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Table of Content

FINAL DRAFT BJEA VOL 9 No2

Justifications for the Need of Logic for Effective Teaching and Learning

By

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ABSTRACT

Logic engages in self-reflection and critical thinking that result to avoidance of errors in judgments and conclusions. Its principles encourage correctness, validity and systemization of thoughts and actions. Education being an essential agent of socialization requires the drivers (teachers) of education to be familiar with logic. Many teachers in the classroom today appear to lack basic reflective and logical skills to communicate and transmit contents in an unambiguous and effective mode. Their pedagogical engagements with learners and interaction with other members of the public, occasionally reflects lack of sequential presentation and correctness in reasoning as well as objectivity in approach. This article therefore, advocates for acquisition of logical skills as an ineluctable tool by classroom teachers to promote effectiveness in teaching and learning. It argues further that education as a systematic and worthwhile enterprise needs to be transmitted by teachers who are adequately furnished with principia logic to orderly guide pedagogical application and content delivery because by its very nature, logic is indispensable to all sciences and indeed to every human enterprise where objectivity and worthwhile values are desired. It recommends among others things that logic should be made as an integral part of teacher education curriculum; teachers be trained in modern pedagogical skills using principles of logic, and inclusion of elementary principles of logic to learners at College level to guarantee effective classroom interaction between teachers and students.

Keywords: Logic, Classroom Teacher, Teaching and Learning

Introduction

Education is a worthwhile activity. It does not engage in arbitrary practice. It is planned. This suggests that it has aims and objectives. It provides the 'why' of the activities which the teacher engages the learner. To have such reasons, Okoro (2002) posits that the teacher needs a logical companion to help him reflect on who to teach, what to teach and how to teach it, what materials are required for the lesson, why they should be chosen and the

expected outcome of the activity. The teacher does all these on the basis of their awareness of the process of education, the principles and theories that guide them and the expected outcomes of the educational enterprise the teacher engages in.

Furthermore, the teacher needs to be oriented in pedagogical techniques such as reflective teaching to be able to transmit contents and caries out systematic activities that will stimulate learners to show some positive behavioural changes; the teacher is still expected to interact with the parents and other members of the public especially, during stake holders' interface, such as visitation panel and Parents Teachers Association (PTA) meetings. Being an enlightened figure-head, the teacher may engage in other leadership roles in the community. Whether the teacher is teaching in the classroom or relating with parents or other members of the public, effective communication and logical reasoning are necessary. If the teacher is adequately prepared on how to reason correctly in reference to what constitutes error in reasoning, there is a high probability that they will guarantee effective teaching and learning, transmit worthwhile content and promote the heritage of the society which is part of their duty (Onwuka & Enemuo, 2014). This indicates that a teacher is very central and pivotal in the business of epistemic

transaction of teaching and learning, they need not to be strangers to sound principles that generate mental clarity for appropriate teaching and learning skills. Logic therefore becomes ineluctable in the process of teaching and learning. Undoubtedly, logic is found in almost all human activities, it is employed in professional discussions and practice, like law, for logical and pedantic arguments; teaching and learning, for sequential classroom presentations; it finds expression also in research activities, inter-personal dialogue, political campaigns etc.

This piece therefore, concerns itself with the justification of logic in teacher education for effective teaching and learning and make necessary recommendations for inclusion and of logic in teacher education curriculum. The discourse in this piece centred primarily on the importance and role, logic plays in the educative process and how it guides pedagogical expression of a classroom teacher that leads to effective teaching and learning.

What is Logic?

Logic is one of the oldest intellectual disciplines in human history. The ancient Greek thought it sufficiently important that Logic was one of the three subjects in the Greek Trivium, along with Grammar and Rhetoric. It dates back to Aristotle (c.304-

322 BC). Genesereth and Chaudhri (2012) assert that logic has been studied through the centuries by philosophers and non-philosophers alike, and it is still a subject of active investigation today. In its most primitive sense, Uduma (2008) sees logic as a philosophic specialism (although it also has affinity with mathematics in a fundamental sense) that is both a propaeteutic and as well deals with truth-worthy principles and methods for the discernment of truth. Etymologically, the term "logic" came from the Greek word *logos*, which is sometimes translated as "sentence", "discourse", "reason", "rule", and "ratio". Of course, these translations are not enough to guarantee all-encompassing understanding of the more specialized meaning of "logic" as it is used today. Uduma (2008) points out further that it is generally difficult to characterize the subject matter of logic, resulting to diverse conceptions about the subject matter. This perhaps arises from the variety of senses in which the Greek word, *logos* from which the term logic is derived possesses. Aristotle defines logic as a "new and necessary reasoning". To him, logic leads man to something new and gets him to know what he did not know before; and leads him to a necessary end because the conclusions that emerge consequent on the reflections and reasoning are ineluctable. Copi (1982), in his definition, looked at

logic as the study of methods and principles used to distinguish good (correct) from bad (incorrect) reasoning. Similarly, Popkin and Stroll (1975) defined logic as that branch of philosophy which tends to reflect upon the nature of thinking itself. Aja (2015) views logic as the study of reasoning, of how to think clearly, how to reason validly and how to argue soundly. One can infer from the above definitions that despite varying definitive stand points by different scholars, there is a common denominator which is the focus on valid reasoning. It is also clear that the logician is uninterested in correctness of sentences, neither is he interested in providing reason why individuals reason the way they do. Rather, logicians concern themselves with furnishing the rules, guidelines and principles that guide in correct reasoning and in evaluating any piece of argument. Generally, logic is a branch of philosophy that emphasizes clarity of ideas and how orderly human thoughts should be presented in any form of discuss or interpersonal dialogue.

The basic aim of logic is to teach man how to reason correctly. Reasoning is the activity or process of adducing and collating reason, weighing them, and drawing conclusions based upon these reasons. Correct reasoning is the art of finding, collecting reasons and/or evidence which do in fact, support or prove any

conclusion. Logic is concerned with justification of ideals and statements; it focuses on the solidity of the grounds one produces to support a claim (Aja, 2015). Within logic, Uduma (2008) identifies two forms of reasoning; deductive and inductive reasoning.

Deductive Reasoning involves reasoning from general to particular incidences. It draws conclusions based on premises generally assumed to be true. Also called "deductive logic," it uses a logical assumption to reach a logical conclusion (Uduma, 2008). Deductive reasoning is often referred to as "top-down reasoning." If something is assumed to be accurate and another relates to the first assumption, the original truth must also hold true for the second. In this case, a conclusion is inferred or deduced from general statements (syllogism). Consider following examples;

Example 1
1. All university students are immoral
2. Terfa is a university student
3. Therefore, Terfa is immoral

Example 2
1. If there is a rainbow, flights get canceled
2. There is a rainbow now
3. Therefore, flights are canceled

It is clear from the above examples that deductive thought uses only information assumed to be accurate. It does not include emotions, feelings, or assumptions without evidence because it is difficult to determine the accuracy of this information. The understanding of deductive logic can equip a teacher with basic principles that will facilitate improvement in teaching and learning. In a classroom situation, the teacher can begin by providing rules to learners along with examples, which are followed by specific activities, so that they can practice. This method (of using deductive approach) is suitable for slow learners who need a clear base to start and are also more accustomed to the traditional approach. In this, teachers determine the concept which needs to be taught to ensure that the point of the lesson is firmly driven home. It will help in covering all the important points without missing any. This involves establishing a connection between the concepts that had been taught in the previous class and what will be taught in the next.

Inductive Reasoning: Inductive reasoning is the ability to combine pieces of information that may seem unrelated to form general rules or relationships (Okoro, 2002). It is a type of reasoning that involves drawing a general conclusion from a set of specific observations. It involves widening specific premises out into broader generalizations. This involves reasoning from general laws or conclusions being inferred from particular incidences. It is the

reverse of deductive reasoning. In this type of reasoning, various incidences of a given specimen are observed over a given period of time.

Example 1

1. Abubakar is a Fulani man and he is a nomad
2. Aminu is a Fulani man and he is a nomad
3. Ibrahim is a Fulani man and he is a nomad
4. Therefore, all Fulani men are nomads

Example 2

1. The flamingos here are all pink
2. All flamingos I have ever seen are pink
3. Therefore, all flamingos must be pink

Here, the premise only provides some (not sufficient) ground to arrive at a conclusion, therefore, qualifiers like valid or invalid cannot be used to summarize its conclusion. This means that inductive reasoning is probalistic in nature, it is possible to have premises that are true and conclusion that is false. Hence, unlike deduction, induction is a probalistic kind of argument that does not guarantee certainty. In a classroom situation, inductive reasoning forms part of a wider strategy of self-discovery and self-educating, which has seen a surge in popularity in recent times. The learning takes place in the hands of the students and in this way, it can be a highly effective tool

to encourage students' participation and engagement. When compare to the deductive approach, inductive teaching is generally more effective. In addition, inductive reasoning is an underlying force in the cognitive development of children. It is an active process of learning, as it assists in bolstering students' motivation. Inductive process itself promotes an act of deep thought among students, which is beneficial for the entire learning process. In practice, Michael and Rechard (2006) stated that neither teaching nor learning is ever purely inductive or deductive. Like the scientific method, learning invariably involves movement in both directions, with the student using new observations to infer rules and theories (induction) and then testing the theories by using them to deduce consequences and applications that can be verified experimentally (deduction). Good logical teaching helps students learn to do both. As already established from the beginning of this article, logic is found in every department of human learning including education. The teacher is at the centre of any educative process, to ensure effective teaching and learning, a teacher needs logic because there is logic in teaching. The science of ordering thought and presentations in a sequential way is determined by logic. The next question is, who is a classroom teacher?

A Classroom Teacher

A classroom teacher, also called a school-teacher or formally an educator, is a person who helps students to acquire knowledge, competence, or virtue, via the practice of teaching. Akinsanya (2015) sees a teacher as one who has received training in pedagogical skills to be able to facilitate learning. Ukaro in Kana (2014) further identifies the teacher as one who helps to make the society what it is. This means that the teacher promotes and influences the mind of learners to embrace the values and heritage of the society. Effective and efficient teaching does not only polish the mind of learners but also advances the society while ineffective teaching can impede the societal development. The teacher's task is to create or influence desirable changes in behaviour among learners. In the opinion of the ancient Roman writer cum philosopher, Cicero (c. 106-43 BC), a teacher must be a well-rounded individual who is widely read and thereafter settles down to acquire skills in methodology. For him knowledge without ability to present it properly is useless (Boyd and King in Onwuka & Enemuo, 2014). This is where a teacher requires logical principles to be able to present the acquired contents more effectively and efficiently.

From the foregoing definitions of a teacher, anyone who plans to be a teacher must at least have good understanding of teaching and learning processes and should be acquainted with major variables that influence the success of the teaching and learning process. The teacher is a critical element in the teaching and learning situation. His action and inaction may affect learning profoundly. The classroom teacher is the key factor in whether or not students learn well. Kana (2014) observes that the teacher acts like a field worker in the educational programme. In order to make him capable of fulfilling his role, he needs to be orientated in the methods/techniques of knowledge impartation and insight about subject matter. The responsibility of the teacher, both in the classroom and in the society is sensitive and enormous. He requires profound exposure to logical principles of correct and sound reasoning so that he can discharge his classroom task appropriately and unambiguously, to promote effective teaching and learning. This require the teacher to be acquainted with both deductive and inductive logic to facilitate teaching and learning and to be able to satisfy all students with learning differences.

The Concept of Teaching and Learning

Teaching and learning are two "sides of the same coin". The two concepts may be

defined as though, distinct from each other but none can be exhaustively expressed without the other because there can be no learning without teaching and vice-versa. Sequeira (2012) views learning as any change that is brought about by developing a new skill, understanding a scientific law and changing an attitude. This change is not merely incidental or natural, it is a relatively permanent change, usually brought about intentionally. This shows that when one attends a course, searches through a book, or reads a discussion paper, he or she sets out to learn. It is important to point out that learning is internal to learners and it is both motive and behaviour but only behaviour is seen motives are not seen. Teaching in another hand is a set of events, outside the learners which are designed to support internal process of learning (Afzal and Abul, 2021). It is the process of heeding people's needs, experiences, feelings, and interfering so that specific content can be learnt. Its major function in education is to systematically lead and guide activities that result to acquisition of new experiences. The process of teaching is aimed at the transmission of knowledge, and impartation of skills, values, and behaviour. Teaching has been considered a tri-polar process; for an activity to be tagged teaching, there must be a learner, teacher and a course. Both teaching and learning process are organized in terms of the requirements of the individual and the society. Teaching and Learning are variables that interact as learners work towards their goals and incorporate new knowledge, behaviours, and skills that add to the range of their epistemic composition. In this process, the teacher, the learner, and the curriculum are organized in a systematic way to achieve the educational goals and objectives. This process requires logical skill to arrange them sequentially for effective transmission in the classroom. As

noted earlier, logic is the science of reasoning; it is an important skill to use not only in real life but also in the classroom. It allows learners to get information that is mediated by the teacher and build on it. Logical thinking becomes pivotal as it encourages students to think critically, experiment diligently, and even ask seemingly unconventional but reasonable questions about the activities in the classroom. It is therefore, justifiable to entrench logic in teaching and learning.

Justifications for the Need of Logic for Effective Teaching and Learning

Those alien to the logic of teaching and learning have often asked; of what pedagogical importance is logic to classroom activity? Such a question is rather an ironical one, because the sensitive and systemization involved in teaching and

learning should convince anyone, interested in educative process to ask; how much of logic is the classroom teacher expose to? According to Kneller (1971), a teacher who studied logic tends to be more rational and more intellectually aware than the one who has not. Enemuo (2013) further affirm that a teacher who is grounded in logic will be more likely to question his own prejudices and rationalization. This implies that he will be less influenced by the specious pleading of others and more competent to spot fallacies and inconsistencies in their arguments. In a related argument, Okoro (2002) posits that logic furnishes the teacher with the methods and principles to distinguish between correct and incorrect reasoning. With the definition of logic construed as a study of the methods and principles whereby to distinguish between correct and incorrect reasoning, any teacher who has devoted some time to the study of logic is more likely to reason more correctly than the one who has never been exposed to its principles and methods. The teacher will be more critically aware and stands a better chance of inculcating a similar habit and attitudes in the pupils under his care. Logic makes the teacher not only to be aware but also inspire him to probe into the meaning of many concepts, ideas, theories and principles of education and appropriate application. This constitutes the important

aspect of philosophy of education. The teacher who is well grounded in logic is already intellectually equipped to understand and appreciate other courses in education thereby, facilitating efficacy in teaching and learning. Furthermore, logic exposes both teachers and learners to critical analysis and examination of some fallacies. Logic introduces the method of analysis by which the meaning of a concept, its essence or its truth may be established by classification or definition or by examining the truth of ideas expressed in language, or both. There is also application of laws of logic to ensure that truth is attained in the process of classroom delivery. Knowing what a fallacy is, the teacher and the learner will be able to point out a case in which it is committed, and at the same time being careful not to commit it in the process of teaching and learning by using suitable concepts, language and ensuring appropriate application. Again, it is necessary to state that logic helps the teacher and the learner to overcome sentiments and mere propaganda. Following rational principles, logic has no room for sentiment. In this regard, it equips both teachers and students with such techniques and principles whereby to distinguish between facts and propaganda. Such individuals remain uninfluenced by the specious arguments and pleadings of the politicians, prejudices and cultural beliefs.

