondary school students is family history of addiction/parental factor, peer pressure, alteration in perception of reality, the loss of a loved one, mass or social media and self-medication. Since the grand

mean is also above the mean criterion of 2.50, it shows that the respondents have a positive perception about the causes of drug abuse by secondary school students in Asaba.

Research Question Two: Does peer group influence lead to drug abuse behaviour among students in Oshimili Local Government Area of Delta State?

Table 3: Peer Group Influence and Drug Abuse Behaviour among Students

S/N	Item	Mean	SD	Remark
7	My friends lured me to taking drugs	2.51	1.342	Agreed
8	I love mingling/identifying with drug users	3.08	.957	Agreed

9	I like doing something that one wouldn't normally do to fit in with friends	3.25	.928	Agreed
10	Taking drugs with my friends makes me sociable	2.63	1.340	Agreed
11	My friends have access to drugs and it is distributed for free among us	3.18	.975	Agreed
12	I enjoy the company of my friends after taking drugs as it places us on the same frequency of behaviour	3.42	.495	Agreed

\bar{X} = Mean responses of 120 respondents and the mean criterion is 2.50
Source: Field work (2022)

The Table 3 above shows that items 7-12 all have calculated mean values ranging 2.51-3.42 which is above the mean criterion of 2.5. This means that all the respondents agreed to the statements that peer influence leads to drug abuse by secondary school students such as friends luring them to taking drugs, I love mingling/identifying with drug users, I like doing something that one wouldn't normally do to fit in with friends, taking drugs with my friends makes me sociable, My friends have access to drugs and it is distributed for free among us and I enjoy the

company of my friends after taking drugs as it places us on the same frequency of behaviour. Since the grand mean is also above the mean criterion of 2.50, it shows that the respondents have a positive perception that peer influence leads to drug abuse by secondary school students in Oshimili Local Government Area of Delta State.

Research Question Three: Is there any relationship between family background and students' involvement in drug abuse?

Table 4: Family Background and Students' Involvement in Drug Abuse

S/N	Item	Mea n	SD	Remark
13	Family attitudes and practices about substance abuse	2.62	1.189	Agreed
14	Problematic family and partner relations	2.73	1.172	Agreed

15	Family structure	2.95	1.106	Agreed
16	A family history of drug abuse and dependence	2.97	1.201	Agreed
17	The family environment	3.02	1.045	Agreed
18	Child physical and sexual abuse	2.72	1.217	Agreed

\bar{X} = Mean responses of 120 respondents and the mean criterion is 2.50

Source: Field work (2022)

The Table 4 above shows that items 13-18 all have calculated mean values ranging 2.72-3.02 which is above the mean criterion of 2.5. This means that all the respondents agreed to the statements that a relationship exist between family background and students' involvement in drug abuse with reasons such as; family attitudes and practices about substance abuse, problematic family and partner relations, family structure, family history of drug abuse and dependence, the family environment

and child physical and sexual abuse. Since the grand mean is also above the mean criterion of 2.50, it shows that the respondents have a positive perception that a relationship exist between family background and students' involvement in drug abuse in the study area.

Research Question Four

Does the personality type of the students influence their engagement in drug abuse behaviour among students?

Table 5: Personality type of the student and influence in the engagement in drug abuse behaviour

S/N	Item	Mean	SD	Remark
19	I see myself as someone who is curious about things	2.93	1.128	Agreed
20	I see myself as someone who is emotionally stable	3.37	.777	Agreed
21	I see myself as someone who has an assertive personality	3.70	.588	Agreed
22	I see myself as someone who can be cold and aloof	3.33	1.110	Agreed
23	I see myself as some who I considerate and kind to almost everyone	3.26	.912	Agreed

24	I see myself as someone who generates a lot of enthusiasm	2.88	1.146	Agreed
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\bar{X} = Mean responses of 120 respondents and the mean criterion is 2.50
Source: Field work (2022)

The Table 5 above shows that items 19-24 all have calculated mean values ranging 2.88-3.70 which is above the mean criterion of 2.5. This means that all the respondents agreed to the statements that personality type of student influence their engagement in drug abuse with reasons such as; I see myself as someone who is curious about things, I see myself as someone who is emotionally stable, I see myself as someone who has an assertive personality, I see myself as someone who can be cold and aloof, I From the result presented above, the result reveals the Fraction not to be significant at 0.05 level of significance, $F(1, 117) = 470.5$; $p > 0.05$. The F-ratio of 470.5 with a p-value as .000 calculated at 0.05 level of significance and at 117 degree of freedom to be greater than 0.05. The null hypothesis was therefore

see myself as some who I considerate and kind to almost everyone and I see myself as someone who generates a lot of enthusiasm. Since the grand mean is also above the mean criterion of 2.50, it shows that the respondents agreed that personality type of the students influence their engagement in drug abuse behaviour among students in the study area.

Hypothesis One: There is no significant relationship between the causes of drug abuse and the behaviours of students.

accepted as postulated that there is no significant relationship between the causes of drug abuse and the behaviours of students.

Hypothesis Two: There is no significant relationship between the influence of peer group and drug abuse behaviour of students

Table 7: Relationship between Peer Group and Drug Abuse Behaviour of Students

		Peer Group Influence	Behaviour Disorder
Peer Group Influence	Pearson Correlation	1	.706**

	Sig. (2-tailed)			.000
	N		120	120
Behaviour Disorder	Pearson Correlation		.706**	1
	Sig. (2-tailed)		.000	
	N		120	120

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

From the result presented above, the result reveals $r = 0.706$; $p > 0.05$. The null hypothesis was therefore accepted as postulated that there is no significant relationship between the

influence of peer group and drug abuse behaviour of students.

Hypothesis Three: There is no significant relationship between family background and students' involvement in drug abuse

Table 8: Relationship between Family Background and Students Involvement in Drug Abuse

		Family Background	Drug Abuse
Family Background	Pearson Correlation	1	.799**
	Sig. (2-tailed)		.000
	N	120	120
Drug Abuse	Pearson Correlation	.799**	1
	Sig. (2-tailed)	.000	
	N	120	120

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

From Table 8, the result revealed $r = 0.799$, $p < 0.05$ level of significance. The null hypothesis was therefore rejected as postulated that there is no significant relationship between family background and student's involvement in drug abuse. This

therefore implies that family background has significant relationship in student's involvement in drug abuse behaviours.

Hypothesis Four: There is no significant relationship between the

personality type of students and their engagement in drug abuse

Table 9: Relationship between Personality Type of Students and Their Engagement in Drug Abuse

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	29.244 ^a	18	.045
Likelihood Ratio	39.926	18	.002
Linear-by-Linear Association	22.561	1	.000
N of Valid Cases	120		

From the result presented above, the result reveals Chi-square value of 29.244 and a p-value as .045 calculated at 0.05 level of significance and at (1,18) degree of freedom to be greater than 0.05. The null hypotheses was therefore accepted as postulated that there is no significant relationship between the personality type of students and their engagement in drug abuse.

Discussion

In the present study, the majority of the participants were between 11-16 years. In this present situation, if students being in the 13-16 age group abuse drugs, they will be at risk for acute and chronic health, social as well as psychological problems (Obob & Obob, 2020). Substance abuse may result in behavioral, cognitive, and physiological disorders (Jorge et al., 2018). In this study also, most of the participants

were males, which is consistent with the recent Nigeria drug use report-2018 of the United Nations Office on Drugs and Crime (UNODC). UNODC (2018) reported that among 4 drug users in Nigeria, one is a female, thus more males (10.8 million men) than females (3.4 million females) were reported as drug users in the previous year. The result from the research questions also showed that respondents agreed to the statements that the causes of drug abuse by secondary school students is family history of addiction/parental factor, peer pressure, alteration in perception of reality, the loss of a loved one, mass or social media and self-medication. Since the grand mean is also above the mean criterion of 2.50, it shows that the respondents have a positive perception about the causes of drug abuse by secondary school students in Asaba. It also revealed that respondents agreed to

the statements that peer influence leads to drug abuse by secondary school students since the grand mean is also above the mean criterion of 2.50, it indicates that the respondents have a positive perception that peer influence leads to drug abuse by secondary school students in Asaba. In addition, the result also showed that respondents agreed to the statements that a relationship exist between family background and students' involvement in drug abuse since the grand mean is also above the mean criterion of 2.50, indicating the respondents have a positive perception that a relationship exist between family background and students' involvement in drug abuse in the study area. Again, the findings also showed that respondents agreed to the statements that personality type of student influence their engagement in drug abuse, with grand mean above the mean criterion of 2.50, indicating that the respondents agreed that personality type of the students influence their engagement in drug abuse behaviour among students in the study area.

Results from hypotheses one findings revealed that that there is no significant relationship between the causes of drug abuse and the behaviours of students. This was validated as the null hypotheses was therefore accepted as postulated that there is no significant relationship

between the causes of drug abuse and the behaviours of students. This result is in agreement with the findings of Oketch (2008) who observed that the period of adolescence is characterized by many challenges which they believe are understood by their peers. In all this turmoil come a socially classic, adult idealized, commonly available, mood-altering drugs. Thus, he said, many adolescents try alcohol, cigarettes and cannabis. This is also in agreement with the findings of Ojiakwu and Nwokoro (2021) report that students abuse drugs as a result of poor parenting, drug dependence, peer influence, decrease recognition, easy accessibility to drugs, missing classes, experimental curiosity, disloyalty to school rules, personality problems due to socioeconomic situations, fighting in class/school and desire to work for long period. They emphasized that students with the mentioned problems will definitely participate in drug abuse if they are not properly monitored to direct them.

Results from hypotheses two revealed that there is no significant relationship between the influence of peer group and drug abuse behaviour of students. Peer pressure was significantly associated with students' involvement in drug abuse, which is consistent with the findings of Sarkingobir and Dikko (2020), and Azeez et al. (2020). The result of a

study conducted by Sanni and Aransi (2020) revealed that peer pressure is among the psychosocial factors that determine students' drug use. In association with social learning theory (Bandura, 1977), drug abuse is a type of behavior which can easily be acquired by students observing their peers who are involved in drug abuse. However, the result of this study is inconsistent with the probe conducted by Iwuala (2015) which demonstrated that peer relation fails to bear any significant effect on students' alcohol use and abuse.

From hypotheses three results, findings revealed that family background has significant relationship in student's involvement in drug abuse behaviours. This was buttressed as the null hypotheses was therefore rejected as postulated that there is no significant relationship between family background and students' involvement in drug abuse. This finding is in agreement with the findings of Mboto (2014), family, background has a great influence on the behaviour and lifestyle of the individual. It is also supported by Isako (2014) that poor home or family back ground is one of the things that contribute to students' involvement in drug abuse. Bolvin (2009) commented that those with violent, chaotic and stressful experiences at home often engage in drug abuse. Eze (2016) opined that the polygamous

family type and large family size which are difficult to manage can lead to drug abuse tendency among students, which is linked with bad behaviours such as cultism, rape, thuggery, youth restiveness and even armed robbery, and so on.

Result of the finding on hypotheses four reveals that personality type proved to be not significant in this study which implies that personality type difference is ineffective in students' engagement in drug abuse. This was consonant with the findings of Anyasor (2006) and Asika (2011) reported that personality type has no significant impact on drug abuse. While that of Oparah (2011) revealed that personality type "A" individuals would not differ from personality type "B" people in their level of alcohol abuse. In contrast, the findings of Nwachukwu (2011) suggested personality type being a significant determinant of drug abuse.

CONCLUSION

The study concluded that students drug abuse behaviour is caused by social and psychological factors such as peer pressure (one of the most important causes), role-modeling/imitation, easy availability, conflicts (usually intrafamilial), social attitude, curiosity, social rebelliousness (disobedience), sensation seeking (feeling high), low self-esteem (anomie), poor stress

management, childhood loss or trauma, as a relief from fatigue or boredom, to escape reality, lack of interest in conventional goals and psychological distress.

Evidence from the study also revealed that peer group influence bears a significant impact on drug abuse among students, which denotes that the more the students are associated with drug-abusing peers, the more likely they would engage in drug abuse. It is evident in the study that family background has significant influence on student's involvement in drug abuse, which discerns that when students are raised by parents who participate in one form of drug usage or the other, it will invariably influence the child negatively as children are good imitators. Again, the study proved that personality trait has no significant effect on student's engagement in drug abuse, which implies that the individual might have a personality trait that is open to all but can be influenced if they do stay away from their peers who are drug abusers and are unwilling to stop such behavior.

RECOMMENDATIONS

The following recommendations were made based on the findings of the study:

1. Stakeholders in the education sector should develop, implement and regularly

review, in consultation with the school community and governing council, a school behaviour code which is consistent with the drug abuse policies

2. Parents and guardians should ensure that the student attends school and that school staff are notified of behaviour change and absences
3. Teachers should communicate and interact effectively with students and engage in cooperative guiding and counseling sessions
4. Proper and effective education on dangers of substance or drug abuse should be addressed in schools, and at home by teachers, parents and guardians.
5. Students should be recommended to be cautious not to copy all behaviors of their peers.
6. Teachers, parents and guardians are also needed to teach the students positive quality frames of peer association.
7. Policy makers are to engage in appropriate interagency agreements in order to

streamline the provision of services to support students with social and behavioural problems emanating from drug abuse

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THE INFLUENCE OF GENDER AND SCHOOL LOCATION ON ACADEMIC PERFORMANCE OF SENIOR SECONDARY SCHOOL STUDENTS IN RINGIM EDUCATION ZONE, JIGAWA STATE

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ABSTRACT

The study examined whether gender and school location influenced senior secondary school students' academic performance in the Ringim Education Zone of Jigawa state. The populations comprised of Senior Secondary Class Two (SS II) Students in public secondary schools in Ringim local government Area of Jigawa State and a sample of 329 students were randomly selected using stratified sampling technique. Students' School Location Inventory (SSLI) was used to collect data in the study independent t-test statistics was used to analyze the data. The findings revealed that there was a significant difference in academic performance of rural and urban students. However, there was no significant difference in academic performance of male and female students in the Ringim Education Zone. It was concluded that location of schools influenced the performances of senior secondary school students. The study recommended that the government should provide all necessary materials and equipment to the rural schools as it was available in the urban schools in the state.

Keywords: School location, Gender, Academic performance, Ringim Education Zone

INTRODUCTION

Schools play a vital role in developing and sustaining rural communities and are crucial to Nigeria's sustainable growth and development. In Nigeria rural is rather defined by the amenities available or non-existent. Such amenities include electricity, pipe-borne water, motorable roads, and health facilities, among others

(Onuka & Emunemu, 2010). But in the context of this research any town which is not up to local government headquarter is a rural area, by extension any school which is not located in the local government or its headquarters is regarded as rural school.

School location refers to the community in which the school is located such as a village, hamlet or rural area and town, city or urban area. A rural area: (less than 3000 people), a small town: (3000 to about 15,000 people). A town: (15,000 to about 100,000 people). A city: (100,000 to about 1,000,000 people), close to the center of a city with over 1000,000 people (Glossary of Statistical Terms, 2002).

Generally speaking, students in rural areas are educationally disadvantaged compared to their urban counterparts. This observation is reinforced by views gleaned from literature-research based and otherwise. For instance, it has been observed that rural schools face challenges relating to isolation, poverty and limited job opportunities for school leavers. Isolation denies rural schools the advantages of urban-based resources (e.g., libraries, electricity, technology etc.) that might enhance learning gains (Capper, 1993). The poverty of many rural communities, on the other hand, limits parent's ability to provide for their children and to augment their children's education with resources at home that can spark and sustain interest in learning in the absence of the teacher. Bickel and Lange (1995) averred that because of limited employment opportunities, learners in rural areas do not see any financial benefits to attend or succeed

in school. Consequently, most rural based learners end up performing poorly in the exit examination while limiting their chances of moving up the education ladder.

Sheldon (2012) noted that due to distance factor, most rural schools are less likely to get the much-needed supervisory advice from their professional seniors. Moreover, due to lack of attractive amenities (e.g., good houses, clean water, electricity and so on) a significant proportion of teachers posted to rural schools either apply for transfer immediately or become habitual absenteeism. This makes it difficult for rural schools to keep classrooms staffed. Added to that is the lack of facilities in most rural schools. For instance, in a 1988 World Bank report observed that most rural schools in Africa were characterized by dilapidated buildings, missing or broken desks and chairs and a lack of good ventilation and sanitation facilities (World Bank, 1988). These circumstances, the report noted, had the net effect of discouraging school attendance and hampering school's efforts to enhance learning gains by learners.

However, school location is among the factors that can affect students' academic performance. Sokoye (2009) cited in Adeyemi (2013) submitted that the location of a school

has a significant effect on the academic performance of the child. Since self-efficacy could have an effect on teacher and students' proficiency, environmental factors such as school location (rural or urban) could also have effect or impact on the proficiency academic achievement of students. To corroborate this, Ekperkunmo (2002) submitted that location of school can predict or determine pupils' achievement in science. According to Onuka and Emunemu (2010), schools that have provided generations of children and young people with knowledge, skills and attitude need to become autonomous and responsive. Schools play a vital role in developing and sustaining rural communities and are crucial to Nigeria's sustainable growth and development.

There are several efforts which have been implemented to ensure quality education by the government. Such efforts include the establishments of the quality assurance, workshops, and inductions programmes. However, performance of some rural secondary schools in the NECO and WAEC has remained low in Ringim. This raised some questions for their poor performance in relation to their location and hence, this study. Investigation was deemed appropriate, as without it, schools would continue the same without

improvement in the students' performance while jeopardizing national efforts geared at having skilled and competent citizens.

Students attending rural schools face challenges of higher poverty than those attending urban schools. In Nigeria, the lingual Franca is English language, which in most cases is not widely spoken in rural schools. What obtains in most cases is the native language of that setting. This can greatly affect students' performance in mathematics since it is in English language mathematics is being taught and assessed in schools. Urban schools have main advantages like availability of resources, library, opportunities, good environment, teachers etc. However, one of the greatest advantages of rural schools is the tendency for smaller classes, which promise increased student evaluation, and provide greater flexibility in teaching strategy. However, Owoeye (2002) claimed that urban students performed better than rural students in all forms of achievement test used. Kissau (2006) reported that students in urban and rural locations performed in a similar manner. Obioma (1989) indicated that most mathematically deficient learners were found in major urban centers rather than other locations. Igboegwu and Okonkwo (2012) study indicates a significant difference in

students' achievement with respect to location of school and education zones. The study showed that urban schools achieved significantly better than students in the rural schools did.

According to Philips (2003) cited in Onuka and Emunemu (2010), observed that in the United State of America 'rural' means a small town having a population of twenty-five thousand people and less, but in Nigeria 'rural' is rather defined by the amenities available or non-existent. Such amenities include electricity, pipe-born water, motorable roads, and health facilities, among others (Onuka & Emunemu, 2010).

Adeyemi (2013) cited in Brown and Susanson (2006) asserted that reasons for variations in student's achievement are geographical locations (rural or urban), resources, availability of technology and quality of teachers. In other words, students tend to learn and perform better in an educationally stimulating environment that is likely to arouse a higher degree of interest. He also found that there was a significant main effect of school location on students' achievement and attitude to economics. Also, Okoye (2008) pointed out that in Nigeria most rural-based schools lack enough qualified teachers, also they are poorly equipped and lack basic amenities, all

serving as inhibiting factors to good academic performance.

Durowoju and Onuka (2015) conducted a study which examined the Teachers' Self-efficacy Enhancement and School Location: Implication for Students' Achievement in Economics in Senior Secondary School in Ibadan, Oyo state, Nigeria. The study sought to investigate the effect of teachers' self-efficacy enhancement and school location on students' achievement in economics in senior secondary school in Ibadan metropolis of Oyo state, Nigeria, using pre-test and post-test quasi-experimental/control group design. The target population for the study comprised all public senior secondary school teachers and students in Ibadan, Oyo state of Nigeria. Multi-stage sampling technique was adopted in the study. Four LGAs (two urban and two rural) out of the eleven LGAs councils in Ibadan were randomly selected. 60 schools (30 in the urban and 30 in the rural) whose classes were used as intact classes were involved in the study. Two instruments namely: teachers' self-efficacy enhancement scale (TSES) and economics achievement test (EAT) were used to generate data for the study. The reliability coefficients of the instruments were 0.79 and 0.74 respectively. One treatment package

(teacher self-efficacy enhancement package) was developed and used to enhance the self-efficacy of the teachers. Data were scored, collected and analyzed using analysis of covariance (ANCOVA) to test the significance differences between group means and to control for the effects of covariates.

Some of the findings were: teachers' self-efficacy enhancement had significant main effect on students' achievement in economics; school location also had significant main effect on students' achievement in economics while teachers' self-efficacy enhancement and school location had no significant interaction effects on students' achievement in economics. It was recommended that teachers should be exposed to self-efficacy enhancement programs to enable them imbibe the spirit of self-efficacy in carrying out their assignments. Furthermore, teachers should be made to understand and accept the fact that their students can perform excellently in their academic work regardless of their school location if they develop in themselves a high level of self-efficacy.

In another study conducted by Kiumi et al. (2013) examined the influence of Pupil-Teacher Ratio and School Location on Pupils' Performance in Exit Examination in Kenya's Free Primary Education Program. The

study sought to find out whether pupil teacher ratio (PTR) and school location have any influence on pupils' performance in the KCPE examination, using descriptive research design of the ex-post facto type 59 head teachers were serve as a sample out of which 46 were in charge of rural schools while 13 were heading urban schools. The sample was generated through systematic and simple random sampling in line with Krejcie and Morgan's (1970) table for determining sample size from a given population. The Kenya certificate of primary education (KCPE) examination average scores (2003 – 2010) are the sampled schools ranging between 150 and 350 marks out of a possible maximum mean score of 500 marks. The mean scores were divided into three groups: 150-199; 200-249 and 250-350. This constituted the level of pupil's performance (LPP) index which was categorized as "very low" "low" and "moderately high" LPP respectively. The data were collected through questionnaires; the instrument was piloted in the neighboring 01 Joro-Orok division. Items that were found to be unclear or open to misinterpretation were rephrased before the main study was executed.

Using the statistical package for the social science (SPSS) version 11.5 computer programmer, nominal scale data (i.e., respondents and school

characteristics) were analyzed through frequency counts and percentages while hypotheses were tested using chi-square statistics at 0.05 alpha level. The finding and conclusions showed that the relationship between school location and pupils' performance in KCPE examination was statistically significant ($P > .5$) with pupils in urban schools performing much better than their rural counterparts. This seems to indicate that chances of success in the KCPE examination were comparatively higher in urban – based schools among others.

Objectives of the Study

The specific objectives of the study are to:

1. examine if difference exists in academic performance of Urban and Rural senior secondary school Students in Ringim Education Zone
2. determine whether sex difference exists in academic performance of students in Ringim education zone

Research Hypotheses

1. There is no significant difference in academic performance of Urban and Rural senior secondary school students in Ringim Education Zone

2. There is no significant gender difference in academic performance of Urban and Rural senior secondary school students in Ringim Education Zone

METHODOLOGY

Research Design

The research design for the study was ex-post facto type. This is because the researcher will not be able to manipulate the variables for the simple reason that they have already occurred.

Participants

The research respondents for the study were SS II students in the rural and urban areas in Ringim Education Zone, Jigawa state, Nigeria. A total of 29 secondary schools formed the target population comprising 1 Federal Unity school and 28 public schools, 14s urban senior secondary schools and 15s rural senior secondary schools and a sample of 329 students were randomly selected using stratified sampling technique.

Instrumentation

The research instrument was Students' School Location Inventory (SSLI) designed by the researcher. It has 2 Sections. Section A: has items dealing with preliminary information of the respondents such as age,

gender, location of school (rural/urban), class, number of students in class, among others. Section B: has 16 items that measure the number of students in class in rural and urban schools, number of periods taught by teachers, number of teachers per subject, distance from home to school, presence of laboratories and library in school, power availability, among others. The respondents were asked to respond to the inventory on a four-point Likert Scale of strongly agree, agree, disagree and strongly disagree.

Validity and Reliability of the Research Instrument(s)

The researcher chooses face validity for his instruments. The items were taken to experts in the field of psychology and test and measurement to ascertain the validity of the instruments. While the reliability of the instrument, Cronbach alpha reliability index for the instrument SSLI was found to be 0.756, after a

pilot study conducted at Junior Secondary School Auramo Ringim. This shows that the Items included in the instruments have adequate reliability.

Data Analysis

The researcher with the aid of research assistants administered the Student’s School Location Inventory (SSLI), The data was analyzed using inferential statistics for all the hypotheses i.e. t-test between two groups were used with the aid of statistical package for social science (SPSS) version 22.

RESULTS

Hypothesis One: There is no significant difference in academic performance of rural and urban senior secondary school students in Ringim Educational Zone.

Table 1: Difference in academic performance of rural and urban senior secondary school students

VARIABLES	N	Me	SD	DF	t-cal	t-	P
USSAP	14	61.94	17.47	9.096	73	1.15	<0.05
RSSAP	1500	55.00	16.00				

The table 1 showed calculated t-value as 1.173, $p < 0.05$. Therefore, the null hypothesis is hereby rejected and it is inferred that, there was a significant difference in students' academic performance in urban and rural senior secondary schools.

Hypothesis Two: There is no significant difference in academic performance of male and female students in Ringim Education Zone

Table 2: Difference in academic performance of male and female students

VARIABLE	N	Mean	SD	DF	t-cal	P
MSAP	170	58.3103	16.70 20.30	-	- 0.364	>0.05
FSAP	159	63.0000	21.66			

The table 2 shows t calculated at -0.364, $p > 0.05$. Thus demonstrate a greater p. value than the level of significance. This calls for the retention of null hypothesis, the hypothesis is hereby accepted and it is inferred that, there is no significant differences in academic performance between male and female students.

Discussion

For the first hypothesis, a significant difference existed in academic performance of rural and urban senior secondary school students in the Ringim Education Zone. This is to say that the geographical location of Schools has an influence on the academic achievement of students. Rural urban dichotomy in terms of academic achievement of students as highlighted in the review literature

has been attributed to various cause vis-à-vis, uneven distribution of resources, poor school mapping, facilities, problem of qualified teachers refusing appointment or not willing to perform well in isolated villages, lack of good roads, poor communication, nonchalant attitude of some communities to schooling among others. The above results therefore supported the findings of Durowoju and Onuka (2015) who found that school location had a significant main effect on students' achievement in economics. Also Kiumi et al. (2013) examined the influence of pupil-teacher ratio and school location on pupils' performance found statistically significant ($p > .5$) with pupils in urban schools performing much better than their rural counterparts. This seems to

indicate that chances of success in the Kenya certificate primary education (KCPE) examination were comparatively higher in urban-based schools. Also, Caroline et al. (2015) reported that urban students performed better than rural students.

The second hypothesis pinpointed towards non-existence of any significant difference in academic performance of male and female students in urban and rural senior secondary schools in Ringim Education Zone. This is in line with findings of Kimani et al. (2013) in their research that found students' gender is not significantly related to academic achievement in secondary schools among others. But in another research of Tenaw (2013) that investigated the relationship between self-efficacy, academic achievement and gender in analytical chemistry reported that there was a statistically significant difference in achievement of students arising from teachers' gender. Using data from a randomized experiment, Caroline et al. (2015) discovered that male students performed better than female students in their study.

Therefore, students in urban areas had better academic performance than their rural counterparts. In other words, students in urban locations have a very great advantage by

learning in an urban environment, which apparently enriches their academic knowledge, despite the apparent disadvantage, as it were of having to learn in large classes.

CONCLUSION

Conclusively, the study has proven that students in urban areas had better academic achievement than their rural counterparts. In other words, students in urban locations have a very great advantage by learning in an urban environment, which apparently enriches their academic knowledge, despite the apparent disadvantage, as it were, of having to learn in large classes.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were proffered

1. The government should provide some social amenities like good motorable roads, power electricity, pipe bone water etc. to rural areas.
2. Instructional materials such as library materials, laboratory equipment, introductory technology equipment etc. should be provided to rural areas in order to bust the educational uniqueness and stability.

3. Government should provide monetary aids (allowance) to the rural teachers in order to motivate them on their duties.
 4. Regular supervision and inspection should be organized by ministry of education or zonal education to the rural schools in order to checkmate the staff and students performances
 5. Similar study should be replicated in other areas to determine the effect of geographical location on students 'academic performance.
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PRESCRIBED INSTRUCTIONAL MATERIALS AND ALTERNATIVES IN TEACHING FISHERY TRADE SUBJECT IN PUBLIC SCHOOLS: IMPLICATIONS FOR A SUSTAINABLE WORKFORCE

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ABSTRACT

The utilization of prescribed instructional materials and its alternative is imperative for a sustainable workforce in the Nigerian fishery industry. The study adopted the descriptive survey research method to obtain data from Head teachers of agricultural science in Delta State. A self-developed 58-item structured questionnaire was used to collate data for the study. Data collected were analyzed using means and standard deviation to research questions. The study found out that all prescribed instructional materials in teaching fishery trade subject in public schools can be utilized. Materials such as well, drums, buckets for water tanks, poultry droppings for organic fertilizers among others can also be used as alternatives, and the actions that could be undertaken to utilize alternative materials include having current knowledge skills in fish farming, identifying the alternative for prescribed instructional materials among others. The study concluded that utilization of prescribed instructional materials and its alternative in teaching the fishery trade subject makes learning stimulating and abstract knowledge concretized for learning experiences. It was recommended that the prescribed instructional materials be provided for schools, and where they are not available, alternative materials should be sourced to arouse students' interest into the fishery industry.

Keywords: Alternatives, Fishery, Prescribed Instructional Materials, Sustainable Workforce, Trade Subject

INTRODUCTION

Nigeria is blessed with abundance of young adults in secondary schools who could be motivated to become the future workforce in the fishery industry. Fishery is an activity that leads to the cropping of fish in confined settings or from wild bodies of water. It is a signal of the presence

of human actions, and the use of materials and tools for effective production (Fisheries & Resources Monitoring System (FIRMS), 2023). Fishery provides livelihoods worldwide to over 820 million persons on a full-time or part-time basis (Food & Agricultural

Organization (FAO), 2022), yet the industry cannot meet the demand for fish protein consumption, particularly in Nigeria. More so, the widespread fish farming for fish protein is alarming and its resources are inexhaustible as job opportunities are always available because of its economic importance to man (Alejandro et al., 2022; Gozzer-Wuest et al., 2022; FAO, 2022; Ikeoji, 2018).

To foster the development of occupational skills in young adults and use the same means to gain a smooth transition from school to the world of work, the Nigerian Educational Research and Development Council (NERDC) designed the Senior Secondary Education Curriculum to meet this objective. Although the implementation of the curriculum began over a decade ago, it seems the fishery component is unable to develop young adults who are motivated and skillful to sustain the workforce in the fishery industry (Agbidi et al., 2022; Ogwu et al., 2021; Agbidi & Ikeoji, 2018).

A sustainable workforce in the fishery industry refers to people who are skillful and able to adapt to changes in the emerging environment to meet fish protein demand. Kossek et al. (2014) illustrated a sustainable

workforce as one whose workers demonstrate vitality in their capabilities to use organizational resources to meet demands. Thus, suggesting the use of materials and tools in a workplace environment for fish production. This would make them skillful in fish farming and consequently meet societal needs and values. All these are embedded in the trade/entrepreneurship curriculum (Alkali et al., 2016).

The trade or entrepreneurship curriculum provides that prescribed instructional materials be used for teaching fishery (Agbidi & Ikeoji, 2018; Orji, 2014; NERDC, 2013). Despite this, a significant number of young adults in public schools do not have the requisite knowledge skill for employment in the fishing industry, owing largely in part to inadequate provisions and the use of prescribed fishery instructional materials (Agbidi et al., 2022; Anyakaorah, 2021; Onifade & Owoade, 2020; Agbidi & Ikeoji, 2018). Although, pictures, textbooks, and television are some instructional materials useful for learning, these materials do not give the young adults actual hands-on experience as used in the fishery industry, thereby making them lose interest in the trade subject.

Prescribed instructional materials are the approved tools and equipment

originally meant for the teaching and learning purposes of a subject. Fishery culture items, fishing gears and craft, fish processing equipment, freezers/refrigerators, and ovens among others are prescribed instructional materials that could facilitate understanding and concertize learning of the fishery trade subject (Agbidi et al., 2022; Agbidi & Ikeoji, 2018; Ikeoji, 2017; NERDC, 2013).

The utilization of these fishing materials and tools is very vital as it makes understanding the art of fish farming substantive rather than obscured. This means that the utilization of fishery tools and equipment cannot be underestimated, suggesting that alternative materials and tools could be used as a substitute in the absence or inadequacies in the prescribed fishery instructional materials. The alternative instructional materials are fishing materials and tools that can be used in the absence of the prescribed ones to gain actual fishery industry experience. It is the use of the best available means to instruct learners in the absence of prescribed materials (Agbidi et al., 2022; Alejandro et al., 2022; Ema, 2018).

Furthermore, the use of alternative fishing materials and tools is also a means by which the teacher

improvises. It is a technique that utilizes other close materials (Onifade & Owoade, 2020; Ema, 2018). These alternatives can be found locally within the environment or sourced from artisans. More so, the use of these tools and materials in the absence of official ones ensures the sustainability of the fishery industry workforce with skilled young adults who are ready to contribute to the socio-economic development of a nation (Acarli et al., 2019).

Kolb (1984) experiential learning theory advocates learning with the use of tools and materials to gain actual industry experience. Engaging students with the use of fishery tools and materials could help in connecting theoretical learning to real situations. Nonetheless, experiential learning is anchored on the premise of learning by action, doing, and experience (Ikeoji, 2017). It also relies on observation in the use of materials during learning which precedes the replication of observed experience (Cherry, 2021).

In gaining this fishery industry workplace experience, it is appropriate that materials and tools be used to stimulate students into the industry. Moreover, where the original prescribed fishery instructional materials are not available or inadequate for use, the

Agricultural science teacher is expected to think of a local alternative that can be substituted for the original ones. The teacher is equally expected to take the necessary action to use these alternative materials. It is this gap that this study wants to bridge by assessing the Head agricultural science teacher's opinion on the prescribed instructional materials and alternatives in teaching fishery trade subjects in public schools.

Objectives of the Study

- i. identify the prescribed instructional materials that can be utilized in teaching fishery trade subject in public schools in Delta State, Nigeria;
- ii. ascertain the alternative materials that can be utilized for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria;
- iii. determine the actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria;

Research Questions

- i. What are the prescribed instructional materials that can be utilized in teaching fishery

trade subject in public schools in Delta State, Nigeria?

- ii. What are the alternative materials that can be utilized for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria?
- iii. What are the actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria?

METHODOLOGY

Research Design

The study employed the descriptive survey method to elicit an opinion from the Head agricultural science teachers in public schools.

Participants

The study participants are located in Delta State, Nigeria. Delta State is rich in abundant water resources which are found within the rural riverine communities and creeks of the delta where the majority are artisan fishermen. The study population is 1,143 teachers of agricultural science in 464 Delta State public secondary schools (Delta State Post-Primary Board, 2021). The study sample size was 229 Head teachers of agricultural science,

representing 20% of the entire population of the study population in Delta State. Asika (1991) posited that 10% - 30% of a study population is reasonable enough for a sample size.

A purposive stratified random sampling technique was adopted based on rural and urban schools in ranging from Strongly Agree (4) to Strongly Disagree (1) was used for data collection. The instrument consists of three sections to solicit information on the prescribed instructional materials that can be utilized in teaching fishery trade subjects in public schools, the alternative materials that can be utilized for the prescribed instructional materials, and the actions that teachers could undertake to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria.

Validity and Reliability of the Research Instrument

The instrument was content validated by three experts, one from the Ministry of Education/NERDC (Delta State, Asaba), two from Delta State University, Abraka, (Department of Vocational Education - Agricultural Education Unit and Department of Guidance & Counselling - Test & Measurement Unit). The coefficient of stability of

favour of schools located in riverine/creeks communities. From these schools, one Head teacher of agricultural science was selected.

Instrumentation

A self-developed 58-item questionnaire from reviewed literature designed on a 4-point scale the validated instrument was obtained using the test-re-test techniques by administering the questionnaire twice within two weeks to 20 public secondary school Agricultural science teachers from Bayelsa State. The obtained scores from the two administrations were calculated using Pearson Product Moment Correlation Coefficient which yielded a 0.87 mean stability coefficient.

Procedure for Data Collection

Two hundred and twenty-nine copies of the questionnaire were administered with the help of four trained research assistants to the Head agricultural science teachers after permission was obtained from the school principal. The same method was used to retrieve the questionnaire back. Two hundred and fifteen out of the 229 copies of the questionnaire were filled and returned, representing a 93.89% rate of return.

Data Analysis

Collected data were analyzed using mean and standard deviations to

answer the research questions, and for each item, any mean score higher than 2.50 was regarded as Agree and anyone less than 2.50 as Disagree.

Research Question 1: What are the prescribed instructional materials that can be utilized in teaching fishery trade subject in public schools in Delta State, Nigeria?

RESULTS

Table 1: Prescribed Instructional Materials that Can be Utilized in Teaching Fishery Trade Subject (n=215)

S/N	Items	Mean	SD	Decision
Fishery Culture Items				
1	Fish Ponds such as nursery ponds, demonstration ponds	3.44	0.69	Agree
2	Machine-equipment such as grinding machines, pelleting machine	3.07	0.82	Agree
3	Thermometer	2.73	0.91	Agree
4	Water pumps	3.25	0.74	Agree
5	Magnifying glass	2.73	0.90	Agree
6	Dissolved Oxygen meter	2.87	0.88	Agree
7	Aerators-accessories	2.53	0.88	Agree
8	pH meter	2.82	0.91	Agree
9	Plastic sieves	3.02	0.88	Agree
10	Compounded feeds	3.13	0.86	Agree
11	Water tanks	3.42	0.65	Agree
Fishing Gears and Craft				
12	Mounting twine	3.03	0.85	Agree
13	Netting materials	3.13	0.81	Agree
14	Model fish traps such as basket trap	3.15	0.80	Agree
15	Hooks and line	3.02	0.92	Agree
16	Fishing nets such as gillnet nets, cast nets, seine net	3.05	0.83	Agree
Fish Processing Equipment				

17	Dryers such as ovens, fish drying racks, ovens, kilns	2.87	0.90	Agree
18	Gutting knives-measuring boards	3.08	0.81	Agree
19	Salting trays-basins	2.95	0.79	Agree
20	Fish storage boxes such as fish boxes	2.74	0.89	Agree
21	Weighing balances	2.87	0.91	Agree
22	Treatment drugs	3.01	0.85	Agree

Source: Field Work (2023)

Table 1 showed the mean scores of the responses on the prescribed instructional materials that can be utilized in teaching fishery trade subject in public schools ranging from 2.53 – 3.44. These values are higher than the cut-off mark of 2.50 which signifies agreement that all the items are the prescribed instructional materials that can be utilized in teaching fishery trade subject in public schools, particularly items like fish ponds, water tanks, water pumps,

model fish traps among others. The values of standard deviations ranged from 0.65 – 0.92 indicating that the responses of the Head teachers of agricultural science are not far from the means but are close to one another in their responses.

Research Question 2: What are the alternative materials that can be utilized for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria?

Table 2: Alternative Materials that can be Utilized for the Prescribed Instructional Materials in Teaching Fishery Trade Subject (n=215)

S/N	Items	Mean	SD	Decision	
	Prescribed Alternative Materials				
	Materials				
1	Earthen ponds	Tarpaulins-drums-plastic tank	3.33	0.70	Agree
2	Grinding machines	Grinding stones-mortar and pestle	2.69	0.94	Agree
3	Thermometer	Hand-elbow feel	2.56	1.01	Agree
4	Water pumps	Hand pumps	2.81	0.86	Agree

5	Magnifying glass	Hand lens	2.73	0.70	Agree
6	Dissolved Oxygen meter	Saliva forming test	2.96	0.83	Agree
7	Aerators-accessories	Wood-stick stirrer	1.82	0.76	Disagree
8	pH meter	Litmus paper	2.78	0.78	Agree
9	Microscopes	Paper microscopes-fold scopes	2.72	0.83	Agree
10	Plastic sieves	Wooden sieves	2.83	0.82	Agree
11	Compounded feeds	Maggots-animal intestine-insects-poultry droppings	3.11	0.91	Agree
12	Water tanks	Well-drums-buckets	3.44	0.63	Agree
13	Netting Materials	Bamboo materials	2.38	0.84	Disagree
14	Fish traps	Basket trap-cage trap	2.98	0.74	Agree
15	Fishing nets	Drag net-raffia netting	2.30	0.85	Disagree
16	Oven fish dryers	Smoke-sun drying	3.06	0.76	Agree
17	Gutting knives	Kitchen knife	3.08	0.75	Agree
18	Measuring boards	Wooden board	2.96	0.84	Agree
19	Salting trays	Bamboo basket trays	2.97	0.89	Agree
20	Fish storage box	Cantons-wooden boxes-baskets	2.98	0.91	Agree
21	Organic fertilizer	Poultry droppings	3.29	0.70	Agree
22	Treatment drugs	Salt-tetracycline-bitter leaf	3.09	0.82	Agree

Source: Field Work (2023)

Table 2 presented the mean scores of the responses on the alternative materials that can be utilized for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria showing that 20 items had a mean score range of 2.56 - 3.44. These

values are higher than the cut-off mark of 2.50 which signifies agreement that items such as well, drums, buckets for water tanks, poultry droppings for organic fertilizers; maggots, animal intestine, insects, and poultry droppings for compounded feeds; salt, tetracycline, bitter leaf for treatment drugs among

others are alternative materials that can be used for the prescribed instructional materials in teaching fishery trade subject in public schools. The standard deviations ranged from 0.63 – 1.01 showing that the Head teachers of agricultural science responses do not deviate widely from the means but are close to one another in the opinion.

Research Question 3: What are the actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria?

Table 3: Actions that could be Undertaken to Utilize Alternative Materials for the Prescribed Instructional Materials in Teaching Fishery Trade Subject (n=215).

S/N	Items	Mean	SD	Decision
1	Have current knowledge skills in fish farming	3.51	0.58	Agree
2	Organize lessons for instruction decisively	2.78	0.94	Agree
3	maintain physical-psychological fitness to use alternative materials	2.87	0.76	Agree
4	Identify alternative materials for prescribed instructional materials	3.32	0.73	Agree
5	Source available alternative materials locally	2.98	0.74	Agree
6	Examine the alternative materials for achieving the lesson objective	3.05	0.81	Agree
7	Adapt the alternative materials for instruction	3.15	0.77	Agree
8	Prepare the environment for instruction	2.83	0.97	Agree
9	Incorporate the alternative materials for instruction	2.89	0.98	Agree
10	Make the alternative materials observable for gainful experience	3.02	0.77	Agree
11	Use the improvised instructional materials for instruction	2.93	0.85	Agree
12	Be audible-visible to students	2.68	0.85	Agree
13	Give room for replication of the observed experience	2.93	0.78	Agree
14	Assess learning outcome after instruction	2.61	0.85	Agree

Source: Field Work (2023)

Table 3 showed the mean scores of the respondents on the actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools in Delta State, Nigeria ranging from 2.61 – 3.51. These values are above the cut-off mark of 2.50 which signifies agreement that all the items are actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools, particularly items such as having current knowledge skills in fish farming, identifying the alternative materials for prescribed instructional materials, adapting the alternative materials for instruction among others. The standard deviations ranged from 0.58 – 0.98 showing that the Head teachers of agricultural science responses are not far apart from the means but are close to one in their opinion.

Discussion

The result in Table one identified that fish ponds, water tanks, water pumps, model fish traps, netting materials, and compounded feeds among others are the prescribed instructional materials that can be utilized in teaching fishery trade subject in public schools. The finding of this

study is in line with Ogwu et al. (2021), Agbidi and Ikeoji (2018), and Alkali et al. (2016) that instructional materials are needed for instructing students to bridge skill gaps. Ikeoji (2017) added that an adequate supply of instructional materials creates the opportunity for imitation of the workplace environment. This finding implies that hands-on experience is gained for future application, as students are familiar with the usage of the fishery industry materials and tools.

The result in Table two identified that the alternative materials that can be used for the prescribed instructional materials in teaching fishery trade subject in public schools include well, drums, buckets for water tanks; poultry droppings for organic fertilizers; maggots, animal intestines, insects, and poultry droppings for compounded feeds; salt, tetracycline, bitter leaf for treatment drugs among others. This result agrees with Agbidi et al. (2022) that improvised materials can be utilized in the absence or inadequacies of the prescribed ones. Although Obidike (2021) reported that prescribed instructional materials are not always available, Agbidi et al. (2022) in consonance with Ogbe and Omenka, (2017) emphasized that this inadequacy can be corrected by using

another material similar to the non-available one for instruction. Besides, growing attention in recent times is focused on the consideration of suitable materials for the fishery

The result in Table three showed that having current knowledge skills in fish farming, identifying the alternative materials for prescribed instructional materials, adapting the alternative materials for instruction, examining the alternative materials for achieving lesson objectives among others are the actions that could be undertaken to utilize alternative materials for the prescribed instructional materials in teaching fishery trade subject in public schools. This result confirms

CONCLUSION

Prescribed instructional materials such as fish ponds, water tanks, water pumps, model fish traps among others can be utilized in teaching fishery trade subject in public schools. However, where these materials are not available for instruction, alternative materials such as well, drums, buckets for water tanks; poultry droppings for organic fertilizers; maggots, animal intestines, insects, and poultry droppings for compounded feeds among others can be used. Therefore, irrespective of the fishery materials or tools used for instruction, the use of

industry (Alejandro et al., 2022). This implies that a sustainable workforce is dependent on the use of suitable materials for the development of the industry.

that experiential learning authenticates first-hand experience when actions are taken to utilize alternative instructional materials locally sourced (Onifade & Owoade, 2020; Ikeoji, 2017). The implication of this finding to a sustainable workforce is that the availability of fishery resources when properly utilized stimulates students' interest and consequently improves their learning outcome.

fishery instructional materials during teaching makes learning stimulating and abstract knowledge becomes concretized as learning experiences are observed and replicated in the future.

RECOMMENDATIONS

Based on the findings in this study, the study recommended the following:

- i. NERDC through the Federal and State Ministry of Education should ensure that the prescribed instructional materials designed for teaching the fishery trade subject be

- provided for use to all public schools irrespective of their location;
- ii. Likewise, where these approved materials are not available, the Head teachers of agricultural science should fashion a means of sourcing an alternative locally to stimulate the students to choose the fishery trade subject; and
 - iii. The Federal Government of Nigeria should encourage the fishery industry by making favourable policies that would stimulate young people to engage in the industry, thereby sustaining the workforce for the future.
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IMPACT OF SCIENTIFIC CREATIVE THINKING SKILLS ON ACADEMIC ACHIEVEMENT AMONG BIOLOGY SECONDARY SCHOOL STUDENTS IN JIGAWA STATE, NIGERIA

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ABSTRACT

This study investigated the difference in Biology achievement of students with Low, Medium and High Scientific Creative Thinking Skills in Secondary Schools in Jigawa State. An ex -post-facto research design was adopted in the study. The accessible population comprised of 3,045 Senior Science Secondary School Students in Jigawa State, from which 346 students were selected as sample using a multi-stage sampling technique. Scientific Creative Thinking and Biology Achievement Test were used as instruments for data collection. Data were analysed using One-Way Analysis of Variance (ANOVA) and Turkey post-hoc statistics. The results revealed that there was a significant difference in Biology achievement of students with Low, Medium and High Scientific Creative Thinking Skills among secondary school students in Jigawa State. Also, that the level of Scientific Creative Thinking Skills possessed by students positively influenced academic achievement in Biology. The study concluded that the Scientific Creative Thinking Skills improved the level of academic achievement in Biology from low to medium and high levels. It was recommended that Science Teachers should be encouraged to use Scientific Creative Thinking Skills in teaching Biology in secondary school throughout the country.

Keywords: Scientific Creative Thinking Skills, Academic achievement, Biology

INTRODUCTION

Biology Education as a branch of Science Education comprises the application of Scientific Creative Thinking Skills and methods to bring

about meaningful learning. It involves what is life, what life needs to survive and how life forms interrelate with each other. Biology,

therefore, plays a significant role in how humans interact with their environment's biotic and abiotic components (Weber, 2016). Biology is a practical subject, which equips students with concepts and creative skills useful in solving the day-to-day problems of life. Biology is central to many sciences-related courses such as Medicine, Pharmacy, Agriculture, Nursing, Biochemistry, and so on. It is clear that no student aiming to study these disciplines can do without Biology. The study of Biology as a science subject in senior secondary schools requires the exposure of learners to both theoretical and practical aspects of learning experiences (Wicaksono, 2017).

In recent times, there have been those who still see Biology as a subject that needs more memorization. Lince (2016), observed that learning in biology is more into the textbook-based method. This perception should be discouraged because biology is one of the sciences whose characteristics have contributed to the development of technology. The objective of biology learning is associated with real-world phenomena and life processes. Learning Biology is made up of four elements namely scientific processes, scientific products/knowledge, scientific attitudes, creativity, and technology Wicaksono (2017). To

make students understand both the scientific process and product, a need arises for students to develop scientific creative thinking skills.

Scientific Creative Thinking Skills are defined as "the cognitive skill of offering a solution to solve a problem or doing a useful or novel activity from ordinary"(Hwang et al., 2016). Creative thinking can benefit the way in which students learn by supporting the interpretation of experiences, actions and events in novel and personally meaningful ways (Beghetto & Kaufman, 2017).

Scientific Creativity is necessary for science, technology, and art that encompass everyday life (Runco, 2017). Despite the importance of scientific creativity, educational systems, at all levels, are still lacking in sufficient development of their skills they are only concerned with memorizing information without understanding. One of the major problems in education is a low level of academic achievement and a low level of student's creative thinking skills (Yumusak, 2016). In order to improve students' academic achievement at school, new forms of learning that engage with the creative energies and recognise the creative potential of all students need to be developed. Such development may particularly help those students who show little interest in school and

guide the students to express their ideas and achieve their potential (Hwang, 2015). Therefore, the thinking skill should have been developed at an early age, so that there will be no developmental obstacles. Tan (2015) in his opinion posited that scientific creative thinking in Biology is a combination of logical thinking and divergent thinking which is derived from intuition, consciously, which takes into account flexibility, fluency, novelty and originality.

Scientific Creative Thinking has a significant influence on Biology Practical at the senior secondary school level where students are required to be evaluated on practical activities as one aspect of the nine papers written in the final examination and also test the intellectual development; cognitive, affective and psychomotor skills (Syaiful et al., (2020). The role of biology for future life is to prepare students to be creative, and competitive scientifically. Moreover, students should be able to solve problems and make decisions properly, hence, they can survive in a global era (William, (2020). Therefore, biology learning requires a good understanding of biological concepts that give emphasis to scientific creative thinking skills. Generally, students 'scientific

creative thinking skills in Biology can be influenced by other factors such as the student's academic achievement. Academic Achievement means the extent to which teaching and learning have resulted in mastering. It is the outcome of the general learning process (Suman (2020). Academic achievement refers to the knowledge attained and skills developed by the learner in school subjects. So, academic achievement in biology means the achievement of students in biology subjects in relation to their knowledge, skills and degree of competence in school tasks usually measured by standardized tests and expressed in grades on student performance.

Creative thinking skills come to be part of the learning process to help students to improve high academic performances.

Ufot (2015) conducted a study on the influence of science students' creative performance in the laboratory. The results admitted that students with creative ability performed better in physics and biology than those with non-creative ability. In the same spirit, the above study is in line with that of William (2020) who concludes that students' creative thinking significantly influences their academic achievement. In his statement, the author maintained that students with

high scientific creative thinking abilities performed better than those with medium or low scientific creative thinking abilities.

Several studies such as Fasakin (2015) and Udochukwu (2018) were conducted to determine the effect of various teaching methods on students' academic achievement in biology. The results showed consistent poor academic achievement in all areas. Consequently, Suman (2020) attributed this to poor reasoning, and poor manipulative skills among others in biology subjects. According to William (2020), the absence of Scientific Creative Thinking Skills gives rise to poor performance in Biology.

Based on the aforementioned, this study therefore investigated the impact of scientific creative thinking skills on academic's achievement among Biology secondary school students in Jigawa State. It is believed that the findings from this study will enable biology teachers to effectively use scientific creative thinking skills in the teaching and learning of biology. The findings will also provide evidence that could be used to encourage as well as support biology teachers in senior secondary schools thereby, stimulating them to get actively involved in the

continuous improvement of classroom teaching as well as students' academic achievement.

Objectives of the Study

The main objective of this study is to investigate the Impact of Scientific Creative Thinking Skills on Academic's Achievement among Biology Secondary School Students in Jigawa State. The specific objective of the study was to:

1. Investigate whether Scientific Creative Thinking Skills impact academic achievement among Senior Secondary School Biology students in Jigawa State.

Research Question

1. What level of impact of Scientific Creative Thinking Skills exists on academic achievement among Senior Secondary School Biology students in Jigawa state?

Research Hypothesis

1. There is no significant difference in academics achievement of students with Low, Medium and High Scientific Creative Thinking Skills.

METHODOLOGY

Research Design

An ex-post-facto research design was adopted for the study

Participants

The accessible population of the study comprises of all the 15 Senior Science Secondary School Students in Jigawa State. With the total population of 3,045 from which 346 students were selected as a sample using research advisor (2006).

Instrumentation

Scientific Creative Thinking and Biology Achievement Test were used as data collection instruments. Scientific Creative Thinking Skills Test was adapted from Saptura and Aminatun (2017) who design their instrument based on the design of Hu and Adey (2002). The test consists of seven (7) semi open-ended questions on biology content material based on fluency, flexibility and originality. Biology Achievement Test consists of twenty (20) multiple choice questions with options A-D adopted

from West African Examination Council past questions.

Validity and Reliability of the Research Instruments

The instruments were validated using face and content validity procedure’s 0.83 validity coefficient was obtained using FCVI inter-rater. Reliability coefficient was obtained after pilot testing using a test re-test reliability with an index of 0.926.

Procedure for Data Collection

The procedure for data collection is the test of Scientific thinking skills, and the Biology Achievement Test, was administered to the sampled students concurrently; the scripts were collected and marked. The scores of each test were scored and recorded.

Procedure for Data Analysis

Data collected were analysed using One-Way Analysis of Variance (ANOVA) statistics.

RESULTS

Research Question 1: What is the impact of Scientific Creative thinking Skills on Academic Achievement among Senior Secondary School Biology Students in Jigawa state?

Table 1: Mean and Standard Deviation of Academic Achievement Test Scores of Students

SCTS	N	Mean	St.D
High SCTS	117	74.35	15.22

Medium SCTS	123	62.95	8.65
Low SCTS	106	47.16	8.09
Total	346	61.97	15.62

Descriptive statistics in Table 1. showed a mean scores and standard deviation of Academics Achievement for Students with High, Medium and Low Scientific Creative Thinking Skills. The result revealed a mean value of 74.35 with a standard deviation of 15.22 for the Students with High Scientific Creative Thinking Skills. The mean score of 62.95 with a standard deviation of 8.65 for students with medium Scientific Creative Thinking Skills and the mean score of 47.16 with a standard deviation of 8.09 for Students with Low Scientific Creative Thinking Skills. Results showed that the mean gain for students with High Scientific

Creative Thinking Skills was higher than that of the students with Medium and Low Scientific Creative Thinking Skills. This result shows that Scientific Creative Thinking Skills improved students' academic achievement in Biology. This is an indication that Scientific Creative Thinking Skills have some impact on student's academic achievement in Biology.

Hypothesis One: There is no significant difference in Academics Achievement of students with Low, Medium and High Scientific Creative Thinking Skills among Biology Secondary School Students in Jigawa State.

Table 2: Summary of Homogeneity of the Variance

Levene statistics	Df1	Df2	Sig
10.897	.2	.343	.000

From the above table, the p-value is .000 which is less than the level of significant 0.05. this indicates that the homogeneity of the variance is rejected. This means that there is a

significant difference in the Academics Achievement of students with High, Medium and Low Scientific Creative thinking Skills.

Table 3: Difference in Biology Achievement of Low, Medium and High student in Scientific Creative Thinking Skills in Secondary Schools in Jigawa State.

	Sum of squares	Df	Mean square	F	Sig
Between groups	41272.39	2	20636.19	164.87	.000
	3		7	7	
Within group	42930.37	343	125.161		
	3				
Total	84202.76	345			
	6				

Table 3. Showed that the p-value is lower than the alpha level of .05, so the null hypothesis was rejected and the alternative hypothesis was accepted. This indicated that there

was a significant difference in Biology Achievement scores of students with High, Medium and Low Scientific Creative Thinking Skills.

Table 4: Post-Hoc Test Group Mean Difference in Biology Achievement scores of Students with High, Medium and Low Scientific Creative Thinking Skills

(I) SCTS	(J)SCT S	Mean Differen t (I-J)	Sig
High SCTS	Medium SCTS	11.39	.000
	Low SCTS	27.18	.000
Medium SCTS	High SCTS	-11.39	.000
	Low SCTS	15.78	.000
Low SCTS	High SCTS	-27.18	.000
	Medium SCTS	-15.78	.000

Table 4 showed a multiple comparison, the results for the Tukey HSD shows that High SCTS and Medium SCTS at 11.39 mean different has a p-value of .000, which is less than the alpha level of .05 is statistically significant. And High SCTS and Low SCTS also has a 27.18 mean different and p-value of .000 is less than the alpha level of .05. This indicate that is statistically significant. Also, Medium SCTS and High SCTS has a mean difference of -11.39 and p-value of .000 is less than the alpha level of .05 is statistically significant. Also, Medium SCTS and Low SCTS has a mean difference of 15.78 and p-value of .000 is less than the alpha level .05. thus, is statistically

significant. Low SCTS and High SCTS has a mean difference of -27.18 and p-value of .000 which is less than the alpha level of .05 this show that is statistically significant. Also, Low SCTS and Medium SCTS has a mean difference of -15.78 and p-value is .000 is less than the alpha level of .05. This indicate that is statistically significant. This showed that the mean for all of the groups is different from each other. Therefore, the null hypothesis is rejected. And conclude that there is significant difference in Biology Achievement of Biology students with High, Medium and Low Scientific Creative Thinking Skills in Secondary Schools in Jigawa State.

Figure 1: Mean Plot for Biology Achievement Test

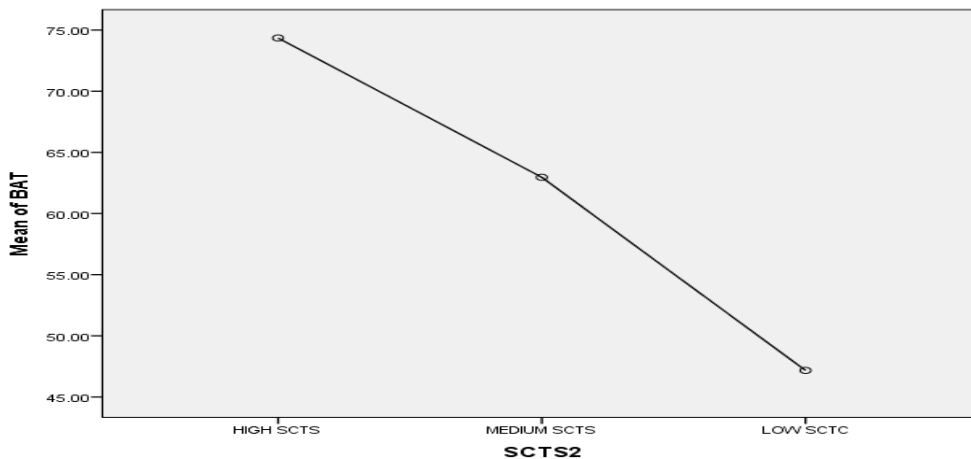


Figure 1 is a visual representation of the data previously presented in Table 1. which shows students with high Scientific Creative Thinking Skills scored higher on the Biology Achievement Test, students with medium Scientific Creative Thinking Skills scored average on the Biology Achievement Test and students with low Scientific Creative Thinking Skills score lower on the Biology Achievement Test. The null hypothesis states that there is no significant difference in Academics Achievement between students with High, Medium and Low Scientific Creative Thinking Skills. There is enough evidence to reject the null hypothesis.

Discussion

The main aims of this study were to determine the impact of Scientific Creative Thinking on Academics Achievement, among Biology Secondary Schools Students in Jigawa State, Nigeria. The result as analysed and computed revealed the fact that the hypothesis formulated was rejected. Is supported by many other studies conducted around the world and at the same time contradicts a few other results.

The result in Table 1. indicates that the difference in mean academic achievement scores of students with high, medium and low Scientific Creative Thinking Skills was

significant. The null hypothesis (H01) which stated that there is no significant difference in the academic achievement of students with high, medium and low Scientific Creative Thinking Skills is rejected, implying that there was a significant difference in academics achievement scores of students with high, medium and low Scientific Creative Thinking Skills. The results of this study corroborated a study conducted by Ali and Aliyu (2020) whose findings also indicate that the null hypotheses were rejected while alternative hypotheses were upheld. It was concluded that academic achievement is improving through the development of favourable scientific creativity in science learning among secondary school students, there is an urgent need to make learning experiences thought-provoking through creative teaching. In addition, the research findings on the effect of creative teaching on science students' academic achievement are the same as the finding of William (2020), who concluded that students' creativity significantly influences their academic performances in science subjects. It also confirms the submission of the study conducted in Lagos State, Nigeria by Chukwuyenum (2016) whose research found that Scientific Creative Thinking Skills was also an effective means of enhancing

students' understanding of Biology concepts. It is therefore recommended that in teaching Biology in secondary schools, scientific creative thinking skills should be infused into the curriculum of teacher's education so as to improve students' performance in Biology.

As in Radaa and Reda (2019), scientific creative thinking has a positive effect on the development of creativity and academic achievement. *This goes the same way with* Sarwanto (2022), as their findings revealed that creative thinking is an alternative for improving student academic performance. The findings also corroborate those of Kaçan. & Şahin. (2018) that students with high scientific creativity showed significant academic achievement, as reflected in grade-point high in secondary school.

On the contrary, the findings of this study contradict those of Handayani and Agustini (2021) who reported that the student's creative thinking skills were still low at all indicators of creative thinking skills and included in an uncreative category, especially in detailing and producing innovations as well as troubleshooting problems using various approaches. Ramos and Villamor (2017), found that there is a

significant but weak negative relationship between students' scientific creative thinking and their academic achievement. Nurhamidaha and Dwiastuti (2018) are even more contradicting, as their results showed that in the school of high academic rank, 89,74% of students had low creative thinking skills and 10,25% of them are in the moderate category. In the medium academic rank school, 85,71% of students had low creative thinking skills and 14,29% of them are moderate. In schools of low academic rank, 8% of students had very low creative thinking skills, 88% are low, and 4% are moderate. Based on the finding of the research, the creative thinking skills of students in the three school was categorised as low level.

CONCLUSION

The study concluded that Scientific Creative Thinking Skills improve the level of Academic Achievement in Biology from low to medium to high levels. Also, that the level of Scientific Creative Thinking Skills possessed by the students positively influences academic achievement in biology.

RECOMMENDATIONS

1. Science Teachers should be encouraged to use scientific creative thinking skills in teaching secondary school

students. As it improves students' academic achievement and also encourages the spirit of creative thinking in the learners to apply their skills and knowledge to solve day-to-day problems in the dynamic world.

2. Government, in conjunction with other professional bodies, should sponsor further research on the use of scientific creative thinking skills.

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IMPACT OF TEACHER SELF-EFFICACY ON BIOLOGY ACHIEVEMENT AMONG SENIOR SECONDARY SCHOOL STUDENTS IN JIGAWA STATE, NIGERIA

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ABSTRACT

This study determined level of teachers' self-efficacy on the biology academic achievement of senior secondary school students in Jigawa state. The ex-post-facto research designed was employed in the study. The population consisted of 3,045 biology students. The sample comprised of 443 biology students and 15 biology teachers. The data collected were analyzed using simple percentages, mean and standard deviations to answer research questions and One- Way Analysis of Variance (ANOVA) and Turkey post-hoc statistics were used to test the hypothesis. The findings revealed that there was a significant difference in the mean achievement scores of students taught biology by teachers with low, moderate and high self-efficacy. The study concluded that there was a significant difference in the mean achievement scores of students taught biology by teacher' with low, moderate and high self-efficacy. It was recommended that the state Ministry of Education, Science and Technology should incorporate the use of the teacher self-efficacy questionnaire as part of the recruitment interview process to get an idea of how prepared the prospective teachers are for the challenges at the secondary school level.

Keywords: Biology, Achievement, Self- efficacy, Student, Teacher

INTRODUCTION

Biology as a branch of science and a prerequisite subject for many fields of learning, contributes immensely to the technological growth of the nation. The study of Biology in Senior Secondary School can equip students with useful concepts, principles and theories that will enable them to face challenges (Abiodun & Victoria, 2023). The

importance accorded Biology in the school curriculum from senior secondary school level to tertiary education reflects accurately the vital role played by biology in contemporary society. The importance of the subject is not restricted to the development of the individual alone, but for the advancement of the social, economic

and political goals of countries all over the world. Furthermore, Biology provides contents in the training of students who want to study medicine, nursing, pharmacy, biochemistry, microbiology forestry, fisheries and so on. Requirement for a credit pass and above for senior secondary students in biology is necessary for admission into tertiary institution for science and science-related discipline (Duniya, 2016).

Despite the importance and applications of biology in many fields of learning, the performance of students in biology has been a source of concern to all stakeholders – the parents, teachers, students, science educators, researcher, government and general public. The performance of students in biology senior secondary school examinations has remained consistently poor. In recent times, the Senior Secondary Certificate Examination (SSCE) conducted by West African Examination Council (WAEC) revealed that a very few numbers of students performed better (WAEC, 2020). In Jigawa state which is the area of this study the story remained the same. Statistical evidence confirmed that, the percentage of students that passed Biology at credit level is consistently less than 40 % for the past 3 years between 2017 to 2019 (Jigawa State Education Resource

Department, 2020). Several studies were conducted in and outside the shores of this country to investigate the causes of students' poor academic performance in science particularly Biology and the most recurring factor in all the reports was lack of teacher self-efficacy.

In support of the reports, Usak et al, (2022) stated that one of the important factors affecting the quality of education is the quality of an individual teacher in the classroom. Teachers are vital for success or failure of an educational system; they implement the policies of an education system on the ground as well as designing, planning, and implementing a lesson. Educators are continuing to search for ways to improve student academic achievement and one way of doing so, is by enhancing the abilities of those who provide direct instruction to students. The relationship between teacher and student consists of numerous dynamics and interactions. Teachers must be prepared to address the diverse needs of their students. In the same vein, studies have shown that teachers' expectations of their students can significantly affect their academic achievement (Nunez, 2019). However, the more competent the teachers are, the more effective is the educational system. Teacher competency is based on self-efficacy

and lack of self-efficacy can cause many psychological problems such as low confidence level and low self-esteem (Yasin et al, 2022).

Self-efficacy is viewed as conviction of an individual to meet the expected behavior in achieving a goal successfully (Hartadiyati & Sutikno, 2015). Teacher self-efficacy is also described as self-belief of teachers on their capabilities and trust they have on their methodologies to accomplish the tasks. According to Bandura (1997), four sources influence the level of self-efficacy: mastery experiences, vicarious learning, social persuasion as well as physiological and affective states. Mastery experiences are the outcomes of the performance, successful or unsuccessful. These experiences are considered the most powerful influence on a person's level of self-efficacy. Vicarious experiences occur when a person sees someone with perceived similar ability performing the task. Social persuasions occur when the task is performed with encouragement from someone who is more knowledgeable. Lastly, physiological and affective states are the physical and mental processes that may interfere with the performance of the task, such as exhaustion or anxiety. The above sources determine the level of self-

efficacy one has; in turn, self-efficacy affects people's lives in several areas. Hence, self-efficacy has been studied in fields as diverse as life-course development in education, health, psychopathology, athletics, business, and international affairs (Bandura, 2018). In academic settings, it has been investigated through studies of teacher efficacy and student self-efficacy.

Individuals with positive self-efficacy view themselves as competent. Those with high self-efficacy envision themselves as capable of great feats and are able to change their environment, improve and cause changes in others. Individuals that suffer from a low sense of self-efficacy on the other hand, view themselves as unable or unlikely to influence their environment, others or themselves (Conary, 2019). In addition, highly efficacious teachers are better organized, possess superior instruction skills, provide feedback to struggling students, and keep students on task (Wolff et al, 2014). Teachers with high self-efficacy are also more committed to their students and the profession. However, one key to the academic success of students is teachers with a high sense of efficacy, teachers who believe in their abilities to provide the students with the necessary tools to achieve success.

Consequently, many of the teachers we have in secondary schools today are such with low self-efficacy, and that is why we have many topics in biology that were taught not to the students until about writing the final examination (Kola & Sunday 2015). Moreover, the lower level of students' achievement often recorded in some secondary school subjects today could be traced to low teachers' self-efficacy and teachers' self-efficacy had proved to be related powerfully to meaningful educational outcomes such as student academic performance (Patra & Guha, 2017). Hence, this study investigated impacts of teacher self- efficacy on biology students' academic achievement in senior secondary schools in Jigawa state.

Recently, Jigawa state government suspended written of West African Secondary School Certificate Examinations (WASSCE) across the government owned senior secondary schools due to poor students' academic achievement (MOESATJS, 2020). In the same vein, the growing rate of students' failures in Join Admission and Matriculation Board Examination (JAMB) which is the other side of coin and prerequisite for admission into Universities, College of Education and others institution in Nigeria deprived many students' admission. In support of the above

statement, a comparative students' performance in Join Admission and Matriculation Board (JAMB) between 2021 and some previous years revealed that, the percentage of students that scored 200 and above is decreasing at alarming rate; 2018- 25.81%, 2019- 22.97%, 2020- 20.76% and 2021- 12.84% (Oloyede, 2021). These reasons have injected worry into the minds of all those who have concern for Nigerian youths. However, in a state or country where a greater number of youths are deprived for education due to examination failure or dropouts, social vices such as armed robbery, raping, bandit, kidnapping and others will be on the increase. Researchers have consistently shown that the major cause of students' poor academic achievement in science particularly Biology and the most recurring factor in all the reports was lack of teacher self-efficacy, hence this study.