Having been so groomed and equipped, only such a teacher is the one more competent and disposed to inculcate similar virtue in the learners. According to Enemuo (2013), logic is also therapeutic. This suggests that the logician does not take instruction just because it proceeds from an authority. He carries out analysis to determine the worthiness of such an instruction. When others feel inclined to accept "hand-outs" without questioning the reason or rationale behind their transmission, the logician calls for critical examination of the basis for such an acceptance. This is necessary because without anchor on the principles of logic, knowledge would be seen to be a mere memorization of facts. Only a teacher and a learner who have mastery of logical principles can apply this approach in the classroom and in the community in which they live. Logic makes the teacher conscious of this necessities so that in the process of teaching and learning in which analysis of terms or statements feature, the teacher knows what he engages in, and why. Generally, logic develops in both the teacher and learner the ability to spot logical difficulties in what others write or say and to avoid those pitfalls in their own thinking. Logic makes a teacher to lead students to think for themselves and teach them not to receive every information at face value. The principles of logic help learners to apply discussions and evidence to their thoughts. It is applied in conceptualizing educational policies and realization of educational objectives. The teacher who is at the centre of learning process is equipped with the right reasoning and right language for curriculum content delivery. Summarily, both teachers and learners who are oriented in logic learn how to think, read, write and speak more critically, consistently, coherently, carefully and cogently. In other words, logic helps both the teacher and learners to be very mindful, tactful, careful, efficient and efficacious in the use of language. It develops the consciousness of the ambiguous nature of words, premises, definitions, claims and arguments.

Conclusion

In every discipline, logic introduces order and clarity in reasoning; it does more in teaching. It does this by establishing rules for the analysis of concepts and ideas expressed in language. In addition, knowing what fallacies are, being able to avoid them are all parts of the contributions of logic to teaching and learning. The science of a well-ordered and systematic presentation of lesson is informed by logical principles which the teacher needs in classroom for effectiveness. Logic is therefore an essential tool which teachers are expected to get exposed to before engaging in the business of teaching and

learning. In a nut shell, logic is the Portmanteau upon which effective and efficient teaching and learning is hanged.

Recommendations

To further improve on the issues analyzed in this article, the following recommendations were made.

1. Logic should be made as an integral part of teacher education curriculum. Many institutions and faculties of education offer philosophy of education as an elective course, thereby making it optional for student teachers. Where philosophy is even made as a core course for student teachers, emphasis is not placed on the study of logic as a necessary pedagogical skill.

2. Special training for teachers should be initiated to equip them with modern pedagogical techniques using principles of logic. Modern educational reforms require methodologies that encourage critical thinking skills which is essentially promoted by logic.

3. Students at upper basic education and senior secondary school should be exposed to basic or elementary principles of logic. If both teachers and learners are reasoning towards the same direction, teaching and learning will become seamless and more effective.

More research should be conducted to establish the nexus between logic and effective teaching and learning. Research on logic and teaching appears to be limited in education repository, resulting to paucity of literature on the subject matter.

References

Afzal, S. M. and Abul, K. (2021). Teaching and learning process to enhance teaching effectiveness: a literature review. International Journal of Humanities and Innovation. Vol. 4 No. 1, pp. 1-4

Aja, E. (2015). Logic and Clear Thought: An investigation to good reasoning. Nsukka: Great AP Express Publishers Limited.

Akinsanya, P.O. (2015). Philosophising about education. Lagos: University of Lagos Press and Bookshop Ltd.

Copi, M. I (1982). Introduction to logic. New York: Macmillan Publishing Co. Inc.

Enemuo, P.C. (2013). Logic-the classroom teacher's tool: Forms and fallacies in Queen I. O. & Enemuo, P.C. (Eds.), Advanced philosophical foundations of education (pp. 1-18).

Kana, A.E. (2014). The principles and practice of teacher education in Nigeria. Makurdi: Aboki Publishers

Keller, F. G. (1971). Foundations of education. California: John Wiley and Son inc.

Michael, G. and Vinay, C. (2012). Logic in secondary education. Retrieved from http://intrologic. stanford.edu/miscellaneous/intro.ht ml on 28th November, 2022

Michael, J. P. and Richard, M. F. (2006). Inductive teaching and learning methods: definitions, comparisons, and research bases. Retrieved from https://www.engr.ncsu.edu/wp-content/uploads/drive/1-MORshfST1zjmfEqk33HF1PCYP-HbW3L/2006-Inductive%20learning%20paper%20(JEE).pdf on 11 September, 2023.

Okoro, O. (2002). Branches of philosophy in education. Onitsha: Ballin Publishers Nig. Limited.

Onwuka, C.J.A and Enemuo, C.P. (2014). Introduction to history of education. Nsukka: Chuka Educational Publishers.

Popkin, R. H and Stroll, A. (1975). Philosophy made simple, London: Doubleday and Co. Inc.

Sequeira, A. (2012). Introduction to concepts of teaching and learning. National Institute of Technology Karnataka, Surathkal, India.

Uduma, O. U. (2008). Introduction to logic and fundamentals of formal reasoning. Abakaliki: Willyrose& Appleseed Publishing Coy.

Barriers to Accessing Sexual and Reproductive Health Services among Adolescents in Garba Buzu Internally Displaced Persons Camp, Maiduguri, Borno State, Nigeria

By

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ABSTRACT

This study was conducted to assess barriers to accessing sexual and reproductive health services among adolescents in Garba Buzu Internally Displaced Persons' camp, Maiduguri, Borno State. The study was guided by two objectives, two research questions were answered and two hypotheses were tested. Population for the study comprised 1052 male and female adolescents. Survey research design method was used for the study. Simple random sampling and proportionate techniques were used to select a sample of 104 respondents. Demographic characteristics of respondents and research questions were analysed using frequency counts and percentages. Independent samples t-test was used to test hypotheses at 0.05 level of significance. Finding of the study indicates that majority of the respondents were between 15-20 years, single, primary school leavers, and females. Findings of the study also revealed that cultural factors, being unmarried, fear of stigma, providers' bias and unfriendliness are barriers to accessing contraceptive services among adolescents. It also revealed that absence confidentiality, service inadequacy, and concern about test results are barriers to accessing STIs management services among adolescents. It was concluded that prevalence of unplanned pregnancies and STIs among adolescents in the study may be associated to barriers in accessing contraceptive and STIs management services. Hypothesis one was rejected; the p-value, 0.030, was less than the level of significance, 0.05. This means that there is significant difference in barriers to accessing contraceptive services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State. Hypothesis two was retained; the p-value, 0.21, was greater than the level of significance, 0.05. This therefore means that there is no significant difference in barriers to accessing STIs management services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State, It was recommended that stakeholders should create adolescents safe-spaces and peer education intervention to cater for sexual and reproductive health needs of the adolescents.

Keywords: *Adolescents,* accessing, barriers, health, sexual, Sexual and reproductive

Introduction

Sexual and Reproductive Health (SRH) is a state of physical, mental and social well-being in relation to sexuality, which is not the mere absence of disease, dysfunction or

disability (WHO, 2006). SRH services in the family health program are traditionally targeted at married couples. Meanwhile, adolescents are perceived as generally healthy and not in need of special health services. In reality, adolescents' health needs, behaviors and expectations are unique and routine health care services are needed, (Agampodi, 2018). This is a huge challenge in developing countries due to various cultural and social barriers. In order to provide acceptable services with adequate utilization, in-depth exploration of social and cultural barriers and understanding the needs and expectations of adolescents is a great necessity, (Omobuwa,Asekun-Olarinmoye & Olajide, 2012).

Adolescents' Sexual and Reproductive Health (ASRH) service range from sexuality education, family planning/ contraceptive services, antenatal care, postnatal care, postabortion, safe mother hood, and prevention and management of STIs (including HIV/AIDS). (Odo, Nwagi, Nnamani, & Atama, 2018); which can readily be provided by both schools and the healthcare centers. However, these services were general services and not specifically for adolescents as revealed by qualitative data and absence of youth clinic or unit in

majority of the health facilities (Powell, Weeks, & Illangasekare, 2016).

Sexual behaviours of adolescents have become increasingly more permissive in the last three decades (Ayodele, 2011). In a meta-analysis study by (Adebisi & Olanrewaju, 2019), it was reported that 34% of early adolescents and 61% late adolescents reported they have had sexual intercourse, and 7% of high school students said they first had intercourse before age of 13 years. It was further that 89.3% male and 91.2% female have once had sexual intercourse in the last six month. Out of these, 6.1% male and 28.8% female had experienced attempted forced sex.

Adolescents are at higher risk of STIs/HIV infection and unwanted pregnancies than other general public, due to their higher levels of sexual experimentation, unsafe sexual practices, being sexually active, multiple-casual-sexual-partners, use condoms inconsistently, and use and abuse various substances. A review study conducted by Hoque & Ghuman (2011) among adolescents concluded that at least 50% of young people are sexually active by the age of 16 years; and 10–25% of males have more than four partners per year; and between 50% and 60% of sexually active adolescents reported never using condoms.

A survey among Nigerian university adolescents, indicated that adolescents have an average of 3.5 sexual partners at the time of the study and that 45% of secondary school adolescents had more than one sexual partners, and nearly half of sexually-experienced school-adolescents in Nigeria did not use condoms during last sexual encounter (Aderibigbe & Araoye, 2018).

Adolescents Sexual and Reproductive Health (ASRH) is a global public health Concern because of enormous challenges faced. Kpangbala (2020) reported that an estimated 222 million women including youths in developing world have Unmet need for modern method of contraception with Sub-Saharan Africa and Central Asia together accounting for 59 percent. High rate of unintended pregnancies amongst adolescents is most common in poorer and marginalized settings especially due to lack of education, sexual violence, poverty and unemployment. In the least developed countries, about 39% of girls get married under the age of 18 years and about 12% of girls under 15 years. Though in most instances they are pressured into these marriages, other girls prefer to get pregnant and married early since they lack education and do not have any means of livelihood, (Svanemyr, Chandra-Mouli, Raj, Travers, &Sundaram, 2020). It is estimated that

about 25.1 million unsafe abortion occurred from 2010 to 2014; with 97% of the 25.1 million from the developing country; with forty-one per cent of these cases among persons aged 15-24 years, and 15 per cent among adolescents aged 15-19 years old, (Kpangbala, 2020). The World Health Organisation (2013), estimated that 24.4 million women globally resort to abortions annually, with adolescents accounting for about 50% of abortion-related mortality in the African region. Unintended pregnancies have been as a result of non-abstinence (Ayodele, 2011); unprotected sexual intercourse as well as contraceptive failure (Osakinle, Babatunde & Alade, 2013). Abortion complications account for 13% of maternal mortality worldwide (Adebisi & Olanrewaju, 2019).

Youths and Adolescents also confronted with poor SRH indicators across the globe. For instance, the highest rates of sexually transmitted diseases (STDs) occur among 20-24 years old, followed by 15-19 year old and Sub-Saharan Africa is the region where persons age 10- 19 years constitute the largest proportion of the population, (Shah & Åhman, 2012). Youth and adolescents in this region are particularly at high risk for HIV infection with 2.2 per cent of young women and 1.1 per cent of young men

living with HIV as of 2013, (Shah & Åhman, 2012). WHO (2011) confirmed that unprotected sex is responsible for about 498 million cases of STIs experienced yearly among adolescents.

Adolescents face greater barriers to accessing Sexual and Reproductive Health services, with disparities in access based on gender, race and ethnicity, and sexual orientation, among other characteristics. Nigerian adolescents are in need of viable Sexual and Reproductive Healthcare services, but failed to access the existing services because the providers are often biased, unfriendly, or not adequately trained to serve adolescents, (Njoroge, 2016). There is evidence that low socioeconomic status, lack of information, stigma and cultural factors are some of the factors that compromise adolescents' access and utilization of reproductive health services, (Regmi, Teijlingen, Simkhada., & Acharya, 2010). While concerns about confidentiality and embarrassment are common across adolescents of all genders and backgrounds, one study found that female adolescents who were concerned about confidentiality, particularly related to their parents, were less likely to receive contraceptive services (Fuentes, Ingerick, Jones; Lindberg, 2018). A qualitative study

of young men identified a range of challenges, including the perception that SRH services were not designed for them (Marcell, Morgan, Sanders, Lunardi, Pilgrim, & Jennings, 2017). Consequently, minority females are more likely to become pregnant during adolescence (Paschen-Wolff, Kelvin, Wells, &Grov, 2018). Findings of a study conducted by Decker, Tara, Atyam, Catherine, Angela, Bautista and Saphi, (2021) revealed that concerns about test results, cost of services, and confidentiality were the most common barriers to SRH services perceived by adolescents. Furthermore, findings of a study conducted by Rafael, Sadaat, marinda and oluwole (2015) on adolescents' sexual and reproductive health in Nigeria revealed that social and cultural reasons, fear of stigma, limited access to contraceptive, abortions, pregnancy, or STI related services, especially for unmarried adolescents, are barriers to accessing SRH services.

It is therefore against this background that this study was designed to assess Barriers to Accessing Sexual and Reproductive Health Services among Adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State, Nigeria.

Objectives of the Study

The objectives of this study are to assess:

1. Barriers to Accessing contraceptive Services among Adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

2. Barriers to Accessing STIs Management Services among Adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

Research Questions

The following research question were answered:

1. What are the barriers to accessing contraceptive Services among Adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State?

2. What are the barriers to accessing STIs Management Services among adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State?

Hypotheses

The following hypothesis was tested:

Ho1: There is no significant difference in barriers to accessing contraceptive services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

Ho2: There is no significant difference in barriers to accessing STIs management services between male and female adolescents in Garba Buzu Internally

Displaced Persons' Camp, Maiduguri, Borno State.