Objectives of the Study

The objectives of this study are to:

1. Determine the level of biology teacher self-efficacy among senior secondary school teachers in Jigawa State.
2. Investigate the impact of biology teachers' self-efficacy on the academic achievement of senior

secondary school students in Jigawa state.

Research Questions

Based on the objectives of the study, the following research questions were posed:

1. What are the levels of self-efficacy among senior secondary school biology teachers in Jigawa State?
2. What is the difference in the mean achievement scores among students taught biology by teacher with low, moderate and high self-efficacy?

Research Hypothesis

This hypothesis was formulated tested at 0.05 level of significance There is no significant difference in the mean achievement scores among students taught biology by teacher' with low, moderate and high self-efficacy.

METHODOLOGY

Research Design

Ex- post-facto research design was used for the purpose of this research to gather the data needed. Since, the researcher has no control over the variables of interest and cannot be

manipulated, because they already exist and cannot be changed.

Participants

The participants of this study include all Science and Technical Senior Secondary School II students in Jigawa state and their corresponding Biology teachers during the course of data collection, with a total of three thousand and forty-five students and fifteen biology teachers. Cochran (1977) sample size formula was used to draw the sample of 443 students and 15 biology teachers.

Instrumentation

Two instruments were used for the purpose of data collection namely; Teacher Self- efficacy Questionnaire (TSQ) and Biology Achievement Test (BAT). TSQ was adapted from Bandura while BAT was developed by the researcher using West African Examination Council (WAEC) past questions paper between 2018-2022.

Validation and Reliability of the Research Instruments

The two instruments were validated by six experts in the area of science education biology, educational psychology, and test and measurement. The reliability of instruments was found to be 0.82 for the Teacher Self- efficacy Questionnaire (TSQ) and 0.88 for Biology Achievement Test (BAT)

using Cronbach alpha and Pearson’s Product-Moment Correlation (PPMC) respectively.

Procedure for Data Collection

A letter of permission was collected from the state Ministry of Education to enable the researcher to have access to the fieldwork of research at the senior secondary schools sampled for data collection. The teacher Self-efficacy Questionnaire was administrated to the sampled biology teacher while Biology Achievement Test was administrated to the sampled students. The scripts were collected and marked for each teacher and their corresponding students. Teacher Self-efficacy Questionnaire (TSQ) was used for identifying the level of secondary school teachers’ efficacy for teaching biology which can be classified into three groups; High

teacher self-efficacy, moderate teacher self-efficacy, and low teacher self-efficacy. The achievement scores of students under the three categories of teacher self-efficacy were later compared to find out the difference.

Data Analysis

The data collected for the study were analyzed using descriptive statistics, simple percentages, mean and standard deviation to answer research questions, and inferential statistics using ANOVA to test the stated null hypothesis at a 0.05 level of significance.

RESULTS

Research Question 1: What are the levels of self-efficacy among senior secondary school biology teachers in Jigawa State?

Table 1: Levels of Biology Teachers’ Self-efficacy in Jigawa State

Level of teachers’ self- efficacy	Number	percentage %
High Teacher Self- Efficacy	5	33.3 %
Moderate Teacher Self- Efficacy	3	20.0%
Low Teacher Self- Efficacy	7	46.7 %
Total	15	100 %

Table 2 showed that, 33.3 % of the biology teachers in Jigawa state have high self- efficacy of teaching biology, 20.0 % have moderate teacher self- teacher and 46.7% low teacher self- efficacy. The results revealed higher percentage of biology

teachers with low level of teacher self- efficacy of 46.7%.

Research Question 2: What is the difference in the mean achievement scores among students taught biology by teachers with low, moderate and high self-efficacy?

Table 2: Mean and Standard Deviation of Biology Students' Academic Achievement Taught by Teachers with Low, Moderate and High Self-Efficacy

Level of Teachers' Self- Efficacy	N	Mean	SD
High Teacher Self- Efficacy	159	61.04	16.428
Moderate Teacher Self- Efficacy	172	53.19	16.566
Low Teacher Self- Efficacy	112	41.67	12.629

The result in Table 2 showed that the mean achievement scores of students with teacher of high self- efficacy is higher 61.04, follow by teacher with moderate self- efficacy which is 53.19 and then teacher of low self- efficacy is 41.67. Based on this result, by implication, the higher the level of teacher self- efficacy toward teaching biology, the higher will be the student academic achievement. To test whether the difference is significant or not, null hypothesis was

formulated and tested using ANOVA statistic.

Hypothesis One: There is no significant difference in the mean achievement scores among students taught biology by teacher' with low, moderate and high self- efficacy. To test this hypothesis, the mean academic achievement scores of students taught biology by teacher' with low, moderate and high self- efficacy were subjected to ANOVA statistic and summary of analysis are shown on Table 3.

Table 3: Difference in Students' Academic Achievement Taught Biology by Teacher with Low, Moderate and High Self- Efficacy.

Sources	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24668.689	2	12334.344	50.592	.000
Within Groups	107272.137	440	243.800		
Total	131940.826	442			

Table 3 showed F -test between the academic achievements mean scores of students that taught biology by teacher' with low, moderate and high self- efficacy. The result showed that p- value of 0.000 is less than 0.05 level of significant, which indicated a

significant difference. Therefore, the difference between students taught biology by teacher' with low, moderate and high self- efficacy is significant. Hence the stated null hypothesis is thereby rejected, which means there is significant difference

in the mean achievement scores among students taught biology by

teacher' with low, moderate and high self- efficacy.

Table 4: Post Hoc Analysis on Students' Academic Achievement Taught Biology by Teachers with Low, Moderate and High Self- Efficacy

(I) Teacher Efficacy	(J) Teacher Efficacy	Mean difference (I-J)	Sig
High efficacy	Moderate efficacy	9.75163	0.000
	Low efficacy	18.15907	0.000
Moderate efficacy	High efficacy	-9.75163	0.000
	Low efficacy	8.40744	0.000
Low efficacy	High efficacy	-18.15907	0.000
	Moderate efficacy	-8.40744	0.000

After the F-statistic indicated overall significance in the scores, post hoc calculations identified exactly where the differences lie. Table 4 indicated significant differences in the achievement scores of students who have teachers with the High self-efficacy group with (moderate and low), Moderate self-efficacy group with (high and low) and low self-efficacy group with (high and moderate). The mean difference is significant at 0.05.

Discussion

The study sought to find out the Impact of Teacher Self- Efficacy on Biology Academic Achievement among Senior Secondary School Student in Jigawa State. Two research questions were asked and one null hypothesis was tested. The results of

data analysis of the research questions and null hypothesis are hereby discussed.

The results of analysis presented in table 1 showed higher level of biology teachers with low self-efficacy 46.7% which is higher than moderate and high teacher self-efficacy categories. This finding is in agreement with that of Hartelt et al., (2022) who investigate Biology teacher self- efficacy and ability to diagnose and deal with student conception. The result of their study indicated high level of low teacher self- efficacy among inexperience biology teachers. In contrary finding from Orakci et al., (2023) investigate a mix method study of teacher self-efficacy and their ability to improve self- efficacy belief during teaching

and their finding revealed high level of teacher self- efficacy. In the vein, Ahmed, Lawal and Ahmed (2021) result also indicates a higher moderate level of teacher self- efficacy in biology. In the same vein, Tzovla and Kedraka (2020) finding also indicated higher moderate level of teacher self- efficacy in biology.

The results of analysis presented in table 2 and 3 showed significant difference in the mean achievement scores between students taught biology by teacher' with low, moderate and high self- efficacy. The findings of this study substantiated with Iranian study conducted by Hassan and Akbar (2019) whose findings also indicate that the higher the level of teacher self- efficacy, the higher the students' academic achievement. Their results also compared students' academic achievement based on teacher self- efficacy which revealed that, students who had teachers with higher level of self- efficacy, got high scores than those of moderate and low. This result is also confirming the submission of Nunez (2019) whose research found that students with teachers who believe they have a high and medium sense of self- efficacy are more likely to achieve success on their standardized examination compared to students with teachers who have low self- efficacy. The finding is also

in line with that of Shahzad (2017), who investigate the impact of teacher self- efficacy on secondary school students' academic achievement and the findings of the study revealed that teacher self- efficacy has a positive impact on the students' academic achievement. This study is also in agreement with Abubakar (2021) who found out positive correlation between teacher self – efficacy and student academic achievement. In the same line, Chinyere, Constance and Amba (2020) revealed a strong positive relationship between teachers' teaching efficacy and students' understanding of Biology concepts and concluded that teachers' teaching efficacy has strong influence on the students' understanding of Biology concepts. This finding is contrary with that of Kucukalioglu and Tuluk (2020) who reported that self- efficacy level of teachers does not have a significant effect on students' academic achievement in mathematics. Similarly, Suharta et al., (2018) revealed that there was no influence of teacher self- efficacy on student learning achievement.

CONCLUSION

Based on the findings of this study, it was concluded that there was a significant difference in the mean achievement scores of students taught biology by teacher' with low, moderate and high self- efficacy.

RECOMMENDATIONS

Based on the forgone submission, the following recommendations were made:

1. The State Ministry of Education, Science and Technology should organize regular workshops, seminars, conferences and lectures on teacher self- efficacy for biology teachers so that, low efficacious teachers have the opportunity to correct this with guidance and support.
2. Government should also incorporate the use of the Teacher self- efficacy in the interviewing process to get an idea of how prepared the applicant is to find solutions to the challenges in the teaching learning process.
3. Biology teachers should encourage to create a conducive atmosphere for healthy interaction with students to reinforce students' confidence in teaching and learning biology.

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INFLUENCE OF CAUSAL SEX RELATIONSHIP ON ACADEMIC ATTAINMENT OF STUDENTS IN ONDO WEST LOCAL GOVERNMENT AREA, ONDO STATE, NIGERIA

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ABSTRACT

This study examined the influence of pre-marital sex abuse on academic attainment of students in Ondo West Local Government Area of Ondo State Nigeria. The study adopted descriptive research design of the survey type. The population of the study consisted of all secondary school students in Ondo West Local Government Area of Ondo State Nigeria. Two hundred (200) students were randomly selected through the use of simple random sampling technique. A well-structured questionnaire was used as an instrument for collecting data in the study. The data collected were analyzed using frequency count, simple percentage and independent t-test statistics. The findings showed that there was a significant influence of pre-marital sex on academic attainment of secondary school students due to gender, age, class and school type. The study concluded that there was a significant influence of pre-marital sex on academic attainment of male and female secondary school students. Also, a significant influence of pre-marital sex existed on academic attainment of students due to age, class and school type. It was recommended that there was a need for government non-governmental agencies and the general public to be more proactive in addressing the issues of adolescent/ youth's sexuality or productive lifestyle.

Keywords: Influence, Pre-marital sex, Academic attainment, Student

Human beings, young and old are sexually active and as such prone to pre-marital sex. In some cases, vagaries of adolescence overcome their sense of reasoning, exposing them to uncontrolled adventure in sexuality. Pre-marital sex is

INTRODUCTION

increasing at an alarming rate especially among adolescents/youths. Today, the difference between love and sex seems to disappear with most young school leavers ending up exploring each other's physique and ultimately unprotected sexual intercourse results. Sex which was

regarded as sacred and limited to adult males and females within marriage institution has been relegated in the society. The Holy Scripture frowned against pre-marital sex: In Hebrew chapter 13 verse 4; Marriage is honourable and the bed undefiled; but whore mongers and adulterers God will judge. Additionally, public opinion polls have consistently kicked against pre-marital sex. According to these polls pre -marital sex s wrong and dangerous to health resulting n abortions teenage mothers and sexually transmitted infections (Alo, 2009). Premarital sex is not confined to adolescent alone a good number of people who are married are also vulnerable to pre -marital sex. This accounted to large number of cases of unwanted pregnancies recorded on daily basis; many of which get terminated through unsafe abortions (Crimes, 2010). From this point of view, the issue of sex is hardly discussed with children especially of early stage of their life. In Nigeria setting virginity is highly esteem by parents and as such issue of sex seem to considered as a taboo. Based on this, the youths or adolescents learned through the mass media and peers unguided. Ojong ojong- Alasis and Samson Akpan (2014) noted that adolescents learned about sex Education n negative manners rather

than having proper sex socialization at home and or in schools.

Having sexual intercourse out of marriage is now a common thing among secondary school students in this 21st century. All now have the mindset that it is only those who are uncivilized that preserve their virginity unlike in the olden days when people cherished and keep virginity which is the pride of the lady in question and her entire family members, indeed virginity is one of the signs of dignity contrary to what a popular opinion that says “virginity is not dignity” it is lack of opportunity (Esen, 2014). Due, to civilization, youths are to desperation to have sex at all cost and as such resulted to the use of contraceptive and other devices in order to prevent them from the outcome crisis of pre -marital sex. Those who are not smart about sex, may eventually take the risk of abortion which may ultimately lead to life barrenness, dropout of school and early marriage. This, however stopped many female secondary school students from schooling. It is observed that many young people are becoming increasingly exposed to the risk of HIV/ADS infections due to inexperience and sex education. Nigeria Demographic and Health Survey (2013) recorded that only 18.5% of young women had sex in 12 months preceding the survey used

condoms. Out of 33% never married sexually, active men and women, 1728 representing 52% live in urban areas and 43% of them did not use condom during sexual intercourse in the 12 months preceding the survey. Akinsola (2010) noted that though in some respects a girl who experiments with premature or extramarital sex may suffer more severely than a male who does so, men are also damaged by illicit sex. In addition to their own later feelings of guilt for having used young women, they often find it hard to build and maintain a long term relationship with one person. Any sexual experimentation outside of marriage is a mistake. A man will never be the same in the sense that he has surrendered a part of himself that he should have reserved for his bride.

Premarital sex is a sexual intercourse that most youths engage in before legal marriage. Extra marital sex is what some married people indulges in, when they are not faithful to their partners and their marriage vows. Sex is honourable and legitimate when it occurs between married couples, hence God loves it and it brings purity. Several studies revealed that teens of ages of eleven to twenty (11-20 years) actively partake in dating and interactions and sexual intercourse with the opposite sex some of early teenage to adolescent. Statistics indicate that youths that

engaged in dating at young age lose their virginity within the first week of dating. During this short period, opposite sexes attract which ignites desires for intercourse which ends with premarital sexual relations (Adeoye et al., 2012).

Other elements/factors associated with premarital sex, but the primary cause of premarital sex is dating. The term dating is a social term which shows that “A” and “B” are into a relationship which may lead to real marriage or not. But in most cases such dating may last the work within short period of time if the two players (boys and girl) are not properly guided. Dating from cultural angle, is regarded as a legitimate avenue for two people (male and female) to become better acquainted with each other. Dating should be an honourable purpose to help a young man and woman determine if they are compatible to get married to each other. This is the period the Yoruba called “Ifojusode” which must be accompanied with “Alarinna” the intermediary between the two young man and woman dating each other (Odewole, 2000; Kunnuji, 2010).

During this period also sexual feelings and romantic emotion first become strong. This is the period the New world Holy Bible Translation in first Corinthians 7:36 tagged “Bloom

of Youth”. This is the most critical stage of the youth; hence cautions must be taken as it may mar or make the total life of the youths. Additionally, maintaining close relationship with one particular member of the opposite sex may serve as a propelling force for sexual urge which may end to premarital sex. Peer pressure influences the youth as many youths are eager to satisfy their sexual urge outside legal marriage. This however emanated as a result of frequent interaction with their peers within and outside the school system (Lawal, 2010).

Barber (2016) reported that contrary to what some may think taking improper sexual liberties does not mean that love really exist, nor does it deepen a relationship. Many young ones today view relationships as transitory which in a sense prepares them for divorce rather than for marriages. In consequences, premarital sex is often an emotionally painful experience. After sex, according to Adewale (2007), the typical feelings most youths feel are embarrassment and being ashamed.

In recent past, discussing about sex among secondary school students was frowned at by traditional norms and values, hence, sexual discuss and behavior were approached with esteem/ great respect. Things are

actually falling apart with the high increasing number of young people (especially school students) that involve in premarital sex. These practices constitute a serious health hazard and the education authority is skeptical about the security report and not convinced that such practice occur among secondary school students. The society expects the secondary school students to enforce the values of the larger society, where children are trained and encouraged to stay away from and sexual activities or behaviours that will attract sexual advances. Several measures have been adopted by health care providers, government and non-governmental organizations to avert problem generated from premarital sex. In spite of these, there is still clear evidence that sensitization does not achieve the desired impact. This, however informed the need to carry out this study as premarital sex crisis is a serious social problem in the society due to its effects on the youths and education of the nation (Nigeria) as a whole. Based on this, this study investigated the influence of premarital sex among secondary school students in Ondo West Local Government Area of Ondo State.

Objectives of the Study

The study aimed at investigating the influence of premarital sex on academic attainment of students in Ondo West Local Government Area of Ondo State, Nigeria. The specific objectives are to:

1. Investigate the influence of premarital sex on academic attainment of secondary school students on the basis of gender.
2. Examine the influence of premarital sex on academic attainment of secondary school students on the basis of class
3. Find out the influence of premarital sex on academic attainment of secondary school students on the basis of age
4. Determine the influence of premarital sex on academic attainment of secondary school students on the basis of school type.

Research Questions

The following research questions guided the study

1. What is the influence of premarital sex on academic attainment of secondary school students on the basis of gender?

2. What is the influence of premarital sex on academic attainment of secondary school students on the basis of class?
3. What is the influence of premarital sex on academic attainment of secondary school students on the basis of age?
4. What is the influence of premarital sex on academic attainment of secondary school students on the basis of school type?

Research Hypotheses

The study tested the following hypotheses

1. There is no significant influence of premarital sex on academic attainment of secondary school students on the basis of gender.
2. There is no significant influence of premarital sex on academic attainment of secondary school students on the basis of class
3. There is no significant influence of premarital sex on academic attainment of secondary school students on the basis of age
4. There is no significant influence of premarital sex on

academic attainment of secondary school students on the basis of school type.

METHODOLOGY

Research Design

The research design for this study is descriptive survey design. This is because the researcher will not be able to manipulate the variables for the simple reason that they have already occurred.

Participants

The research respondents for this study were all public secondary school students in Ondo West Government Area Ondo State, Nigeria. The study adopted simple random sampling and fifteen (15) secondary schools in Ondo West Local Government Area of Ondo State, five (5) schools were randomly sampled. A total of 200 students were randomly drawn from across the selected such that forty (40) students represented each school in the sample.

Instrumentation

The research instrument was influence of premarital sex on Academic Attainment of students. Questionnaire (IPSAASQ) designed by the researcher. It has section A

with four items dealing with profile of respondents such as age, sex, class and school type. Section B has 20 items that measured the students' perception about premarital sex and influence of premarital sex on academic attainment. The respondents were asked to respond to the questions on a scale of four point Likert Scale of strongly agree, agree, disagree and strongly disagree.

Validity and Reliability of the Instruments

The instruments were validated by specialists in Tests and Measurement. The test re-test method of reliability test was adopted and determined using Pearson Product Moment Correlation (PPMC) which yielded a reliability coefficient of 0.84 that confirmed the suitability of the research instrument constructed for the study.

Data Analysis

The data collected were analyzed using frequency count while hypothesis were tested with t-test, Analysis of Variance (ANOVA) and Pearson's Product Moment Correlation Coefficient statistical at 0.05 level of significance.

RESULTS

Testing of Hypotheses

Hypothesis One: There is no significant influence of premarital sex on academic attainment among secondary school students due to gender.

Table 1: Difference in Academic Attainment of Male and Female Secondary School Students Owing to Pre-Marital Sex

Variable	N	Mean scores	SD	Df	t-cal	t-critical
Male	93	35.65	4.82	198	22.49*	1.960
Female	107	35.63	5.26			

***Significant, $p < 0.05$**

Table 1 revealed that t-calculated (22.498) is greater than t-tabulated (1.960) at 0.05 level of significance. The null hypothesis is rejected. This implies that there was a significant influence of premarital sex on academic attainment on secondary

school students on the basis of gender.

Hypothesis Two: There is no significant influence of pre-marital sex on academic attainment among secondary school students on the basis of age.

Table 2: Summary of ANOVA showing the Influence of Pre-marital Sex on Academic Attainment of Secondary School Students on the Basis of Age

Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Sum of Squares	F-ratio	F-critical
Between Groups	365.92	4	91.48	5.102	2.41
Within Groups	4392.58	245	17.93		
Total	4758.50	249			

***Significant, $p < 0.05$**

Analysis presented on Table 2 showed that F value is 5.102 and Fcrit is 2.41. The tested null hypothesis is rejected because the significant value is less than 0.05, therefore, it is inferred that age has significant influence on secondary school

students' involvement in premarital sexual activities.

Hypothesis Three: There is no significant influence of pre-marital sex on academic attainment among secondary school students on the basis of class.

Table 3: Difference in Academic Attainment of Secondary School Students Owing to Class

Variable	N	Mean scores	SD	Df	t-cal	t-critical
JSS	47	36.01	1.14	198	19.90*	1.960
SS	153	35.63	2.23			

***Significant, $p < 0.05$**

Table 3 showed that t-calculated (95.982) is greater than t-tabulated (1.960) at 0.05 level of significance. The null hypothesis is rejected. Therefore, there is significant influence of premarital sex on academic attainment among

secondary school students on the basis of class.

Hypothesis Four: There is no significant influence of pre-marital sex on academic attainment among secondary school students on the basis of school type.

Table 4: Difference in Academic Attainment of Secondary School Students Owing to School Type

Variable	N	Mean scores	SD	Df	t-cal	t-critical
Private School	67	34.75	1.03	198	10.29*	1.960
Public School	133	33.64	2.04			

***Significant, $p < 0.05$**

Table 4 revealed that t-calculated (10.294) is greater than t-tabulated (1.960) at 0.05 level of significance. The null hypothesis is rejected. This implies that there is significant influence of pre-marital sex on academic attainment among secondary school students on the basis of school type.

Discussion

Hypothesis one stated that there is no significant influence of pre-marital sex on academic attainment among secondary school students on the basis of gender. Result from Table 1 show that there is significant influence of pre-marital sex on academic attainment among secondary school students on the basis of gender. The result agreed with Erikson, (2014) in his study, who found evidence that economic or

material relatively inexperienced themselves, or from the media, which tends to represent sexual and gender and extremes. Some studies have found a strong correlation between an individual's behavior and the perceived behavior of the best friends of the same sex, and between the individual's own attitudes and perceived attitudes of the same sex.

Hypothesis two stated that there is no significant influence of pre-marital sex on academic attainment among secondary school students on the age. The result from table 8 explained that there is significant influence of premarital sex on academic attainment among secondary school student on the basis of age involvement in premarital sexual activities. Adolescence all over the world are sexually active but the age at which they start having intercourse

varies between regions, and within a country, between urban and rural settings. The result against findings of Arowoju, Ilesanmi, and Okunola (2002) who opined that many authors have documented the strong correlation between age and sexual experience, as age increases, the likelihood, of participation in premarital sexual activity increases. Age can also increase opportunities for independence and decision making for adolescent (Abraham & Kumar, 2009). Bijoret et al (2008) showed that average age of the unmarried female workers included in the sample was 20.2 years and majority of them showed a low level of sex-related knowledge. Approximately 13% of participants held a favorable attitude towards premarital sexual intercourse and youths from the east\central were more likely to have favorable attitudes compared with those from the west ($p<0.005$). About 17.0% of unmarried female workers reported having engaged in premarital sexual intercourse, and females from the east\central were more likely to have experienced premarital sexual intercourse than those from the west ($p<0.05$). Multivariate analysis revealed that age, education, current residential type, dating, sexual knowledge attitudes and pattern of communication were significantly

associated with premarital sexual intercourse (Olusola, 2021).

Hypothesis three shows there is no significant influence on premarital sex on academic attainment among secondary school students on the basis of class. The result shows that there is significant influence of premarital sex on academic attainment among secondary school students on the basis of class. The result agreed with Adewale, (2007) who aware that classmates may pressure couple to have sex. Believing that you must have sex to know if you're in love. Contrary to what some may think, taking improper sexual liberties does not mean that you are in love nor does it deepen a relationship. Many young ones in senior secondary school today view relationships as transitory – which in a sense prepares them for divorce rather than for marriage. This ties with the statement "Pick the mate you want to Stick with instead of the mate you're Stuck with". With the effect of young teens engaging in premarital sex we see young "teen parents" a responsibility given to inexperienced. Hence the statement "Babies raising Babies". In consequence, premarital sex is often an emotionally painful experience. After sex, the typical feelings most youths feel are embarrassment and ashamed. Christians are urged to wait

until marriage to enjoy the gift of sexual relations. The Bible illustrates, at Ecclesiastes chap.3:1-8, that “just as there is a time to love and time to hate”, there is also a time to act on sexual urges and a time to refrain from doing so. Therefore, the hypothesis three as rejected base on the result findings.

Hypothesis four stated that there is significant influence of pre-marital sex on academic attainment among secondary school students on the basis of school type. The result from table 10 shows that there is significant influence of pre-marital sex on academic attainment among secondary school students on the basis of school type. The types of school also determine the level of secondary school students’ toward pre-marital sex, that is, pre-marital sex is mostly common among public secondary. The agreed with Durojaye, (2009) who suggested that the intention or inclination of adolescents are likely to be influenced by various contexts in which they function, the types of school attended, or community location.

CONCLUSION

On the basis of the findings in this study, it can be concluded that there was a significant influence of pre-marital sex on academic attainment of

male and female secondary school students. Also, a significant influence of pre-marital sex existed on academic attainment of students due to age, class and school type.

RECOMMENDATIONS

Arising from the findings of the study, the following recommendations are hereby suggested.

1. There is need for government/non-governmental agencies and the general public to be more protective in addressing the issues of adolescents/youths sexuality or reproductive lifestyle.
2. More health awareness programmes on the danger of premarital sex should be made available to secondary school students’ and adolescents since it is within this age (10-25years) bracket that we our have future generation of leaders.
3. Efforts should be made to assist indigent students financially, by the way of providing scholarships, bursaries, work study programmes for them so as to enhance their socio-economic

status, in that some students indulge in premarital sexual activities in order to make money for personal survival.

4. It is recommended that all forms of sexual harassment by the teachers should be prohibited and backed up by law.

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DYADIC FINANCIAL MANAGEMENT AND EFFECTIVE COMMUNICATION AS CORRELATES OF MARITAL HARMONY AMONG MARRIED COUPLES IN EDO STATE

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ABSTRACT

This study investigated dyadic financial management and effective communication as correlates of marital harmony among married couples in Ovia North-East Local Government Area of Edo State. The population of the study consisted of all married couples in Ovia North-East Local Government Area. A sample of 200 couples was randomly selected for the study. The questionnaires titled Dyadic Financial Management (DFM), Effective Communication (EC) and Marital Harmony Questionnaire (MHQ) were used to collect data for the study. Data was analysed using Pearson Product Moment Correlation Statistical technique. The findings showed that dyadic financial management and Effective communication has significant relationship with marital harmony. Based on the findings, it was concluded that marital financial management and effective communication have significant contribution and influence on enhancing marital harmony among married couples in Ovia north east Local Government area of Edo state. It was therefore, recommended that couples experiencing disharmony should consult counselling experts to help married persons in improving financial management and effective communication in dyadic relationship.

Keywords: Dyadic, Financial management, Effective communication, Marital harmony, Married couples

INTRODUCTION

Marriage is a covenant relationship between male and female spouses. The covenant nature of marriage provides a strong foundation and secure framework for spouses' commitment to each other. According to Oko (2017), marriage is a union between a man and a woman who choose to be husband and wife to

nurture their love and navigate the world together. It is an agreement to be united and live in an intimate relationship to support each other and develop together. Marriage usually forms the nucleus of a family, which in turn become the bedrock of the society. Okorodudu (2010) asserted that, right from the time of creation,

marriage has been in existence, and it is regarded as the oldest institution on earth. God expressly ordained marriage. It is the union of a man and woman who have offer to come together to build a family. Marriage serves the three-pronged utility of addressing the psychological, physiological and social needs of man. The three aspects of marriage are geared towards the sexual survival and economical instincts, which form integrated part of nature and indeed their organisms. This, no doubt, makes it very clear that marriage is an essential institution responsible for human growth and development. In other words, marriage provides a major base for the internalisation of society's culture, which in turn is internalised as part of adult personality structure that governs all human activities. Nevertheless, it is rather unfortunate that, the situation in many marriage and family cycles points to many incidences of disharmony and prolonged experience of unspeakable pattern of marital relationship (Jesuorobo, 2019).

The concept of harmony as used in relation to couple's interactive nature in marriage is very challenging as it calls for concerted efforts and concentrated desire to accomplish marital success. Adigeb and Mbua (2015) regarded marital harmony as

individual's subjective experience of marriage in terms of when their needs are met, and when the individual's expectations and desires are being satisfied. Ofoegbu (2002) observed that, harmonious marital relationship is a well adjustment marriage. The dyads are in significant agreement on the essential issues of marriage in a union. Such issues are offspring, financial management, in-laws, interests, objectives, parenting, conjugal relationship, religion and culture. According to Uwe (2000) cited by Okorududu (2010), marital harmony is the blending of all the efforts of marriage culminating into the bond of love and oneness. She noted that the process of unity involves the blending of spouses' marital, spiritual, emotional and physical differences into a harmonious relationship within the marital bond. Okorodudu (2010) believed that marital harmony or integration involves the extent to which the husband and the wife get from each other the attitudes, services and goods they learn to need and to expect from the marriage. The concept of marital harmony must be understood to mean a condition that sets forth in a given marriage, the need for availability of certain ingredients of success in order that the growth and personal fulfilment of members can be assured in the family. It involves the process whereby

couples are engaged in marital, sexual, physical, emotional, spiritual, financial as well as social and educational adjustment to children and themselves. The processes of accomplishing unity or harmony in the family call for concerted efforts and willingness of all members of the family such as the father, mother and children to bring about this needed peace and happiness in the home. Counselling literatures have showed that couple marital financial management and effective communication have the tendency of enhancing harmonious dyadic relationship. (Uwe 2000; Okorodudu, 2010).

The concept of marital communication simply refers to the process of sending and receiving messages between husbands and wives as they interact in marriage relationship. Akpan (2000) defined communication as the transmission of information from husband to wife vice versa. It is described as the process through which husband and wife reach each other with ideas, facts, thoughts, feelings and values. An intimate marital relationship requires that couples learn to communicate with each other while they accommodate their individual differences. The promotion of effective communication in marriage and family life seem to be a major

solution to many cases of marital discord in our society. This is because partners need to share many things. Such things would include their thoughts, emotions and feelings on daily basis. In sharing, they would need to know and understand themselves, past experiences, feelings, values, likes and dislikes, problems and weaknesses within and outside the dyadic relationship. Asuzu (2012) also asserted that communication is vital in a couple relationship and healthy marriage. Effective communication is the type of communication that leads to desired outcome. It involves the use of certain skill such as active listening, non-verbal communication and giving and receiving compliments from each other. A marriage without effective communication is likely to crumble. Communication is a life wire of marriage relationship or any other meaningful relationship (Esere, 2002; Esere 2006). It is the elixir for ailing marital relationship (Olagunju & Eweniyi, 2002). With so many marriages ending tragically in divorce (Adegoke & Esere, 1998), it is more important now to work on the communication between husband and wife. So many problems escalate when there is no communication, and many problems are resolved when there is effective communication. For sure, communication is the key to

successful marriage, and without communication no marriage can survive in this divorce - filled world we live in (Jolin, 2007). Communication is very vital in marriage as it enable couples to bridge gaps between them, assist in providing appropriate information to enable them to make informed decision about life's theories thereby resulting in achieving psychologically wellbeing in marriage. This type of communication should be empathic, non- judgmental, patience, active listening, creating a warm, acceptable and conducive atmosphere for discussion. Communication is very essential in stabilising a marriage. Effective communication results in proper understanding of each other, which will eventually lead to peace, progress, good health and productivity. Poor or lack of communication in marriage results to poor understanding of each other, anxiety, depression, loneliness, negative mental health and lack of progress generally in the marriage. According to Idowu and Esere (2007), more than half of the failed relationships are because there was a severe lack of communication between couples. In order to have a long and lasting relationship with someone, one must have excellent communication skills. One must be able to convey one's emotions and

thoughts, as well as being able to absorb one's partner's emotions and thoughts. The art of listening is probably even more important than the art of talking. Couples will learn and grow far more in their relationships if they sit down and listen to their partners, instead of talking and voicing all of their opinions at once. This is not to say that one will not voice one's opinions. However, one must listen to the other's opinions as well, and consider them. Some people do not communicate with words, they communicate through actions. If one pays close attention, one will get what he/she wants from his/her partner (Akinade, 2015). Nevertheless, the problem is, most couples do not pay close attention to each other, thereby causing marital disharmony. Good interpersonal relationship cannot develop without good communication. When the need to conceal information and feeling becomes stronger than the desire to share mind and express feeling with a spouse, a relationship is sick. To communicate is to overcome the desire to conceal feelings and thoughts and rise to the level of talking about money, fears, wishes, motivation, sexual feelings and response, mistakes made, resentments, and misunderstanding with the intent to resolve them (Ode 2006). Akinade (2015) opined some

principles that could help to improve effective communication in marital relationship which include; practice to talk to spouse regularly and amicably, use expressions and styles that sustained your courtship, do not try to have an important conversation when one of spouse is in a hurry, anxious, upset, tired, hungry or distracted, Akpan (2000) and Okorodudu (2010) also stated that spouses should not overstretch their objections during an argument or a quarrel, limit their discussion to the matter at hand, speak about a specific mistake of your spouse, never dig out past conflicts, no matter how tempted; when provoked, avoid losing temper even under provocation, remember angry responses can and do attract very harsh or angrier statement. Marital communication affects marital satisfaction (Caughlin & Huston, 2002; Huston et al., 2001). Sexual communication has been found to predict marital satisfaction (Rehman et al., 2011; Timm & Keiley, 2011) and sexual satisfaction (Timm & Keiley, 2011). According to Laurenceau et al. (2005), ineffective communication may pose a significant barrier to harmony or intimacy. They observed that the destructive communication might include pattern such as incessant speaking coupled with poor listening, ineffective ways of managing conflict

or problem solving, persistent criticism, defensiveness or circles of demand-withdrawal. Marital disharmony is associated with communication gap. Rosenberg (2005), opined that the toll for non-expression of feelings in families is severe when members are unable to communicate their emotions. Communication is impaired when husband-wife relationship is disturbed. With non-communication, there is tension, mistrust, doubt, less feeling of closeness, less sharing, less intimacy and sense of isolation (Ezeilo, 1995). Adegboyega (2021) investigated a study on the influence of Spousal communication on marital conflict resolution as expressed by married adults in Kwara State. Its findings showed that effective communication in marriage help to resolve marital conflict and enhance respect for each other. Du Plooy and de Beer (2018) did a study on Effective interactions: Communication and high levels of marital satisfaction. The results revealed that there is relationship between communication activities and high marital satisfaction. Similarly, Esere et al., (2011), investigated the influence of spousal communication on marital stability: Implication for conducive home environment. The result revealed that lack of effective communication is the bane to marital stability. The

negative experiences spouses get embroiled in disagreement, quarrel, discord, friction, antagonism or open-clash are common features of most marriages (Omorogbe et al, 2010).

Finance is another touchy subject that may cause intense arguments especially in marriage. Meyer (2011) identified finance as one of the major causes of marital disharmony identified. According to her, most couples argue over bills, debt, spending and other financial issues. Without some information on how to communicate properly about money, marital problems could grow bigger than one may envisage. This should be from the beginning to the end. There are chances that many couples would go through high and low economic periods in their marriages. This irrespective of whether they are salary earners or self-employed persons. Financial mismanagement in marriage may generate stress that in turn can make marital harmony very difficult and cause conflict episodes quite frequent in marital relationship. Santrock (2003) and Omage (2013) indicated that money is one of the biggest causes for arguments in a marriage and can eventually lead to divorce if they continue. The root of the problem is usually a difference in spouses' views of money. The difficulty is that the couple will be sharing finances and most likely, this

means that any money spent may come out of a joint account. If one is thriftier and the other prefers to splash the cash, then this can cause arguments – one partner shouting at the other for spending money that should not have been spent, or another getting annoyed at always feeling restricted on what has been earned to be spent. There is nothing more frustrating than working hard all day at work and then coming home to find a partner has just bought himself/herself a new expensive outfit – after prevailing on the other partner not to purchase something so much desired because of seemingly lack of fund.

Bob and Jann (2004) asserted that the simple solution is to try to avoid the problem altogether by simply not sharing money. This means that each should have a separate account for anything the couple might choose to save for him or herself or anything they might choose to buy for their partner. This also makes gifts much more worthwhile as they are not taking out of money both have access to. A couple can have a joint account for bills and for things both need such as food and washing products, and they can just both pay the same amount into that account. Lemoul (2015) however opined that there are some pitfalls with this solution. The first of these is that it can be unfair if

one of the couples is a stay-at-home wife or husband. This might mean that one of them is staying home and not earning any money, and has no access to any of the other partner's account – despite all the work they put into looking after the house and raising the children. In this scenario, a great solution is to agree to 'split' the salary. It is not a 'wage' paid by the working partner to the other, but rather an agreed amount by which to share out the money. If shared in percentage, the salary will affect both. This also allows the partner staying at home to get much more involved and interested in their other half's career and prevents one of the other common arguments caused by finances – 'you're never at home!' Lastly, this method can also mean that if the couple end up getting divorced, they can easily split their assets down the middle and both walk away with what's his/hers (Ofoegbu 2002). This method creates a certain amount of freedom and independence that enables the couple to function better. However, it is not for everyone and some people will be put off and developed the idea of 'hoarding' money away from their partner. This can sometimes raise issues about trust. In some cases, it can cause arguments if it seems like one of the couples is always paying for the meals. Some people will simply have a desire to merge their assets when

they get married from a romantic point of view, seeing it as part of the process of marrying and becoming 'one'. A similar method is simply to make sure that the couple budget and as well as possible take time to agree on how much they are going to spend on themselves each month, how much they are going to put away as savings, how much they are going to spend on household items and so on. This way they can stick within the budget and neither of them will have any need for complaint (Akinade 2015). Also, it is believed that husband and wife should work together or independently to make money designed for sustaining the family. Spouses should pull their economic resources together to tide over economic demands and problems. There have been many studies linking financial factors to marital satisfaction (Archuleta et al., 2011; Dew, 2011). Healthy financial management behaviours have been found to be associated with marital satisfaction and marital success (Dew & Xiao, 2013; Shapiro 2007). Okon and Eze (2006) cited by Ibeh, and Uzochina (2013), asserted that couples should be knowledgeable about funds management that would help them develop positive trust towards each other in terms of how to manage funds without disharmony. Makinde (2004) had earlier advocated for adequate planning and

budgeting of family finance by the couples. In a study carried out by Onyechi (2003) on some correlates of family stability among couples in Anambra State, the study made use of 500 respondents. The family stability scale designed by the researcher was the main instrument used for the study. The data were analyzed using Pearson product moment correlation coefficient (r) and the multiple Regression Correlation co-efficient. The study showed that there is a significant relationship between money management and family stability. She also found that, inability of spouses to adequately manage the financial resources of their family whether large or small give rise to crisis in marriage. Asana (1990) cited by Okorie (2009), in his study worked on problems of marriage and family life in African context, viewed from the perspective of the Christian pastor as a counsellor, found out that many things could cause conflict in homes. They include issues like childlessness, religion, finance, parents in law, among others. The issue of control and maintenance of family income and resource have been associated with marital conflict. Goldenberg and Goldenberg (1990) cited by Okorie (2009) discovered that interpersonal issues, such as ineffective communication pattern, sexual incompatibility, conflict over money, in – laws, children and lack

of sensitivity to partner are the core cause of most marital disharmony. However, these previous studies are different from the present study in terms of sample and sample configuration, combination of independent variables as well as geo-political zone. The current study will determine the influence of dyadic financial management and effective marital communication among married persons on marital harmony in Edo state.

There has been a decline in the ideal of marital quality and harmony, which made persons less willing and less able to make the commitments, sacrifices, and investment of energy and time that are necessary to make marriages succeed. Every couple begins marriage with an array of hopes and dreams. None expects divorce to end their relationship. However, it is estimated that between 40% and 50% of all marriages end in divorce (Amato, 2010; Cherlin, 2010). Studies have shown that more frequent financial conflict predicts divorce, even after controlling for other financial stressors and resources (Britt & Huston, 2012; Dew et al., 2012). So many problems escalate when there is no mutual understanding and healthy communication, and many problems could be amicably resolved when there is effective communication.

Effective interpersonal communication skills are essential to social interaction, and to the building and maintenance of all relationships. Poor communication skills can cause irrevocable damage to relationships; affecting productivity, satisfaction, performance, morale, trust, respect, self-confidence, and even physical health. Effective communication in marriage seems vital to a happy marriage and family life. Therefore, the researchers want to investigate the influence of dyadic financial management and effective communication on marital harmony in Ovia North-East Local Government in Edo State.

Objectives of the Study

The broad objective of this study is to examine how financial management and effective communication relate to marital harmony of Couples in Ovia North-East Local Government Area of Edo State. The specific objectives of this study are to:

1. investigate if relationship exists between dyadic financial management and marital harmony among couples in Ovia North-East Local Government Area of Edo State.
2. Determine whether relationship exists between dyadic effective communication and marital harmony among couples in

Ovia North-East Local Government Area of Edo State.

Hypotheses

The following null hypotheses guided the study and were tested at 0.05 level of significance.

1. There is no significant relationship between financial management and marital harmony among couples in Ovia North-East Local Government of Edo State?
2. There is no significant relationship between effective communication and marital harmony among couples in Ovia North-East Local Government of Edo State?

METHODOLOGY

Research Design

The design of this study was survey research, which adopted Correlational approach. This is because the researchers were interested in investigating the strength of the influence that exists between the independent variables (dyadic financial management and effective communication) on the dependent variable (marital harmony).

Participants

The population of the study included all the spouses in Ovia North-East

Local Government in Edo State. The exact population size was not determined hence the choice of convenience sampling technique in constituting the study sample. The sample size of 200 couples participated in the study.

Instrumentation

The questionnaires titled Dyadic Financial Management (DFM), Effective Communication (EC) and Marital Harmony Questionnaire (MHQ) were used to collect data for the study. The instrument respectfully comprised of 11 items, 15 items and 16 items structured questionnaires developed by the researchers. The items were developed in the pattern of modified four Point Likert-type instruments with weighting 4 points for Strongly Agree, Agree 3 points, Disagree 2 points and Strongly Disagree 1 point.

Validity and Reliability of the Research Instruments

Two experts in the fields of Psychology, Guidance & Counselling, Measurement and Evaluation did the validity of the instruments. Pearson product moment statistic was used to establish the correlation coefficients of the instruments, which were found to be 0.82 for financial management, 0.76 for Effective communication and 0.78 for marital harmony respectively.

Procedure for Data collection

The simple random sampling method was used to select four (4) wards from the thirteen (13) wards in Ovia North-east Local Government Area of Edo state. The researcher selected fifty (50) couples from each ward to get two hundred (200) couples. The interest and consent of the participants were sought through conversation thereby the essence of the research study was explained to the participants. After they agreed to participate in the study, Sunday evenings were fixed for the researchers and participants to meet at a nearby school compound in batches for four consecutive Sundays at their convenience. Before the questionnaires were administered to the participants, the instructions on how to fill the questionnaires were clearly read out and they were requested to fill the questionnaires with all sincerity. The researchers appreciated their participation and the questionnaires collected after being filled by the participants for data analysis

Data analysis

Data were analyzed with Pearson Product Moment Correlation statistical tool at 0.05 level of significance.

RESULTS

management and marital harmony among couples in Ovia North-East Local Government of Edo State?

Hypothesis 1: There is no significant relationship between dyadic financial

Table 1: Relationship between Marital Harmony and Dyadic Financial Management

		Marital Harmony	Financial management	Remark
Marital Harmony	Pearson Correlation	1	.935**	H ₀ rejected
	Sig. (2-tailed)		.000	
	N	400	400	
financial management	Pearson Correlation	.935**	1	
	Sig. (2-tailed)	.000		
	N	400	400	

Table 1 indicates that $r = 0.935$, $p < 0.05$. The result showed a positive and high relationship between marital harmony and financial management which was statistically significant. This implies that there is a significant relationship between marital harmony and financial management.

Hypothesis 2: There is no significant relationship between effective communication and marital harmony among couples in Ovia North-East Local Government of Edo State?

Table 2: Relationship between Effective Communication and Marital Harmony

		Marital Harmony	Effective Communication	Remarks
Marital Harmony	Pearson Correlation	1	.623**	H ₀ rejected
	Sig. (2-tailed)		.000	
	N	400	400	
Effective Communication	Pearson Correlation	.623**	1	
	Sig. (2-tailed)	.000		
	N	400	400	

Table 2 indicates that $r = 0.623$, $p < 0.05$. The results showed a positive and moderate relationship between effective communication and marital harmony, which was statistically significant. Therefore, the null hypothesis was rejected. This implied that there is a significant relationship between effective communication and marital harmony.

Discussion

The result from the first hypothesis arising from Table 1 of this research, showed that there is positive relationship between dyadic financial management and marital harmony, $r = 0.935$, $P < 0.05$. With this result, the null hypothesis is rejected. This means that as scores of dyadic financial management increases, there is a corresponding increase in marital harmony scores and vice-versa. This implies that most spouses whose scores are high on dyadic financial management, earn high scores on marital harmony, while some whose scores are low on dyadic financial management, earn low score on marital harmony. The result indicates significant positive relationship between dyadic financial management and marital harmony. The ability of the couple to work out financial issues in a marriage with mutual understanding and oneness seems to be the basis for harmonious marital life. When spouses get it right

in the area of financial management in their relationship, there is the tendency that they will enjoy marital bliss and satisfying relationship. Lack of financial management in a marriage will likely cause disharmony and sadness in marital relationship. When couple plan together financially, there is the likelihood that they will succeed in other areas of their marital life. The result is in agreement with that of Dew & Xiao, 2013; Shapiro 2007; Okon & Eze, (2006) cited by Ibeh et al., (2013), who found out that, healthy financial management behaviours are associated with marital satisfaction and marital success. The findings of this study also correspond with that of Onyechi (2003), who studied some correlates of family stability among couples in Anambra State. The data were analyzed using Pearson product moment correlation coefficient (r) and the multiple Regression Correlation co-efficient. The study showed that there is a significant relationship between money management and family stability. She also found that, inability of spouses to adequately manage the financial resources of their family whether large or small give rise to crisis in marriage.

Findings in table 2 showed that there is positive relationship between

effective communication and marital harmony since the $r = 0.623$, $P < 0.05$. The result obviously showed that communication is very vital in marriage as it enables couples to bridge gaps between them, assist in providing appropriate information to enable them to make informed decision about life's issues thereby resulting in achieving psychologically wellbeing in marriage. Spouses need to share many things. Such things would include their thoughts, emotions and feelings on daily basis. In sharing, they would need to know and understand themselves, past experiences, feelings, values, likes and dislikes, problems and weaknesses within and outside the dyadic relationship. Couple should communicate intimately and openly not just about work but also about themselves, relationship, home and their children for the health of the marriage. They should express themselves as much as possible as lack of communication often leads to suspicious behaviour. Effective communication results in proper understanding of each other, which will eventually lead to peace, progress, good health and productivity. Poor or lack of communication in marriage results to poor understanding of each other, anxiety, depression, loneliness, negative mental health and lack of

progress generally in the marriage. Effective communication tends to produce closeness and lovely attachment among married persons. The result of this research is in agreement with the findings of Adegboyega (2021); Du Plooy and de Beer (2018); Esere et al., (2011) in which there is positive relationship between marital communication and harmonious marital life.

CONCLUSION

The study focused on dyadic financial management and effective communication among married persons. The findings of the study revealed that marital financial management and effective communication have significant contribution and influence on enhancing marital harmony among married couples in Ovia north east Local Government area of Edo state.

RECOMMENDATIONS

Based on the findings of the study, the following counselling interventions are hereby recommended.

1. Government should set up marital counselling clinics in all nooks and crannies of the community with Professional counsellors, to help married persons in improving financial management and effective communication in dyadic relationship

2. Also, courses in marital financial management and communication should be made compulsory for counsellors in training.
3. Couples should communicate effectively and try as much as possible to know the likes and dislikes of each other.
4. Married partners should discuss and agreed on how they will manage their income, with mutual understanding and sense of oneness.
5. Finally, the researchers recommend the provision of marital counselling to couples before and after marriage. Marriage seminars and symposia should constantly be organized for married couples.

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**JUNIOR SECONDARY SCHOOL STUDENTS' SOCIAL STUDIES
PERFORMANCE AS PREDICTOR OF SENIOR SCHOOL
CERTIFICATE EXAMINATION'S PERFORMANCE IN SOCIAL
SCIENCE SUBJECTS IN BENIN METROPOLIS**

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ABSTRACT

This study investigated if Junior Secondary School Certificate Examination (JSSCE) in Social Studies would predict Senior Secondary School Certificate Examination (SSCE) results in Geography, Government and Economics in Benin Metropolis. The design of the study was a correlational survey based on the framework of ex-post facto. The population of the study was 10,458. This comprised 4,612 and 5,846 JSSIII (2017-2018) and SSSIII (2020/2011) students respectively. The step-wise multi-stage sampling technique was adopted for the study with a sample size of 300 students. A proforma titled: School and Student Data Proforma (SSDP) was used for data collection. The data collected were analyzed using linear regression statistics. The findings showed that Social Studies does not significantly predict SSSIII students' scores in Geography and Government. However, the findings also revealed that Social Studies significantly predict SSSIII students' achievement in Economics. Based on the findings of the study, the study concluded that Social Studies is not a good predictor of Social Science subjects in Senior School Certificate Examination in Benin metropolis.

Keywords: Junior Secondary Certificate Examination, Senior Secondary School Examination, Predictor, Social Studies

INTRODUCTION

Social Studies is one of the basic education subjects in the Junior Secondary School level in Nigeria. It is a school subject that deals with the study of man in relationship with his social and physical environment. There is the general belief that Social Studies is about the grooming of good citizens. One of its objectives is to reposition young ones so that they can possess knowledge, skills and values necessary for active participation in societal activities (Ariri, 2015).

The essence of schooling is to avail learners the opportunity of acquiring the requisite education and training that will enable them to adjust meaningfully in the society and contribute to national development. Iyamu (2002) opined that the success of a nation's educational system is measured by the academic achievement of the students. Imogie (2011) noted that a lot of emphasis has been placed by the society on the academic achievement of its citizens for the past couple of decades.

Academic achievement is a term used in schools to describe when a student performs well in academics. According to Ali (2013), academic achievement is the outcome of education that indicates how well a student or class of students is doing academically. Academic achievement is commonly measured by

examinations or continuous assessment but there is no general agreement by experts on how it is best tested or which aspects are most important.

Predictive validity simply refers to a measure of how good a test can predict the future performance of students. It investigates how well somebody will perform in future if given a related task. Predictive validity as originally defined by the American Psychological Association (APA) is a term used mostly to describe the existing relationship between predictor(s) such as a test score and a later criterion such as a Grade Point Average (GPA). Thus, in this study the JSS3 students' Social Studies' score is the predictor score while the SSI students' Social Science score is the criterion score.

Over the years, researchers have advanced the knowledge for assessing predictive validity. Mitchell (1990) identified four statistical methods. These are discriminant function analysis, structural equations modality, correlation analysis and regression analysis. However, many predictive validity studies employ regression statistical procedure in their data analysis (Mitchell, 1990). According to Kyei-Blankson (2005) regression analysis is the appropriate

statistical procedure for assessing the effectiveness of predictors on validation studies.

Faloye (2009 in Longe 2013) carried out a study on predictive validity using Osun State Junior Certificate Examination scores as predictor of students' performance in Senior School Examination (SSCE). The study revealed that Osun State Junior School Certificate Examination is a poor predictor of students' performance in SSCE. From another study on predicting Senior Secondary School Certificate Examinations in Ondo State, Nigeria. Adeyemi (2008) found that Junior Secondary School Certificate Examination results as good predictor of performance at the Senior Secondary Certificate Examinations.

Ahmadu and Amadu (2015) carried out a "Predictive Validity of Teacher Made Test in Relation to Students' Performance in SSCE Sciences in Maiduguri Secondary Schools of Borno State Nigeria" (p.79). Data were collected through inventory from a sample of 188 students selected from 10 secondary schools made up of three public and seven private. The data collected were analyzed using Pearson product moment correlation statistical techniques. The product moment correlation statistics result obtained

revealed that teacher made test is a good predictor of SSCE Sciences and that good performance in teacher made test will lead to good performance in SSCE.

Elishama (2014) works on predictive validity of JSCE on SSCE in Yola South Local Government Areas of Adamawa State. Data for the study was collected, was done through the use of inventory. The sample of the study was 665 students selected from 5 secondary schools through stratified random sampling technique. The data collected were analyzed using percentages, z-test and Pearson product moment correction statistics. The independent variables of the study were 2010 JSCE scores in English, Mathematics, Agricultural Science, Hausa Language, Social Studies and Integrated Science; while the dependent variables were 2013 SSCE scores in English, Mathematics, Agricultural Science, Hausa Language, Government, Chemistry and Biology. The findings of the study revealed that JSCE is a poor predictor of performance in SSCE. The contradictory research reports by various researchers on the predictive ability of JSCE and its related subjects on SSCE performance call for concern. It is in the light of this the researchers embarked on this study.

Our world is a dynamic one with daily and ethical issues that requires sound understanding from individuals, firms and government to make decision that will make the environment a better place to live in. Social Science subjects such as Geography, Economics, Government that are studied at the Senior Secondary School level are vital for further academic pursuit in Political, Science, Anthropology, Sociology among others. The decline rate in performance of students in some of the above listed subjects in public examinations has become worrisome. Despite the fact that researchers have made series of efforts to investigate variables responsible for this decline, it was discovered that more than 25% of the students who enrolled for Senior Secondary Certificate Examination (SSCE) in the last four years had less than the credits in their enrolled subjects some of which include Geography, Economics and Government (Adeyemi, 2008; Ahmadu & Amuda, 2015). In the course of these, some researchers have been having some conflicting research report on the predictive strength on Junior Secondary School III students Social Studies scores at predicting performance in Senior Secondary Certificate Examinations in Social Science subjects.

Objectives of the Study

The objectives of the study was to investigate the extent to which JSCE III students' performance in Social Studies could predict their performance in SSS III Social Science subjects specifically, the study:

- ascertained if JSSCE III Social Studies scores predict SSCE scores in Geography
- determined if JSSCE III Social Studies scores predict SSCE III scores in Government
- examined if JSSCE III scores in Social Studies predict SSCE III scores in Economics.

Research Questions

For the purpose of this study, the following research questions were raised:

1. To what extent do students JSCE Social Studies scores predict SSCE scores in Geography?
2. To what extent do students JSCE Social Studies scores predict SSCE scores in Government?
3. To what extent do students' JSCE Social Studies scores predict SSCE students' scores in Economics?

Hypotheses

To further guide the study, the three hypotheses were hypothesized and tested at 0.05 level of significance.

1. The performance of students' JSCE Social Studies will not significantly predict their SSCE scores in Geography.
2. The performance of students' JSCE Social Studies will not significantly predict their SSCE scores in Government.
3. The performance of students' JSCE Social Studies will not significantly predict their SSCE scores in Economics.

METHODOLOGY

Research Design

The study employed the correlational survey designed based on the framework of ex-post facto.

Participants

The participants of the study were made up of 10,458 public Junior Secondary School and Senior Secondary School students in Benin metropolis who sat for the 2017 JSCE Social Studies and 2020 SSCE in Geography, Government and Economics. The step-wise sampling technique was adopted for the study. Firstly, a simple random sampling technique was used to select 15 schools out of the 46 schools in Benin metropolis. Secondly, a simple

random technique was again used to select 20 students each from the 15 sampled schools in both JSS III and the same 20 students in SSS III; thereby making the sample used for the study to be 300.

Instrumentation

The instrument used for the study was a proforma titled: School and Students Data Proforma (SSDP). This was used to collect students' 2017 JSSCE scores in Social Studies and students' SSCE scores in Geography, Government and Economics.

Validity and Reliability of the Instrument

The validity and the reliability were not established since the two examinations, that is JSSCE and SSCE were conducted by standardized examination bodies and was believed to have established the validity and the reliabilities of the two instruments.

Method of Data Collection

The study made use of secondary data, which is 2017 JSCE Social Studies and the 2020 SSCE Geography, Government and Economics results. The 2017 JSCE Social Studies results were obtained from the Ministry of Education, Benin City, while the SSCE Geography, Government and

Economics results of 2020 were obtained from WAEC Zonal Office in Benin. The results were given to the researcher in letter grades. The results were later converted from ordinal to interval level of measurement to allow for the use of inferential statistics in analysis.

Data Analysis

The method of data analysis used for the study was simple linear regression

statistics. The three null hypotheses were tested at 0.05 alpha level of significance.

RESULTS

The results of the data analyses are presented in Tables 1, 2 and 3 as follows:

Hypothesis One: The performance of students’ JSCE Social Studies will not significantly predict their SSCE scores in Geography.

Table 1: ANOVA and Model Summary of the Regression Analysis of Predictive Validity of Junior Secondary School Social Studies on Performance of Geography in Senior Secondary Schools

Model	Sum of Square	df	Mean Square	F	Sig.
1	512.367	1	512.367	2.989	0.085
Regression					
Residual	51089.379	298			
Total	51601.747	299			
Model	R	R=Square	Adjusted R Square	Std. Error of the Estimate	
	0.1	0.010	0.07	13.093	

a. Dependent variable: Geography

b. Predictors (constant) Social Studies

Table 1 showed F-value of 2.989, p-value of 0.085. Testing the hypothesis at 0.05 level of significance, the p-value of 0.085 is greater than the alpha value of 0.05, thus the hypothesis which states that the performance of students’ JSCE Social Studies will not significantly predict their SSCE scores in Geography is

retained. Therefore, JSCE Social Studies does not significantly predict SSCE performance in Geography. The R² value is 0.010 which indicates that 1% of the variance in students’ performance in Geography is accounted for by Social Studies.

Hypothesis Two: The performance of students' JSCE Social Studies will

not significantly predict their SSCE scores in Government.

Table 2: ANOVA and Model Summary of the Regression Analysis of Predictive Validity of Junior Secondary School Social Studies on Performance of Government in Senior Secondary Schools

Model	Sum of Square	Df	Mean Square	F	Sig.
1	134.104	1	134.104	0.891	0.346
Regression					
Residual	44339.776	298	150.469		
Total	44973.880	299			
Model	R	R=Square	Adjusted R Square	Std. Error of the Estimate	
	0.055	0.003	0.000	12.26658	

a. Dependent variable: Government

b. Predictors (constant) Social Studies

Table 2 showed F-value of 0.891 and p-value of 0.346. Testing the hypothesis at 0.05 level of significance, the p-value of 0.346 is greater than alpha of 0.05. Thus, the hypothesis which states that the performance of students' JSCE Social Studies will not significantly predict their SSCE scores in Government is retained. Therefore, JSCE Social

Studies does not significantly predict SSCE Government scores. R^2 value is 0.003 which indicates that 0.3% the variance in students' performance in Government is accounted for by Social Studies.

Hypothesis Three: The performance of students' JSCE Social Studies will not significantly predict their SSCE scores in Economics.

Table 3: ANOVA and Model Summary of the Regression Analysis of Predictive Validity of Junior Secondary School Social Studies on Performance of Economics in Senior Secondary Schools

Model	Sum of Square	df	Mean Square	F	Sig.
1	2369.382	1	2369.382	17.985	0.000
Regression					

Residual	39258.948	298	131.741	
Total	41628.330	299		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.239	0.057	0.054	11.47787

- a. *Dependent variable: Economics*
- b. *Predictors (constant) Social Studies*

Table 3 showed F-value of 17.985, p-value is 0.000. Testing the hypothesis as 0.05 level of significance, the p-value is less than 0.05, thus the hypothesis which states that the performance of students JSCE Social Studies will not significantly predict their SSCE scores in Economics is rejected. Therefore, the performance of students' JSCE Social Studies significantly predict SSCE Economics scores. The R² value is 0.057 which indicates that 5.7% variance in students' performance is accounted for in Economics by Social Studies.

Discussion

The result of hypothesis 1 revealed that JSCE Social Studies is not a significant predictor of SSCE students Geography scores. This finding is in agreement with Faloye (2009) whose study revealed that Osun State Junior School Certificate Examination is a poor predictor of students' performance in SSCE. However, the finding of hypothesis is not consistent with the finding of

Adeyemi (2006) who found out that Junior Secondary Examination results are good predictor of performance at the Senior Secondary Certificate Examinations. The result of hypothesis 2 revealed that JSCE Social Studies is not a significant predictor of SSCE students' Government scores. This finding is in line with Elishama (2014) who worked on predictive validity of JSCE on SSCE in Yola South Local Government Area of Adamawa State. Finding of the study revealed that JSCE is a poor predictor of performance in SSCE.

The reason for disagreement in results by these two researchers may have resulted from the population, sample and the location used for the studies. The result of hypothesis 3 revealed that JSCE Social Studies significantly predict scores of SSCE Economics. This finding is in agreement with the finding of Adeyemi (2006) who found out that Junior Secondary Examination results are good

predictor of performance at the Senior Secondary Certificate Examinations. Again, this finding may have resulted from the population, sample, location and instrument used for the study.

CONCLUSION

The study investigated Junior Secondary School students' Social Studies performance as predictor of Senior Certificate Examinations in Social Science subjects in Benin Metropolis. Based on the findings of the study, it was concluded that JSCE Social Studies is not a significant predictor of SSCE Geography and Government. However, the finding of hypothesis 3 revealed JSCE Social Studies is a good predictor of SSCE Economics performance.

RECOMMENDATIONS

1. Government should ensure the provision of relevant learning facilities to enhance Social Studies teaching in Junior Secondary Schools so as to increase SSCE Social Science subject's performance.
2. JSCE Social Studies curriculum should be reviewed to be in line with the SSCE syllabus of Social Science subjects so as to bring in predictive validity.
3. Examination bodies such as WEAC and NECO should at

regular intervals undertake predictive validity studies in order to improve on their test quality.

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SCHOOL-BASED MANAGEMENT COMMITTEES' RESOURCE MOBILIZATION AND UTILIZATION: PANACEA FOR BETTER PRIMARY SCHOOL PUPILS' ACADEMIC ACHIEVEMENT IN EKITI STATE

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ABSTRACT

This study investigated School-Based Management Committee resource mobilization and utilization as a panacea to Ekiti State public primary school pupils' better academic achievement. The targeted population was One thousand and hundred (1200) participants drawn from Ekiti State public primary schools. A four Likert-types self-designed questionnaire titled "SBMC resource mobilization and utilization questionnaire" was used to elicit information from participants. Simple linear Regression statistics were used to analyze the data. The findings showed that there was a significant influence of SBMC resource mobilization on the utilization of pupils' academic achievement as a panacea in Ekiti State public primary schools existed. It was recommended that the SBMC members should not turn themselves into obstacles for the school heads in the management and administration. It means they should work within their defined scope and limit of their responsibilities as prescribed in the National and State School-Based Management (SBM) Policy.

Keywords: School-Based Management Committee, Resource mobilization, Utilization, Primary School, Academic achievement

Academic achievement is always an issue of concern to the critical stakeholders in the education sector such as the government at the various levels of governance; the parents; students/pupils; and the employers of labour amongst others. Academic achievement is attributed to the level

INTRODUCTION

of attainment that a student/pupil could attain within a period of time in an examination and/or in a continuous assessment of a particular subject and/or number of subjects. According to Oresajo (2021), pupils' academic achievement serves as one of the indices for school performance in the

sense that there is know-how a particular school can be seen as effective and efficient in meeting up the goals of its establishment without referring to its academic prowess. Thus, academic achievement emphasizes the assessment of pupils, especially in the area of cognition using continuous assessment policy and termly/promotion examinations. In other words, Duruji et al. (2014) referred to pupils' academic achievement as the degree of a pupil's accomplishment in his or her tasks and studies. The most well-known indicator of measuring academic achievement is graded which reflects the pupil's "score" for their subjects and overall tenure. Success is measured by academic achievement in most educational institutions. In this case, how well a pupil meets standards set out by an institution itself or an external examination body either set up by the government or an independent outfit signifies success or good performance.

Therefore, primary school education is a second stage and/or second phase of basic education. It is (a primary school) an institution designed for children of age 6 to 12 years before going to junior secondary schools. Its aims and objectives are to fulfill the following as stated in the National Policy on Education (NPE), Federal Republic of Nigeria (FRN 2014);

Section 2c; Paragraph 19 to include: Inculcate permanent literacy, numeracy, and the ability to communicate effectively; ii). lay a sound basis for scientific, critical, and reflective thinking; iii). promote patriotism, fairness, understanding, and national unity; iv). instill social, moral, norms and values in the child; v). develop in the child the ability to adapt to the changing environment; and vi). provide opportunities for the child to develop life-manipulative skills that will enable the child to function effectively in society within the limits of the child's capacity (p.7).

The perceived dwindling in the academic achievement of public primary school pupils called for the concern and attention of the government, and other stakeholders in education, to deems-it-fit to look inward on what could be responsible and what is the likely way out and way forward to improve the pupils' academic achievement in Ekiti State and Nigeria as a whole. One of the perceived way-forward and way out to improve the academic achievement of pupils in the public primary school, which this study intends to focus on, as a panacea, is the school-based management committees (SBMCs) in terms of its resource mobilization and monitoring of the resource utilization at the public primary school level by

end-users in achieving primary schools' objectives.

School-based management committees (SMBCs) are statutory organizations put in place at the primary school level of education to perform an oversight function of a certain level of the decision-making process in assisting the primary school headteachers.

Federal Ministry of Education (2015) established that SBMC is a global reform of education of the 1990s and 2000s which provided the impetus for the Nigerian Government to institutionalize the SBM system operations in the primary schools' administration and management. Therefore in 2005, the National Council on Education (NCE) at its 52nd meeting directed that all schools should establish School-Based Management Committees (SBMCs) to ensure that local communities participate in the school decision-making process. SBMC in primary schools' administration and management is a conglomerate of school community members (that is staff, pupils, and the PTA's executive representatives) and of the school domicile community members' representatives.

The National School-Based Management System Policy

(NSBMP) (Federal Ministry of Education, 2015), Chapter 2: Sub-chapter 2.3.3c itemized the specific roles of SBMC to include: (i) Effective participation in the overall learning outcomes of pupils and students; (ii) Effective participation in school development planning process; (iii) Networking with other stakeholders, promoting partnerships and inclusion of women and children towards improved quality and inclusive education; (iv) Resource mobilization for school improvement; (v) Community sensitization towards ensuring improved enrolment of pupils/students, retention, completion, and transition; (vi) Providing support and motivation for teachers and learners; (vii) Collaboration with local communities to provide safety for teachers, learners, and school property and (viii) Oversight functions on funds allocation and utilization for school improvement. Whereas, in Ekiti State main roles of SBMC include: a). enhancing the school's ability to set priorities for effective management of resources at the school level; b). contributing to the planning, management, and monitoring of the school for efficient decision-making and implementation process; c). supporting greater professional development opportunities for staff; d). engendering the interest of the

community in the school improvement; e). encouraging parents to send their children to school and support them to complete their education, especially girls; f). supporting principals/headteachers to enhance school administration; g). designing and implementing of school improvement plan; and h). serving as a medium of transmission of skills, knowledge, value, and traditions of the community to the younger generation (Ekiti SBMC policy manual, 2017). Items iv and viii on the specific roles of the SBMC as stated in the National School-Based Management (NSBM) Policy document quoted above stating that (iv) Resource mobilization for school improvement; and (viii). Oversight functions on funds allocation and utilization for school improvement. In the same vein, Ekiti State SBMC policy items a and b admonished that SBMC should a). enhance the school's ability to set priorities for effective management of resources at the school level; and b). contribute to the planning, management, and monitoring of the school for efficient decision-making and implementation process. These are pointers that SBMC in public primary schools is a panacea to pupils' academic achievement because resources are pivotal to the achievement of any organizational goals, aims, and objectives if well and judiciously

utilized by purported end users. The policy documents on SBMC at the National and State levels empowered the organization (SBMC) in the public primary school system to mobilize resources and oversee the allocation and utilization of such judiciously.

Educational resources include six of the followings: human, material, physical, financial, time, and relevant information that aids and improves the teaching-learning processes leading to pupils' academic achievement. Educational resources are attributed to all the available resources channeled toward achieving and fulfilling educational goals, aims, and objectives. Akinsanya (2014) opined that the smooth functioning of any organization depends largely on the availability of adequate resources. Educational resources which are the sum total of everything that goes into the system, are very essential for the effective operation and maintenance of the system. School buildings, students' enrolment, adequate and qualified teaching staff, furniture, textbooks, and infrastructures that are vital for the system are part of educational resources. The educational resources are human, physical, material, and financial resources. For a high and uniform academic standard, these resources

especially (human and material) must not only be available in adequate quantity but also be equitably distributed and utilized well amongst users. Ngurukwem (2005) in Chijioke et al. (2014) stated that utilization is the proportion of the available time a system is operating. In terms of educational resources, it could refer to the extent of available resources that are put to use. It, therefore, becomes imperative that the availability and adequate utilization of educational resources such as human, material, physical, and financial in some rural communities can be explored to determine their applications for knowledge delivery as well as the relationships between resource availability and performance towards achieving universal primary education goal no. 2 of Millennium Development Goals.