Methodology

Population for this study comprised all male and female adolescents (458 female adolescents and 594 female adolescents) that stay inside Garba Buzu Internally Displaced Persons Camp, Maiduguri Borno State. Survey research design was used for the study. Simple random sampling with proportionate technique was use to select a sample of 104 (10% of the population) respondents (45 male adolescents and 59 female adolescents). Fifteen-item question-naire on Likert-scale of strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD), (with respective points of 4, 3, 2, and 1 respectively) was used for data collection. The instrument was divided into three sections. Section "A" contained demographic characteristics of the respondents; section "B" sought data on barriers to accessing contraceptive services by the respondents; while section "C" sought data on barriers to accessing STIs management services by the respondents. Data for this study was collected over a period of one week with the help of two research assistants. Demographic characteristics of the respondents was analyzed using frequency counts and

percentages. Independent samples t-test was used to test hypothesis at 0.05 level of significance.

Results

Table 1: Demographic Characteristics of the Respondents

S/N		Frequency	Percentage (%)
1.	Age		
a.	10-15 year	29	27.9
b.	15-20 years	75	72. 1
	Total	104	100
2.	**Marital status**		
a.	Married	14	13.5
b.	Single	75	72.1
c.	Divorced	15	14.4
	Total	104	100
3.	**Educational Qualifications**		
a.	Primary School Certificate	63	60.6
b.	Secondary School Certificate	32	30.8
c.	Tertiary School Certificate	9	8.7
	Total	104	100
4.	**Sex**		
a.	Male	45	43.3
b.	Female	59	56.7
	Total	104	100

Table 1.1 contains data on demographic characteristics of the respondents. It shows that 29(27.9 %) were between the age of 10-15 years and 75(72.1%) respondents were between the age 15 -20 years; that therefore implies that majority of the respondents were between the age of 15-20 years. On the basis of marital status, the table indicates that 14(13.5% respondents are married, 75(72.1%) respondents are single, and 15(14.4%) respondents are divorced; that therefore shows that majority of the respondents were single.

Furthermore, the table indicates that 63 (60.6%) respondents have primary school certificates, 32(30.8) respondents have secondary school certificates, and 9(8.7) respondents have tertiary school certificates; this indicates that majority of the respondents are primary school leavers. It also shows that 45(43.3) respondents are male and 59(56.7%) respondents are female; this implies that majority of the respondents were female adolescents.

Research Question One: What are the barriers to accessing contraceptive Services among Adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State?

Table 2: Barriers to Accessing Contraceptive Services among Adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

S/N	Response Modes	
	Agreed	disagreed
5. Cultural factors are barriers to accessing contraceptive services	62(59.8%)	42(40.4%)
6. Being unmarried is a barrier to accessing contraceptive services	65(62.5%)	39(37.5%)
7. Absence of confidentiality is a barrier to accessing contraceptive services	47(45.2%)	57(54.8%)
8. Fear of stigma is a barrier to accessing contraceptive services	84(80.8%)	20(19.3%)
9. Providers' bias/unfriendliness is a barrier to accessing contraceptive services	71(68.3%)	33(31.7%)

Table 2 contains data on barriers to accessing contraceptive services among adolescents. The table shows that 62(59.8%) respondents agreed that cultural factors are barriers to accessing contraceptive services while 42(40.4%) disagreed, 65(62.5%) respondents agreed that being unmarried is a barrier to accessing contraceptive services while 39(37.5%) disagreed, and that 47(45.2%) respondents agreed that absence of confidentiality is a barrier to accessing contraceptive services while 57(54.8%) respondents disagreed. The table further indicates that 84(80.8%) respondents agreed that fear of stigma is a barrier to accessing contraceptive services while 20(19.3%) respondents disagreed, and 71(68.3%) respondents agreed that providers' bias/unfriendliness is a barriers to accessing contraceptive services while 33(31.7%) respondents disagreed. This therefore indicates that majority of the respondents agreed that cultural factors, being unmarried, fear of stigma, and providers' bias and unfriendliness are barriers to accessing contraceptive services among adolescents in the study area.

Research Question Two: What are the barriers to accessing STIs Management Services among adolescent in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State?

Table 3: Barriers to Accessing STIs management Services among Adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State

S/N	Response Modes	
	Agreed	disagreed
10. Cost is a barrier to accessing STIs management Services	19(27.9)	
75(72.1%)		
11. Absence of confidentiality is a barrier to accessing STIs management services	81(77.9%)	23(22.1)
12. Fear of stigma is a barrier to accessing STIs management services	50(48.1%)	54(51.8%)
13. Service inadequacy is a barrier to accessing STIs management services	84(80.8)	20(19.3)
14. Providers' bias/unfriendliness is a barrier to accessing STIs management services	50(48.1%)	54(52.0%)
15. Concern about test result is a barrier to accessing STIs management services	89(85.6%)	15(14.5%)

Table 3 contain data on barriers to accessing STIs management services among adolescents. It shows that 19(27.9) respondents agreed that cost is a barrier to accessing STIs management Services among adolescents while 75(72.1%) respondents disagreed, 81(77.9%) respondents agreed that absence of confidentiality is a barrier to accessing STIs management services among adolescents, while 23(22.1) respondents disagreed, and 50(48.1%) respondents agreed that fear of stigma is a barrier to accessing STIs management services among adolescents while 54(51.8%) respondents disagreed. More so, the table indicates that 84(80.8%) respondents agreed that service inadequacy is a barrier to accessing STIs management services among adolescents 20(19.3%) respondents disagreed, 50(48.1%) respon-

dents agreed providers' bias/unfriendliness is a barrier to accessing STIs management services among adolescents, while 54(52.0%) respondents disagreed, and 89(85.6%) respondents agreed that concern about test result is a barrier to accessing STIs management services among adolescents, while 15(14.5%) respondents disagreed. This therefore indicates that absence confidentiality, service inadequacy, and concern about test results are barriers to accessing STIs management services among adolescents in Garba Buzu Internally Displaced Person' Camp, Maiduguri, Borno State.

Hypothesis Testing

Ho$_1$: There is no significant difference in barriers to accessing contraceptive services between male and female adolescents in

Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

Table 4: t-test Summary on Barriers to Accessing Contraceptive Services Between Male and Female Adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State (n=104)

Status	N	Mean	Std.	Std. Error	df	t	p-value
Male	**45**	14.133	2.052	.306	102	2.124	.034
Female	**59**	13.356	1.679	.219			

Table 4 contains t-test Summary on barriers to accessing contraceptive services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State. The table shows a t-test value of 2.124 and a p-value of 0.03. This shows that the p value is less than the level of significance (0.05), the hypothesis (**Ho$_1$**) is rejected. That implies that there is significant difference in barriers to accessing contraceptive services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

Table 5: t-test Summary on Barriers to Accessing STIs Management Services Between Male and Female Adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State (n=104)

Status	N	Mean	Std. D.	Std. Error	df	t	p-value
Male	45	18.47	1.467	.219	102	1.267	0.21
Female	59	18.00	2.109	.274			

Table 5 contains t-test Summary on barriers to accessing STIs management services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State. The table a t-test value of 1.267 and a p-value of 0.21. This shows that the p value is greater than the level of significance, the hypothesis (**Ho$_2$**) is retained. That implies that there is no significant difference in barriers to accessing STIs management services between male and female adolescents in Garba Buzu Internally Displaced Persons' Camp, Maiduguri, Borno State.

Discussion

Findings of this study on research question one revealed that cultural factors, being unmarried, fear of stigma, and providers' bias and unfriendliness are barriers to accessing contraceptive services among adolescents in Garba Buzu Interanally Displaced Persons Camp, Maiduguri, Borno, State. This finding is in line with that of Ezeokoli, Olaoye, Ayodele, Obasohan, and Ilesanmi (2015), and

Njoroge (2016) which indicated that common barriers to accessing contraceptive services include (including other SRH

Lunardi, Pilgrim, & Jennings, (2017) and Fuentes, Ingerick, Jones, & Lindberg, (2018) , which showed that a perception that contraceptive service is for unmarried (adolescents), confidentiality, and fear of social stigma are barriers to accessing contraceptive services.

Findings of this study on research question two revealed that confidentiality, service inadequacy, and concern about test results are barriers to accessing STIs management services among adolescents in Garba Buzu Internally Displaced Person' Camp, Maiduguri, Borno State. This is similar to findings of studies by Charlton, Corliss, Missmer, Frazier, Rosario & Kahn,(2017) and Decker, Tara, Atyam, Catherine, Angela, Bautista & Saphi, (2021) which indicated that fear about test results, confidentiality and poor service deter adolescents from accessing STIs management services.

Findings on Hypothesis one revealed that it is rejected as evidenced by a t-test value of 2.124 and a p-value of 0.03 that is less than the level of significance 0.05. That is to say, although there are barriers to accessing contraceptive services among adolescents

components) are bias/unfriendliness of the providers. It also corroborates findings of studies by Marcell, Morgan, Sanders,

in the study area, but the barriers differ between male and female which may be attributed to the cultural status of females in the study area and Borno state in general. This is in line with the findings of Fuentes, Ingerick, Jones, & Lindberg, (2018) which indicated that female adolescents are more prone to barriers in accessing contraceptive services than male adolescents.

More so, findings on hypothesis two revealed that it is retained as shown by a t-test value of 1.267 and a p-value of 0.21 that is greater than the level of significance (0.05). That means, although there are barriers to accessing STIs management services among adolescents in the study area, there are no difference in accessing the service which is likely be due to sensitivity of STIs stigma and fear among the adolescents. This finding is in line with opinions of Powell, Weeks, & Illangasekare (2016) that barriers accessing to STIs management services are experienced similarly by adolescents irrespective of gender/sex difference.

Conclusion

Based on findings of this study, it is concluded that prevalence of unplanned

pregnancies and STIs among adolescents in the study area may be associated to barriers in accessing contraceptive and STIs management services. It was also concluded that there was a significant difference in barriers to accessing contraceptive services between male and female adolescents; with female adolescents experiencing more barriers which is likely due to cultural status of females in the study area and Borno state in general. It was further concluded that there was no significant difference in barriers to accessing STIs management services betweenmale and female adolescents in the study are; that is to say both male and female adolescents experience similar barriers to accessing the service which is likely be due to sensitivity of STIs stigma and fear among the adolescents.

Recommendations

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

1. Governmental and Non-governmental Organizations working at Garba Buzu Internally Dispalced Persons' camp, Maiduguri, should create adolescents safe-spaces that can cater for sexual and reproductive health needs of the adolescents.

2. Peer education should be employed as a means of identifying sexual and reproductive health problems of adolescents at Garba Buzu Internally Dispalced Persons' camp, Maiduguri, by actors working on Adolescents' Sexual and Reproductive Health (ASRH).

REFERENCES

Adebisi, A.G., Olanrewaju, A. K.(2019): Factors Influencing Access and Utilization of Reproductive Health Services among Undergraduates in Selected Tertiary Institutions in Ogun State, Nigeria: *International Journal of Health Sciences.*7 (2), 38-49

Aderibigbe, S. A., & Araoye, M. O. (2018). Effect of Health Education on Sexual Behaviour of Students of Public Secondary Schools in Ilorin, Nigeria: *European Journal of Scientific Research,* 24(1), 33-41.

Agampodi SB.2018)**.** Adolescents' Perception of Reproductive Health care Services in Sri Lanka. *BMC* Health Services Research: Retrieved from www.biomedcentral.com/1472-6963/8/98

Ayodele, K. O., Olanipekun, O. K., & Akinlana, T. (2015). Fostering Positive Sexual Attitude among Nigerian Adolescents through Life skills training: *Babcock University Journal of Education*, 1 (1), 22-28

Decker M. J, Atyam T. V., Zárate C. G.,, Bayer A. M.,, Bautista C., & Saphi M. (2021): Adolescents' Perceived Barriers to Accessing Sexual and Reproductive Health Services in California: A Cross-sectional Survey. *BMC Health Services Research (2021) 21:1263.* https://doi.org/10.1186/s12913-021-07278-3

Ezeokoli, R N, Obasohan, M. O., Ayodele, K. O., Olaoye T., & Ilesanmi A. O.(2015). Sexual behaviour, HIV/STI prevention knowledge, and utilisation of VCT among the residents in Sagamu Metropolis of Ogun State, Nigeria: *International Journal of Prevention and Treatment,* 4(1), 8-13

Ezeokoli, R, Olaoye T, Ayodele, K. O, Obasohan, M. & Ilesanmi, A. (2015). Willingness to seek Voluntary Counselling and Testing (VCT): An empirical analysis among Sagamu residents of Ogun State, Nigeria: *Int Journal of Preventive Medicine Research,*1(2), 65-70

Fuentes L, Ingerick M, Jones R, Lindberg L.(2018). Adolescents' and Young Adults' Reports of Barriers to Confidential Healthcare and Receipt of Contraceptive Services: *Journal of Adolescents Health. 62(1), PP36–43.*

Hoque, E. M., & Ghuman, S. (2011). Sexual Behaviour and Knowledge Regarding Sexually Transmitted Infections among Undergraduate SDtudents in Durban, South Africa: *Journal of Gender and Behaviour. 9(1),*

Kpangbala, N.N. (2020): Barriers in Accessing Sexual and Reproductive Health Services among Youth in Liberia: Unpublished Masters' Thesis submitted to the Royal Institute/Virji University, Amsterdam, The Neitherlands.

Macapagal K, Bhatia R, Greene GJ(2016). Differences in healthcare access, use, and experiences within a community sample of racially diverse lesbian, gay, bisexual, transgender, and questioning emerging adults: LGBT Health. 3(6):434–42.

Marcell AV, Morgan AR, Sanders R, Lunardi N, Pilgrim NA, Jennings JM, (2017). The Socio-ecology of Sexual and Reproductive Healthcare Use among Young Urban Minority Males: *Journal of Adolescents Health.* 1–9.

Njoroge P. W. (2016). Factors influencing Uptake of Contraceptive Services among Undergraduate Students aged 18-35 Years at Jomo Kenyatta University of Agriculture and Technology, Kenya: Unpublished Master Thesis in Public Health in the Jomo Kenyatta University of Agriculture and Technology

Odo A. N., Samuel E. S., Nwagu E. N., Nnamani P. O., and Atama C. S (2018). Sexual and Reproductive Health Services for Adolescents in Enugu State, Nigeria: A Mixed Methods Approach: *BMC Health Services Research*. Available on 10.1186/s12913-017-2779

Omobuwa O., Asekun-Olarinmoye E. O. and Olajide F. O.(2012). Knowledge and Perception of Reproductive Health Services among in-school adolescents in Ile-Ife, Osun State, Nigeria. *Journal of Medicine and Medical Sciences Vol. 3(7)* pp. 481-488.Available online http://www.interesjournals.org/JMMS

Osakinle, E.O., Babatunde, J.O. and Alade, F.A. (2013). Youths and Their Choice of Contraceptives towards an Effective Reproductive Health: The Case of Ekiti State, Nigeria. *European Scientific Journal,* 9(9), PP. 193-202.