Against this background, this study sorted to examine the extent and how the school-based management committees at public primary schools serve as a panacea to improving the pupils' academic achievement in Ekiti State, Nigeria. The variables of the study were discussed and recommendations were suggested as a way to improve pupils' academic achievement by seeing SBMC resource mobilization and utilization as a panacea.

Objective of the Study

The objective of this study is to find out the extent to which SBMCs' resource mobilization and utilization serve as the panacea for better pupils' academic achievement in Ekiti State primary schools.

Research Question

What is the extent of SBMCs' resource mobilization and utilization as a panacea for better pupils' academic achievement in Ekiti State primary schools?

Hypothesis

Ho. There is no significant difference between SBMCs resource mobilization and utilization as a panacea to pupil academic achievement in Ekiti State public primary schools.

METHODOLOGY

Research Design

This study adopted a descriptive research survey design; hence the variables were discussed as they appeared in their true nature without any form of manipulations.

Participants

One thousand and hundred (1200) participants were targeted as the study sample, drawn from Ekiti State public primary schools across sixteen (16) Local Government Basic Education

Authorities (LGBEAs) under the supervision of Ekiti State Universal Basic Education Board (SUBEB). The selection of the participants was done using a simple random sampling method.

Instrumentation

Four Likert types of the self-designed questionnaire was used to elicit information from the prospective participants of the study. It contained Sections “A”, “B”, and “C” which embraced the participants’ bio-data, and item questions on resource mobilization and utilization, all in all, twenty-one (21) items tested in line with the study variables indices.

Validity and Reliability of the Research Instrument

The research instrument was subjected to validity and reliability test respectively with pilot testing given Cronbach’s Alpha of 0.85. This is to ascertain that the questionnaire was dependable and titled “SBMC resource mobilization and utilization questionnaire”.

Procedure for Data Collection

A letter of intent to conduct a research study was written to the Executive Chairman of Ekiti State Universal

Basic Education Board and approval was given. The approval letter was presented to the Local Government Universal Basic Education Authorities (LGUBEAs) for further notification of the intention before moving around the public primary schools in Ekiti State for the administration of the study instrument.

Data Analysis

The data generated from the field were analyzed using an appropriate statistical tool of Simple Linear Regression. However, one thousand and eight-four (1084) questionnaires were returned from one thousand and two hundred (1200) questionnaires administered to the participants and these were used for the study data analysis which represents 90.3% of the total number of questionnaires administered.

RESULTS

Research Question 1: What is the extent of SBMC resource mobilization, and utilization as a panacea for better pupils’ academic achievement in Ekiti State primary school?

Table 1: Knowledge of the Respondents on Resource Mobilization

Resource Mobilization	n=89 Headteachers	n=76 SBMC Chairman	n=919 Teachers	N=1084 Pooled
1. Calls on the individuals to support the school's improvement.	1.76	1.81	1.84	1.80
2. SBMC sources resources to support the school development activities.	1.93	1.96	1.92	1.93
3. SBMC looks for resources from community members to put educational projects in school.	1.92	2.03	2.00	1.98
4. Assists in the procurement of teaching/learning resource materials.	1.84	2.00	1.99	1.95
5. Ensures that resources are mobilized and available for the school's effective utilization.	1.95	2.00	1.92	1.95
6. Brings in other stakeholders (PTA, Religious bodies, the Alumni among others) to help in mobilizing resources to the school.	1.95	1.95	1.85	1.91
7. Involves the host community in mobilizing resources for the school use	1.97	2.61	2.10	2.23
8. Usually convince their community members to contribute to the school's needed resources.	1.78	2.00	2.05	1.94

9. The resources mobilized by SBMC in your school enhance pupils' academic performance.	1.67	1.90	1.90	
10. SBMCs making requests to LGEA and SUBEB for support to schools that cannot be provided at the community level.	2.29	1.90	1.92	1.82
11. SBMCs assist in mobilizing resources (time, funds, labour, and equipment) to support the marginalized and vulnerable groups of pupils in the school.	2.16	2.14	2.07	2.04
Pooled	1.93	2.03	1.96	2.12 1.97

Table 1 showed the responses of the respondents in terms of their mean based on the lower mean and the upper mean, which were as follows: headteachers (n=89) 1.67 to 2.29, and the pooled was 1.93. They were of the opinion that the resources available and mobilized by SBMC in their schools enhance pupils' academic performance and that SBMCs making requests to LGEA and SUBEB for support to schools that cannot be provided at the community level; SBMC chairmen (n=76) 1.97 to 2.14 and the pooled was 2.03. They ensured that resources are mobilized and available for the school's effective utilization and SBMCs

mobilizing resources (time, funds, labour, equipment) for school improvement, marginalized and vulnerable groups of children; and teachers (n=919) 1.84 to 2.10 and the pooled was 1.96. They aligned that Calls on the community to support the school's improvement and normally involves the host community in mobilizing resources for the school's use. Thus, the pooled (N=1084) was 1.80 to 2.04, and the pooled was 1.97. The pooled indicated the overall variance of the different populations. Therefore, it could be observed that there were variations in the knowledge of the respondents compared with the observation noted

in the school administration as long as resource mobilization was concerned

as indicated in the descriptive statistical analysis of the study.

Table 2: Knowledge of the Respondents on Resources Utilization

Resources Utilization	Headteachers Mean, n=89	SBMC Chairman Mean, n=76	Teachers Mean, n=919	Pooled N=1084
1. SBMC ensures that school facilities are well maintained and utilized.	1.74	1.66	1.78	1.73
2. There is ultimate utilization of the resources mobilized and available by your school SBMC.	1.78	1.8	1.91	1.83
3, There is always under-utilization of the resources mobilized and available by the school SBMC in your school.	2.8	2.46	2.46	2.57
4. Adequate utilization of the resources mobilized and available by SBMC in the school influence pupils' academic performance.	1.92	1.86	1.90	1.89
5. there is an inadequate resource mobilization and availability by SBMC leading to over-utilization of the available school facilities in your school.	2.39	2.44	2.31	2.38
5. The mobilized funds are utilized based on priority as indicated in the WSDP/SDP.	1.80	2.00	2.11	1.97

6. Book and equipment storage facilities in the school are adequately utilized in achieving pupils' academic progress.	1.89	1.77	1.74	
7. Teaching resources such as dusters, chalk/chalkboard, and charts among others are judiciously used in the school.	1.73	1.77	1.70	1.8
8. The number of desks and chairs in the classroom is under-utilized.	2.87	2.56	2.4	1.73
9. The number of latrines/toilets in the school used for the number of pupils in the school.	2.26	2.38	2.30	2.62
Pooled	2.12	2.08	2.06	2.31
				2.08

Table 2 showed knowledge of the responses derived from the respondents (headteachers, SBMC chairmen, and teachers) on school resource utilization. To the headteachers, n=89 indicated a mean ranging from 1.73 to 2.87 with a pooled of 2.12, showing that teaching resources such as dusters, chalk/chalkboard, and charts among others are judiciously used in the school and that the number of desks and chairs in the classroom are under-utilized by the pupils. Furthermore, the n=76 of the SBMC chairmen

indicated mean ranging from 1.66 to 2.56 with the pooled of 2.07 reflecting that SBMC ensures that school facilities are well maintained and utilized and more so, the number of desks and chairs in the classroom are under-utilized by the pupils. Whereas the n=919 of the teachers showed a mean ranging from 1.67 to 2.46 with a pooled of 2.063. This was an indication that teaching resources such as dusters, chalk/chalkboard, and charts among others are judiciously used in the school, and in addition, there should always be

under-utilization of the resources mobilized and available by the school SBMC in their school. However, the pooled N=1084 showed a mean ranging from 1.73 to 2.62 with the pooled of 2.08.

Testing of Hypotheses

Hypothesis Two: There is no significant difference between SBMCs resource mobilization and utilization as a panacea to pupils' academic achievement in Ekiti State public primary schools.

Table 3: SBMCs resource mobilization and utilization as a panacea to pupil academic achievement

	Model	Sum of Squares	Df	Mean Squares	F	Sig
R = .082	Regression	6530.190	1	6530.190	7.239	.007
R ² = .007	Residual	976010.007	1082	902.043		
Adj. R ² = .006	Total	982540.197	1083			
Std Error = 30.03						

The result in Table 3 indicated the significance of SBMC resource mobilization and utilization to pupils' academic achievement as a panacea in Ekiti State public primary schools existed ($R = .082$; $R^2 = .007$; $F_{(1,1083)} = 7.239$; $P < .05$). This showed that resource mobilization and utilization accounted for 8.2% of the variance in pupils' academic achievement as a panacea. The null hypothesis which stated that no significant difference between SBMCs resource mobilization and utilization of pupils' academic achievement as a panacea in Ekiti State public primary schools was rejected. It means that there was a significant difference in SBMC resources mobilization and utilization as a panacea to pupils' academic

achievement in Ekiti State public primary schools.

Discussion

Therefore, the researcher believes that the extent of SBMC resource mobilization cannot be over-emphasized as a panacea to pupils' academic achievement in Ekiti State public primary schools. It indicated that SBMC members need to be more proactive in resource mobilization, hence needed resources made available for school utilization will bring about a child-friendly school environment, and the result will be effective and/or efficient teaching and learning that will embrace high academic achievement of the pupils. Federal Ministry of Education (2015) in the National School-Based

Management Policy (NSBMP), Section 4.2 stated that SBMCs have a strong role to play in mobilizing resources for school improvement. The resource mobilization capacity varies from community to community, some communities may not be able to provide all the necessary resources for a school. In view of this, SBMCs have to render assistance in the area of mobilization of funds using a variety of strategies including but not limited to: (i). organizing fund-raising activities; (ii). launching appeals for funds; (iii). partnering with philanthropic/charitable organizations and religious bodies; (iv). engaging in advocacy visits, etc. SBMCs may as well work in collaboration with Parent-Teacher-Association (PTAs) and Old Students Associations to mobilize funds for school improvement of pupils' academic achievement.

The pooled depicted the overall variance of the different populations. It could be observed that the headteachers, SBMC chairmen, and the teachers were in agreement in the area of teaching resources such as dusters, chalk/chalkboard, and charts among others are judiciously used in the schools. However, on the other hand, there were variations in their opinions which informed their level of means either low or up. It is

imperative to say that the means of the responses of the respondents were observed based on the lower mean and the upper mean. This was applicable to the respondents' group respectively.

Eze (1983) in Aigboje and Gbinigie (2006) in Oresajo (2021) postulated that utilization of resources is the effective and efficient use of resources allocated and provided to the organization for the achievement of a maximum result. They emphasized that when these resources are subjected to various forms of processes, that is when they are capable of yielding certain outputs which can satisfy the system's aspirations and expectations. High-quality education will then be assured and maintained by the effective utilization of the school resources provided and effectively utilized could lead to pupils' proper academic development and school performance. It is an indication that if the scarce available resources to the school were evenly distributed and judiciously used the pupils' academic achievement would experience a certain level of improvement. Fabunmi, Brai-Abu, and Adeniji (2007) in Adane (2013) indicated that there are three factors namely; class size, pupils' classroom space, and class utilization rate, when taken together, to determine significant

pupils' academic achievement in Oyo state, Nigeria. Ayeni and Ibukun (2013) stated that the low achievement of pupils could be a reflection of the gap in resource inputs, quality of curriculum management, and poor academic standards of pupils. It has perhaps been attributed to the gap in the input-process-output system and the systemic malfunctioning in the school management procedures being practiced in primary schools. This often leads to a steady decline in pupils' academic achievement and depicts the nonrealization of quality assurance in the education system.

Johan (2004) in Omiyale and Fadokun (2018) stated that educational outcomes in schools are closely linked to the utilization and adequacy of teaching/learning resources in different ways; poor utilization, underutilization, unqualified educators bring forth low pupils' academic achievement. Oloyede (2003) in Okemakinde, Adedeji, and Sempebwa (2013) observed that effective utilization of school resources significantly impacts the level of pupils' academic attainment while Farombi (1998) in Okemakinde, Adedeji, and Sempebwa (2013) concluded that effective utilization of educational resources could enhance the academic achievement of learners.

Furthermore, the result corroborated the assertion of Fabunmi (1997) in Owoeye (2011) that school facilities when made available will aid teaching-learning programmes and consequently improve pupils' academic achievement.

Oredein (2016) asserted that poor academic achievement of pupils in Nigerian schools has been of much concern to the government, parents, teachers, and even pupils themselves. The quality of education not only depends on the teachers as reflected in the performance of their duties but also in the effective coordination of the school variables. It is believed that the school's physical features have a form of relationship with the pupil's academic achievement in terms of the school size, structure, ownership, location, and type. A school with highly populated pupils may result in the teachers not being able to monitor the performance of the pupils and thus reducing the pupils' academic achievement. Improve the academic achievement of pupils in Ekiti State public primary schools prompted the state government to enshrine in SBMC manual policy document to address teacher deployment in core subject areas under DLI 2, focusing on improving school performance through teacher availability and utilization in core subjects such as English and Mathematics, Integrated

Science/Basic science. There is no systematic core-subject deployment currently to address the shortage of teachers in core subjects. The state will approve a need-based programme for the deployment of teachers in core subject areas, stating the criteria, incentives, procedures, and implementation plan (Ekiti State SBMC Manual, 2017).

CONCLUSION

Arising from the study result analysis, school-based management committees' resource mobilization and utilization are a significant panacea for better primary school pupils' academic achievement in Ekiti State. The committees help to pool resources and mobilize funds to enhance school infrastructure, teachers' training, and classroom instructional materials. These efforts improve the quality of education and create a conducive learning environment for pupils. In addition, school-based management committees ensure that resources are effectively and efficiently utilized and that funds are allocated and spent in line with school needs. The successful implementation of school-based management committees significantly improved academic achievement in Ekiti State's primary schools, leading to a brighter future for the pupils and the State as a whole.

RECOMMENDATIONS

Therefore, the following were suggested as recommendations arising from the study:

1. The government at the various levels of government should always endeavour that the SBMC members undergo periodic training and re-training from time to time. This would enable them to be familiar with their responsibilities in the school system and be relevant to what is obtainable in their immediate and out their immediate environment from time to time.
2. The school head should always ensure that he/she carries the SBMC members along in the school management and administration, and also, he/she reports the pupils' academic achievement in the form of academic progress report to the SBMC members as and when due.
3. The SBMC members should not turn themselves into obstacles for the school heads in the management and administration. It means they should work within their defined scope and limit of their responsibilities as prescribed in the National and State School-Based Management (SBM) Policy.
4. The school heads should endeavour to manage the SBMC members and the PTA executive without placing one above the other, especially PTA above the SBMC.

This is because SBMC is a statutory organization whereas PTA is an association.

5. The SBMC members should see themselves as the bridge between the school and the community which they are representing. Therefore, if there is a conflict between the school and the community, it behooves the SBMC to intervene and resolve the issue of contention amicably between the school and the community.

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INVESTIGATING LOCUS OF CONTROL AMONG SENIOR SECONDARY SCHOOL SCIENCE STUDENTS IN JIGAWA STATE

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ABSTRACT

The paper examined the locus of control among senior secondary school science students in Jigawa State. The sample comprised of 400 senior secondary class two students (SSII) who were randomly selected from 9 science secondary school in the state. A survey research design was used in the study. A unidimensional Locus of Control Scale was used to collect data. Chi-Square (X^2) statistical method was used to analyse the data. The findings revealed that there was a significant association between gender and locus of control among senior secondary science students in Jigawa state. Also, male students are statistically significantly more prone to internal locus of control than female students and vice versa. The study concluded that majority of science secondary school class two students have external locus of control. It was recommended that teachers at various levels of education should identify the locus of control of their students so as to make plans in their science lesson preparations and delivery.

Keywords: Locus of control, Gender, Senior secondary science students

Science Education is a field of study that is concerned with the dissemination of scientific information from the scientific community to the general populace. The field serves as a bridge between the scientific community and the non-scientific community. It is a discipline made up of two major complementary parts: a body of knowledge about the natural world, and the process and procedures of accumulating and refining the

INTRODUCTION

knowledge (Musa & Abubakar, 2021). Odunusi (2014) observed that the economic and political strength of a country is always assessed in terms of achievements in science and technology. Knowledge of science and technology contributes significantly to individuals' personal, social, and professional lives. Therefore, an understanding of science and technology is thus, central to a young person's preparedness for life. Realizing the

contributions of science and technology to economic growth and national development, Nigeria in its National Policy on Education (Federal Ministry of Education, 2013) emphasized the provision of science and technology education at all levels of education. The curriculum stipulated the teaching of science subjects in the senior secondary curricula. The subjects taught are Chemistry, Mathematics, Physics, and Biology.

Despite this, numerous studies have shown that attainment of the science learning outcomes in Nigeria which includes scientific literacy; academic achievement, scientific attitude, Motivation and interest in science have not been achieved. (Kareem, et al., 2020; Obi, 2019; Muoneme, 2014; Nwosu & Ibe, 2014). These issues of unsatisfactory attainment of the learning outcomes had been attributed to so many factors such as teaching methods, study habits, self concepts, and defaults from the curriculum, teacher's professional development among others (Hadi, et al., 2020; Chukwuorji, et al., 2018; Ibrahim, 2017; Ibe & Ebere, 2013).

The term locus of control refers to the site of a cause, that is, whether or not the outcome of an event is attributed to something inside (internal to) or outside (external to) the person involved (Rotter, 1966; Weiner,

2010; Afshan, et al., 2020; Chinedu & Nwizuzu, 2021; Chriatian-Ike & Okoli, 2021; Flores et al., 2020). Locus of control relates to people's attitudes, emotions, health, and motivation, as well as behavior in organizations and educational institutions. It is a personality construct representing the degree to which individuals perceive reinforcing events in their lives to be the result of their actions (Sudaji, 2020; Tyler et al., 2020). It is conceptualized as internal or external in addition, some scholars (Strickland, 1978; Levenson, 1973) have modified the construct to include three dimensions of internality (I), externality due to more powerful others (P), and externality due to fate (C). However, the current study employed Ratter's generalized locus of control scale with two dimensions for measuring internality and externality. Rotter (1966) hypothesized that an individual develops a generalized expectancy of control when reinforcement is perceived as contingent on his or her behavior. Behaviors that result in reinforcement serve to strengthen an individual's perception of control. On the other hand, when reinforcement fails to occur, the generalized expectancy will diminish or extinguish (Hans, et al., 2017; Kiral, 2019; Miu, 2016; Raamefar, 2017; Reknes, et al., 2019; Rutkowska &

Gierczuk, 2014). It is therefore important to identify students' locus of control to advance remediation in their academic attitudes where necessary.

The nexus between attainment of learning outcomes in science and the locus of control can be best understood by the work motivation theory and achievement goal theory (Duda, 2004; Urdan, 2010; Harwood & Thrower, 2020). The work motivation theory explains students' achievement as a function of two expectancies: that Students efforts will lead to performance and that performance will lead to valued outcomes. Students who believe that the likelihood of finding a high paying job depends little on their human capital investments but more on luck, fate, or other "external" factors might be more likely to drop out of school or fail to concentrate on their studies. On the other hand, students who believe that their human capital investments or other "internal" factors will have a strong impact on their future opportunities might be more likely to complete school or achieved higher. According to the achievement goal theory, students are motivated to either develop a skill, termed mastery orientation, or demonstrate a skill, termed performance orientation. Students with a mastery orientation

focus on learning and understanding while students with a performance orientation focus on creating an aura of competence. For students with a performance orientation, competence is demonstrated through comparison with others (externality) while for mastery-oriented students, the comparison is to an internal standard (internality). Thus, locus of control operates through students' expectations of the returns to human capital investments. Students who identify as internals obtain significantly high scores (Flores et.al., 2020; Haider & Naeem, 2013; Bedel, 2015; Flores et.al., 2020; Jami et al.,2020). In addition, internals show significantly low academic procrastination, low debilitating test anxiety (Nath, 2015, Christian- Ike & Okoli, 2021).

Similarly, studies have been conducted on the relationship between locus of control and gender, and the studies show that males are more internal than females, Flores, Urizar, Ramirez, Arancio and Cofre (2020) ; Haider and Naeem (2013) ;Bedel, (2015); Jamil, Saeed, Jamil,& Waqas ; Kaleem, (2020) while Goyal (2010) found that females were more internal than their male counterparts.

Nigeria as a country have invested heavenly in science and technology

sector as well as making teaching and learning science across all level of education a reality. Despite this, numerous studies have shown that attainment of the science learning outcomes have not been fully achieved (Kareem, et al., 2020; Obi, 2019; Muoneme, 2014; Nwosu & Ibe, 2014). These issues of unsatisfactory attainment of the learning outcomes had been attributed to so many factors such as teaching methods, study habits, self concepts, and defaults from the curriculum, teacher's professional development among others (Hadi, et. al., 2020; Chukwuorji et al., 2018; Ibrahim, 2017; Ibe & Ebere, 2013). But only few literatures were reported on locus of control as one of the factors that may likely influence the attainment of those outcomes. Hence the need to establish an empirical study on the locus of control among senior secondary school science students because the construct of locus of control depends on various experiences the individual goes through including culture, religion, societal influence, sex, age, and training and forms during childhood and stabilizes during adolescence, as the senior secondary school students are at their adolescence stage. This study therefore, investigated the locus of control among senior science secondary school students in Jigawa State.

Objectives of the Study

The objectives of the study are to:

1. investigate the most prevalent locus of control among senior secondary school Science students in Jigawa state
2. examine the association between gender and locus of control among Senior Secondary Science Students in Jigawa State.

Research Questions

1. What is the most prevalent locus of control among senior secondary school science students in Jigawa state?
2. What is the degree of association between gender and locus of control among Senior Secondary science Students in Jigawa State?

Hypothesis

1. There is no significant association between gender and locus of control among Senior Secondary science Students in Jigawa State.

METHODOLOGY

Research Design

A survey research design was adopted for this study, this design involves collecting information from respondents (students) used to answer the research questions and also to test the hypothesis raised for this study.

Participants

The population of this study comprised of all the senior secondary school two (SS II) science students in all the public senior science secondary schools in Jigawa State. Nine (9) schools were randomly selected and used for the study; a sample of four hundred (400) S.S.II Science students were also randomly selected from the 9 sampled schools, consisting of 185 males and 215 female students.

Instrumentation

The Instrument used for data collection was the Locus of Control scale (LOCS) adapted from Levenson (1973). It consists of two sections A and B. Section A demands personal information such as the sex and age of the respondents and Section B consists of twenty (24) item statements. The item statements are classified into two parts (internal locus of control and external locus of control statements). Items 1, 3, 4, 5, 9, 10, 11, 16, 18, 19, 21, and 23 measure the internal locus of control: Items 2, 6, 7, 8, 12, 13, 14, 15, 17, 20, 22 and

24 measure external locus of control. The responses are ranked based on a four-point Likert Scale of strongly agree, agree, disagree, and strongly disagree. An interval data will be generated by summing the total responses of each respondent. The scoring of the instrument is done by summing responses for the items listed for each of the items in the external and internal responses of the scale. High ratings on external locus of control items indicate that a respondent is having an external locus of control and also high scoring in the internal locus of control indicated that a respondent is having internal locus of control.

Validity and reliability of the Instrument

The instrument was subjected to both Construct and content validity by experts with a rank of Senior Lecture in the field of psychology and psychometrics. The reliability of the instrument was established using internal consistency and the Cronbach alpha coefficient was found to be 0.88.

Procedure for Data Collection

For the purpose of data collection an introductory letter was collected from the ministry of Education science and Technology Dutse, Jigawa State and presented to the sample schools. With the help of research assistant the

instrument was distributed to the students and the responses were retrieved instantly to maximize response rate. All the instrument distributed were fully retrieved and scored.

Data Analysis

The data collected was analyzed using SPSS Software to answer the

research questions and test the hypothesis.

RESULTS

Research Question One: What is the most prevalent locus of control among senior secondary school Science students in Jigawa state? To answer this question frequency and simple percentage was used.

Table 1: Frequencies and Percentages on the most prevalent Locus of Control among senior Science Secondary School Students in Jigawa state

Locus of Control	Frequency	Percentage
Internals	196	48.3
Externals	204	51.7
Total	400	100

Analysis from Table 1 showed that 196 respondents representing 48% of the students have an internal locus of control while 204 respondents representing 51.7% of the students are having an external locus of control. This means that majority of the senior science secondary students in Jigawa state have an external locus of control.

Research Question Two: To what degree is the association between Gender and Locus of Control among Senior Secondary science Students in Jigawa State? To answer this question frequency and simple percentage was used.

Table 2: Frequencies and Percentages on Association between Gender and Locus of Control among Senior Secondary Science Students in Jigawa State

Gender	Locus of Control				Total	
	Internal		External		Frequency	%
	Frequency	%	Frequency	%		
Male	116	62.7%	69	37.3%	185	46.2%
Female	80	37.2%	135	62.8%	215	53.8%
Total	196	49.0%	204	51.0%	400	100%

Result from table 2 shows that 116 representing 62.7 % of the put of the total males of 185 have internal locus of control while only 65 male student representing 37.3% have internal locus of control. Similarly, 135 female students representing 62.8% of the total 215 of female students have external locus of control while 80 representing 37.2% has internal locus of control. This shows that male

students are more external in their locus of control while the female students are more externals in their locus of control.

Hypothesis One: There is no significant association between gender and Locus of Control among Senior Secondary science Students in Jigawa State. A chi-square statistic was used to test this hypothesis.

Table 3: Relationship between Gender and Locus of Control among Senior Secondary School Biology Students in Jigawa State

Gender	Locus of Control		N	χ^2 -cal	Df	p-value	Decision
	Internal	External					
Male	116	69	185	25.86	1	0.000	Significant
Female	80	135	215				
Total	196	204	400				

Significant at p<0.05

The results from Table 3 show a chi-square statistics which examine the association between categorical variable (Gender and Locus of control). The result shows a significant association at $\alpha = P \leq 0.05$ level of significance between gender and locus of control of senior secondary Biology students in Jigawa State. The result indicated that males are more internal than female students while the female students are more external than their male counterparts. ($\chi^2 = 25.86$, $df = 1$, $p = 0.000$). Since the P value of 0.000 observed is less than 0.05 level of significance, the hypothesis which state that there is no significant association between gender and Locus of Control among Senior Secondary Biology Students in Jigawa State is rejected.

Discussion

Analysis from table 1 shows that 196 respondents representing 48% of the students have an internal locus of control while 204 respondents representing 51.7% of the students are having an external locus of control. This means that majority of the senior science secondary students in Jigawa state have an external locus of control. This is in line with the findings of Chriatian- Ike and Okoli (2021) , Atibuni et al. (2017) who reported that external locus of control is more prevalent among Science secondary school students.

Also result of the findings from Table 2 and 3 shows a significant association between gender and locus of control among senior secondary Biology students in Jigawa State. The result indicated that males are more internal than female students while the female students are more external than their male counterparts. The finding of this study is in agreement with that of Flores et al. (2020); Haider and Naeem (2013); Bedel, (2015); Jamil et al. (2020) ; zaidi and Mohsin (2013) ;Saniogolu and Uslu (2013) ;Rutkwoska and Giereczuk (214) ; and Wali et al. (2021). the finding disagree with that of Goyal (2010); Mohanty (2021) ; Khetmalis and Das (2013) ; Naik (2015) ;Kiral (2019) ;Tyler, Hefferman and Fortune (2020) who all reported no significant gender difference in the locus of control of students. Also the study contradicts the findings of Majzub et al. (2009) who found that male students are more external than female students.

CONCLUSION

This study that majority of the science secondary school students have an external locus of control and that male students are more internal while female students are more external. Also there is a significant association between gender of the students and their locus of control.

RECOMMENDATIONS

Based on the findings of the study it was recommended that:

1. Teachers at various levels of education should try and identify the locus of control of their students so as to make plans in their science lesson preparations and delivery, this will help each and every student learn and acquire the desired scientific literacy skills to function effectively in the 21st century.
2. Senior secondary school science administrators in collaboration with state ministry of education should build up a strong guidance and counseling units in each school.
3. The school counselors should device an effective intervention for student with external locus of control so as to have confidence in them; this will make them to become successful in their life.

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MOTIVATION AND JOB SATISFACTION AS CORRELATES OF JOB INVOLVEMENT AMONG COACHES OF SPORTS COUNCILS IN SOUTH-SOUTH, NIGERIA

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ABSTRACT

This study determined whether relationship existed among motivation, job satisfaction and job involvement of coaches of sports councils in South-South, Nigeria. Correlational research design was adopted for the study. The population consisted of all the 578 coaches in the sports councils in South-South, Nigeria. The sample was made up of 301 coaches and they were selected through multistage sampling procedure. Three instruments were used to collect data for the study which consisted of Aspina Motivation Scale, Weiss, Dawis, England and Lofquist Minnesota Satisfaction Scale and Lodahl and Kejner Job Involvement Scale. Regression analysis was used to test the hypothesis at 0.05 alpha level of significance. The results revealed that motivation, job satisfaction and job involvement of coaches of sports councils in South-South, Nigeria were not significant. It was concluded that there was no positive relationship existed among motivation, job satisfaction and job involvement of coaches of sports councils in South-South, Nigeria. It was therefore recommended that adequate but functional, standard modern sports facilities and equipment should be made available by state government in the various sports councils in South-South Nigeria.

Keywords: Motivation, Job satisfaction, Job involvement, Coaches

INTRODUCTION

Commonly held view is that motivation is either good or bad. However, this understanding is limited and promotes an inaccurate

understanding of motivation and its varying influences on sports participations. Motivation is a desire, the fire that fuels great performances,

outstanding victories, persistence, perseverance, determination and drive (Wayne, 2016). The varying degree of motivation experienced by different coaches is the explanations for some coaches to have a winning attitude while others have a non-driving force for winning. Wayne further stressed that, it is the rationale behind “mental toughness” which is the strength and the character that allows coaches to overcome adversity, setbacks, disappointments, injuries and become non-selective. It is the seemingly endless energy driving force to perform even at the toughest, most challenging and most exhausting workouts. In effect, motivation is a cornerstone of success for every great coach as well as for every great athletic or sports achievement.

Coaches’ motivation provides the channel that sustains and influences their behaviour towards high performance and quality output. It is a key to organizational effectiveness and is a predictor of job involvement and satisfaction (Lather & Jain, 2005). Bartol and Martin (1998) considered motivation as a powerful tool that reinforces behaviour and triggers the tendency to continue. In other words, motivation is an internal drive to satisfy an unsatisfied need and to achieve a certain goal. It is a procedure that begins through

activating both physiological and psychological propensity that stimulates a performance-driven objective Coaches’ motivation provides the channel that sustains and influences their behaviour towards high performance and quality output. It is a key to organizational effectiveness and is a predictor of job involvement and satisfaction (Lather & Ja, 2005). Kamalian, Yaghoubi, and Moloudi (2010) asserted that, a well-motivated coach has their goals aligned with those of the organization and directs their efforts in that direction of achieving them. Therefore, such a coach is more successful, as their efforts are continuously looking for ways to improve the scheduled work. Meanwhile, getting coaches to reach their full potential at work under stressful conditions is a tough challenge; this can be achieved by motivating them.

Coaches can be stimulated by employing effective motivation which in turn can make them feel satisfied and get committed to their job. Under motivational influences, coaches coach their athletes/players better, train them better and are in a better psychological frame to perfect their strategies for an enhanced performance. Heathfield (2015) noted that individual’s motivation is influenced by biological, intellectual,

social and emotional factors which make motivation complex. Every coach has activities, events, and goal in their life that they find motivating, so, motivation about some aspect of life exists in each person's consciousness and action.

The trick for employers to figure out how to inspire coaches' motivation at work hinges on creating a conducive work environment in which coaches are motivated about their work. Sports councils as employers of coaches should understand that they need to provide a work environment that creates motivation in coaches. It is against this backdrop that Heathfield came up with the following factors that encourage coaches motivation to include; transparent and regular communication about factors important to coaches, treating coaches with respect, providing regular coaches recognition, feedback from managers and leaders, providing benefits and compensation, positively managing coaches within a success framework of goals, measurement and clear expectations as well as providing comfortable working environment, job security, recognition, and social supports that can serve as motivators to coaches. It is when these are assured that a coach becomes happy, satisfied and fulfilled in their job.

Greenberg and Baron (2008) viewed job satisfaction as a feeling that can produce a positive or negative effect toward one's roles and responsibilities at work and added that it is important to understand the concept of job satisfaction as there is no single way to satisfy all coaches in a workplace. George and Jones (2005) noted that job satisfaction is the combination of feelings and beliefs, which include the mental, emotional and physical domains. Job satisfaction can also be seen as a worker emotional response to different job-related factors resulting in finding pleasure, comfort, confidence, rewards, personal growth and various positive opportunities, including upward mobility, recognition and appraisal done on a merit pattern with monetary value as compensation (Robin & Judge, 2007; George & Jones, 2005).

It should be noted that many variables make a difference in the level of job satisfaction experience by coaches some of which are found within the organization, some within the framework of the job itself and others are inherent in each coaches' character and personality traits (George & Jones, 2007). Wright and Cropanzano (2000) argued that the link between job satisfaction and productivity hinged upon the concept of happiness. Hence satisfied coaches

tended to be more reliable to show up at work than dissatisfied coaches (Schermerhorn et al., 2003). Cherrington (1994) postulated that coaches experiencing high satisfaction level contribute to organizational commitment, job involvement, improve physical and mental health and improve quality of life both on and off the job. Job dissatisfaction culminates in higher absenteeism, turnover labour problems, attempts to organize labour union and a negative organizational climate. This evaluation occurs on the basis of the factors which coaches regarded as important to them such as co-worker good relationship, job content, remuneration and rewards, promotion and physical condition of the work environment.

Coaches are the strongest pillar and the most valuable asset that contributes significantly to the success and prosperity of any given sports organization. Many sports organizations face the challenges of managing and empowering their coaches to actively contribute towards better performance. In this current tumultuous economic environment, organizations require creative and innovative coaches who can take initiative, embrace change, stimulate innovation and cope with high uncertainty in the work place. Most of the new generation coaches

want to work in organisation that can actively listen and embrace their ideas. To accommodate the demand of the employees, most organisations have relinquished their centralized control management with the hope of promoting flexibility and decisiveness as well as subsequent improvement in individual and organizational performance (Hung, 2008).

Kanungo (2006) stated that job involvement is the coaches' belief towards their present job and further maintained that job involvement acts as a catalyst to satisfy the individual present needs. Khalid and Rashid (2011) described job involvement as motivation to carry out work and it is highly compatible between personal and organizational goals, which stimulate motivation among the coaches to generate positive work outcomes. Hung (2008) stated that job involvement is coaches' cognitive needs' fulfillment, which assists them to work harder and boost up their performance. Indeed, a higher degree of job involvement among coaches in organization is essential to enhance the organizational effectiveness. Apart from that, there are four ways to categorize job involvement which are: active contribution to the job, work as the central life of interest, performance compatibility with the self-concepts and performance as

central to self-esteem (Ishfaq & Talat, 2011).

Coaches who view their work as the central life of interest will have greater opportunity to fulfill their major needs. Hung (2008) noted that coaches will be motivated to work harder and upgrade their performance once their mental needs are fulfilled. Hung emphasized that coaches' physical and mental conditions would change when their job conflicts with their life. As a result, these would affect their job involvement and performance. Job involvement is also viewed as a fixed variable which critically control the coaches' working attitude, such as job satisfaction, tendency to resignation, and organizational commitment. People who are highly involved in their job will seriously take care and concern about their work. Besides, according to Chughtai (2008), Coaches who have higher self esteem in their job mostly would be the coaches who are highly involved in their job. The same authority maintained that, coaches with high job involvement would not be late or absent from their work. Also, a highly job involved individual would have fewer excuses (such as illness or transportation problems) and pay more attention on their job and hence reduce absenteeism.

Objective of the Study

The objective of this study was to determine whether relationship existed among motivation, job satisfaction and job involvement among coaches of sports councils in South-South, Nigeria.

Hypothesis

1. There is no significant difference in the relationship among motivation, job satisfaction and job involvement among coaches of sports councils in South-South, Nigeria.

METHODOLOGY

Research Design

Correlational research design was adopted in this study.

Participants

The population of this study comprised all the coaches in sports councils in South-South, Nigeria. The total population of all the coaches in the sports councils in the six states is 578 made up of 460 male and 118 female coaches (Data from various state sports councils, 2018) A total of 301 coaches constituted the sample size for this study (Male=231 and Female=70). Multi-stage sampling procedure was used to select the sample. First, it involves stratifying the coaches into male and female in each sports councils in South-South,

Nigeria.. Secondly, proportionate random sampling technique was used to select 50 percent of male and 50 percent female coaches in various sports council in South-South, Nigeria.

Instrumentation

An adapted questionnaire was used to collect data in this study. The questionnaire was made up of four sections. Each of this section is described below; Section A elicited information on coaches' gender, age, work experience, marital status and the type of sports the coach handles. Section B is adapted from Aspina (2014) motivation questionnaire. This questionnaire allowed the coaches to determine how motivated they feel in their current role. It is a 20-item inventory; the inventory used summated rating scale format with 3 choices per item, using the rating scale: 5= I fully agree, 3=I'm not sure and 1= I fully disagree. Section C is adopted from Lodahl and Kejner (1965) job involvement inventory. The 20-item inventory is designed to measure what the authors described as the extent to which a person's work performance affects their self esteem. The inventory used summated rating scale format with 4 choices per item, using the following rating scale: 1=strongly agree, 2=Agree, 3=Disagree, 4=strongly disagree. There is a direct scoring and reverse

scoring of the items. Add together the result of the direct score and the reverse score items to obtain the overall job involvement score. The norms reported here are the mean scores obtained by workers in the general population. The norms or mean score for Nigerian samples is 41.76. Scores lower than the norms indicated job involvement. This means that the higher the score the poorer the job involvement of the coach. Concurrent validity was obtained by correlating Job Involvement with Job Descriptive Index (Smith, Kendall & Hullin,1969). JDI for Nigerian samples are: Work =.23, Pay =-.09, Promotion =-.09, Supervision =-.09, Co-workers =-.11. The mean scores obtained by the general population; Nigerian sample = M&F(n=600):41.76. Govender and Paramasur (2010) in determining the validation of the job involvement scale of Lodahl and Kejner (1965), factor analysis generated four factors with eigen values > 1 and a Kaiser-Meyer-Olkin measure yielded a value of 0.782. The alpha coefficient of 0.695 indicated that the instrument was reliable. Ejiogu (1986) adopted and validated the job involvement scale by Lodahl and Kejner with a split half reliability of .76

Validity and Reliability of the Instrument

Aspina motivation questionnaire was validated by three experts. One from the department of Human kinetics and sports science, university of Benin, one also from Department of Human kinetics and Health Education, Nnamdi Azikiwe university, Awka and the other from measurement and evaluation, university of Benin. Their corrections, clarifications, suggestions, modifications and recommendations served as the final draft of the instrument. Aspina motivation instrument was administered to 20 coaches in Ondo state sports council. The data collected were analysed using the Cronbach Alpha statistics and a coefficient value of 0.89 was obtained. Job involvement instrument reliability was re-established by the researcher.

The instrument was administered to 20 coaches in Ondo state sports council. The data collected were analysed using the Cronbach Alpha statistics and a coefficient value of .88 for Job involvement. The Lodahl and Kejner (1965) for job involvement obtained Spearman Brown internal reliability coefficients of .72 and .80 for females and males respectively. The coefficient of test-retest reliability obtained in an interval of 72 days was .90.

Procedure for Data Collection

A letter of introduction was obtained from the Department of Human Kinetics and Health Education, Nnamdi Azikiwe University, Awka. This letter introduced the researcher to the Directors in the Sports Councils in the various states. On getting to any sports council, the researcher first point of call was the director of sports. The director of sports handed the researcher and his assistants to the personnel who introduced the researcher to the coaches. The administration of the instrument was over two months. The researchers and the research assistants personally administered the questionnaire to the various sports councils. Meanwhile, the administration of instrument usually commenced in the morning, when the coaches have finished their training. At times some of the coaches were very reluctant to respond, this was achieved through appealing to them, in some cases, coaches ordered us to read and interpret for them. This actually delayed us in administering the instrument on time. However, after completion, the questionnaire forms were retrieved. Meanwhile, out of the 301 questionnaires, male 231 and female 70 sent out, a total of 227 for male and 64 female, totaling (291) were retrieved and was finally used for the study, representing 95percent returned rate.

Data Analysis

Regression statistical technique was used to test hypothesis at 0.05 level of significance.

Hypothesis One: There is no significant difference in the relationship among motivation, job satisfaction and job involvement among coaches of sports councils in South-South, Nigeria.

RESULTS

Table 1: Relationship among motivation, job satisfaction and job involvement of Coaches of Sports Councils in South-South, Nigeria

Variable	r	R ²	R ² change	B	Beta	% variance	F _{Cal}	df	F _{Crit.}	Remark
Variable	0.081	0.007	0.00	45.768		0.00	0.96	290	3.00	NS
Motivation				0.063	0.094					
Job Satisfaction				0.021	0.023					

Table 1 indicated that the motivation and job satisfaction of the coaches have R² change of 0.00. This indicates that they had the 0.00 percent correlation with their job involvement. Also, at 2df numerator, 290df denominator and 0.05 level of significant, the calculated F value 0.96 was less than the critical F value of 3.00. Therefore, motivation, job satisfaction and job involvement of coaches of sports councils in South-South, Nigeria were not significantly correlated.

satisfaction had a 0.00 percent correlation with their job involvement. Therefore, motivation, job satisfaction and job involvement of the coaches of sports councils in South-South Nigeria were not significantly correlated. This could be attributed to lack of recognition, transparency, praises, job security and job advancement. This finding agrees with Campbell and Campbell (1998) who stated that less motivated, dissatisfied and unguided coaches are liabilities. A poorly motivated and unsatisfied coach does not like their job and as such demonstrate lukewarm attitude towards their job and as such this will lead to poor job involvement. The findings corroborated Saari and Judge (2004) dissatisfied and demoralized coaches tend to have low level of job

Discussion

The results revealed the nature of relationship that existed among motivation, job satisfaction and job involvement of coaches of sports council in South-South Nigeria. This indicates that, motivation and job

involvement, which in turn, impact negatively on performance and the achievement of organizational goals.

CONCLUSION

Based on the findings of the study, it could be concluded that, there is no significant relationship existing among motivation, job satisfaction and job involvement of sports council's coaches in South-South Nigeria.

RECOMMENDATIONS

From the findings of the study and conclusion drawn, the following recommendations were made:

1. Adequate, functional and modern sports facilities and equipment should be made available by state governments in the various sports councils in South-South Nigeria.
2. Regular and prompt payment of coaches' salary and bonuses should be a top priority by various state governments. This will not only boost the morale of coaches, it will also help to build confidence, self-esteem and fulfillment.

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THE EFFECT OF DICTOGLOSS STRATEGY ON DEVELOPING MOTIVATION TOWARDS LEARNING EFL LISTENING SKILLS OF NIGERIAN SECONDARY SCHOOL STUDENTS

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ABSTRACT

This study examined the effect of using dictogloss strategy to improve motivation towards learning English Foreign Language (EFL) listening sub- skills of Nigerian secondary school students. Quasi-experimental research design was adopted in the study. An intact class of 120 students comprising experimental and control groups participated in the study. A self-developed instrument titled “Motivation Scale Towards Learning Listening Skills of Students” was administered to collect data in the study. Data were analyzed using t-test for independent samples. The results showed that students were motivated towards learning EFL listening skills due to use of dictogloss strategy. The study concluded that dictogloss has positive effects on improving students’ motivation towards learning EFL listening skills. It was recommended that the Ministry of Education should organize workshops and seminars to train teachers on how to use dictogloss technique to prepare the secondary school curriculum, and facilitate motivation towards learning listening skills through dictogloss in secondary schools.

Keywords: Dictogloss, Motivation, Listening skills

INTRODUCTION

It is undisputable that teaching and learning of the English language have attracted wide recognition and acceptance world over. Historically, foreign language teaching begun with the practice developed during the early centuries of teaching Latin and Greek in England and Europe (Dimitrios, 2019). Subsequently,

language teaching began to emerge as a discipline and profession, and it came into its own as a profession in the 20th century (McLelland & Smith, 2020). The idea of “method” and “approach” to teaching languages was a major part of this change and teachers and applied linguists spent most of the 20th century looking for

better ways to teach languages (Renau, 2016). Therefore, Language skills are now integrated through dictogloss procedure. Traditional methods of teaching English often include translating structures from the mother tongue; although this method may seem antiquated, its usage is common. Indeed, those teachers who were taught by traditional methods tend to continue their teaching with similar methods. Instead of reinforcing a linear approach to learning (i.e., input- comprehension - output), the dictogloss procedures illustrate a unique learning approach. Students have opportunities to integrate reading, writing, listening and speaking skills through social interaction. Learning paradigms are now shifting beyond the changes experienced in the 20th century in terms of the role of teaching and learning. The teacher's role changed from teaching to learning facilitation. Currently, the shift is towards facilitated and supported inquiry.

According to Habu (2004) secondary stage students in Nigeria are unable to get the minimum requirement to pass English language examination at credit level in their final year which is prerequisite for getting admission into a university. Listening is a comprehension process because listener has to construct a meaning out of what the speaker transmits

(Goss cited in Cardona, Londona & Osono, 2013). Listening is a medium for humans to get information as knowledge (Safran, 2015). Purdy (2011) confirmed that listening is the active and dynamic process in which individuals attend, perceive, remember, interpret, and respond on the communicated needs, concerns, and so on.

Dictogloss was first introduced by Wajnryb in (1990) as a substitute method of teaching grammar (Vasiljevic, 2010). Dictogloss is defined as a classroom dictation activity where students are asked to listen to a text (usually, a short one) that is read by the teacher and the students reconstruct the text in their own words (Cardosa, 2012). Dictogloss is also described as a language teaching technique which is used to effectively teach grammatical structures in which students create small groups and summarize a target –language passage (Richards & Schmidt, 2009).

Mahadi and Jafari (2012) defined motivation as physical, psychological or social need which motivates the individual to reach or achieve his goal and fulfill his need and finally feel satisfied owing to achieving his aim. Motivation can be described as one of the factors stimulating, directing and strengthening certain behaviour,

ensuring its repetition and continuity. It is known that a high level of motivation is a strong force directing people to act in a more determined manner to reach aimed targets (Ozturk & Uzunkol, 2013).

Hang (2017) investigated a study on the impact of dictogloss on students' motivation. Data were collected through tests, questionnaires, and observation involving twenty-eight second year students of HCE in Vietnam. The research was carried out in twelve weeks respectively. The initial result indicated that students had low motivation in learning English when taught with traditional method. The later result after applying dictogloss demonstrated the positive impacts of using dictogloss on students' motivation. Learners could not only make improvements in their motivation but also express greater interest in the English class. However, data from observations demonstrate that dictogloss contributed to the exciting atmosphere in the classroom. The participants, after the intervention, expressed clear interest to the new technique.

Lebsir (2010) conducted research to examine the effect of dictogloss on students' motivation and attitude to perform a collaborative learning procedure, on second year students in

learning English tenses. The participants of the study were 118 second year secondary school students who were divided into a control and experimental groups. A pre-test and post-test were used as instruments of the research. The results of the study showed that the experimental group performed better than the control group. These results show that dictogloss had a positive effect on students' motivation in learning English tenses. Additionally, the results also indicated that the students expressed positive attitudes toward dictogloss.

Objectives of the Study

1. Examine the effect of dictogloss strategy on second year secondary school students' motivation towards learning EFL listening sub-skills.
2. Examine the effect of dictogloss strategy in improving motivation towards learning EFL listening sub-skills of Nigerian secondary stage students.

Research Questions

The current research answered the following questions:

1. What is the effect of dictogloss strategy on second year secondary school students' motivation towards learning EFL listening sub-skills?
2. To what extent does dictogloss strategy enhances to enhance EFL

listening sub-skills of the second-year secondary school students in Nigeria?

Hypotheses

The following null hypotheses were tested in this study:

1. There is no significant difference between the mean scores of the experimental group and that of the control group on the post administration of the Motivation scale towards learning listening in favour of the experimental group.
2. There is no significant difference between the mean scores of experimental group on the pre and post administration of the Motivation scale towards learning listening in favour of the post administration.

METHODOLOGY

Research Design

The design of the study is a quasi-experimental research design. The researcher used non randomized pre-test post-test measures which involved two groups or samples: the experimental group and the control group. The experimental group was given the treatment while the control group was required for comparison purposes. In this case, students were subjected to an experimental treatment and the scores compared with the results of control group at both pre-test and post-test stages. The design was considered appropriate

because the study involved subjects in a natural setting. The research design of this study is presented below:

NR: O1	X	O2
NR: O1	---	O2

Source: Diagrammatic Representation of the Quasi-Experimental Research Design (Christopher, 2013)

Participants

One hundred and twenty (120) participants were chosen randomly from the second-year secondary classes to serve as control and experimental groups. Two intact classrooms of sixty (60) students each were used. Both groups comprised of sixty (60) participants.

Instrumentation

The instrument titled “Motivation scale towards learning EFL listening skills” was prepared and administered basically to discover the pre- and post-performance of the control and experimental groups before and after the experiment.

Validity of the Instrument

To make sure the scale was accurate, it was shown to a group of specialists in English language methodology, test and measurement, experienced supervisors and teachers in schools, totalling (16) jurors. This was done to make sure that the scale measured what it was supposed to measure and

what was agreed upon by (14) jurors out of a total of (16) equivalent to (87.5%). The scale proved to be valid as the jurors approved most of the items and provided some modifications that were considered in the final version of the scale. The validity of the internal consistency of the scale was calculated after applying it to a random sample of (30) EFL second year secondary stage students in Nigeria. Results revealed that all the values of the correlation coefficients were positive and significant at the level of significance (0.01). Values of the correlation coefficients of the degree of each item with the total score of the scale ranged between (0.688) and (0.808). This indicates that there is a good, important and strong relationship between the degree of each item and the total score of the scale.

Reliability of the Instrument

Using Cronbach's alpha method, the researcher determined the reliability of the motivation scale towards learning EFL listening scale. Thus, the value of the reliability of the scale as a whole was (0.873), which is a high and statistically acceptable reliability value. It is evident from the previous results that the motivation to listening skills as a whole possesses

sufficient validity and reliability for its use in the current study.

Procedure for Data Collection

The data for this research was collected after administering the instrument of the research titled "Motivation scale towards learning EFL listening skills" to the sampled population. They were required to choose from the motivation scale according to the scale of four point analytic scoring scale, with scores ranging from 4 as its highest score and 1 as the lowest score, where (4 = Excellent, 3 = V. Good, 2 = Good, 1 = Poor).

Data Analysis

The independent t-test was used to analyze the data collected in the study.

RESULTS

Hypothesis One: The first hypothesis stated that there is no significant difference between the mean scores of the experimental group and that of the control group on the post administration of the Motivation scale towards learning listening in favour of the experimental group.

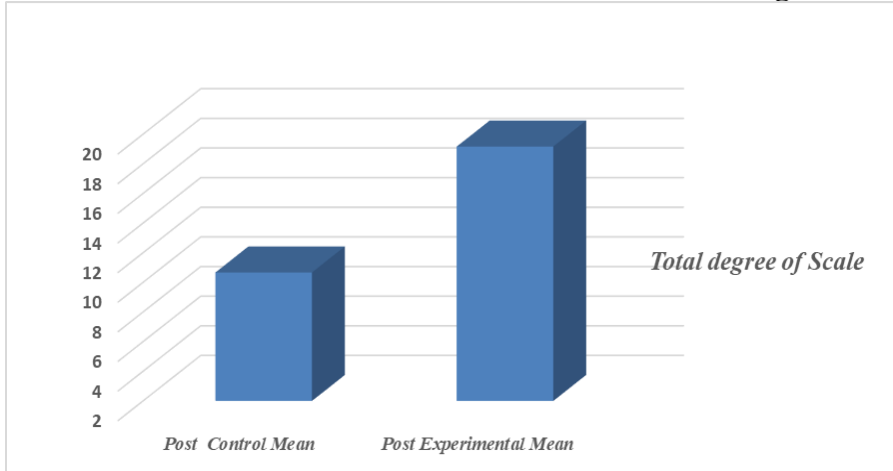
Table 1: Comparing the Experimental and the Control Groups on the Post Administration of Motivation towards Learning Listening Skills Scale

	Group	N	Mean scores	SD	Df	t-cal.	Sig.
Total degree of the Scale	Control	60	10.67	1.481	118	34.598	0.01
	Experimental	60	19.17	1.196			

Table 1 showed that there were statistically significant differences between the mean scores of the experimental and control groups in the total score of the motivational listening scale in the post-administration in favour of the experimental group (highest mean = 19.17), where the value of ($t = 34.598$) was statistically significant at Significance level (0.01) and degree of freedom = 118. These results confirm the validity of the fifth hypothesis and the hypothesis was accepted. The researcher associates these differences to the employment of dictogloss strategy on

experimental group. The improvement in the motivation level is as a result of using dictogloss and some of its steps and activities such as (initiation, input, independent, interdependent, performance, reflective and evaluation). The dictogloss strategy also arouses the students' interest and develops their enthusiasm towards listening attentiveness. Differences between the experimental and that of the control group mean scores in all the sub-skills of the post administration of the motivation scale towards learning listening skills are indicated in the following figure:

Figure 1: The Mean Scores of the Experimental and Control Groups in the Post Administration of the Motivation Scale towards Learning Listening Skills



Hypothesis Two: The second hypothesis stated that: There is no significant difference between the mean scores of experimental group on

the pre and post administration of the Motivation scale towards learning listening in favour of the post administration.

Table 2: Comparing the Experimental Group Pre and Post Administrations of motivation towards Learning Listening Skills Scale

	Application	N	Mean scores	SD	Df	t-cal.	Sig.
<i>Total degree of the Scale</i>	pre – test	60	9.47	0.596	59	56.430	0.01
	post – test	60	19.17	1.196			

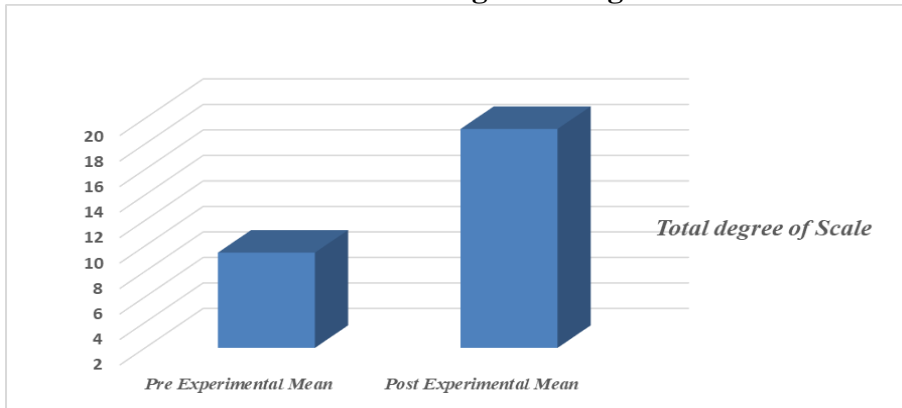
Table 2 revealed that there were statistically significant differences between the mean scores of the experimental group in the pre and post administration in the total score of the motivational listening scale in favour of

the post administration (highest mean = 19.17), where the value of ($t = 56.430$) was statistically significant. The level of significance is (0.01) and the degree of freedom is (59). These results confirm the validity of the sixth hypothesis. Thus,

the hypothesis was accepted. The researcher attributes these differences to the employment of dictogloss strategy. Differences between the experimental group scores in the pre- post

administration of the motivation scale towards learning listening in all sub-skills of the scale and the total score are showed in figure 2 below:

Figure 2: Experimental Group Scores in the Pre- Post Administration of the Motivation Scale towards Learning Listening Sub-Skills



To establish the effect size of the dictogloss program regarding the difference between the experimental group's pre- and post- administrations of the motivation towards learning listening

skills, eta square (η^2) and effect size were estimated after calculating the t-value. The results are presented in Table 3.

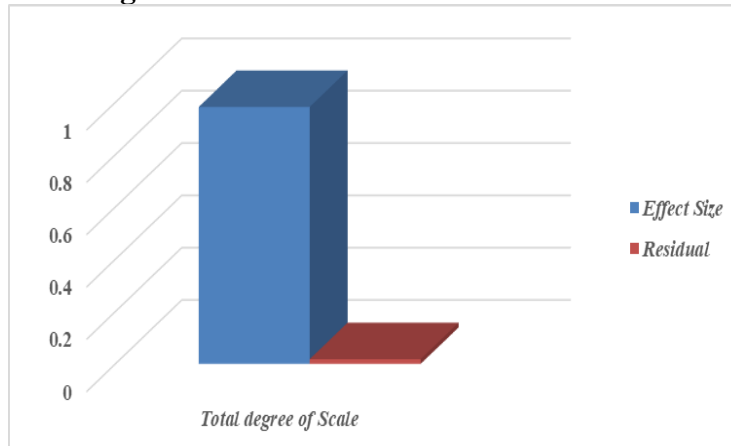
Table 3: Values of (η^2) and Effect Size of the Treatment on Developing the Motivation towards Learning Listening Scale of the Experimental Group

	η^2	Effect size
Total degree of the Scale	0.982	High

Table 3 revealed the strength of the influence of independent variable (total degree of the scale) of dictogloss method on the total score of the motivation to listening skills, where the value of (η^2) came in the total score of the scale, variance, thus, indicates the significant impact meaning that 98.2% of the total variance in the of the programme.

The effect size of the dictogloss program towards learning listening skills and its overall the performance of experimental group score are indicated in figure 3: students in five sub-skills of the motivation

Figure 3: Effect Size of Dictogloss Strategy on Motivation Scale towards Learning Listening



Discussion

The results in this study indicated that there was a statistically significant difference between the experimental group and their counterparts in the control group in the variables under study in favour of the experimental one. These results revealed the development in the experimental group students' motivational level towards learning listening skills on the post administration of the tests and the motivation scale. Such development could be associated to the effectiveness of using the dictogloss strategy on experimental students.

The results of the study also showed that the students in the experimental group were more active and aware of the listening skills, and their motivation

enhanced. Thus, this is associated to the activities and tasks that were involved in the proposed program which motivated and encouraged the participants to intermingle and communicate using the focused skills. Moreover, students who studied listening via dictogloss strategy became more willing and motivated to participate in listening activities. This, as a result, it was revealed that administering the dictogloss strategy of the current study led to improving the experimental students' motivation towards learning listening skills than their equivalents of the control group. Furthermore, the results indicated that the dictogloss strategy is more effective than the regular method. This led to improving the EFL listening skills of

second year secondary stage students in Nigeria and their motivation towards learning the skills developed. Consequently, the effectiveness of dictogloss strategy can be associated to its peculiarities that led to the reasons as follows. Dictogloss promotes interactive and collaborative participation of EFL students in listening tasks with the help of a teacher serving as a facilitator, guide, instructor and director. In addition, it creates interactive teaching method that encourages students to interact and learn positively. The strategy included listening activities that focused the needs and interests of those students. The dictogloss provides students with good opportunities to freely as individual and in group during independent and interdependent stages of the strategy. These stages evidently have contributed to developing students' attitudes towards motivating EFL learning. It makes students to become more aware of the necessary listening skills and the criteria according to which their listening was evaluated. It provides unique blending of teaching listening skills. During listening activities, students were motivated to use extra ability and intelligence that could assist them to get clear understanding and background about the topic they were supposed to listen through various stages of dictogloss strategy. Using interesting topics in the dictogloss application method such as: The wealthy mare, The joy of victory and Animal plan to

overthrow man. Furthermore, to using various illustrative materials including images, tables to assist students to activate the students' previous knowledge and as a result motivate their listening and link them collectively.

CONCLUSION

This study concluded that improving motivation towards learning EFL students' listening skills are possible through dictogloss teaching method. The findings of the research accounted for empirical evidence that dictogloss helps EFL secondary school students develop their motivation towards learning EFL listening skills. Several studies on the topic in language methodology found similar results.

RECOMMENDATIONS

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

1. EFL teachers are recommended to be aware of the relevance of applying dictogloss method in teaching listening skills to their students. It improves their EFL students' motivation towards learning the skills.

2. EFL teachers are recommended to believe that their roles changed from being the only sources of knowledge to guides, monitors, facilitators, collaborators and consultants to their students.
3. EFL teachers should prepare their students to apply the dictogloss content in the classrooms to practice English language and build a friendly and conducive environment for learning listening and improve students' motivation.
4. Students centered approach and self-learning should be applied in motivating students' motivational level of learning listening skills. Thus, teaching materials, activities and tasks should be improved in accordance with students' interests. Students are needed to embrace more interesting and enjoyable learning strategies and be self-governed, and involved in the interactive- oriented classes.

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IMPACT OF COMPUTER AND PAPER BASED TEST EXAMINATIONS ON ACADEMIC PERFORMANCE AMONG UNDERGRADUATE GEOGRAPHY STUDENTS IN KATSINA STATE, NIGERIA

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ABSTRACT

This study investigated the impact of Computer-Based-Test and Paper-Based-Test on academic performance scores of undergraduate geography students in Katsina state. It also determined the difference in academic performance scores of male and female undergraduate geography students due to the impact of Computer-Based-Test and Paper-Based-Test. Quasi-experimental research design was adopted in the study. The population consisted of 35, 222 students out of which 255 students were selected in the study. A researcher-constructed instrument namely: "Geography Academic Performance Test (CAPT)" was used for data collection. The mean and standard deviation were used to answer research questions, while independent sample t-test was used to test the hypotheses at 0.05-level of significance. The results revealed that there was a significant difference in the mean academic performance scores of undergraduate geography students exposed to Computer-Based-Test and their counterparts exposed to Paper-Based-Test. Also, there was a significant difference in the mean academic performance scores of male and female undergraduate geography students exposed to Computer-Based-Test and Paper-Based-Test. It was recommended that the government should organize workshops and seminars for teachers to master the use and relevance of Computer-Based-Test and to adopt them in their various institutions.

Keywords: Computer-Based-Test, Paper-Based-Test, Geography, Student, Academic performance

INTRODUCTION

National University Commission (2018) state that, the smooth running of any university should be based on the recognition, which should be achieved after the coalition of interests that are loosely coupled for defining, negotiating and crystallizing societal needs and expectations (Oyedepo, 2012).

Therefore, the operation of a university is anything but the achievement of societal needs and aspirations. Thus, the nature and quality of a university may largely depend on academic satisfaction of that university's products. A university is a place where solutions to societal problems are found and

value added to humanity; a university is not a monastery but a factory which produces values and drives research, the real value of a university is only established by the problems it solved (Oyedepo, 2012). This statement signifies that a university can only be established to solve societal problems; it is an ultimate level of educational system in Nigeria; therefore, its educational system needs to be compared with the rest of Universities in the world; this is in terms of system standardization, research, dissemination of existing and new information (Innovation), provision of a deposited knowledge, pursuit of service to the community and in global ranking staples.

For Nigerian Universities to reach a global standard, therefore they must confront with the demands of globalization, the demands for National relevance, the challenges of Information and Communication Technology (ICT) and the emergence of technology, the demands to produce graduates comparable to the best elsewhere and sufficiently competitive for the international job market. To address these challenges and many more, the Nigerian Universities need to have valid reliable and flexible educational system that support appropriate evaluation strategy that will achieve

21st century Sustainable Development Goals (Oyedepo, 2012).

Academic performance is defined by Adeyemi (2017), as the exhibition of knowledge attainment or skills developed by the students in a subject designed by test scores assigned by the teachers. Many researchers like (Abdulkarim, Salisu & Lawal, 2016) indicated that students performed poorly in Geography especially at undergraduate level. Other challenges in learning Geography outlined by Aderogba (2012) include large classes, students' limited interest in geography compounded by limited teaching aids and poor teaching techniques.

Gender is a socio-economic variable for analyzing roles, responsibilities, constraints, and needs of men and women in a given context. It refers to the social and cultural constructs that each society assigns to behaviors, characteristics and values attributed to men and women (Sanda & Kurfi, 2013). The basis of the construct lies behind the idea that they are natural or intrinsic, and therefore, unalterable. These gender constructs are shaped by ideological, historical, religious, ethnic, economic and cultural determinants. These are usually translated into social, economic and political inequalities, where men's activities and their

gender attributes are perceived as essentially superior to women. Therefore, the description of gender in this research totally deals with differences found among the male and female students' attitude and academic performance in geography concepts on computer based test and traditional paper based test examination in Nigerian universities. Traditional paper and pencil examination as described by (Alakyleh, 2018) is the oldest method adopted by Nigerian Universities for administering examination through question papers to which students respond in the form of written answers to a limited choice of previously unseen examination questions, set in advance and answered in examination centers where invigilators prevent communications between students and prohibit the use of notes or any other revision aids; the student also has a freedom of writing his own expression without demarcating him by any border lines or stresses and anxiety of any external technological equipments' factors.

However, in recent time, there has been a growing interest in using computer and technological accessories for conducting educational assessment known as computer assisted, e-assessment, and Computer-Based Test (CBT)

examination especially in higher institutions of learning. Whatever is the name, it is the system whereby computer is an integral part of administering the examination; this has become a new innovation that keeps with technological trends of 21st century. The use of Information and Communication Technology in registering and administering examinations helps in attaining efficiency and error-free results and computation (Abdullahi 2016). Therefore, this study examined the Influence of Computer and Paper Based Test on Attitude and academic Performance among undergraduate geography students in Katsina State.

The study was set to examine the Influence of Computer and Paper based test on Attitude and academic Performance among the undergraduate geography students of Katsina State. Therefore, the researcher wishes to critically observe four (4) years' results in Climatology among three hundred level courses. These results of Climatology, written in Computer Based Test (CBT) and compared with the same Climatology course written in Paper Based Test (PBT) at Department of Geography, Faculty of Natural and Applied Science, Umaru Musa Yar'adua University (UMYU) and Federal University Dutsinma (FUDMA)

Table 1: Four Years Analysis of Climatology Results

Session	Institutions	No. of Students Reg.	No. of Students Pass	%	No. of Students fail	%
2015/2016	UMYU	47	35	75%	12	25%
	FUDMA	26	26	100%	0	0%
2016/2017	UMYU	62	50	84%	12	16%
	FUDMA	46	34	78.4%	11	21.6%
2017/2018	UMYU	86	65	68.5%	21	31.5%
	FUDMA	53	31	62.1%	22	37.9%
2018/2019	UMYU	93	71	62.1%	22	37.9%
	FUDMA	136	94	64%	42	36%

Source: Geography Departments, UMYU and FUDMA (2018)

Objectives of the Study

The study aimed at achieving the following set of objectives, to:

1. examine the influence of Computer based test and Paper Based Test on academic performance scores among undergraduate geography students in Katsina State.
2. investigate the influence of Computer based test and Paper Based Test on academic Performance scores between male and female undergraduate geography students in Katsina State.

Research Questions

The following research questions were formulated to guide the study:

1. What is the difference in the academic Performance scores of undergraduate geography students exposed to Computer based test and Paper Based Test in Katsina State?
2. What is the difference in academic Performance scores between male and female undergraduate geography students exposed to Computer based test and Paper Based Test in Katsina State?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean academic performance scores of undergraduate geography students exposed to Computer based test and their counterparts exposed to Paper Based Test in Katsina State.

2. There is no significant difference in the mean academic Performance scores of male and female undergraduate geography students exposed to Computer based test and their counterparts exposed to Paper Based Test in Katsina State

METHODOLOGY

Research Design

The research design used in this research is Quasi Experimental Design to effectively explain the Influence of Computer and Paper Based Tests on Attitude and academic performance among undergraduate geography students in katsina state. Specifically, it is a pre-test, post- test

non-equivalent control group design. In this study, the independent variable is Computer Based Test and Paper Based Test, while the dependent variables are Students' Attitude and academic performance. The study consists of two groups; Experimental Group (EG) and Control Group (CG). Both groups were pre-tested (O_1) to ensure equivalence in performance. Group one was exposed to instructional approach geared towards computer based test (X_1) while group two was exposed to strategy geared towards paper based test (X_2). Although, different evaluation technique tests (O_2) were adopted for the two groups, the same instructional technique was adopted, Lecture Method was used to treat the two groups for a period of six (6) weeks.

Participants

The population of the study covered the undergraduate students in the six-degree awarding institutions in katsina state, a total of 35222 students; the research used 300 level students of Geography.

Table 2: Population Distribution of Geography Students

S/N	Institutions	Male	Female	Total
1	Al- Qalam University Katsina	5974	2446	8420
2	Federal University Dutsin-Ma	9139	2684	11823
3	Federal Collage of Education Katsina	673	305	978
4	IsahKaita Collage of Education Dutsin-Ma	872	211	1083
5	Umaru Musa Yar'adua University Katsina	7545	2373	9918
6	National Open University of Nigeria (katsina Centre)	1850	1150	3000
Total		26,053	9,169	35,222

Source: Academic Units of Affected Universities (2019)

The researcher used simple random sampling techniques in selecting two-degree awarding institutions to represents the entire population and these are Umaru MusaYar'adua University Katsina and Federal University Dutsin-ma Katsina State; this selection however, was done on the bases of the following: (i) The institution that offers Computer Based Test (CBT) and Paper Based Test (PBT) in their semester examinations; (ii) The institutions that are accredited by the National University Commission NUC for full time

courses of study; and (iii) The institutions that offers Climatology as a prerequisite course in studying Bsc Geography and Bsc Ed Geography. The researcher also used purposive random sampling to select three hundred level students of degree program in the department of Geography of the two selected institutions, a total of 179, at Federal University Dutsin Ma, as Control Group (CG) and a total of 76 students at Umaru Musa Yar'adua University, as Experimental Group.

Table 3: Sample Distribution by Group and Institution

S/N	Name of the Institutions	Group	Sample
1	Umaru Musa Yar'adua University Katsina	CBT	76
2	Federal University Dutsin Ma	PBT	179
Total			255

Source: HOD's of UMYU and FUDMA (2019).