Paschen-Wolff MM, Kelvin EA, Wells BE, Grov C. (2018). Sexual Orientation and Pregnancy among Female Adolescents in the National Survey of Family Growth, 2002-2015: *LGBT Health. 2018;5(8):449–60.*

Powell TW, Weeks FH, Illangasekare S. (2016). Facilitators and Barriers to implementing church-based Adolescent Sexual Health Programs in Baltimore city: *Journal of Adolescents Health*. Available on https://doi.org/10.1016/j.jadohealth

Rafael C., Sadaat S., marinda E., and oluwole O. (2015). Adolescents Sexual and Reproductive Health in Nigeria. A Publication of World Bank Group on Health, Nutrition and Population Global Practice. Available on https://www.researchgate.net/publication/282291304

Regmi, P. R., van Teijlingen, E., Simkhada., & Acharya, D. R (2010). Barriers to Sexual Health Services for Young people in Nepal. Retrieved from http://www.ncbi.nlm.nih.gov.

Schriver, B., Meagley, K., Norris, S., Geary, R., & Stein, A. D. (2014). Young people's Perceptions of Youth-oriented Health Services in Urban Soweto, South Africa: A qualitative investigation. *BMC Health Services Research, 14*, 625

Shah IH, Åhman E (2012): Unsafe Abortion Differentials in 2012 by age and Developing Country and Region: High Burden among Young Women. *Reproductive Health Matters*.20 (39):PP. 169–73.

Smith E. J. (2011). Contraception: Why Not. Retrieved from www.catholiceducation.org.

Svanemyr J, Chandra-Mouli V, Raj A, Travers E, Sundaram L. Research priorities on ending child marriage and supporting married girls. Reprod Health [Internet]. 2015 Sep 3 [cited 2020 Oct 3];12(1):80. Available from: https://doi.org/10.1186/s12978-0150060-5

WHO. (2006). Sexual Health and Rights in the Life Course; A publication of the World Health Organization. Geneva. Retrieved from: www.who.org.\/en/topics/srh

World Health Organization (2013) Media Centre, *Sexually Transmitted Infec tions*, Retrieved from http://www. who.int/mediacentre/factsheets

WHO (2011)**.** *Young people: health risks and solutions.* s.l. : WHO, Aug 2011. Fact sheet No. 345.

Enhancing Business Education: Key to E-Accounting Skills for Thriving in the Digital Era

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ABSTRACT

Serious complaints from employers of labour concerning the inability of business education graduates to perform e-accounting operations informed the decision of the researchers to investigate the e-accounting skills needed by business education students to be relevant in digital era. The problem identified by the researchers is that e-accounting, despite its' relevance, is not included in the current business education curriculum for Nigeria Certificate in Education. Two purposes, two research questions and two hypotheses guided the study. The researchers adopted the descriptive survey research design while the population of the study consisted of 30 business education lecturers and 400 final year regular NCE business education students registered for the 2020/2021 academic session in the two public colleges of education located in Ogun State, Nigeria. The study sample comprised the entire 30 lecturers and 120 students who were selected using the simple random sampling technique. A structured questionnaire titled, E-Accounting Skills Needed by Business Education Students' Questionnaire (EASNBESQ) was used as instrument for data collection. The Cronbach Alpha formula was used to establish the internal consistency reliability coefficient of 0.81 for the research instrument. The data gathered were analyzed using frequency tables, mean, standard deviation and t-test statistics. The study found out that: easy detection of missing vouchers (mean = 3.73, SD = 0.57), Automation of tedious recording and posting of financial transactions (mean = 3.71, SD = 0.55) among others are the benefits of adopting e-learning tools in the digital era. The study equally revealed that: electronic ordering of payment (mean = 3.71, SD = 0.56), ability to utilize Microsoft excel package (mean = 3.53, SD = 0.53) among others are the e-accounting skills needed by business education students for relevance in digital era. Finally the study recommended that e-accounting be incorporated in the business education curriculum and that adequate provision of internet facilities, computers and accounting software be made for business education departments in various tertiary institutions.

Introduction

Education is one of the indispensable pillars of any society because functional education is the trigger for every development stride in any nation. As a human activity, education is broad-based and multi-dimensional. Education is dynamic because the human society is dynamic, therefore, there are several aspects of functional education. One of the most vital aspects of general education is business education which has been described variously by various authors. According to Udo (2015), business education is an aspect of vocational and technical education which is designed to inculcate competencies in accounting, business management, banking and finance, marketing, book keeping, office technology, business law, economics for business, business web page design, desktop publishing, keyboarding, digital business applications, word processing among others. Similarly Amesi (2016) asserted that business education refers to education for office occupation, marketing occupation, distributive education accounting, business teaching, office technology business management and economic understanding of the individual.

It is noteworthy that the business education programme offered in tertiary institutions in Nigeria is polarized into four options namely;

1. Accounting Education Option (BEA)
2. Entrepreneurial Education Option (BEE)
3. Marketing Education Option (BEM)
4. Office Technology and Management Education Option (BEO) (Federal Republic of Nigeria, 2020:26).

Business education students are expected to offer courses in all the aspects of the programme in the first two years or academic sessions of the four-year programme, thereafter in the third year or 300 level, students are allowed to specialize in any of the options based on their ability or interest. The focus of Entrepreneurship option is to instill in the students the ability to identify business opportunities and viable sources of finance to establish small scale businesses, the Marketing option helps to expose students to the rudiments of online marketing while the Office Technology and Management option exposes the students to the functions of secretarial staff and the dictates of the paperless office. Accounting education is one option that commands high enrolment rate among business education students. This is because accounting is very germane in the business world and its'

importance cannot be over-emphasized. Accounting as a numerate field of study is the process of recording, classifying, summarizing, analyzing, interpreting and reporting financial transactions of business organizations to interested users (Azih, 2013 and Balogun, 2021). As an information system, accounting is the process of identifying, measuring and communicating the economic information of an organization to users who require the information for sound decision making.

In the time past, the accounting system was largely based on the manual process otherwise called the Kalamazoo system. However the evolution of Information and Communication Technology (ICT) has revolutionized all fields of human endea vours including the accounting profession. Consequently accounting practitioners have gone digital by adopting electronic accounting commonly referred to as e-accounting. Other terminologies commonly used as synonyms for e-accounting include: online accounting, digital accounting and paperless accounting among others.

E-accounting refers to the application of online and internet technologies for accounting functions. In a nutshell e-accounting is the "electric enablement" of lawful accounting and traceable accounting processes which were traditionally manual and paper-based (Wikipedia, 2018). According to Yakubu and Gomen (2012), e-accounting refers to the documentation, tracking, recording, archiving and summarizing of financial transactions and events associated with a business entity as well as presenting related summary information to a business entity's interest groups in an electronic environment. At any rate, electronic accounting entails performing regular accounting functions, accounting research and accounting training cum education through various computer/internet based accounting tools such as digital tool kits, various internet resources, international web based materials institute and company data bases which are internet based, web links, internet-based accounting software and electronic financial spreadsheet tools to provide efficient decision-making (Memis, 2011). Technology is very dynamic and for any educational programme to remain relevant it is mandatory for the practitioners to adjust to the prevailing technological demands of the profession (Azih & Igboke, 2014). In a study to assess how to boost business education students' capacity with accounting software skills for improved

service delivery in modern office and school environment, Nwosu and Amahi (2019) adopted the descriptive survey research design with a sample of two hundred and ninety-three selected using the proportionate stratified random sampling technique from a population of four hundred and eighty-nine business educators and employers of labour in Delta State, Nigeria. The instrument for data collection was a structured questionnaire with twenty items. The data collected were analyzed using mean and standard deviation to answer the research questions while the t-test statistics and ANOVA were used to test the hypotheses. Findings revealed that accounting software skills were needed to build the capacity of business education students. However, the study was limited to only one state in Nigeria. Similarly, Adewole and Adegboye (2019) conducted a study to examine the competencies required of accounting education graduates from colleges of education in Oyo State, Nigeria. Two research questions and two hypotheses guided the study while the descriptive survey research design was adopted for the study. The population for the study comprised thirty-five lecturers and three hundred and seventy-three students of business education. Simple random sampling technique was used

to select seventy-five students while the entire lecturers were used as sample. The instrument for data collection was a twenty-eight item questionnaire. The instrument was validated by two experts in business education and the Cronbach Alpha procedure was used to establish a reliability coefficient of 0.84 Data collected were analyzed using mean and standard deviation for the research questions and t-test statistics for the hypotheses at 0.05 level of significance. Findings form the study revealed that both basic and global accounting competencies are highly required of accounting education graduates in the e-world. The implication of the study is that business education students should be exposed to the global best practices in accounting for them to be relevant in the world of work. Udegbunam, Uchenu, Odimmega and Machpherson (2017) conducted a study to assess electronic accounting as a tool for quality management of small and medium scale enterprises in the 21st century Nigeria. Two research questions guided the study while two null hypotheses were tested at 0.05 level of significance. The descriptive survey research design was adopted for the study while the population consisted of 3836 accountants working in small and medium scale enterprises. The

study sample was 384. A structured questionnaire was used for data collection. The instrument was used for data collection. The instrument was validated by three experts. Data gathered were analyzed using mean, standard deviation and z-test statistics. Findings revealed that the uses and benefits of electronic accounting tool in the management of SMEs were highly rated in 21st Century Nigeria. It was equally revealed that there was a significant difference in the mean responses of accountants working in SMEs on the uses and benefits of electronic accounting tools in the management of SMEs in the 21st Century.

Based on the aforementioned previous studies, it is obvious that global technological changes in the modalities for conducting financial transactions and preparing financial records has placed a necessity on curriculum planners and curriculum implementers to expose business education students to e-accounting. It is therefore imperative to investigate the e-accounting skills needed by business education students for relevance in the digital era.

Statement of the problem

The advancement in technology has prompted most notable organizations and businesses to migrate from manual accounting procedure to e-accounting. Most establishments in the public and private sectors have acquired accounting software such as Microsoft excel, Peachtree accounting, Quick books, Sage accounting, MYOB accounting and a host of others to carry out the recording, analysis and storage of financial transactions and records. However, it is worrisome that most tertiary institutions offering accounting still operate a curriculum that is dominated by theoretical and manual methods of preparing financial statements. To compound the situation most of the accounting lecturers were trained using the obsolete curriculum that did not capture electronic accounting skills as part of its' contents. This mismatch between curriculum contents and industry needs might undermine the employability of business education graduates and the reputation of their institution, If this trend is not arrested promptly, Business Education (Accounting option) graduates will be at a disadvantage in the world of work in the digital era because their accounting skills might not be in tandem with the best international global practices, hence the need for this study.

Purpose of the Study

The main purpose of this study was to examine the e-accounting skills needed by

business education for relevance in digital era. Specifically the study sought to:

1. Find out the advantages of adopting e-accounting tools in the digital era.
2. Determine the e-accounting skills needed by business education students for relevance in the digital era.

Research Questions

The following research questions guided the study.

1. What are the advantages of adopting e-accounting tools in the digital era?
2. What are the e-accounting skills needed by business education students for relevance in the digital era?

Hypotheses

Two null hypotheses were formulated and tested at 0.05 level of significance.

Ho1: Business education lecturers and students do not differ significantly in their perception of the advantages of adopting e-accounting tools in digital era.

Ho2: Business education lecturers and students do not differ significantly in their perception of the e-accounting skills needed by business education students for relevance in digital era.

Methodology

The descriptive survey research design was adopted for the study while the population of the study consisted of 30 business education lecturers and 400 final year regular NCE business education students registered for the 2020/2021 academic session in the two public colleges of education located in Ogun State, Nigeria i. e. Federal College of Education, Abeokuta and Tai Solarin College of Education, Omu-Ijebu. For the study sample all the lecturers were selected since the population size is quite manageable while 120 students were selected using the simple random sampling technique. A structured questionnaire titled, E-Accounting Skills Needed by Business Education Students Questionnaire (EASNBESQ) was used as instrument for data validated by three business education lecturers from Olabisi Onabanjo University, Ago-Iwoye. A pilot study was conducted at the Federal College of Education (Special) Oyo. The pilot study involved 10 lecturers and 20 students while the data collected form the pilot study were statistically analyzed using Cronbach Alpha. The reliability coefficient computed for the instrument was 0.81. Copies of the questionnaire were administered on the respondents virtually and physically and there was hundred percent retrieval. The data gathered were analyzed using frequency tables, mean, standard deviation and t-test

statistics. A decision rule of 2.50 was adopted for the research questions. By implication any item with mean score of 2.50 and above was rated as needed while any item with mean score less than 2.50 was rated as not needed. For the test of hypotheses, the rule is, if the p-value is greater than 0.05 the null hypothesis is retained but if the p-value is less than 0.05 the null hypothesis is not retained.

Results

Research question one: What are the advantages of adopting e-accounting tools in the digital era.

Table 1: Mean scores and standard deviation (SD) of responses on the advantages of e-accounting.

S/N	Advantages of e-accounting tools	Mean	SD	Decision
1.	Large data storage capacity	3.39	0.59	Agree
2.	Fast and accurate data processing and analysis	3.30	0.56	Agree
3.	Quick generation of diverse reports as soon as demanded	3.49	0.50	Agree
4.	Automation of tedious recording and posting processes	3.71	0.55	Agree
5.	Automatic verification of account details	3.61	0.48	Agree
6.	Prompt rejection of entries that are at variance with prescribed data.	3.32	0.58	Agree
7.	Enhancement of multi-user and multi-site accessibility	3.50	0.60	Agree
8.	Easy detection of missing cheques or vouchers	3.73	0.57	Agree
9.	Ability to handle huge volumes of transactions with speed and efficiency.	3.39	0.54	Agree
10.	Enhanced productivity and cost-effectiveness.	3.51	0.61	Agree

N=150, Decision rule = 2.50 Weighted mean/SD = 3.50/0.56

Table 1 shows the advantages of adopting e-accounting tools in digital era. The results show that item number 8 (mean = 3.73 and SD = 0.57) is the most ranked advantage while item number 2 is the least ranked advantage. A mean of 2.50 is the yardstick for determining whether an item statement was accepted by the respondents or not. The weighted mean of 3.50 indicates that respondents unanimously agreed that all the items are advantages of adopting e-accounting tools in digital era. The grand SD of 0.56 indicates the homogeneity of the responses. This means that the variance in the responses was minimal. Easy detection of missing cheques or vouchers is a significant

advantage because it helps to prevent fraud and loss of funds.