Instrumentation

The instrumentation for data collection is a distinct instrument, which is Geography Academic Performance Test (GAPT) which was developed by the researchers, containing 20 items to measure students’ academic performance in Climatology Concept; the instrument was developed from the Climatology Concept of 300 level Geography Curriculum. All the items in the test are objectives (Multiple types) test

questions containing four alternatives, (A-D), to determine students’ academic performance.

RESULTS

Research Question One: What is the difference in the Academic Performance scores of undergraduate geography students exposed to Computer and Paper Based Test in Katsina state?

Table 4: Mean and Standard Deviation of Academic Performance scores of Experimental and Control groups

Group	N	Mean	SD	SEM	Mean Difference
CBT	76	59.23	15.14	1.73	
PBT	179	52.39	11.58	.86	6.84

The Table 4 presented the mean and standard deviation of academic performance scores of experimental and control groups. From the result, experimental group recorded mean scores of 59.23 with standard deviations of 15.14, while control group recorded a mean of 52.39 and standard deviation of 11.58 with

mean difference of 6.84. Students from experimental group performed better than those in control group.

Research Question Two: What is the difference in Academic Performance scores of male and female geography students exposed to Computer and Paper Based Test in Katsina state?

Table 5: Mean and Standard Deviation of Academic Performance scores of Male and Female Students in Experimental Group

Gender	N	Mean	SD	SEM	Mean Difference
Male	45	55.92	16.38	2.44	
Female	31	64.04	11.79	2.11	8.12

The Table 5 presented the mean and standard deviation of academic performance scores of Male and Female students in experimental group. From the result, male students recorded mean scores of 55.92 with standard deviations of 16.38, while female students in the same group recorded mean scores of 64.04 and standard deviation of 2.11 with mean

difference of 8.12. Female Students performed better than male students.

Testing of Hypotheses

Hypothesis One: There is no significant difference in the mean academic performance Scores of undergraduate geography students exposed to Computer and their counterparts exposed to Paper Based Test in Katsina State

Table 6: Difference in Academic Performance of Experimental and Control Groups

Group	N	Mean	SD	t-cal.	Df	p-value	Decision
CBT	76	59.23	15.14				
PBT	179	52.39	11.58	3.92	248	.000	Significant

Table 6 presented t-test Analysis of Academic Performance of experimental and control groups. From the results, t-value recorded is 3.92 and p-value observed at degree

of freedom of 248 is 0.000. P-value observed is less than alpha (0.05); therefore, the hypothesis which stated that there is no significant difference in the mean academic performance scores of undergraduate geography

students exposed to Computer Based Test and their counterparts exposed to Paper Based Test in Katsina State is rejected. This shows that there is a significant difference in the mean academic performance scores of undergraduate geography students exposed to computer-based-test and their counterpart exposed to paper-based-test examinations. Clearly, computer-based-test influence

students' academic performance more than paper based test examinations.

Hypothesis Two: There is no significant difference in the mean Academic Performance scores of Male and Female undergraduate geography students exposed to Computer Based Test in Katsina State.

Table 7: Difference in Academic Performance of Male and Female Students in Experimental Group

Gender	N	Mean	SD	t-cal.	Df	p-value	Decision
Male	45	55.92	16.38				
Female	31	64.04	11.79	2.36	74	0.02	Significant

Table 7 presented t-test Analysis of Academic Performance of gender in experimental group. From the results, t-value recorded is 2.36 and p-value observed at degree of freedom of 74 is 0.02. P-value observed is less than alpha (0.05), therefore the hypothesis which stated that there is no significant difference in the mean Academic Performance scores of Male and Female undergraduate geography students exposed to Computer Based Test in and their counterpart exposed to paper based test in degree awarding institutions of

Katsina State, is rejected. This indicates that there is significant difference in mean academic performance scores of male and female undergraduate geography students exposed to computer based test and their counterpart exposed to paper based test examinations in degree awarding institutions of katsina state. Clearly, computer based test influence female students' academic performance more than their counterpart.

Discussion

The finding number one in the study shows that there is significant

difference in the mean Academic Performance of undergraduate geography students exposed to Computer based test and their counterparts exposed to Paper Based Test in Katsina State. This finding is in agreement with Salisu. A (2015) as confirmed by Oyedepo,(2-012) findings which showed that the Performance of students exposed to computer assisted instruction was better than that of their counterparts exposed to the conventional classroom instruction. The findings showed that computer assisted instruction influence students' Performance ability more than those exposed to conventional classroom instruments. Yusuf (2005) as affirmed by Alakyleh (2018) endorsed that computer has dominated human activities especially in the last two decades. Its use is complemented by a whole lot of other electronic devices, all of which are now collectively regarded as Computer Assistance Technology. The finding number two also reveals that there is significant difference in the mean Academic Performance scores of Male and Female undergraduate geography students exposed to Computer Based Test in Katsina State. The findings of Halliru (2015) revealed that there is no significant difference in the performance of students in respect of gender in chemistry due to exposure

to instructional strategy. Mastuti, E., &Handoyo, S. (2017). found no significant difference in the academic achievement between male and female students taught ecological concepts using outdoor laboratory instructional strategy.

CONCLUSION

Based on the findings, the study concluded that:

1. Computer based test enhanced Academic Performance of undergraduate geography students in degree awarding institutions of Katsina State better than Paper Based Test.
2. Computer Based Test exerted profound influence on female undergraduate geography student s more than male in degree awarding institutions of Katsina State.

RECOMMENDATIONS

Basedon the findings of this study, the researcher recommends that:

1. The use of CBT in school should be encouraged by stake holders in the education industries such as Federal Ministry of Education, State Ministries of Education, NERDC among others. This can be done through periodic

seminars and workshops to teachers on how to use animated media in teaching.

2. The Federal Government of Nigeria through its agencies such as the State Ministries of Education, Teacher Training Institutions and professional bodies such as NTI and STAN, should organize special re-training workshops, and seminars for teachers on using Computer Based Test.

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RELATIONSHIP BETWEEN TEACHERS SELF-EFFICACY AND SCIENCE PROCESS SKILLS IN TEACHING SCIENCE THROUGH INQUIRY BASED APPROACHES IN JIGAWA STATE, NIGERIA

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ABSTRACT

This study investigated whether relationship existed between teachers' self-efficacy and science process skills in teaching science through inquiry-based approaches in Jigawa state. It also determined if there was influence of teachers' knowledge efficacy and personal teaching efficacy on teachers' outcomes belief expectancy in teaching science through inquiry-based approaches in Jigawa state. The population consisted of 113 science teachers under Science and Technical Education Board. 81 science teachers made up the sample in the study. A 72-item instrument tagged: "Self-Efficacy in Teaching using Science Inquiry Skills (SESTIS) was adapted and used to collect data in the study. The data obtained were analyzed using Pearson Product Moment Correlation and Multiple Regression statistics. The findings indicated that there was a significant positive relationship between teachers' knowledge efficacy and personal teaching efficacy. Also, personal teaching efficacy had a significant positive influence on teachers' knowledge efficacy. However, teachers' outcomes belief expectancy had no significant influence on teachers' knowledge efficacy. It was recommended that for effective delivery of teaching and learning of sciences, government, curriculum planners, teachers' development programmers should encourage science teachers to use inquiry-based approaches in teaching in secondary schools in the state and throughout the country.

Keywords: Self-efficacy, Science process skills, Inquiry-based approaches

INTRODUCTION

The goal of Science Education emphasized that students should actively participate in inquiry-based learning by doing, observing, formulating hypotheses, conducting

experiments, analyzing, and interpreting data. Students have to apply their understanding of science concepts and technique to participate in experiences and activities used by

scientists, instead of studying science by memorization of a body of knowledge (Brigham et al., 2011). These are the practical skills that lead to science process skills. The goal is to teach students how to produce scientific information as well as to expose them to the factual knowledge that comes from science (Ramseger et al., 2018). These processes involve students to actively participate in the process. The acquisition of science process skills is considered as one of the primary goals of science teaching in Nigeria, as such it has always been captured in various science education curricula established in recent years. It is imperative for science teachers to be knowledgeable enough on the science process skills for proper delivery of science contents in the classrooms. Science process skills are set of activities that scientists employ when investigating a phenomenon find solution to a problem. It is a collection of broadly transferrable talents that are applicable for many different scientific disciplines and are indicative of how scientists behave (Addis & Powell-Coffman, 2018).

The new science framework emphasizes the use of inquiry-based approaches as it allows the students to participate directly in the development and engagement of scientific methods (Lee, et al, 2014). Educating students about science

through enquiry method, allow them to experience science firsthand. McGrath and Hughes (2018) explained that the way the inquiry activity was designed may have contributed to students to grasp scientific process skills effectively. The majority of the science inquiry lessons were concrete in nature, which helped students more clearly develop a conceptual knowledge of the subject matter. Inquiry approach in science teaching comprises a set of interrelated processes by which scientists and students pose questions about the natural world and investigate phenomena; in doing so, students acquire knowledge and develop a rich understanding of concepts, principles, models, and theories. Due to the fact that fundamental concepts are frequently applicable across units and topic areas, this instructional approach benefits the students (Scruggs et al., 2013). This can only be achieved when teachers acquired the essential skills for teaching science. Science teachers are expected to have scientific process skills and acquire the requisite professional knowledge necessary for effective applications to attain such skills, Teacher self-efficacy is considered as one of the determinants for successful application of science process skills in the classroom (Wheatley, 2002).

Self-efficacy is regarded as a critical aspect in strengthening teacher education and advancing educational developments. It refers to a person's views about his ability to achieve specific levels of performance. Self-efficacy beliefs influenced how people feel, perceive, strive, reason, inspire and behave. High self-efficacy demonstrates belief in one's own ability to exert control over one's own motivation, behavior, and surroundings, and it enables students to become champions for their own objectives and supports. According to research, Teachers self-efficacy can improve student achievement, promote mental stability and well-being, and act as a reliable predictor of motivation and accomplishment (Sridhar & Badiei, 2008).

Bandura (1977) outlined two essential elements of self-efficacy: "Efficacy expectation" is the first element, and it stands for the confidence in one's capacity to carry out the activity. The second aspect is "Response outcome expectancy," which is the conviction that carrying out the activity will result in a good outcome. Bandura focused on several studies of teachers conduct and discovered that instructors with high levels of self-efficacy have a strong desire to teach, they work hard to inspire students, and offer them guidance. In addition, teachers with

low self-efficacy spend less time teaching, put little effort in motivating their pupils, and adopt a strict style. Higher self-efficacy teachers are better at what they do, most likely to be interested in a career in that sector, more resilient under pressure, perceive complexity as a challenge rather than a problem, and have a high degree of confidence in their teaching abilities (Camgöz & Tektaş, 2008).

The advantage of science education is to instill in students the methods and procedures for solving problems scientifically; to do this, science teachers must properly inculcate science process skills. No educational system, though, can surpass the level of its educators (Osaki, 2007). The knowledge, beliefs, and behaviors of teachers are fundamental to the successful accomplishment of any education system. The majority of the designed curriculum is implemented by teachers, who also serve as the ultimate decision-makers about what, how, and when the contents are to be imparted. Teachers are the main implementers of any education policy. Any education policy that does not take teacher effectiveness into consideration could eventually fail. Thus, Teachers' Self-efficacy toward teaching science is essential for the successful implementation of the effective curriculum which

certainly stresses the acquisition of Science Process Skills and using of Inquiry-Based Approaches in teaching science.

The trend occurs in the Chief Examiners' Report in Nigeria (2020), which argued that candidates weakness are found to be in the inability to identify some illustrated organisms and inability to give reasons for identifying labeled parts illustrated diagrams, and it's all attributed to low level of science process skills which is directly attributed to the level of their teachers self-efficacy and science process approaches in dissimilating scientific knowledge (Tschannen-Moran & Johnson, 2004; Ketelhut, 2007; Megan & McMaster, 2009; Cakiroglu & Boone, 2002; Chong & Kong, 2012). Therefore, Science Process Skills are directly related to thinking skills, creative thinking skills, problems solving skills of individuals to come up with the solution to problems encountered in our daily life, which is directly connected to the teacher's mastery experience and in turn ensured the high level of self-efficacy.

Researchers examining teacher attitudes toward the implementation of new instructional practices have frequently found teachers' self-efficacy to be among the most

powerful influences on receptivity to change. Megan & McMaster (2009) observed that teachers' level of efficacy influenced their response to professional development such that high self-efficacy teachers were "opportunistic in their approach to professional learning and they sought knowledge through their involvement in activities that often were not overtly professional development opportunities". While low self-efficacy teachers were unable or unwilling to engage in the reforms because of a "perceived disconnection between the purposes of the efforts and their own needs as professionals". Interventions designed specifically to address teachers' self-efficacy beliefs as they encountered new instructional processes have been found to raise teachers' self-efficacy and their implementation of problem-based instructional practices in science (Haney et al., 2007).

Inquiry-based instruction is an important science teaching strategy that involves supporting students in investigating questions and using data as evidence to answer these questions (Capps & Crawford, 2012). Teaching through inquiry is thought to promote scientific literacy and has the potential to improve both student understanding of science and

engagement in science (AAAS, 1993; NRC, 1996).

A synthesis of the literature by Minner et al. (2010) indicated a clear positive trend between inquiry-based instruction and conceptual understanding for students. Moreover, inquiry-based instruction provides a context to begin learning about the nature of inquiry and nature of scientific knowledge. Unfortunately, many teachers have limited experience with scientific inquiry and hold naïve conceptions of the process by which scientific knowledge is generated (Capps & Crawford, 2012). Lack of knowledge and experience with inquiry is thought to act as a barrier for teaching science in this way (Blanchard et al., 2009). This lack of knowledge and experience likely puts serious limitations on teachers' ability to plan and implement lessons that will help their students develop an image of science that goes beyond the familiar body of knowledge. In order for teachers to enact reform-based teaching practices in their classrooms, like inquiry and explicit instruction about nature of science (NOS), it seems reasonable that they will need to develop: (1) adequate understandings about inquiry and NOS, (2) their own abilities to do inquiry, (3) the pedagogical skills necessary to teach science as inquiry

and about NOS, and (4) the intention to teach in this way (Blanchard et al., 2009). Abilities to do inquiry include asking and identifying questions, planning and designing experiments, collecting data using data, and connecting data as evidence with explanations. Third, classroom inquiry can be viewed as a kind of pedagogy, or a teacher's ability to employ inquiry -based instruction in the classroom in order to address key science principles and concepts (NRC, 2012).

Given this information, it is crucial to determine how capable the current science instructors in Jigawa State are at using an Inquiry-Based Approach and Science Process Skills while teaching science. A review of the literature was unable to pinpoint Science teachers' self-efficacy with regard to Science Process Skills in Jigawa and other Northern states of Nigeria. This further investigation aims to close this knowledge gap. However, this study investigated if there was any relationship between teachers' level of self-efficacy and level of science process skills; and if all are related to effective teaching of biology using inquiry-based approaches in Jigawa state, Nigeria.

Objectives of the Study

The specific objectives of the research are:

- (i) To find out the relationships between teachers' knowledge efficacy, personal teaching efficacy, and teacher outcomes belief expectancy in teaching science through Inquiry-Based Approaches in Jigawa state.
- (ii) To find out the influence of teachers' knowledge efficacy and personal teaching efficacy on teacher outcomes belief in teaching science through Inquiry-Based Approaches in Jigawa State.

Research Questions.

The research is guided by the following research questions.

- (i) What are the relationships between Teachers' Knowledge Efficacy, Personal Teaching Efficacy, and Teacher Outcomes Belief Expectancy in teaching science through Inquiry-Based Approaches in Jigawa State?
- (ii) What are the effects of Teachers' Knowledge Efficacy, Personal Teaching Efficacy and Teacher Outcomes Belief

in teaching science through Inquiry-Based Approaches in Jigawa State?

Research Hypotheses

1. There is no significant relationship between Teachers' Knowledge Efficacy, Personal Teaching Efficacy, and Outcomes' Belief Expectancy in Teaching Science through Inquiry-based Approaches.
2. There is no significant effect on Teachers' Knowledge Efficacy, Personal Teaching Efficacy, and Outcomes Belief Expectancy in Teaching Science through Inquiry-Based Approaches.

METHODOLOGY

Research Design

This research study employed correlational research design. Correlational research according to Hassan (1995) is the type of research which is attempts to explore relationship between two or more variables through the use of various measures of statistical association.

Participants

For the purpose of this study, the researchers adopted purposive sampling techniques to select all the schools under Science and Technical

Education Board Jigawa state. Purposive sampling according to (Creswell, 2022), referred to a group of non-probability sampling techniques in which units are selected because they have the characteristics that you need in your sample. It relied on researcher's judgments when identifying and selecting the individuals, cases, or events that can provide the best information to achieve the study's objectives. The schools under science and technical education board are purely science schools with science teachers which are the main target of this research. The total number of schools is Sixteen (16) while the total number of science teachers (Physics, Chemistry and Biology) is One Hundred and Thirteen (113). The sample size is 81 which is recommendable according to research advisors table for the determination of sample size (2006) which is the revised edition of Krejcie & Morgan (1970) determined that, for any sample in the population to about 100-150, 80 is regarded as sample size at 95% confidence level.

Instrumentation

The data collection instrument of this study is SETSIS (Self-efficacy in

Teaching using Science Inquiry Skills Instruments) developed by Syakima (2018) was adapted for the purpose of this research. The SETSIS comprises of three parts, namely, Knowledge Efficacy (KE) which have 26 items, Personal Teaching Efficacy (PTE) having 28 items and lastly Outcomes Belief Expectancy (OBE) which have 18 items that have five-point rating scale respectively.

Reliability of the Instrument

The SETSIS reliability after pilot study indicates 0.96 for KE, 0.95 for PTE, and 0.97 for OBE using Cronbach's alpha consistency measure. The high reliability in three sub-scales also indicates good internal consistency between the items accordingly.

RESULTS

Research Question One: What are the relationships between Teachers Knowledge Efficacy, Personal Teaching Efficacy and Teachers Outcomes Belief Expectancy in Teaching Science through Inquiry Based Approaches?

Table 1: Relationship between Teachers Knowledge Efficacy, Personal Teaching Efficacy and Teachers Outcomes Belief Expectancy in Teaching Science through Inquiry Based Approaches

	Knowledge Efficacy	Personal Teaching Efficacy	Teacher Outcomes Belief Expectancy
Knowledge Efficacy	1	.281	0.053
Personal Teaching Efficacy		1	0.143
Teacher Outcomes Belief Expectancy			1

Table 1 shows the relationship between Teachers Knowledge Efficacy, Personal Teaching Efficacy and Teachers Outcomes Belief Expectancy in Teaching Science through Inquiry Based Approach. The PPMC result shows that the correlation coefficient (r) between Knowledge Efficacy and Personal Teaching Efficacy is .281, which indicates a positive but weak relationship.

Similarly, the correlation coefficient between Knowledge Efficacy and Teachers Outcomes Belief Expectancy is .053, which is close to zero. This indicates a positive but weak relationship.

Hypothesis One: There is no significant relationships between Teachers Knowledge Efficacy, Personal Teaching Efficacy and Outcomes Belief Expectancy in Teaching Science

Table 2: Relationship between knowledge Efficacy, Personal Teaching Efficacy and Outcomes Belief Expectancy in Teaching Science

	N	r-cal	p-value
Knowledge Efficacy	81	1	-
Personal Teaching Efficacy	81	0.281	0.011
Teacher Outcomes Belief Expectancy	81	0.053	0.637

Results from the table indicated that there is a significant positive relationship between Teachers' Knowledge Efficacy and Personal

Teaching Efficacy ($r = 0.281, p < 0.05$). However, there is no significant correlation between Teachers' Knowledge Efficacy and

Teachers' Outcomes Belief Expectancy ($r = 0.053, p > 0.05$), nor between Personal Teaching Efficacy and Teachers' Outcomes Belief Expectancy ($r = 0.143, p > 0.05$).

Hypothesis Two: There is no significant effect of Teachers

Knowledge Efficacy, Personal Teaching Efficacy and Outcomes Belief Expectancy in Teaching Science.

Table 3: Influence of Teachers' Knowledge Efficacy, Personal Teaching Efficacy and Outcomes Belief Expectancy in Teaching Science

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	SE	Beta		
(Constant)	0.708	2.58		0.274	0.785
Personal Teaching Efficacy	1.036	0.407	0.279	2.545	0.013
Teacher Outcomes Belief Expectancy	0.052	0.43	0.013	0.12	0.905

a. Dependent Variable: Knowledge Efficacy

Results showed that Personal Teaching Efficacy with an unstandardized coefficient of 1.036 with a p-value of 0.013 has a significant positive effect on teachers' knowledge efficacy. However, Teacher outcome belief expectancy with a coefficient of 0.052 and a p-value of 0.905 has no significant effect on teachers' knowledge efficacy. Based on the statistical significance of the regression model and the coefficients, we can reject the null hypothesis (HoII). This indicates that there is a significant effect of Personal Teaching Efficacy on Knowledge

Efficacy in teaching science. However, there is no significant effect of teacher outcomes belief expectancy on Knowledge Efficacy of science teachers in Jigawa State.

Discussion

The correlation coefficient between Knowledge Efficacy and Teachers Outcomes Belief Expectancy is .053, which is close to zero. The p-value associated with this correlation is .637, which is greater than the significance level of 0.05. Therefore, we fail to reject the null hypothesis and conclude that there is no significant relationship between

Knowledge Efficacy and Teachers Outcomes Belief Expectancy. The correlation coefficient between Personal Teaching Efficacy and Teachers Outcomes Belief Expectancy is .143, which indicates a positive relationship. However, the p-value associated with this correlation is .203, which is greater than the significance level of 0.05. Therefore, there is no significant relationship between Personal Teaching Efficacy and Teachers Outcomes Belief Expectancy. These findings suggest that while teachers' knowledge efficacy and personal teaching efficacy are related, they may not directly influence teachers' beliefs about the outcomes expectancy of using inquiry-based approaches in teaching science in Jigawa state.

The results of the analysis indicate that Personal Teaching Efficacy has a significant positive effect on teachers' knowledge efficacy in teaching science. The p-value of 0.013 indicates that this relationship is statistically significant. On the other hand, the analysis shows that Teacher Outcomes Belief Expectancy does not have a significant effect on teachers' knowledge efficacy the high p-value of 0.905 suggest that there is no meaningful relationship between these variables. Based on these findings, it can be concluded that teachers' personal belief in their

teaching abilities plays a more significant role in influencing their knowledge efficacy than their belief in the outcomes of inquiry-based approaches. This implies that teachers who have a strong sense of personal teaching efficacy are more likely to have higher knowledge efficacy in teaching science. However, the belief in the outcomes of inquiry-based approaches does not seem to have a significant impact on their knowledge efficacy.

CONCLUSION

Based on these findings, it can be concluded that teachers' personal belief in their teaching abilities plays a more significant role in influencing their knowledge efficacy than their belief in the outcomes of inquiry-based approaches. This implies that teachers who have a strong sense of personal teaching efficacy are more likely to have higher knowledge efficacy in teaching science through inquiry-based approaches in Jigawa State. It was also revealed that, personal teaching efficacy has a significant positive effect on teachers' knowledge efficacy.

RECOMMENDATIONS

Based on the findings from this study, the following recommendations were made:

1. Although many researchers indicate the usefulness of

- using science-inquiry instructional settings, science process skills are the skills that always specifically frame what students should learn in the particular context of science pedagogical settings. Teacher's level of efficacy will make the teachers to be more committed in the teaching of science to make scientific explorations, mental mode of acquiring science concept, and the didactic process in the lecture rooms.
2. It was also recommended that, based on the findings of this study, the curriculum planners and Teachers Development Programmers to ensure the up-liftmen of science teachers Personal Teaching Efficacy which in-turn has positive effect on the Knowledge Efficacy of teachers which make them to teach science effectively through science process and inquiry-based approaches.
 3. Government should ensure training and retraining of teachers (Science) on the usefulness of teaching science through inquiry-based approaches which provide the basis of science process skills in prominent.

4. Teachers are to be encourage by the school administrators in using process approaches, inquiry-based approaches in teaching science which in-turn leads to the up-liftmen of science education towards achieving their goals.

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THE INFLUENCE OF MOBILE TECHNOLOGY ON STUDY HABIT OF UNIVERSITY OF IBADAN STUDENTS IN MICHAEL OTEDOLA COLLEGE OF PRIMARY EDUCATION, EPE, LAGOS STATE

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ABSTRACT

The study investigated whether mobile technologies influenced study habit of undergraduate students of university of Ibadan affiliated programmes in Michael Otedola College of Primary Education. The descriptive research design was adopted, while the sample was 459 students who took part in the study. A structured questionnaire tagged: "Students' Mobile Technologies Utilisation and Study Habit Questionnaire (SMTUSHQ)", was used for data collection. Frequency, percentage, mean, standard deviation and Regression statistics were used to analyse the data in the study. The results showed that students' study habit was high while their multimedia technology utilization was on the average. Also, there was a significant relationship between students' mobile technologies utilization and study habit of undergraduate students of University of Ibadan affiliated programmes with Michael Otedola College of Primary Education. The study concluded that mobile technology could be considered as a significant correlate of students' study habit. It was recommended that government agencies in charge of education should encourage and monitor the implementation of the use of mobile technologies in higher institutions of learning in the country, while management of institutions should implement policies that encourage and improve productivity of academic staff in order to boost qualitative teaching that produces quality graduates.

Keywords: Mobile technologies, Study habit, Undergraduate students, Affiliated programmes

INTRODUCTION

The need for the provision of quality education heightened recently has led to the adoption of international conventions that seek to expand access to education by all citizens irrespective of socio-cultural,

economic and religious background as such have been tremendous reforms in education systems. Literature has documented various factors which either bolster or throttle the academic performance of

students. Tshabalala and Ncube (2013) observed that inadequate instructional materials, inappropriate teaching methods, teachers' self-motivation and lack of funds strongly affect the academic performance of students. Asikhia (2010) unveiled internal and outside classroom factors to affect students' academic performance, School-related factors are basically determined by policies which are out of students' control, but students have control over their study habits. Romeo (2006) agrees that students cannot learn simply by being told what to do or by watching others but rather studying habitually.

Studying is an arranged and organized process. In this view, Okanezi and Braide (2018) opined that study is an organized gaining of intelligence and an interpretation of information and ideologies that call for memorizing and usage. Habit is something an individual does often and almost without thinking; especially something that is hard for someone to stop doing (Hornby, 2000). Habit is identified as a way of doing something, an individual's habit consists of a unique way or how specific things are done by such individual. Habit is relative to individuals or people, each human being acts in a unique way. Cardelle-Elawar and Nevein (2003) considered study habit as the application of an

individual's intelligence, emotions, and activities towards the acquisition of knowledge and skills to accomplish an assignment. They further expound that study habit refers to the conscious and purposeful use of cognitive skills, feelings and actions to maximize acquisition of knowledge and skills for a given task and set of conditions. They further considered study habit as the application of an individual's intelligence, emotions, and activities towards the acquisition of knowledge and skills to accomplish an assignment. Logically, effective study habit is contingent on keen intellectual competence, stable emotions, and relevant activities deliberately directed to construct knowledge and develop skills so as to attain a goal. Wood et al. (2009) concluded that study habits are approaches applied to learning, good study habits assist students to apply their thought processes to identify relevant bodies of knowledge and evaluation of same.

In an exploratory study, Coffield, Moseley et al. (2004) utilized a practice-based approach to focus on the actual study behaviours of 61 undergraduates at three universities in the USA and Canada, drawing upon situated cognition theory to conceptualize studying as a behaviour that encompasses individual study

strategies as they unfolded in specific social, technological and institutional contexts. Data were analyzed using inductive thematic analysis from 22 focus groups. The finding indicated a moderate study habit among them and a significant difference in male and female study habits.

Conversely, poor study habits impede students' capacity to engage in constructive intellectual exercise. Study habit is fundamental academic success, because a student can only recall what is in the memory. Several studies have identified poor performance of students in school to be traced to poor study habit (Barab et al., 1996; Park, 2011; Bahrami et al., 2011). Barab et al. (1996) noted that if study habit is not improved students will continue to perform poorly in tests and may not be able to realise their full potential. Sawar, Bashir, Khan, and Khan (2009) conclude that overachievers possessed better study habits than underachievers. Similarly, Crede and Kuncel (2008), Nonis and Hudson (2010) supported the findings of earlier studies that study habits impact academic performance of students.

The rapid development of scientific and technical progress has increased the demand for the qualitative computer-aided learning process by many scholars. The introduction of

information technology in almost all areas of human activity set new requirements for the acquisition of modern knowledge and skills for professionals of various profiles. At the moment, computers have become a necessary tool not only for professional activities but also for education and improvement of professional skills. In higher education institutions, various computerized systems and programmes for the organization of students' training and knowledge testing are used in the study process. Mobile technologies now play an important role in the education and professional training of specialists. The rapid development of mobile technologies ensures their further integration in the learning process in order to improve the quality of education. Mobile technologies like cell phones, smart phones, and tablets are now outnumbering desktop computers. There has been a sea of change in the way people access, use and share electronic information. This revolution on how students access information makes people to connect and share resources with one another in a relatively inexpensive and convenient manner around the globe using mobile technologies.

Mobile Code Division Multiple Access (MCDMA) technology has evolved rapidly over the past few

years. Since the start of this millennium, a standard mobile device has gone from being no more than a simple two-way pager to a mobile phone, Global Positioning System (GPS) navigation device, an embedded web browser and instant messaging client, and a handheld game console. Viatonu et al. (2014) argued that the future of computer technology rests in mobile computing with wireless networking. Mobile computing by way of tablet computers is becoming more popular. One of the most popular tablets at the moment is the iPad, by Apple.

Mohammadi et al. (2020) stipulated that out of about 20 million smartphone users in South Africa, students account for a large number in this. There have been increasing discussions about the benefits of going mobile in education. Students, as well as education institutions are beginning to discover the many benefits of using mobile technology in education process and classroom situation. In research conducted at the University of KwaZulu-Natal, it was revealed that 92% of students said that it is easier to use their mobile device to improve their access to information (Mohammadi et al., 2020).

The use of mobile technologies is one of the most important factors that can

influence educational performance of students positively or adversely. Siahi and Maiyo (2015) propose that the use of technologies has significant effect on student academic performance and this impact is determined by the purpose of the usage. Mobile technologies utilisation will positively affect students' informative accessibility while negative effect if used for criminal or non-academic functions like fraud, pornography and the likes. Hence this study sought to investigate the influence of mobile technologies on the study habits of undergraduate students of university of Ibadan affiliated programmes in Michael Otedola College of Primary Education (MOCPEd).

Objectives of the Study

The main objective of this study is to investigate the extent to which mobile technologies will influence on the study habits of undergraduate students of university of Ibadan affiliated programmes in Michael Otedola College of Primary Education. The specific objectives are to:

1. examine the frequency of mobile technologies utilisation among undergraduate students University of Ibadan affiliated programmes in MOCPEd Epe.

2. find out the purpose for which undergraduate students University of Ibadan affiliated programmes in MOCPED Epe utilise mobile technologies.
3. examine the level of study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe.
4. find out the relationships between mobile technologies utilisation and study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe.

Research Questions

The following research questions were raised to guide the study:

1. What is the frequency of mobile technologies utilisation among undergraduate students University of Ibadan affiliated programmes in MOCPED Epe?
2. What are the purposes for which undergraduate students of the University of Ibadan affiliated programmes in MOCPED Epe utilise their mobile technologies?
3. What is the level of study habit among undergraduate students of University of

- Ibadan affiliated programmes in MOCPED Epe?
4. What is the relationship between mobile technologies utilisation and study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe?

METHODOLOGY

Research Design

The study adopted a descriptive survey design of correlation type. This design was adopted for the study because the existing variables were investigated in the study and there was no manipulation of any variable.

Participants

The total population for this study was based on undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe. The multi-stage sampling procedure was adopted for the study. Purposive sampling technique was used to select departments that have students from 100 - 400 level. While simple random sampling was used to select 50% of the students were considered from each department. This method was employed for equal representation of respondents from the selected departments. Meanwhile proportionate sample of 519

undergraduate students were selected for the study.

Instrumentation

The main instrument for data collection was the structured questionnaire tagged: “Students’ Mobile Technology Utilisation and Study Habit Questionnaire” (SMTUSHQ). The items in the questionnaire were designed by the researchers. The questionnaire was administered to selected students on University of Ibadan affiliated programmes in Michael Otedola College of Primary Education. The items were designed to examine the influence of the mobile technologies use on study habit of students in the University of Ibadan affiliated programmes in Michael Otedola College of Primary Education.

Reliability of the Instrument

The questionnaire was validated and trial-tested on 30 students who were not part of the sample for the study. The reliability coefficient of 0.87 was derived which was an indication that the instrument was reliable and adequate for the study.

Data Collection

The sample for the study consisted of 519 students, out of which 459 copies (88.44%) were found usable and valid for analysis.

Data Analysis

The data collected were analysed using frequency, percentage, mean, standard deviation and Regression statistics were used to analyse the data in the study.

RESULTS

Table 1: Demographic Information of Respondents

Gender	Frequency		Percentage
Male	153		33.3
Female	306		66.7
Total	459		100.0
Age	Frequency		Percentage
18-22 years	240		52.4
23-27 years	78		17.0
28-32 years	94		20.4
33 years and above	41		8.9
Not indicated	6		1.3
Total	459		100.0

Level of study	Frequency			Percentage
100	129			28.1
200	138			30.1
300	143			31.1
400	49			10.7
Total	459			100.0

Table 1 showed the demographic information of respondents in the study. Table 1 revealed the higher percentage of the respondents was female, and this indicates that there is higher number of female students in University of Ibadan affiliated programme with MOCPEDE Epe campus than male students.

Research question One: What is the frequency of mobile technologies utilisation among undergraduate students on University of Ibadan

affiliated programmes in MOCPEDE Epe campus?

The students were asked to indicate the frequency of mobile technologies utilisation among undergraduate students University of Ibadan affiliated programmes in MOCPEDE Epe. Four-point likert-scale which were very often (VO), often (O), Occasionally (OC) and Never (N). Table 2 shows the response in frequency, percentage, mean, and standard deviation scores of respondents to the questionnaire items on multimedia technologies utilisation. Table 2 presents the findings.