Research questions two: What are the e-accounting skills needed by business education students for relevance in the digital era?

Table 2: Mean scores and standard deviation (SD) of responses on the e-accounting skills needed by business education students for relevance in the digital era.

S/N	E-Accounting Skills	Mean	SD	Decision
1.	Computer application skills	3.51	0.59	Agree
2.	Application of spreadsheet software	3.61	0.60	Agree
3.	Web payment skills	3.19	0.50	Agree
4.	Electronic funds transfer	3.39	0.49	Agree
5.	Electronic ordering of payment	3.71	0.56	Agree
6.	Electronic invoicing of payment	3.30	0.58	Agree
7.	Electronic preparation of payroll	3.32	0.57	Agree
8.	Electronic storage of financial data	3.41	0.55	Agree
9.	Ability to utilize Microsoft excel package	3.53	0.53	Agree
10.	Forensic accounting skills	2.68	0.57	Agree

N = 150, Decision rule = 2.50, Weighted mean/SD = 3.37/0.50

Analysis of data in Table 2 reveals the mean responses on the e-accounting skills needed by business education students for relevance in the digital era. The maximum and minimum mean scores obtained from the analysis of data are 3.71 (Item number 5) and 2.68 (Item number 10) with standard deviations of 0.56 and 0.57 respectively. The weighted mean of 3.37 and standard deviation of 0.50 implied that respondents were convergent in their responses that all the items are e-accounting skills needed by business education students for relevance in digital era. The above mentioned skills are very essential for business education students the skills are indispensable for accounting operations in standard organisations whether in public or private sectors.

Hypothesis One: Business education lecturers and students do not differ significantly in their perception of the advantages of adopting e-accounting tools in digital era.

Table 3: Summary of t-test analysis of difference in lecturers' and students' perception of the advantages of e-accounting tools in digital era.

Academic status	N	Mean	SD	df	t-cal	p-value	Decision
Lecturers	30	3.45	0.51				

Students	120	3.55	0.61	148	1.45	0.341	Accept

Source: Field survey, 2023

The independent sample t-test results presented in Table 3 reveal a calculated t-value of 1.45, while p-value = 0.341. Since p-value is greater than 0.05 the null hypothesis was accepted. This implies that there is no significant difference in business education lecturers' and students' perception of the advantages of e-accounting in digital era.

Hypothesis Two: Business education lecturers and students do not differ significantly in their perception of the e-accounting skills needed by business education students for relevance in digital era.

Table 4: Summary of t-test analysis of differences in lecturers' and students' perception of the e-accounting skills needed by business education students for relevance in digital era.

Academic status	N	Mean	SD	df	t-cal	p-value	Decision
Lecturers	30	3.34	0.46				
Students	120	3.40	0.54	148	1.22	0.231	Accept

Source: Field survey, 2023

Based on the results in Table 2, the difference in lecturers and students' perception of the e-accounting skills needed by business education students for relevance in digital era was not significant. This is shown by the p-value of 0.231 which is greater than the stipulated 0.05 level of significance. Therefore the null hypothesis was upheld. The practical implication of the significant difference is that curriculum planning in business education requires a more dynamic and meticulous approach that will ensure that lecturers and students operate on same page.

Discussion of findings

This study was conducted to investigate the e-accounting skills needed by business education students for relevance in digital era. The findings of this study based on research question one and table one revealed that early detection of missing cheques or vouchers and automation of tedious recording and posting processes are the most ranked advantages of the adoption of e-accounting tools in digital era. Results from the testing of hypothesis one revealed no significant difference in business education lecturers' and students' perception of the advantages of the adoption of e-accounting tools in digital era. This finding supported the

findings of Udegbunam et al. (2017) that timely information management and large storage capacity are some of the benefits of electronic accounting tools and that accountants in small scale enterprises and those in medium scale enterprises did not differ significantly in the mean responses concerning the benefits of using electronic accounting tools.

Research question two inquired about the e-accounting skills needed by business education students for relevance in digital era. Results in Table two showed that electronic ordering of payment and application of spreadsheet software are the most ranked e-accounting skills. The outcome of the testing of hypothesis two indicated no significant difference in business education lecturers' and students' perception of the e-accounting skills needed by business education students for relevance in digital era. This finding buttressed the findings of Nwosu and Amachi (2019) that accounting software skills were needed to build the capacity of business education students. The finding also corroborated the findings of Adewole and Adegboye (2019) that both basic and global accounting competencies are highly required of

accounting education graduates for relevance in the e-world.

Conclusion and Implication

Based on the findings of this study, it was concluded that there are numerous advantages that can be derived from the adoption of e-accounting tools in digital era. It was also concluded that e-accounting skills are essential and highly needed by business education graduates for relevance in the digital era. The implication of this is that e-accounting software should be included in the instructional materials for teaching business education students so that they will acquire e-accounting skills towards becoming employable and performing accounting jobs according to the best global practices. Another implication is that every institution or department offering accounting courses should be equipped with a functional accounting laboratory so as to churn out graduates that are relevant and equipped for the digital era.

Recommendations

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

1. The current curricula for accounting courses offered in the business education programme should be thoroughly reviewed to incorporate e-accounting contents

because manual accounting is going into extinction.

2. There should be adequate provision of internet facilities, computers and accounting software packages for business education programme in tertiary institutions.

3. Furthermore, accounting lecturers should engage in self-development and regular retraining so as to be able to impart the relevant accounting skills to their students

REFERENCES

Adewole, E.G. & Adegboye, I.O. (2019). Competencies required of accounting education graduates in Oyo State Colleges of Education for relevance in the e-world. *Nigerian Journal of Business Education.* 6 (1), 26-34.

Amesi, J. (2016). Issues in evaluation and assessment: Implications for effective teaching and learning in business education in the Niger-Delta. *Nigerian Journal of Business Education,* 3 (2), 242-252.

Azih, N. & Igboke, S.A. (2014). Capacity building in electronic accounting: A reappraisal. *Nigerian Journal of Business Education,* 1 (3), 208 – 217.

Azih, N. (2013). Electronic accounting: An imperative tool for assurance in accounting education programme in digital era. *Nigerian Journal of Business Education,* 1 (2), 90-98.

Balogun, J.A. (2021). Teachers' perception of the training and qualities needed for effective teaching of financial accounting in secondary schools in South-West Nigeria. *ABEN Conference Proceeding.* 8 (1), 110-116.

Federal Republic of Nigeria (2020). *Nigeria Certificate in Education Minimum Standards for Vocational and Technical Education.* Abuja: NCCE.

Memis, M.U. (2011). E-Accounting: AN evaluation on the Turkish case.

European Journal of Economics, Finance and Administrative Sciences, 38 (1), 155-160.

Nwosu, B.O. & Amahi, F.U. (2019). Building the capacity of students of business education (accounting) with accounting software skills for improved service delivery in modern office and school environments. *Nigerian Journal of Business Education.* 6 (2), 368 – 381.

Udegbunam, E.O., Uchenu, C.A., Odimmega, C.G. & Machpherson, C.N. (2017). Electronic accounting A tool for quality management of small and medium scale enterprises (SMEs) in the 21st Century. *ABEN Conference Proceedings*, 4 (1), 182 – 188.

Udo, M.P. (2015). Adequate measures for funding vocational business education (VBE) in Colleges of education in Plateau State. *Nigerian Journal of Business Education,* 2 (3), 65 – 74.

Wikipedia (2022). E-accounting. Retrieved from http://en-wikipedia.org/wik/E-accounting

Yakubu, S. & Gomen, S. (2012). Fraud auditing in electronic accounting practices, *African Journal of Business Management,* 6 (4), 1225 – 1233.

Strategies for Promoting the Sharing of Tacit Knowledge in Academic Libraries

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ABSTRACT

The main objective of this study was to review literature on strategies for promoting the sharing of tacit knowledge in academic libraries with a view of improving library services. The systematic literature review approach was adopted for the study which entails the researchers' critical review on literature to gather data relevant to the study from local, national and international journals, conference papers and other sources of literature such as books and online sources and the review revealed the concept of knowledge and knowledge sharing, strategies for promoting the sharing of tacit knowledge in academic libraries and inhibitors to tacit knowledge sharing in academic libraries. The study concluded that adopting strategies for promoting the sharing of tacit knowledge in academic libraries is very crucial because the library aims at satisfying the information needs of its clients. Hence, the study recommends that there should be institutionalization of knowledge sharing in academic libraries, there should be adequate funding to libraries so as to meet up with the universal standard of reward system to librarians who share their tacit knowledge, there should be modern ICT infrastructure to enable librarians share their tacit knowledge electronically. library management should set up a knowledge management unit geared towards motivating and creating awareness on the importance and benefits of sharing tacit knowledge and the library management should devise a means to strengthen the level of trust and mutual understanding among librarians so as to make them feel secured which would in turn slice away so many inhibitors to tacit knowledge sharing practices.

Keywords: Strategies, Tacit knowledge, Explicit Knowledge, Knowledge Sharing, Academic Libraries.

Introduction

Organizations are motivated to develop strategies that results in new innovations through acquiring, utilization and transformation of Intellectual capital (tacit knowledge) to documented knowledge (explicit knowledge) for positive

progression. However, modern academic libraries have recognized their employees' skills and knowledge as the fundamental resource of the organization and one of the most powerful mechanisms for achieving organizational objectives. This is because the transfer of tacit knowledge from individual to groups in academic libraries can improve their performance and accelerate the transfer of knowledge and information within the organization. Hence, academic libraries require intellectual capital (tacit knowledge) in order to facilitate the acquisition and sharing of knowledge for leveraging organizational competitive advantage Chipeta (2018). Consequently, in a knowledge-based organization such as universities, colleges, polytechnics, libraries etc, adopting sound strategies for promoting the sharing of tacit knowledge is very important because most of the employees are knowledge workers and also in librarianship precisely, effective tacit knowledge sharing would lead librarians to realize and develop their full potentialities as that would foster effective and efficient service delivery. Hence, this component of organization or business defines the interaction between providers and clients where the provider offers a service either in information or task form which the client either finds value or

loses value as a result. The aspect of the library services is that of collecting, synthesizing and disseminating up-to-date, accurate and unbiased relevant information and resources available in books, periodicals, bulletins, guides abstracts, indexes, bibliographies, and non-book formats which can be stored and retrieved whenever needed (Omoniwa, 2016). As such, it is of crucial importance for every academic library to adopt sound strategies for promoting the sharing of tacit knowledge among its employees so as to deliver services of high quality.

Research Objectives

The main objective of this study was to review literature on strategies for promoting the sharing of tacit knowledge in academic libraries while the specific objectives are as follow:

1. To identify the strategies for promoting the sharing of tacit knowledge in academic libraries

2. To identify the inhibitors to tacit knowledge sharing in academic libraries

Concept of Knowledge and Knowledge Sharing

Basically, knowledge has become a competitive factor that provides an essential cause for both individual and organizational success. It is built up from data, information

and prior knowledge. Data refer to raw facts without any processing, organizing or analysis that have little meaning and are normally structured but do not bear any information to use them in a particular context (Chini, 2005). Information refers data that is accumulated to allow comparison, grouping, and categorizing which have been processed to be useful (Sensky, 2002). While, the term Knowledge refers to a mixture of values, contextual information, insights and experiences that can provide a mental framework that help evaluate and incorporate new experiences and information (Trivella and Dimitrios, 2015). Hence, Knowledge is basically classified into so many ways but most commonly it's divided into two parts i.e explicit knowledge and tacit knowledge (Nonaka and Takeuchi, 1995).

Explicit Knowledge

This is also known as codified knowledge which is documented and can be formally communicated. It is a written knowledge that is expressed in form of words, symbols, images and numbers. Hence, Ogunmodede and Popoola (2019) observe that librarians shared explicit related knowledge through workshops, seminar, conferences, meetings, reader's services, orientation and induction, serial management and community of practice.

Tacit Knowledge

Tacit knowledge refers to the know-how that resides in the subconscious mind of an individual which can be acquired through social interaction. It is complex, ambiguous, difficult to communicate and hidden from the consciousness of the employee. Tacit (personalized) knowledge (TK) comes from the individual's mind and is founded on life experiences, reading, learning, environment, beliefs, points of view, technical skills, and other background characteristics (Ekore, 2014). However, Agarwal and Islam (2014) observed that tacit knowledge sharing takes place through social interactions with the knower. Hence, Tacit knowledge sharing leads to the improvement of employees' (academic librarians') performance through enabling them to generate, store and share the right knowledge within the library (Murumba, Kwanya and Maina, 2020).

Knowledge sharing is a central pillar of knowledge management and is very critical to the realization of its success. Hence, Flinchbaugh and Chadwick (2016) describe knowledge sharing as the process of making knowledge available to others by exchanging knowledge among organizational members in order for them to collaborate on organizational tasks, solve problems or implement ideas. A study conducted in Japan

Advanced Institute of Science and Technology (JAIST), by Islam (2013) established that, the capability of sharing tacit knowledge enhances research work significantly; individuals are stimulated to share their tacit knowledge to enhance learning and teaching activities. It is about effectively converting and transferring specific knowledge held by a member to other members of the organization in a form that can be understood, absorbed and used by organization members who need it to engage in a certain activity or in solving problems. However, the following are some of the importance of tacit knowledge sharing in academic libraries Oragui (2021).

i.   Increased Productivity & Organizational Innovation:- Since you'll have collaboratively developed and demonstrated best practices and optimal approaches to tasks, you'll almost certainly perform at a much higher level. Moreover, this type of knowledge sharing and knowledge transfer where individual team members can learn from each other's experiences and mistakes will allow employees to spend less time and energy on ideas that don't work.

Ii. Knowledge is always accessible for everyone :- A big importance of tacit knowledge sharing in the academic library is

that all employees have access to information. They don't have to wait until an employee with specific knowledge returns from holiday, or spend an hour looking for the answer to their question. Through tacit knowledge sharing, employees can find knowledge when they need it, digest it, apply it to their work, and perform better and more effectively Peter (2021).

iii. Employees get recognition and a sense of purpose :- Tacit knowledge sharing makes academic librarians discover that they actually are experts on a certain topic. Or that their colleagues are. Seeing that others benefit from their knowledge can be a huge deal especially if you reward them for having shared it.

iv. It Allows You to Learn from Others' Experiences :- The beauty of tacit knowledge sharing is that it addresses knowledge gaps and lets you learn from others' experiences. When you open yourself up to others' points of view, you gain the knowledge to improve your business and its practices. Injecting tacit knowledge into standard operating procedures (SOPs) give more context on how things are done, which is especially useful for remote onboarding Jubina (2022).

v. You can save money and time :- It takes time for employees to participate in

knowledge sharing actively, but it is more efficient in the long run. Employees who are experts in a specific field often have to answer questions from colleagues, give presentations, or work on courses for the company. These actions combined take a lot longer than creating a course. And creating a course is an activity that employees invest time in only once. After sharing their course, colleagues can watch it as often as they want, whenever they want, from wherever they are.

vi. You can retain knowledge :- Most employees won't stay at your organization forever. And when they leave, they take their knowledge with them. But if they share it with their colleagues, their explicit and tacit knowledge will be passed on to others and will stay within your organization. This is especially true when it comes to senior employees or those who are about to retire Ryan (2021).

vii. It Helps You Communicate More Effectively:- The thing about tacit knowledge is that you can't explain how you learn it; you simply absorb it by gaining experience within an organization. Therefore, relying on an osmosis-like knowledge transfer does not guarantee it will happen. Your team members may not know what they don't know and continue using their usual approach instead of going with the better way to do things David (2021).

viii. It Teaches You to Value Different Perspectives:- Human capital is an academic library's most important asset, and leveraging each librarian's experience and perspective is one of the best thing an academic library can do. Any academic library can teach technical skills, but each person's tacit knowledge and experience are more valuable.

Strategies for Promoting the Sharing of Tacit Knowledge in Academic Libraries

Today, academic libraries, especially in western countries are increasingly adopting knowledge management practices and knowledge sharing strategies to remain competitive in the knowledge based economy (KBE). A strategy is a plan set in place to achieve organizational goals and objectives. Therefore, knowledge sharing strategies (KSS) refers to what needs to be done to achieve organizational goals and objectives (Holsapple and Joshi, 2001). However, there are some alternatives to determine a proper strategy that promotes tacit knowledge sharing in academic libraries. These strategies include:

- **Personalization Strategy**

Organizations such as academic libraries can adopt a personalization strategy to promote

tacit knowledge sharing. This usually involves sharing tacit knowledge through direct contact with the person in possession of this knowledge. Commonly, it entails acquiring tacit knowledge that cannot be codified and stored in a database (Atkova and Tuomela-Pyykkönen, 2015).

- **Coaching**

This involves a member learning by working alongside an experienced member who knows when and how to intervene and share tacit knowledge. Napierala, (2015) explains that it differs from mentoring in that coaching is focused on a specific task or skill, whereas mentoring is a more general and all-encompassing relationship between mentee and mentor. Coaching, in short is a strategy for promoting tacit knowledge sharing which aims specifically at developing new skills in a member.

- **Apprenticeship**

Apprenticeship programs are designed for promoting tacit knowledge sharing amongst experienced and inexperienced organizational members. Chigada and Ngulube (2016) note that, during apprenticeship activities, experienced organizational members share their tacit knowledge with their inexperienced staff so that tacit knowledge of the organization's practices is preserved.

- **After Action Review**

After Action Review (AAR) is a structured review or debriefing process that analyses what happened, why it happened, and how it could have been done better by the individual organizational members that participated in the completion of a project or event. In this regard, Anumba, Egbu and Carillo (2015) suggest that AAR is a strong strategy for tacit knowledge sharing which enables organizational members to capture lessons learned and ensure that the tacit knowledge is shared and applied to the benefit of future projects, thereby preventing situations in which a solution has to be reinvented each time a similar problem is encountered.

- **Brainstorming**

Brainstorming is a simple strategy for promoting tacit knowledge sharing which help members (librarians) to generate new and unusual tacit knowledge. Its purpose as a knowledge-sharing practice is to generate as much tacit knowledge as possible, and then, through discussion, to draw one or a few possible solutions from that tacit knowledge. Hence, brainstorming is considered a social process for sharing tacit knowledge amongst members Evans (2015).

- **Subject-Matter Experts**

Chigada and Ngulube (2016), in a study point out that, subject-matter experts are

experienced staff who demonstrate a mastery of a particular area or job and play a crucial role in the organization by providing tacit knowledge in the form of solutions to inexperienced or less knowledgeable staff. In line with this, Strang (2017), indicates that subject matter experts are always available and willing to share their tacit knowledge.

- **Social Networks**

This refers to a more formal and structured institutional capacity of knowledge sharing especially those in spheres that are critical to the organization. Social networks are one of the most common tools of Web 2.0 technologies that support collaboration, tacit knowledge sharing, interaction and communication among users in different places who come together with a common interest or goal (Balubaid, 2013).

- **Leveraging Retirees**

This process involves experienced staff approaching retirement passing down their tacit knowledge to their inexperienced or less knowledgeable staff. This tacit knowledge may be valuable to inexperienced staff approaching similar circumstances. Chigada and Ngulube (2016), note that, through leveraging retirees, academic libraries can use retired staff as consultants who provide critical tacit knowledge for special projects or assignments by mentoring less knowled-

geable and inexperienced organiza-tional members.

- **Peer Assist**

Peer assists are events which bring together organizational members to share their insights, experience and tacit knowledge of a particular challenge or problem. Mead, Hilton and Curtis (2015) indicate that in peer assists, members/staff provide tacit knowledge, experience and practical help to each other in order to overcome a challenging situation.

- **Face to Face Meetings**

Face-to-face meetings are a highly useful strategy for promoting tacit knowledge sharing among members of an organization. It allows immediate feedback that facilitates understanding and accurate interpretation by colleagues. In line with this, Zaglago (2016) suggests that face-to-face meetings (such as conferences, orientation exercise or seminar presentation) should always be encouraged, especially at the beginning of a working relationship in order for organizational members to build close relationships with one another.

- **Job Rotation**

Job rotation is a strategy for promoting tacit knowledge sharing which gives an opportunity to share tacit knowledge by sending people to other positions in the same

or similar field of work within the organization. Organizational members' relationships with each other and willingness to share tacit knowledge with one another can be improved by using job rotation as a knowledge-sharing practice within an organization such as exchanging of teaching courses by academic staff. In this regard, Salleh, Chong, Ahmad and Ikhsan (2013) explain that the knowledge acquired from a prior position can be shared with other staff within the organization.

- **Communities of Practice**

Community of practice (CoP) is a group of members/staff who have worked together over a period of time and through extensive communication, have developed a common sense of purpose and a desire to share work-related tacit knowledge. Lee, Hong and Suh (2016), in a study indicate that, an organizational CoP consists of a group of staff who interacts via electronic communication (or physically) and share tacit knowledge through the use of ICTs, which is becoming a natural approach to sharing knowledge. Organizational CoPs are seen as the solution to any knowledge-sharing problem faced by organizational members.

- **Mentorship Programs**

Mentoring is a strategy for promoting tacit knowledge sharing that entails an association between a skilled or knowledgeable staff and a less-experienced staff in which the mentor provides guidance, support, and feedback to the mentee/learner. Karkoulian (2008) suggests that formal mentoring arises when the organizational staff provides the support structures to ensure that its members have clarity of purpose and the support they may need to make a successful mentoring relationship.

Inhibitors to Tacit Knowledge Sharing in Academic Libraries

The difficulty of sharing tacit knowledge among librarians may be related to multiple factors that influence the free flow and utilization of knowledge. Dewah and Mutula (2016) in their study of knowledge retention strategies in public sector organization in sub-Saharan Africa, establish several inhibitors to managing knowledge assets that included lack of appropriate technology; shortage of skills; poor incentives or rewards to share knowledge; and limited commitment from senior management. But basically, inhibitors to tacit knowledge sharing practices arise from a combination of individual, organizational and techno-logical factors (Assefa, 2013).

Individual Inhibitors to Knowledge Sharing amongst Team Members

Lack of awareness about the importance and benefit of tacit knowledge sharing and practices hinders knowledge sharing among organizational team members. This is due to the fact that those that have knowledge are not visible and those who need knowledge do not know those who have it (Wendling, 2013), Lack of trust among team members (librarians) is the biggest barrier impeding tacit knowledge sharing thereby impeding utilization of tacit knowledge with each other (Phung, 2016). Riege (2005) notes that lack of time dedicated to knowledge management is a common barrier to adopting tacit knowledge sharing and practices. Thus, the availability of time affects a team member's (librarians) attitude to sharing or withholding knowledge (Assefa, 2013). The author further indicate that communication skills include both verbal and codification skills. Hence, team members need to be able to both express their ideas verbally and document them in writing if they are to perfectly utilize KM practices. According to Wendling (2013), the relationship between members of a virtual team especially that between members of its different sub-teams has an influence that could present a barrier to tacit knowledge sharing practices. Motivation has

a strong influence on the tacit knowledge sharing behaviors of team members. Hence, team members (librarians) may not want to share their tacit knowledge with others, simply because they are not motivated enough (Phung, 2016). Moreover, Jeenger and Kant (2013) believe that the fears and attitudes (culture) of team members are important factors that have an influence on successful adoption and utilization of tacit knowledge.

Organizational Inhibitors to Knowledge Sharing

Kant and Singh (2008) warn that lack of organizational structure can discourage tacit knowledge sharing activities and approaches which certainly hinder the prospect of knowledge sharing. Suppiah and Sandhu (2011) claim that hierarchical structure is bureaucratic that hampers entire KM approaches. Hence, the structure that does not support individuals to communicate vertically is not knowledge sharing friendly. Long and Fahey (2000) point out that 84 percent of knowledge management projects fail due to lack of management support and as a result, knowledge creation, utilization and sharing is hampered. Yao, Kam and Chan (2007) point out that lack of motivation and reward system discourages people to create, share, and use knowledge. However, lack of

funds dedicated to the initial investment, development and running/operational maintenance costs of knowledge management systems is a major financial barrier to tacit knowledge sharing (Jeenger & Kant, 2013).

Technological Inhibitors to knowledge sharing

Technology is an enabler for knowledge management activities; if it is not properly designed and managed it becomes an inhibitor to knowledge sharing. This happens when there is exists lack of technological infrastructure, when technology is complex to use, and lack of skilled staff to design applications, make use of, and also support the technology. Lack of common knowledge infrastructure and social network discourage the smooth sharing of tacit knowledge (Paquette & Desouza, 2011). In addition, complex and unfriendly systems create communication gaps which hamper tacit knowledge sharing (Ghobadi & Mathiassen, 2016). Furthermore, ICTs that are inadequate in meeting team members' expectations can also impede tacit knowledge sharing activities due to a mismatch between team members' expectations of what ICTs can do for them and what ICTs can actually deliver (Marouf & Khalil, 2015). Therefore, ICTs can become a barrier to tacit knowledge

sharing unless assessments and efforts are regularly made to ensure that team members' knowledge-sharing needs are met.

Methodology

For the conduct of this paper, the researchers employed systematic literature review method which entails the researchers' critical review on literature to gather data relevant to the study from local, national and international journals, conference papers and other sources of literature such as books and online sources.

Results and Discussion of Study Findings

Strategies for Promoting the Sharing of Tacit Knowledge in Academic Libraries

Literature reviewed on strategies for promoting the sharing of tacit knowledge in academic libraries show that majority of the authors cited that the strategies for promoting tacit knowledge sharing by academic libraries are: personalization strategy, coaching, apprenticeship, after action review, brainstorming, subject-matter experts, social networks, leveraging retirees, peer assist, face to face meetings, job rotation, communities of practice, mentorship programs, This supports the constructs of the Socialization, Externalization, Combination and Internalization (SECI) theory underlying

the study which presupposes ICT infrastructure, mentoring, performance evaluation, human resource development and job rotation as the strategic factors for promoting tacit knowledge sharing. Likewise, this study is also in harmony with the findings of Topper (2011) on succession planning in libraries in the U.S.A who reveals that libraries were making succession planning a priority of human resource management strategy to retain individuals' knowledge through codification and tacit knowledge sharing.

Inhibitors to Tacit Knowledge Sharing in Academic Libraries

Literature reviewed on inhibitors to knowledge sharing in academic libraries indicate that majority of the authors cited that tacit knowledge sharing is inhibited by individual, organizational and technological factors such as: insufficient funds, personal gains, lack of trust, knowledge hoarding, poor personal relationships, poor communication skills, lack of skilled staff to use ICT facilities for knowledge sharing, lack of technological infrastructure, lack of motivation/support from management, poor organizational culture, poor organization structure and lack of effective communication between staff and management. Hence, this review harmonize

with the findings of Wamundila and Ngulube (2011) in a study of enhancing knowledge retention in higher education in Zambia who found that a number of gaps existed in the current tacit knowledge sharing practices at the University of Zambia (UNZA), they discovered that knowledge loss arising from individual, organizational and technological factors such as retirements and resignations, lack of trust, poor organizational structure, lack of technological infrastructure and lack of effective communication between staff and management would possibly be a risk to university operations.

Conclusion

Academic libraries positive performance has been recognized and associated to the outstanding policies on strategies for promoting tacit knowledge sharing and its utilization. Hence, sound adoption and utilization of tacit knowledge sharing is very crucial for the progress of such libraries. However, the study explore that enabling knowledge sharing environments were the basics for success and survival of academic libraries. As such, strategies for tacit knowledge sharing can be promoted by institutionalization (such as personalization strategy, coaching, apprenticeship, After Action Review (AAR), brainstorming, subject-matter experts, social networks,

leveraging retirees, peer assists, face-to-face meetings, job rotation, community of practice (CoP) and mentorship programs) of tacit knowledge sharing in academic libraries, providing the necessary funding which would serve as reward or social motivation and ICT infrastructure to enable academic librarians share their tacit knowledge as this would improve clients' satisfaction which is the primary objective of librarianship.

Way Foreword

Based on the study review and conclusion, the following recommendations were made;

1. Academic libraries should institutionalize knowledge sharing practices.

2. there should be adequate funding to academic libraries so as to meet up with

the universal standard of reward system to librarians who share their tacit knowledge,

3. There should be modern ICT infrastructure to enable librarians share their tacit knowledge electronically.

4. Library management should set up a knowledge management unit geared towards motivating and creating awareness on the importance and benefit of sharing tacit knowledge.

5. Library management should devise a means to strengthen the level of trust and mutual understanding among librarians so as to make them feel secured which would in turn slice away so many inhibitors to tacit knowledge sharing practices.

REFERENCES

Agarwal, N. K. & Islam, M. A. (2015). Knowledge Retention and Transfer: How Libraries Manage Employees Leaving and Joining. *VINE: The Journal of Information and Knowledge Management Systems*. 45(2), 150-171.