Table 2: The Frequency of Multimedia Technologies Utilisation among Undergraduate Students of University of Ibadan Affiliated Programmes in MOCPEDE Epe Campus (N=459)

S/No	Items	VO %	O %	OC %	N %	M	SD
1	Android phones	345 75.2	36 7.8	29 6.3	49 10.7	3.74	1.01
2	MP 3 and MP 4	186 40.5	73 15.9	96 20.9	104 22.7	2.74	1.21

3	Laptops	128 27.9	113 24.6	109 23.7	109 23.7	2.57	1.13
4	Hand devices	133 29.0	89 19.4	108 23.5	129 28.1	2.49	1.18
5	E-reader	106 23.1	116 25.3	89 19.4	148 32.2	2.39	1.16
6	I-phone	106 23.4	97 21.1	118 25.7	138 30.1	2.37	1.14
7	Personal-digital assistance	116 25.3	69 15.0	95 20.7	179 39.0	2.27	1.21
8	Smart phones	199 43.4	123 26.8	70 15.3	67 14.6	2.09	1.08
9	Tablets	32 7.0	61 13.3	192 41.5	174 37.9	1.89	.88
10	I-pads	28 6.1	40 8.7	200 43.6	191 41.6	1.79	.84
11	Palmtops	6 1.3	20 4.4	136 29.6	297 64.7	1.42	.64

Key: Very Often = 4, Often = 3, Occasionally = 2, Never = 1

Table 2 revealed that the most frequently utilised multimedia technologies by students on UI affiliated programme with MOCPED were Android Phones, (M = 3.74), followed by MP3 and MP4, (M = 2.74), laptops, (M = 2.57) and Hand devices, (M= 2.49), while the least types of mobile technologies were Palmtops, (M = 1.42), I-pads, (M = 1.79) and Tablets, (M = 1.89). This implies that android phones, laptops, Mp3 and MP4 are the most frequently utilised mobile technologies by the students on UI affiliated programme with MOCPED in order to improve their study habits. The test of norm

was conducted for mobile technologies utilisation by students on UI affiliated programme with MOCPED. The maximum score for a respondent on the 11 items of mobile technologies utilisation scale is 44 (11x4), which is the number of possible responses. The level of mobile technologies utilisation is measured on the scale of high level, average level and low level. Therefore, to establish an interval score, the maximum score was divided by the number of levels which is $(44/3) = 14.67$. An interval score of 15 was used to chart the norm table. This is shown in Table 3.

Table 3: Test Norm Table for Mobile Technologies Utilisation among Students on UI Affiliated Programme with MOCPED

Interval	Total mean score	Remark
1-15		Low level of MTU
16-30	25.76	Average level of MTU
31-45		High Level of MTU

Table 3 showed that the frequency of use of mobile technologies among students on UI affiliated programme with MOCPED is on the average. Thus, the overall mean score of students' frequency of mobile technologies utilization scale of 25.76 falls within the interval distribution of 16 and 30 which is average frequency of use. This implies that students on UI affiliated programme with MOCPED utilisation of mobile technologies is on the average.

Research Question Two: What are the purposes for which undergraduate students in University of Ibadan affiliated programmes in MOCPED Epe campus utilise their mobile technologies?

Students were also asked to indicate their purpose of using multimedia technologies on 10 items. Four-point likert scale was used to elicit information from students as follows; Strongly disagree (1), Disagree (2), Agree (3) and Strongly agree (4). Table 4 shows the results.

Table 4: Purposes of Using Multimedia Technologies by Students in University of Ibadan Affiliated Programmes in MOCPED Epe campus

S/ N	Items	SA %	A %	D %	SD %	M	SD
1	I use mobile technologies for personal and intellectual development.	381 83.0	--	28 6.1	50 10.9	3.61	0.94
2	I use mobile technologies for personal reading for lectures.	292 63.6	109 23.7	28 6.1	30 6.5	3.44	.87
3	I use mobile technologies to prepare assignment and seminars papers.	279 55.1	110 24.0	40 8.7	30 6.5	3.39	.90

4	I use mobile technologies to read ahead of the class to improve my academic knowledge.	242 53.9	150 33.4	19 4.2	38 8.5	3.33	0.90
5	I use mobile technologies to prepare for effective participation in classes.	213 46.4	178 38.8	38 8.3	30 6.5	3.25	.86
6	I use mobile technologies to prepare notes, after lecture/ classes.	195 37.8	203 44.2	41 8.9	20 4.4	3.25	.79
7	I use mobile technologies for communication and socializing.	285 63.5	84 18.7	20 4.5	60 13.4	3.22	1.05
8	I use mobile technologies for up to date news on economic and political matters.	199 43.4	162 35.3	68 14.8	30 6.5	3.15	0.91
9	I use mobile technologies to enhance my interaction with friends more than academic work.	222 48.4	81 17.6	58 12.6	98 21.1	2.93	1.21
10	I see the use of mobile technologies as a tool for making new friends and companion than education related tool.	193 42.0	70 15.3	60 13.1	136 29.6	2.70	1.28

Key: strongly agree (SA) =4, agree (A) =3, disagree (D) =2, strongly disagree (SD) =1

Table 4 showed that students on UI affiliated programme with MOCPEP utilize Mobile Technologies are mostly for personal and intellectual development. ($\chi = 3.61$) which is ranked highest by the mean score rating, followed by mobile technologies are utilised for personal reading for lectures, ($M = 3.44$), while its utilisation for preparing prepare

assignment and seminars papers, ($M = 3.39$), and technologies to read ahead of the class to improve academic knowledge, ($M = 3.33$). The least purpose of mobile technologies utilisation by students on UI affiliated programme with MOCPEP was to get up to date news on economic and political matters, ($M = 3.15$), followed by for enhancing students'

interaction with friends more than academic work, (M = 2.95) and lastly a tool for making new friends and companion than education related tool, (M = 2.70). This implies that, students utilised mobile technologies mostly for personal academic and intellectual development rather than for social activities

Research Question Three: What is the level of study habit among undergraduate students of University

of Ibadan affiliated programmes in MOCPED Epe campus?

Students were asked to indicate their agreement on study habit, through four-point likert scales which were strongly disagree, disagree, agree and strongly agree. Table 5 shows the response in frequency, percentage, mean, and standard deviation scores of respondents to the questionnaire items on study habit. Table 5 presents the findings as follows:

Table 5: Level of Study Habit among Undergraduate Students of University of Ibadan Affiliated Programmes in MOCPED Epe Campus (N=459)

S/N	Item	SA %	A %	D %	SD %	M	SD
1	I try to relate the writer's ideas to the things I learned in other places.	241 52.5	185 40.3	--	33 7.2	3.83	0.82
2	I try to understand the text well enough to put it in my own words without losing the author's meaning.	303 66.0	47 10.2	9 2.0	--	3.64	0.52
3	I make and use a time table for studying at home.	298 64.9	20 4.4	20 4.4	40 8.7	3.41	0.95
4	I go over the passage page by page and try to memorize the important points and details on each page.	281 61.2	118 25.7	--	60 13.1	3.35	1.01
5	I revise the lesson that I learned properly after a time gap.	250 54.5	129 28.1	47 10.2	33 7.2	3.30	0,93
6	I become nervous before exams, due to my study strategy.	125 27.2	129 28.1	12 2.6	82 17.9	2.65	1.06

				26. 8			
7	I test myself by answering end of chapter questions.	240 52.3	150 32.1	29 6.3	40 8.7	3.29	.92
8	My periods of study are interrupted by outside interference such as telephone calls, visitors, and noises.	105 23.3	89 19.8	12 1 26. 9	135 30.0	2.36	1.14
9	I find it hard to keep my mind on what I'm studying; I don't know what I've been reading about when I get through.	94 20.5	36 8.3	16 5 35. 5	162 35.3	2.14	1.11
10	I go out with my friends if they call me during my study time.	74 16.1	82 17.9	19 20. 9	307 45.1	2.05	1.13
N = 497		Weighted Mean = 2.96		Criterion Mean= 2.50			

Key: strongly agree (SA) =4, agree (A) =3, disagree (D) =2, strongly disagree (SD) =1

Table 5 shows that students on UI affiliated programme with MOCPEd relate the writer's ideas to the things learnt in other places (M = 3.83) this is ranked highest by the mean score rating, followed by understanding the text well enough to put it in own words without losing the author's meaning, (M = 3.64), while making and using a time table for studying at home, (M = 3.41), going over the passage page by page and try to memorize the important points and details on each page., (M = 3.35). The least purpose of study habit of students on UI affiliated programme with MOCPEd were of study are interrupted by outside interference

such as telephone calls, visitors, and noises., (M = 2.36), followed by finding it hard to keep mind on what student id studying; not knowing what is been read, when student get through, (M = 2.14) and lastly go out with friends if they call me during study time, (M = 2.05). Also, the finding shows that the Weighted Mean (WM) is 2.96 while the Criterion Mean is 2.50, hence the study habit of students on UI affiliated programme with MOCPEd was high since the WM is greater than the CM. This connotes that, study habit of undergraduate students of UI affiliated programme with MOCPEd is high.

Research question 4: What is the relationship between mobile technologies utilization and study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe

campus? The joint contribution of mobile technologies utilisation and study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe campus is presented in Table 6.

Table 6: Joint Contribution of Mobile Technologies Utilisation and Study Habit among Undergraduate Students of University of Ibadan Affiliated Programmes in MOCPED Epe Campus

R	R Square	Adjusted R Square	Std. Error of the Estimate			
.194	.037	.014	1.139			
A N O V A						
Model	Sum of Square	DF	Mean Square	F	Sig.	Remark
Regression	22.568	11	2.052	1.583	.101	*Sig.
Residual	579.436	447	1.296			
Total	602.004	458				

*Sig = Significant at $p < .05$

Table 6 shows a coefficient of multiple correlation ($R = .194$ and the multiple R^2 of $.037$). This means that 13.7% of the variance was accounted for by the predicting variables when taken together. The analysis of variance is F-ratio 1.583 (significant at 0.05 level). This implies that the joint contribution of the independent variables to the dependent variable was significant and that other variables not included in this model may have accounted for the remaining variance. It can be inferred from the result that multimedia technologies utilisation have joint

significant influence on study habit among undergraduate students of University of Ibadan affiliated programmes in MOCPED Epe campus.

Discussion

The findings show an average rate on the frequency of students on UI affiliated programme with MOCPED use of mobile technologies as majority of the students seldom use mobile technologies such as Android Phones, MP3 and MP4, laptops and Hand devices for studying. These

findings support earlier one by Viatonu, Adesanya and Olagunju (2014) in their study on networks on academic performance of student in colleges of education. They identified an average use of mobile technologies by students in colleges of education. The finding is however at variance with that of Maier, Barnett, Warren and Brunner (2000) which identified that smart phone user in University of KwaZulu-Natal South Africa recorded a high use of smart phones among undergraduate students of the University.

The findings also indicated that most students used Mobile Technologies for personal and intellectual development, personal reading for lectures, preparing assignments and seminars papers and to read ahead of the class to improve my academic knowledge. This finding corroborates Dawabi, Wessner and Neuhold (2013) who identified the use of personal mobile device or laptops for personal development. Also Lawal, Viatonu and Adesanya (2013) in a study on internet utilisation by lecturers in colleges of education identified that higher percentage of lecturers understudied use the mobile technologies to access information. Corbeil and Valdes-Corbeil (2017) also identify the use of mobile technology applications for educational activities. Iqbal and

Qureshi (2021) identified the use of mobile technology by young people for digital communications.

The findings show that study habit of undergraduate students of UI affiliated programme with MOCPEP is high. It reveals that students follow writer's ideas to the things learnt in other places. Also they understand the text well enough to put it in their own words without losing the author's meaning, making and using a time table for studying at home and going over the passage page by page and trying to memorize the important points and details on each page. This is at variance with Dunlosky, Rawson, Marsh, Nathan and Willinghamet, (2013) who established a drop in the reading habit of college student; and Okanezi and Braide (2018) who also identified poor reading habit among students in secondary school. However, the finding is in line with Credé and Kuncel (2008) who found that study skills is on the average considering time management, and study objectives which were found to be positively associated with grade point average (GPA) and grades in individual courses among undergraduate students in some USA universities. Coffield, Moseley, Hall and Ecclestoneet, (2004) utilise a practice-based approach to focus on the actual study behaviours of 61

undergraduates at three research universities in the USA and Canada while Kornell and Bjork (2009) conducted a survey to find out the study habit of college students. Both studies found an improvement in their respondents reading habit with the use of mobile technologies.

The findings revealed that the independent variables (mobile technologies utilisation) had contribution to the independent variable (study habit) among undergraduate students of University of Ibadan affiliated programmes in MOCPED. That is students' mobile technologies utilisation had a relationship with their study habit. This implies that the joint contribution of the independent variables to the dependent variable was significant and that other variables not included in this model might have accounted for the remaining variance. This inferred from the result that mobile technologies utilisation contributed significantly to study habit among undergraduate students. These findings are in line with Ellison, Steinfield, and Lampe (2007), Jenkins, Clinton, Purushotma, Robison and Weigel (2017) who found a significant relationship between mobile technologies and access social network sites. Also Lawal, Viatonu and Adesanya (2013) in a study on internet utilisation by

lecturers in colleges of education identified a relationship between lecturers' use of mobile technologies and access to relevant information. Barab, Evans and Baek, (1996) also found a relationship between study habit and academic achievement and concluded that if study habit is not improved students will continue to perform poorly in tests and may not be able to realise their full potential.

CONCLUSION

This study investigated the influence of mobile technology utilisation on the study habit of undergraduate students of the University of Ibadan affiliated programmes in MOCPED. The variable (mobile technologies utilisation) equally contributed specifically to study habit of undergraduate students on University of Ibadan affiliated programmes in MOCPED Epe campus. Also, there was significant relationship between mobile technologies utilisation and study habits. There was no significant difference between male and female use of mobile technologies, but difference existed in their study habit. This is an indication that mobile technology utilization is a sine qua non for improved study habit of students in higher institution of learning such as the university of Ibadan affiliated programmes in MOCPED.

RECOMMENDATIONS

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

1. The government agencies in charge of tertiary education should encourage and monitor the implementation of the use of mobile technologies in school curriculum in Nigerian education system to enhance knowledge transmission.
2. Institution management should implement policies that will encourage and improve productivity of their academic staff in order to boost qualitative teaching and produce quality graduates.
4. Institutions management should encourage and sponsor their lecturers to attend national and international conferences/ workshops/ seminars/ trainings which would expose them to practices on ICT utilisation in order to be at par with their counterparts around the world.
5. Academic staff should be conversant with what happening around the world in this information explosion and technology advancement age in order to be more relevant in this digital age. This will enhance their

commendation and its attendant positive effect of their job productivity.

6. Lecturers should endeavor to give students more take home assignments that will encourage the use of their (students') mobile devices for more academic and intellectual purposes.

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HEALTH EDUCATION AS PANACEA TO COMMUNITY HEALTH IN CENTRAL SENATORIAL DISTRICT, DELTA STATE, NIGERIA

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ABSTRACT

The study was concerned with the practice of health education as practice in the primary health care and benefits of the host community. The objective was to ascertain the influence of health education practice in primary health centres on community health. Ex-post-facto research design was adopted. A self-developed questionnaire of the Likert-scale was used to collect data. The frequency, percentage, One-Way Analysis of Variance (ANOVA) and Regression statistics were used to analyse the data. The results showed that health education as practice in the primary healthcare centres was not significant to community health situation in the host community of the primary healthcare centres. Also, it was found that health education/health promotion, group health education, individual health education and community health education do not make significant impact in community health. The study concluded that health education as practice in the healthcare centres cannot promote community health in the host community. It was recommended that there is a need for community health education extension workers in the community to promote community health in the state.

Keywords: Health education, Health promotion, Primary healthcare centre, Community health

INTRODUCTION

The concept of the primary healthcare makes unique the provision of healthcare to the community and in over demand. The Primary Healthcare Centre becomes a place to reach in every community. In the concept of the primary healthcare, health education and the subsequent health promotion are the first chapter of the primary healthcare agents/elements. World Health

Organisation (WHO) (2021) reiterated the Alma-Ata declaration that education for all as the first element of the primary healthcare. The important role of community participation makes community health a central point in the Primary Health Centres. The Primary Healthcare Centres in the primary entry of individual into the health system. Promoting primary

healthcare in Health Centres means promoting community health and finding answers and solution to community health problems. The practice of health education/health promotion is professionally and legitimately the right and practice of Health Educators. According to Briening et al. (2018), health educators are uniquely positioned to address public health needs by deploying their training and competencies in the application of behavioral theories across a wide range of interventions designed to improve population health. Auld (2017) had earlier stated that health educators use a holistic approach to changing health behaviours, implementing evidence-based intervention and adapting to changing population needs.

WHO (1998) defined health education as comprising consciously constructed opportunity for learning involving some form of communication designed to improve health literacy, including improving and developing life skills which are conducive to individual and community health. In the same vein WHO (2018) addressed health promotion as the process to increase control over and to improve their health. Community health according to Encyclopedia (2018) as referring to the health status of a defined group of people or community and their

actions and conditions that protects and improve the health of the community. People in community live a particular or geographical areas and had common identity of culture, norms, value and belief. It could also be people known for what they are; either religion, trade or tribe within a locality. They live together and are influenced in their health by the others.

This study examined the influence of health education/health promotion as practiced in Primary Health Care Centres in promoting community health in the study area. It has become necessary to access the practice of health education/health promotion in Primary Health Centres as affects the quality of community health secondary to the continuous refused/waste present in the community, increased mortality, absence of a portable water, poor immunization coverage among others in Nigeria. Delta Central Senatorial district as part of the Nigeria nation cannot be said to be exceptional in the poor health situation in the country. According to Mukhtar (2021), a public health challenges have been a nagging problem bedeviling the well-being and stability of Nigeria for a long time. The major public issue according to the author includes, poor sanitation and hygiene, control of vector borne disease, maternal and infant mortality, infectious and non-

communicable diseases among others.

Elements of the primary healthcare according to the Alma-Ata declaration (1978) are education about prevailing health problems and how to prevent and control them (health education), food supply and proper nutrition, adequate supply of water, and basic sanitation, maternal and child health, family planning, immunization against infectious diseases, prevention and control of endemic diseases, treatment of common infectious and essential drugs. On the other hand, community health is the convergence of healthcare services, economics and social responsibilities. Thus, community health focuses on people well-being in a community. Primary healthcare can take place in the school, community, worksite, schools and healthcare sites while according to Moronkolo cited Nwajei (2001) stated that health education can take place in schools, workplace, health facilities etc.

Health education functions in three ways; individual health education group health education and community health education. Individual health education is one to one affair between a professional health educator and a client or patient. It involves counseling the patient on a particular issue to which the patient needs health education. It could also

be the critical learning approach to instructing the client. Group health education uses the expository method of teaching in which the professional health educator talks to a group of people either in the school setting, primary health centre or hospital or a public gathering. Health educator could also give health education in the community setting such public gathering, worshipping centres, market squares, a town hall meeting on public health issues such as COVID 19 or HIV/AIDS.

On the other side the primary healthcare as practiced in the Primary Health Centres according to Ryhove (2012) cited Denhil et al. (1998) stated the overall strategy to be guided by the following; political commitment, equity, accessibility, affordability, availability, effectiveness and efficiency. Efe (2013) stated that to ensure that implementing health programme in the community must, fully involved the community in planning, delivery and evaluation of the services in the spirit of self-reliance.

Various methods are used at reaching the population with health knowledge. These are the various teaching approach. According to Thesaurus (2014), teaching is the act, process or art of impacting knowledge and skills. Many teaching methods are used in the Primary Health Care Centre to reach the

population which according to various researchers, Lorem (2016), Hong Kong health education exhibition center (2017), Forong (2012), Race (2012), all stated that health education teaching method include exhibition method, the lecture method, the demonstration method, the individual method, play way/dramatization method, peer teaching method, role play method and project method.

Studies on health education practice in primary health centres revealed that of Jidril et al. (2017) on impact of education intervention on knowledge and utilization of postnatal care services among women in Education Local Government of Kwara State, Nigeria. The study was quasi-experimental research. The researchers found positive impact of health education intervention on knowledge and willingness of women of child bearing age to utilize post-natal care services and knowledge gained needed to be sustained to improve healthcare seeking behaviour in the community.

Osahan (2017) studied the influence of primary health care training on community and health workers in Edo State. The purpose was to ascertain awareness of healthcare training on both community and health workers and the quality of services render towards the community. His finding was that majority of the respondents

either did not know what primary healthcare training was all about or had never heard of such training before. He also found that the rate of enlightenment and health campaign programme on diseases was low and greatly affected by health education. Osifeso (2013) examined the utilization of PHC centers using descriptive cross-sectional survey and found that 91.1% of the 180 respondents were aware of the PHC Centres in their community, 75.6% use the PHC center services and immunization service. Utilization was 31.1%, 52.5% were satisfied with the PHC Centres services while 52.2% were satisfied with the availability of the services. In another study, Hanafi et al. (2014) studied the knowledge and attitude to and practice of patients attending Primary Health Care Centres before and after a health education programme. Their finding was that health education improved knowledge of attitude to and health practice but the percentage that attend the health centre was low. This means that health education influences must be improve upon to attract PHC Attendance. By implication such low attendance cannot influence community health. Abdulhimeen et al. (2012), in their study of the availability and utility of PHC Centres found that despite the availability, some rural dwellers in Nigeria tend to under-use the service

due to perception of poor quality and inadequate availability of services. From this it can be deduced that the Primary Health Care Centres do not have much influence on community health.

The study is significant to health educators to improve the quality of their health education with the result from this study. Primary health policy formation and implementation will find this study useful in their effort to improve the health services of primary healthcare in Delta State and by implication Nigeria. Health facility users will find the implemented recommendations useful as it will improve the services offered by the health facilities. The National Commission for Health Education Credentialing (NCHEC) (1996) stated serve roles and responsibilities of health education to include among others; assessing individual and community needs for health education. This includes: (i) Provides the foundation for programme planning; (ii) Determines what health problems might exist in any given group; (iii) Includes determination of community resources available to address the problem; (iv) Community empowerment encourages the population to take ownership of their health problems; and (v) Careful data collection and analysis. This single responsibility of the health education

roles speak volume for itself in the role of health education in community health. From the reviewed literature, there is a need to study the relationship benefits of the Primary Health Care Centres and their host communities as it affects community health. It is this gap this study attempts to close.

Objectives of the Study

The specific objectives of the study were to:

1. investigate the influence of health education/ health promotion practice in Primary Health Centres on community health in Central Senatorial District of Delta State, Nigeria.
2. determine the influence of group health education practice in Primary Health Centre on community health in Delta Central Senatorial District, Delta State, Nigeria.
3. determine the influence of individual health education practice in the Primary Health Centres on community health in Central Senatorial District, Delta State, Nigeria
4. examine the influence of community health education n primary health centre on community health on Central Senatorial District, Delta State, Nigeria.

Research Questions

1. to what extent will health education influence community health Central Senatorial District, Delta State.
2. to what extent will group health education practice influence community health in Central Senatorial District, Delta State.
3. To what extent will individual health education practice influence community health in Central Senatorial District, Delta State.
4. To what extent will community health as practice in primary healthcare centres influence community health in Central Senatorial District, Delta State.

Research Hypotheses

1. Health education practice do not significantly influence community health in Central Senatorial District, Delta State.
2. Group health education practice do not significantly influence community health in Central Senatorial District, Delta State.
3. Individual health education practice do not significantly influence community health

in Central Senatorial District, Delta State.

4. Community health has practiced in primary health centre will not significantly influence community health in Central Senatorial District, Delta State.

METHODOLOGY

Research Design

The study adopted the ex-post-facto design of a descriptive research. An ex-post- facto design of a descriptive research is that in the study only examine and analyse what is existing without manipulation. According to Nworgu (2018), ex-post- facto of a descriptive research is that in which the study is carried out as the events are in their natural setting. A descriptive design aim at collecting data and describing it in a systematic manner; the characteristics, features or facts about a given population.

Participants

The population was the 134 functional Primary Health Centres in the Central Senatorial District of Delta State (Primary Health Care Development Authority, Delta State 2021), the sample was 134 primary healthcare professional workers drawn from each PHC centres in the senatorial district. Health educators were the primary targets samples but when a health educator is not

available, the most senior nurse or community extension worker were made part of the study. The Sampling technique could be referred to as purposive sampling technique. Where more than one health educator exists, a simple random sample is used to sample one of them.

Instrumentation

The research instrument was a questionnaire styled health education practice questionnaire that sought to gather the information on health education practice in primary healthcare centres as affects community health. The questionnaire is itself design and self-reporting by the participants/responds. The questionnaire was made up of two sections: Section A, biodata of responds and Section B, Item statements directed at the interest of the study, Section B, was made up of three sections, B1- health education, Section B2, Health promotion practice in PHC Centres, B3, group health education practice in PHC Centres, B4- Individual health education practice in PHC Centers and B5 community. The questionnaire was designed along the Likert like rating scale of Strongly agreed, 4 points, Agreed, 3 points, Disagreed, 2 points, and Strongly disagreed 1 points, Respondents were to tick that which is the most suitable response to the statement.

Validation and Reliability of the Research Instrument

The instrument was validated using face and content validity by three experts in health education in the department of health and safety, Delta State University, Abraka, Nigeria. The experts made amendments on preciseness and approved it for use. The reliability was obtained by administering the instrument to healthcare workers in nearby Edo State, outside the study area. It was first administered to 20 respondents Edo State and after two weeks it was re-administered to the some people. This is referred to test-retest reliability test, Using Pearson Product Moment Co-efficient test to analyse the data which hood at $r = 0.94$. This was found comfortable for the study.

Procedure for Data Collection

The copies of questionnaires were administered to health educators in the Primary healthcare centres during the official working hours. Where a health educator do not exist the most senior health worker in the center was purposively administered the questionnaire. The researcher or research assistant waits until the respondent completes it. All the 135 primary healthcare centers visited either by the researcher or any of the assistants. Eight research assistants took part in the study. All

questionnaire were retrieved and used for the study.

Data Analysis

Data collected were analysed using the frequency, percentage, One-Way Analysis of Variance (ANOVA) and Regression statistics. All hypotheses were tested at 0.05 level of significance.

RESULTS

One hundred and thirty-four (134) respondents took part in the study. One hundred and twenty-one (121) were health educators. Seven (7) were nurses and six (6) were senior health extension workers

Table 1: Frequency count and percentages and mean of the influence of health education/health promotion on community health

S/N	STATEMENT	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Remark
1	Proper Health Education practice in the Primary Health Care (PHC) will help enhance the implementation of PHC in PHC centers	50 (37.31) 200	32 (23.9) 96	27 (20.1) 54	25 (18.65) 25	2.79	Agreed
2	Health education practice on family planning for patients/individuals in the community will enhance community health	40 (34.3) 184	30 (22.38) 90	30 (22.38) 60	28 (20.89) 28	2.70	Agreed
3	Health education practice on prevention and control of communicable diseases for patients/individuals in the PHC will enhance community health	45 (33.3) 180	30 (22.38) 90	30 (22.38) 60	29(21.6) 29	2.67	Agreed
4	Health education for patients/community members within the catchment area of the PHC will help increase health awareness/health care awareness which will therefore help enhance community health	50(37.31) 200	29(21.64) 87	35 (26.11) 70	20(14.92) 20	2.81	Agreed
5	Following the internal referral in the PHC, Doctors/nurses do refer patients that health condition/health problem needed health education to the health educator for health education teaching will enhance community health	15 (11.5) 60	23 (17.2) 69	54 (40.3) 108	42 (31.3) 42	2.08	Disagree
	Grand mean					2.61	Agreed

Table 1 shows that the practice of health education in the primary health centres. It was found that the practice of health education in the PHC centres will promote the enhancement

of promoting the PHC policy, family planning, prevent and control of communicable diseases and increase healthcare awareness with PHC centre catchment area.

Table 2: influence of health education practice in PHC Centres as to promote community health

S/N	STATEMENT	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Remark
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1	Health education program are focused on groups in the community will enhance the implementation of PHC as to raise individual's ability to prevent preventable health problems as to enhance community health	74 (55.22) 269	60(44.77) 180	0 (0) 0	0 (0)	3.55	Agreed
2	Health Education on nutrition and growth monitoring to empower health behavioural change and action focused on different groups to enable healthy choices would improve the implementation of PHC and enhance community health	45 (33.58) 180	30 (22.38) 90	30(22.38) 60	29(21.64)	2.67	Agreed
3	Health education are taught to all groups [not only pregnant women or nursing mothers] on a regular bases in the PHC centre or community in order to enhance community health	14 (10.13) 56	54 (40.29) 162	28(20.89) 56	38(28.35) 38	2.32	Disagree
Grand mean						2.85	Disagree

Table 2 is concerned with the role of PHC centres in promoting community health. It was found that health educated directed at group will

raise individual ability at preventing preventable diseases and enhance nutrition and growth monitoring.

Table 3: Frequency count, percentages and means of individual health education practice in PHC centres as to promote community health

S/N	STATEMENT	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Remark
1	There is time set aside either daily, weekly or monthly bases for health education sensitization /programmes, teaching/learning within the catchment area of the PHC centre as PHC implementation towards community health	30 (22.4) 120	36 (26.9) 108	37 (27.6) 74	31 (23.1) 31	2.48	Disagree
2	The time set aside has always been used for the teaching/learning of health education either in the PHC or in the communities	12 (8.95) 48	25 (18.7) 75	55(41.0) 110	42(31.3) 42	2.05	Disagree
3	Time set aside for health education/promotion programmes geared towards educating patients during the implementation of the PHC in PHC Centre would improve individual ability to control preventable health problem and promote community health	66(49.3) 264	68(50.7) 204	0(0) 0	0(0) 0	3.49	Agreed
4	Effective use of time allocated for individual health education in the implementation of the PHC will increase knowledge/awareness of PHC services and will in turn increase PHC centre patronage and promote community health	69(51.5) 276	65(48.5) 195	0(0) 0	0(0) 0	3.51	Agreed
5	The referral of patients to qualified and certified health educator enhances patients/individual learning, health behavior/practice and promote community health	61(45.5) 244	61(45.5) 183	5(3.7) 10	7(5.2) 7	3.31	Disagree

Grand mean

2.96

Agreed

Table 3, it was revealed in this table that PHC as practice in the health centres has time but aside for teaching/learning, sensitization as implementation of the PHC

programmes, either in the PHC centres or in the community and improve individual ability to prevent and control preventable diseases.

Table 4: frequency count, percentage and mean of the influence of community health education on the promotion of community health

S/N	STATEMENT	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Remark
1	Health education and promotion program on immunization in the PHC Centre increase awareness of the benefits of immunization and increase acceptance of the services in the implementation of the PHC	73 (54.5) 292	61(45.5) 183	0(0) 0	0(0) 0	3.54	Agreed
2	Health education on basic sanitation focused on the community will improve sanitation knowledge/practice in the implementation of the community health.	71 (52.98) 284	62(46.3) 186	0(0) 0	1(0.75) 1	3.50	Agreed
3	Health Education Teaching/Learning Carried Out To The Community On The Services Rendered By The PHC centre and its benefits Will Enhance The Implementation Of The PHC to raise awareness of PHC services to improve community health.	71 (52.98) 284	63 (46.3) 189	0(0) 0	0(0) 0	3.52	Agreed
4	Health Education/promotion programs on prevention and control of communicable disease will improve community health.	79(58.95) 316	55(41.0) 165	0	0	3.58	Agreed
	Grand mean					3.53	Agreed

Table 4 shows that health education as carried out in the PHC centres increase awareness of the benefits of

immunization and their participation, sanitation and improves community health.

Table 5: Health Education Practice, Group Health Education, Individual Health Education and Community Health Education Practice in Primary Health Centre as Influence Community Health

Model	Sum of squares	Df	Mean Square	F	Sig.
Regression	156.150.	7	22.307		
Residual	2222.634	126	17.640	1.265	0.273
Total	23778.784	133			

Table 5 revealed that the F-value of 1.265 df of 7/126 and significant value of 0.273 at 0.05 alpha which are the regression of health

education/health promotion, group health education, individual health education and community health education were not significant in

promotion community health thus the hypothesis that these variables do not predict promoting community health was accepted. However, with R^2 adjusted at 0.014 these variables

contributed 1.40% (positively) to improved community health and with R^2 of 0.066, these variables accounted for 6.6% (positively) variance in community health.

Table 6: Co-Efficient Analysis of Variables of Health Education, Individual Health Education, Group Health Education and Community Health Education in Relation to Community Health

	Unstandardized Coefficients		Standardized Coefficients			Remark
	B	Std. Error	Beta	T	Sig.	
(Constant)	28.522	10.133		2.815	.006	
HEP	.049	.138	.032	.357	.722	Not Significant
GHP	-.155	.190	-.072	-.817	.416	Not Significant
IHP	.366	.206	.157	1.777	.078	Not Significant
CHP	-.58	.452	-.115	-1.296	.197	Not Significant

Dependent variables on community health

- HEP: Health Education/Health Promotion
- GEP: Group Health Education
- IHP: Individual Health Education
- CHP: Community Health Education

Discussion

The findings of this study showed that health education as practice in the primary healthcare centres was not significant to community health situation in the host community of the primary healthcare centres. It was found that all the variables of the study: health education/health promotion, group health education, individual health education and community health education had an F-value of 1.265 at 7/133 significant at 0.273 when analysed at 0.05 alpha. This shows the non-significance between the practice of health education in the primary healthcare

centres and the situation in the community. It shows that the primary healthcare centres do not make significant impact in community health. These findings tally with that of the findings of Hanafi et al. (2014) who reported that although health education did improve knowledge and attitude to health practice but stated that the percentage that attend the health centres were low. The low attendance is an indication that the primary healthcare centre does not and cannot influence their practice of community health in the host community. This study also correlates that of abdulraheem et al. (2012)

who found that despite the availability and utility of primary healthcare centres in some rural areas in Nigeria, the rural dwellers has low perception of the quality of services rendered in the primary healthcare centres. From this it could be inferred that health education in the PHC centres do not influence the practice of community health in the host communities. From the analysis of Group, individual and community health education as practiced in the PHC Centres, variables were found not to be significant to community health practice in the host community. Individual and community health education had a t-value of 0.357 and significant value of .722 and .078 respectively.

The findings of this study on group health education was variance with that of Jidril et al (2017) who stated that health education intervention programme improves knowledge and utilization of postnatal care services among women. Osahon (2017) had a similar finding in his study. This study established a correlation with that of Oshon (2017) who stated that both community members and even some health workers had never heard of Primary health care training thus inputting that the primary healthcare centres do not influence community health practice.

On individual health education, it was found not to be significant to community health in this study. However, there were no available previous studies to make a comparison, at least to these researchers, this findings in this study becomes a base-line data on individual primary healthcare as it influences community health practice in the host community.

CONCLUSION

The study was the practice of health education/health promotion in primary health care centres as it influenced on the practice of community health in the host community using three component of health education; group, individual and community. All variables of the study as combined was found not to be significant to community health in the host community. A co-efficient analysis, further found that, health education/health promotion, group health education, individual and community health education were not significant at their individual levels. This study do not found relationship between health education and community health as being presently practice in primary healthcare centres in Delta Central Senatorial District, Delta State, Nigeria.

RECOMMENDATIONS

Arising from the findings in this study, it was recommended that:

1. Health education/health promotion should practice in healthcare centres as prescribed in the concept of the Primary Health making health education the central practice using education as to reduce ignorance and promote health in the community through public/community health programme.
2. Group health education should be made functional on daily routine in all primary healthcare centres
3. Individual health education should be functional by Doctors and Nurses referring patients with chronic health issues and reoccurring health problem in individual or family to the health educators for health education individual counselling
4. Community health education programe whould be introduce into the community through every group assembly such as worshipping centres, schools, clubs etc as the community to be aware of their responsibility in community health
5. Health education community extension workers should be

introduced into the community through the Primary healthcare centres

6. Home visit and follow up programme should be introduce into the primary healthcare programme as to promote community health.

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