Assefa, T., Garfield, M. & Meshesha, M. (2013). Barriers of Knowledge Sharing Among Employees: The Case of Commercial Bank of Ethiopia. *Journal of Information & Knowledge Management* 12(2), 1-11.

Atkova, I. & Tuomela-Pyykkönen, M. (2015). Knowledge Sharing Barriers in Procurement: Case of a Finnish-Based Construction Company, in *Knowledge Management for Competitive Advantage during Eco nomic Crisis*. Hersey, *10*(1), 100–116.

Biranvand, Ali & Seif, Mohammad Hassan and Khasseh, Ali. (2015). Knowledge Sharing among Librarians in Public Libraries of Far Province, Iran. *Library Philosophy and Practice.* 4(2), 83-98.

Castellani, P., Rossato, C., Giaretta, E. & Davide, R. (2021). Tacit Knowledge Sharing in Knowledge-intensive Firms: Perceptions of Team Members and Team Leaders. *Review of Managerial Science*, 15(1), 125-155..

Chigada, J. & Ngulube, P. (2016). A comparative analysis of knowledge retention strategies at selected banks in South Africa. *Business Information Review* 33(4):221–227.

Chini, T.C., (2005). Effective knowledge transfer in multinational corpor. *Gor donsville, VA:Palgrave.* (pp. 40–58).

Dewah, P. & Mutula, S. M. (2014). Knowledge retention strategies in public sector organizations: Current status in sub-Saharan Africa.

Information Development, *32*(3), 362–376. Retrieved from http://idv.sagepub.com/content/early/2018/09/22/0266666914551070.full.pdf+html

Ekore, J.O., 2014. Impact of key organizational factors on knowledge transfer success in multinational enterprises. *Journal of Management,* 19(2), 3-18.

Ergun, E. K. and sAvci, U. (2018). Knowledge Sharing Self-efficacy, Motivation and Sense of Community as Predictors of Knowledge Receiving and giving Behaviors. *Educational Technology and Society*, 21(3), 60-73.

Evans, N. (2015). Destroying collaboration and knowledge sharing. *Knowledge Management Research & Practice* 10(1):175–187.

Flinchbaugh, C. & Chadwick, C. (2016). Team-level high involvement work practices: investigating the role of knowledge sharing and perspective taking. *Human Resource Manage ment Journal,* 26(2):134–150.

Ghobadi, S., & Mathiassen, L. (2016). Perceived barriers to effective knowledge sharing in agile software teams. *Journal of Information Systems*, *26*(2), 95–125.

Islam, M., Siddike, M. K., Norwin, S., & Nazim, S. (2015). Usage and Applications of Knowledge Manage ment for Improving Library and Information Services in Bangladesh. *Journal of Information and Know ledge Management*, 14(3), 1-10.

Jeenger, P. & Kant, R. (2013). Understanding the Knowledge Sharing Barriers in Organization: A Fuzzy AHP Approach. *Journal of Information & Knowledge Management* 12(1),1-12.

Lee, S., Hong, J. Y. & Suh, E. (2016). Measuring the change in knowledge sharing efficiency of virtual communities of practice: a case study. *International Journal of Technology Management* 70(1):58–75.

Marouf, L. N. & Khalil, O. E. M. (2015). The Influence of Individual Charac teristics on Knowledge Sharing Practices, Enablers, and Barriers in a Project Management Context. *International Journal of Knowledge Management* 11(1), 1-27.

Mead, S., Hilton, D. & Curtis, L. (2015). Peer support: A theoretical perspective. *Psychiatric Rehabilitation Journal* 25(2):134-141.

Murumba, J. W., Kwanya, T. & Maina, J. C. (2020). Effect of Tacit Knowledge on the Performance of Selected University in Kenya. *Management Dynamics in the Knowledge Economy*, 8(2), 125-144.

Ogunmodede, T. A. & Popoola, S. O. (2019). Knowledge Sharing by Librarians in Federal Universities in Nigeria. *Journal of Balkan Libraries Union*, 6(1), 20-33, 2019.

Okere, G. (2017). Barriers and Enablers of Effective Knowledge Management: A Case in the Construction Sector. *Electronic Journal of Knowledge Management* (EJKM), 15(2), 85-97.

Oliveira, M., Pinheiro, P., Lopes, J. M. & Oliveira, J. (2021). How to Overcome Barriers to Sharing Tacit Knowledge in Non-Profit Organizations, *Journal of Knowledge Economy*, 13(4), 1-32.

Omoniwa, M. A (2016). The role of library and information services in national development, *Nigerian Libraries,* 22(2):13-14

Paquette, S. & Desouza, K. V. (2011). Knowledge creation. In K. C. Desouza & S. Paquette (Eds.), *Knowledge management: An introduction* (pp. 99–138). London: Facet publishing.

Phung, V. D., Hawryszkiewycz, I. & Binsawad, M. H. (2016). Classifying knowledge-sharing barriers by organizational structure in order to find ways to remove these barriers, in *2016 Eighth International Conference on Knowledge and Systems Engineering (KSE). Hanoi, Vietnam, October 2016, proceedings.* IEEE Xplore Digital Library: 73-78.

Rahman, M., Mannan, M., Hossain, M. A., Zaman, Mahmud & Hassan, H. (2018). Tacit Knowledge Sharing Behavior among the Academic Staff: Trust, Self-efficacy, Motivation and Big five Personality Traits Embedded Model. *International journal of edu cation management,* 32(5) 100-114.

Riege, A. (2005), Three-dozen knowledge sharing barriers managers must consider, *Journal of Knowledge Management,* 9(3), 8-35.

Salleh, K., Chong, S. C., Ahmad, S. N. S. & Ikhsan, S. O. (2013). The extent of influence of learning factors on tacit knowledge sharing among public sector accountants. *VINE: The journal of information and knowledge management systems,* 43(4):424-441.

Sensky, T., 2002. Knowledge management. *Advances in Psychiatric Treatment,* 8(5), 387–396.

Strang, K. D. (2017). Needs assessment of international capacity building using a Delphi technique. *World Journal of Entrepreneurship, Managt and Sustai nable Development* 13(4):286-302.

Suppiah, V., & Sandhu, M. S. (2011). Organisational culture's influence on tacit knowledge-sharing behaviour. *Journal of Knowledge Managament 15*(3), 462–477

Effect of Self-Directed Learning using Problem Solving Skills on Performance and Motivation among Biology Students in Kaduna North, Nigeria

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ABSTRACT

This study investigated the effect of self-directed learning using problem solving skills on performance and motivation among SS2 senior secondary school biology students in Kaduna North, Kaduna State, Nigeria. The objective of the study is to determine the effects of self-directed learning using problem-solving skills on performance and motivation of SS2 biology students. Two research questions are formulated to guide the study and two null hypotheses are formulated for testing at $p \leq 0.05$ level of significance. The design for the study is pre-test and post-test quasi-experimental design. The instrument biology performance test (BPT) and student biology motivation questionnaire (SBMQ) were developed and administered to 115 randomly selected students from a population of 4964. The instruments were validated and used for pilot study. The reliability coefficients of BPT and SBMQ were $r = 0.89$ and $r = 0.85$ respectively. Experimental group were trained on self-directed learning using problem solving skills while the control group were exposed to lecture method respectively. Research questions were answered using descriptive method of analysis. Null hypotheses were tested at $\alpha\ P \leq 0.05$ levels using t-tests and mann whitney. The Result shows significant difference in the mean performance score of experimental and control groups. There was a significant difference in the motivational score of experimental and control groups. It was recommended among others, the need for biology teachers to use such innovative techniques in teaching biology concept, ministry of education and curriculum planners should promote the use of self-directed learning using problem solving skills into biology courses as it enhances students' motivation and improves performance.

Keywords: Self-directed learning, Problem-solving skills, Motivation, Academic Performance.

Introduction

The world is changing every day; science and technology which brings about the advancement and national development have to change too. This may be the reason why Akin (2017) opined that in line with the changing world, there is an urgent need for science and technology to meet the need of the hour, therefore the need and usefulness of teaching and learning of science cannot be overlooked. Bulama (2018) suggested that significant amount of research in science should be devoted to

understanding ways we can improve the quality of science and increase enrolment in science courses and degrees. Biology as a branch of science and a prerequisite subject for many fields of learning contributes immensely to the technological growth of the nation, particularly in areas of medicine, pharmacy, agriculture, biotechnology and nursing. The study of biology in both secondary and tertiary institutions can equip students with useful concepts, principles and theories that will enable them to face the challenges before and after graduation. The objectives of teaching biology at secondary school level as stated in the National Policy of Education (FME, 2013) involve ability of the learners to develop an awareness of the environment, to have meaningful and relevant knowledge of biology necessary for successful living in a scientific and technological world and to make room for technological advancement.

Despite the key role of biology as the central science that forms the basic foundation of many disciplines and in improving the quality of life, the performance of Nigeria secondary and tertiary students in the subject has for many years remained a matter of serious concern (Bassey 2017). In recent years evidence shows that there is a high rate of failure in biology among senior secondary school students over the country as revealed by the

analysis made by West African Examination Council (WAEC) Chief Examiner's Reports (2017- 2023). This situation has spurred research in science education to investigate ways in which science students would learn science through learner centered approach. Several learners centered teaching strategies have been advocated for use in science and mathematics classrooms. One of such methods is self-directed using problem solving skills (Zakari & Usman, 2019).

Self-directed learning is a process in which an individual takes the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcome (Obioha, 2019). It builds in opportunities for active engagement in a learning environment which shape learners understanding (Mathew, 2019). In a self-directed learning, the teacher provides a conducive learning environment for the students, observes the participants' challenges and guides the students to achieve their learning goals (Abdullahi, 2018). Self-directed learning required students to plan and manage learning activities, find solutions to a given problem, construct knowledge and gain skills. It involves various learner activities

such as self-guided reading, participation in study groups, accessing electronic information and reflective writing. The teacher roles include dialogue with learners, securing resources, evaluating learning outcomes, and promoting critical thinking among students (Obioha, 2019). Harrison (2020) examined biology students using self-directed learning and its impact on academic performance in university of Lagos and found a positive relationship between self-directed learning and academic performance. Haruna, (2020) established the relationship between self-directed learning readiness, completion and achievement among biology students in university of Jos and found that self-directed learning improves academic achievement and motivation. Steven (2021) examined the effect of self-directed learning on achievement of biology students comparing face-to-face and online learning instruction in college of education north central and found self-directed learning to improve students' academic achievement. Another study of Sani (2019) in federal university of technology Minna, Niger state found that self-directed learning has the same level of performance with lecture method and student motivation was low. Most of the studies on self-directed learning are carried out at higher institution, this present study tries to investigates the effect of self-directed

learning at secondary level using problem-solving skills to see whether it will improve SS2 biology student performance and motivation in Kaduna north.

Problem-solving is a student-centered instructional strategy in which problems of scientific nature or problems related to real-world are carefully formulated and presented to students to solve through collaborative and self-directed learning activities under the guidance of a teacher (Ibrahim, 2021). Study carried out by Mokhtar (2021) shows that systematic approach to problem-solving encourages good learning habits, contribute to clarity of thinking, enhance logical reasoning and promote intellectual development. Another study conducted by Ibrahim (2021) shows that the process of problem-solving allows students interaction with one another and with the instructional materials and consequently students construct knowledge by themselves and acquires problem solving skills. According to Fred (2021), problem-solving strategy help learners develop flexible knowledge, effective problem-solving skills through self-directed learning, improve effective collaborative skills and motivation. Problem-solving process comprises of seven (7) steps as follows: Identify the problem, explore pre-existing knowledge, generate learning hypotheses, identify learning issues, self-directed study, re-

evaluation, application of new knowledge to the problem, assessment and reflection on learning (James, 2019). Problem-solving strategy enable students to apply what they learned in terms of knowledge, solve problems, conduct life-long learning, work in team, communicate and respect the values and ethics of the exploration process, because they undergo teaching and learning approach of practice by doing and interaction (Surif, 2021). Researchers reported that Problem-solving is very effective in many areas of learning: It improves the quality of learning because it is multidisciplinary in approach. It makes students to be responsible for their learning process as they learn privately with very little assistance from the teacher or guide. Students can transfer learning in terms of knowledge and skills from one situation to another (Fred, 2019). This provides linkages between classrooms situations and everyday life in the society, the professional life at work places and the acquisition of life-long learning. Students participate fully in collaborative learning activities including, discussions within a group, between groups, presentations of ideas and development of problem-solving skills. This creates a friendly learning environment between teachers and their students (Mokhtar, 2021). Problem-solving developed students' critical thinking to ask more questions, critically look at solutions

and conclude on learning issues (Tanveer, 2022). This research therefore investigates effect of self-directed learning using problem-solving skills on performance and motivation among senior secondary school ss2 biology students in Kaduna north Nigeria.

However, teacher-centered method (lecture method) was used in this study to teach the control group in order to compare the performance of students with those trained on self-directed learning using problem-solving skills. Therefore, Lecture method of instruction is teacher-centered, characterized by the teacher talking to the class most of the time, while the students listen, take down notes and occasionally ask questions (Isah, 2022). It is the teaching technique in which the teacher presents a spoken discourse on a particular subject. The teacher does much of the activity in form of talking and writing while the students listen (Kelly, 2022). The effectiveness of this method is that, it requires clear and good command of language and good ability to write. It also saves time and energy, not expensive, saves teacher a lot of challenges in class and it allows handling of larger classes and easy coverage of syllabus (Gumel, 2022). Though in this method, different ability groups are not properly taken care of in class, it is boring to the students, encourages rote learning among others. As

such, the researcher adopts the use of self-directed learning using problem-solving skills in learning of biology concepts, in Kaduna north, Nigeria to determine its effects on ss2 student motivation and performance.

According to Haruna (2019), Academic performance refers to student's success in meeting short- or long-term goals in education. Sani (2019) defines academic achievement as "an accomplishment or proficiency of performance in a given skill or body of knowledge". Tayo (2019), viewed academic performance as the knowledge attained or skills developed in school subject designed by test and examination scores or marks assigned by the subject teachers. It can be considered as a demonstrating ability of students to comprehend, analyze, apply, synthesize and evaluate biology information. Usman (2019) noted that, poor performance recorded in sciences could be attributed to the teaching method which does not allow students to demonstrate their abilities and motivation.

The motivation of students is a vital component of their academic success. It is also a means to reach the academic performance that they desire. According to Zack (2020), authentic engagement can help students develop higher academic success. Without sufficient motivation to learn, academic achievement and school learning are unlikely to occur. Individuals are motivated by the desire to achieve a goal, finish an assignment, or get a degree in their chosen field. This process helps determine the reasons behind their behavior. Motivated behaviors are permanent, energetic, and oriented (Omkar, 2020). According to experts, there are two types of motivation: intrinsic and extrinsic. The former involves an individual's desire to achieve a specific goal. On the other hand, the latter refers to the individual's motivation to do something for free. In view of this, the study tends to examine the effect of self-directed learning using problem-solving skills on performance and motivation among biology students in Kaduna North, Nigeria.

Statement of Problem

The study of biology is very important as it involves the application of various principles to life. It is regarded as a core science subject and the students' performance is of utmost importance to stakeholders in the education of learners. The factors that have been identified as contributing to the low performance of students in biology are the poor quality of teaching methods and the lack of laboratory equipment. In addition, the use of a teacher-centered approach to teaching has also been known to negatively affect the students' performance. Many students are unable to

gain admission into various tertiary institutions if their performance in biology continues to be poor. The results of the 2021 and 2022 Joint Admission Matriculation Board, JAMB examinations revealed that many students failed to meet the entrance requirements for certain science and technology-related disciplines. The board said that out of the 6,944,368 candidates who sat for the examination, only 973,384 passed with the necessary scores to be admitted into Nigerian universities. This means that 86% of the students who sat for the examination failed. The country's quest for scientific development may be a mirage without technological and scientific progress and the economy of Nigeria will not grow, as such the goals and objectives of the country's education policy and the sustainable development will be wasted. In response to the alarming performance of students in biology subject, the country's scholars such as Zakari & Usman (2022) have proposed the use of self-directed learning as a means of improving the students' performance. This method will enable them to become more focused on their goals and improve their performance. In view of this the study examined the effect of self-directed learning using problem solving skill on students' motivation and academic performance in biology in Kaduna-north, Nigeria.

Research Questions

The following research questions are formulated to guide the study.

1. What is the mean performance scores of senior secondary school ss2 biology students exposed to self-directed learning using problem-solving skills and those exposed to lecture method?

2. What is the effect of self-directed learning using problem-solving skills and lecture method on the motivation of senior secondary school ss 2 biology students?

Research Hypotheses

The following null hypotheses are formulated for testing at $p \leq 0.05$ level of significance.

H0$_1$: There is no significant difference in mean performance scores of senior secondary school ss2 biology students exposed to self-directed learning using problem-solving skills and those exposed to lecture method.

H0$_2$: There is no significant difference in the motivation of senior secondary school ss2 biology students exposed to self-directed learning using problem-solving skills and those exposed lecture method.

Research Methodology

The study employed quasi-experimental design and involve two groups

(experimental and control). The first group which is experimental group was exposed to self-directed learning training for six weeks while the control group was taught the same concept using lecture method. After the six weeks training period, a post-test was administered to the students to determine if the treatment was effective in improving the student biology knowledge.

Population of the Study

The population for the study comprised of all SSII public senior secondary school students offering biology as a subject in kaduna-north Nigeria. The public schools are selected for use in this study because of their convenience, availability of infrastructure, population, readiness to assist the researcher when conducting research among others. There are 24 senior secondary schools offering biology in Kaduna-North Nigeria with a total number of 4964 SSII biology students.

Sample and Sampling Technique

115 students were sampled out using the simple random sampling technique out of which (55 are in the experimental and 60 are in the control groups) from the two schools are considered as sample size for the study. This is in line with central limit theorem Sambo (2018), proposes that minimum of 50 sample size is viable for experimental research. The details of the sample selected is presented in Table 1.

Table 1: Sample of the Study

S/No.	Name of School	Male	Female	Total	Group
1	School A	22	23	55	Experimental
2	School B	30	30	60	Control
	Total	**65**	**52**	**115**	

Instrumentation

Two validated instruments labelled "Biology Performance Test (BPT) and Student Biology Motivation Questionnaire (SBMQ) were used to collected data for the study. BPT and SBMQ had a reliability of 0.89 and 0.85 respectively when subjected to the Alpha Cronbach's statistics.

Results and Findings

The research null hypotheses are tested at $p \leq 0.05$ level of significant using independent t-test and man whitney u-test. The analysis was done by the aid of Statistical Package for Social Sciences (SPSS version 20).

H0₁: There is no significant difference in mean performance scores of senior secondary school biology students exposed to self-directed learning using problem-solving skills and lecture method.

Hypothesis one was tested at $p \leq 0.05$ level of significance using t-test statistical tool. The result of findings is presented in table 4.1

Table 4.2: Independent t-test Statistics on Mean Performance Score of Experimental and Control Groups

Study groups	N	Mean	STD	MD	Df	P value	R
Exp	55	32.73	3.53				
				8.58	131	0.00	S
Control	60	24.15	3.87				

Significant at α P≤ 0.05 level of significant.

Table 2 of the independent t-test statistics above revealed that there is significant difference in the mean performance score of experimental and control groups. This is because the p value of 0.00 is less than the 0.05 alpha level of significance. Therefore, the null hypothesis which state that there is no significant differences in the mean performance score of biology students exposed to self-directed learning using problem-solving skills and lecture method is hereby rejected.

H0₂: There is no significant difference in the motivation of senior secondary school biology students exposed to self-directed learning using problem-solving skills and lecture method.

Hypothesis two was tested at $p \leq 0.05$ level of significance using Mann whitney test. The summary of findings is presented in table 4.2 below

Table 4.3: **Mann Whitney Statistics Differences in the motivation of Students of Experimental and Control Groups.**

Study Groups	N	Mean Rank	Sum of Whitney	Mann	Z	P value	R
Exp	50	98.34	6687.00		9.59		
Control	60	34.22	2224.00		0.47	0.00	S
Total	**133**						

Significant at α P≤ 0.05 level of significance.

Result from Table 4.2 of the Mann Whitney shows that there is significant differences in the motivation of biology student of

experimental and control groups. Reasons being that the p value of 0.00 is less than the 0.05 alpha level of significance. This shows

that the motivation of students exposed to self-directed learning using problem-solving skills is enhanced more than those taught using lecture method. Therefore, the null hypothesis which state that there is no significant difference in the motivation of biology students exposed to self-directed learning using problem-solving skills and lecture method is hereby rejected.

Discussion of Result

The result of hypothesis one shows that students who were trained in self-directed learning using problem-solving skills performed significantly higher than those in the control group. The superiority of the experimental group over the control group stem from the fact that students were able to improve their performance using problem-solving skills by taking initiative in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, evaluating learning outcome and were also able to identify their strengths and weaknesses, provide feedback on the various activities (Obioh,a 2019). The finding which indicates better performance of students in the experimental group agrees with the earlier findings of Harrison, Haruna and Steven (2020). Their findings shows that self-directed learning allows active participation

of students in the learning process, it allows for high degree of interaction among learners, materials, content and environment and also enables students to become persistent seekers and problem solvers. The result of this study disagrees with the finding of Sani (2019) which shows that self-directed learning when compared to lecture method in federal university of technology Minna, Niger state has the same level of performance. The difference in the result may be due to the fact that the previous study was carried out in at higher institution on a different subject and location.

The results of hypothesis two (2) revealed that students in the experimental group control had higher motivation level than those in the control group. The motivational scores of students is in favour of experimental group indicating that self-directed learning using problem-solving skills enables students to plan and manage learning activities, develop solution, pursue knowledge and skills (Fred, 2021). It involves various student activities, such as self-guided reading, participation in study groups, accessing electronic information and reflective writing. Students participate fully in collaborative learning activities including, discussions within a group, between groups, presentations of ideas and development of problem-solving skills and

creates a friendly learning environment between teachers and their students (James 2019). The finding of this study agrees with the findings of Haruna & Steven (2020) which shows that self-directed learning strategy significantly enhanced students' motivation levels in biology concepts. Also the finding of this study disagrees with the findings of Sani (2019) which shows that self-directed learning when compared to lecture method in federal university of technology Minna, Niger state has the same level of performance. The difference in the result may be due to the fact that the previous study was carried out in at higher institution on a different subject and location

Conclusion

In the light of the preceding discussion, the following conclusions were drawn.
The study shows that self-directed learning using problem-solving skills significantly improved the student ability to learn biology and had high motivation when learning biology concepts. Through this study, the researchers were able to create a self-directed learning using problem-solving skills training program that can be use in other subject areas.

Recommendations

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

1. It is recommended that student self-directed learning using problem solving skills be incorporated into the learning processes at the secondary, primary and tertiary levels. This method can help improve student performance because it provides them with long-term learning skills.

2. Curriculum planners should establish self-directed learning using problem-solving skills as a component of the school curricula so as lessons can be learner-centered. This will help teachers develop a more effective and engaging teaching style.

Suggestions for Further Studies

The following suggestions are therefore made to further expand the scope:

A similar study on secondary school students should be carried out focusing on the teaching of other science education courses like chemistry, physics and mathematics using self-directed learning involving problem-solving skills with a view to finding out if similar or different results as in this study may be obtained. This study can be extended to students in tertiary institutions such as, polytechnic and university to investigate if these levels of education will have similar effect on the variables that this study dealt with.

REFERENCES

Akin, P. (2017). *Effects of Prior Knowledge, Exploration, Discussion, Dissatisfaction with Prior Knowledge Application (PEDDA) and the Teaching Learning Cycle (TLC) Constructivist Instructional Models on Students Conceptual Change and Retention.* An Unpublished Ph.D Thesis, University of Nigeria, Nsukka.

Abdullahi, H. (2019). Effects of Gender on Students' Achievement in Biology using Problem solving. *Journal of Educational and Social Research,* 3(6), 17-21.

Bulama, A. (2018). Students Teachers' Perception of the causes of Poor Academic Performance in Ogun State Secondary School (Nigeria): Implications for Counselling for National Development. *European Journal of Social Science,*13(2), 229-242.

Bassey, E. (2017). Self-directed learning and academic achievement in secondary online students. An unpublished Ph.D Dissertation, University of Tennessee.

Ebube, B. (2018). Self-directed learning, personality traits and academic achievement. *Procedia - Social and Behavioral Sciences*, 127, 640 – 644.

Fred, J. (2021). Effect of Problem-Solving Method of Instruction on Students' Achievement and Retention in Chemistry. *Nigeria Journal of Functional Education,* 5(1), 7-11.

Federal Government of Nigeria (FGN) (2013). *National Population Commission: Census for Nigeria*. Lagos: Federal Republic of Nigeria.

Harrison, D. L. (2020). Engaging adult learners in self-directed learning and its impact on learning styles. An Unpublished PhD dissertation, University of New Orleans, New Orleans.

Haruna, K. (2019). The relationship between self-directed learning readiness, completion and achievement in a community college telecourse program. Unpublished PhD dissertation, University of Georgia.

Isah, M. (2020). The effect of self-directed learning readiness on achievement comparing face-to-face and two-way distance learning instruction. *International Journal of Instructional Media,* 32(2), 143-155.

James, S. (2020). Self-directed learning in acquisition of formal reasoning approach. *Journal of the Physics Teachers Association of Nigeria,* 37, 76-81.

Kelly, L. S. (2020). The relationship between self-directed learning readiness and academic performance in a non-traditional higher education program. Unpublished PhD dissertation, University of Oklahoma.

Muhammad, Z. (2021). Effect of Self-directed learning on Students' Achievement in Three Categories of Questions in SSCE Practical Chemistry Examination. *Journal of the Science Teachers Association of Nigeria (STAN),* 42(1), 67-72.

Mokhtar, A. A. (2021). Teachers' Awareness of Creativity Related Behaviours in Science Classroom. *Journal of Science & Technology Association of Nigeria*, 39(1&2), 22-26.

Omkar, T. (2020). Commitment to Science and Gender as Determinant of Students' Motivation and Practical Skills in Physics. *Journal of the*

Science Teachers Association of Nigeria (STAN), 46(1), 125-135.

Obioha, C. (2019). *Making Science Education Accessible to All. 23rd Inaugural Lecture of the University of Nigeria, Nsukka.* Nsukka: University of Nigeria Press.

Ryan, P. (2021), *Effect of improvised materials on Junior Secondary School two students achievement and motivation in mathematics. An Unpublished Ph.D dissertation,* Benue State University, Markudi.

Sambo, T. (2018). Effects of Ability Gender Grouping in Learning and Understanding of Chemistry Concepts. *Journal of Education Thought,* 5(1), 23-27.

Steven, R. A. (2021). Investigating the link between self-directed learning readiness and project- based learning outcome: The case of international master's students in an engineering management course. *European Journal of Engineering Education*, 32(4), 453-465.

Taiwo, M. (2019). Effects of Mastery Learning Strategy on Students achievement in Symbols, formulae and equations in Biology. *Journal of Educational Research and Reviews*, 2(3), 28-35.

Usman. J. (2019). The Effects of Gender and Mathematics Ability on Academic Performance of Students in Biology. *An International Multidisciplinary Journal*, 5(4), 21-29.

Zakari, T. (2019). Effect of Constructivism Teaching Strategy on Senior Secondary Students' Achievement and self-efficacy in Physics. *African journal of science Technology and Mathematics Education*, 1(1), 141-160.

Emotional Intelligence as a Predictor of Adjustment to Boarding Environment of Secondary School Students in Akwa-Ibom North-West Senatorial District, Nigeria

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ABSTRACT

This study examined how emotional intelligence variables predict the adjustment of secondary school students to boarding environment in North West Senatorial. Two research questions were postulated to guide the study. The correlation research design was adopted to carry out the study. The population of the study captured all the JSS 1 students in schools with functional boarding facilities in North West Senatorial District, Akwa Ibom State. A sample of 210 respondents was selected using the purposive sampling technique. "The National Health Service Emotional Intelligence Questionnaire" and" Students Adjustment to College Questionnaire" were adapted for the study. The reliability coefficients of 0.73 and 0.94 were obtained for NHSEIQ and SACQ respectively, using Cronbach Alpha statistical analysis. The instruments were face validated by experts within the faculty of Education and the NHSEIQ was construct validated with construct validity coefficient of between 0.20 - 0.78. Data analysis was done using simple linear regression statistics and all hypotheses were tested at .05 level of significance. It was concluded that social skills and Self-awareness highly and moderately respectively, predicted social adjustment to boarding environments of secondary school students in Akwa Ibom North West Senatorial District, Nigeria. It was therefore recommended among others, that the Government should employ adequate number of professional counsellors to meet the ratio of one counsellor to 250 students, so that the counselling needs of the students in boarding schools would be adequately catered for.

Introduction/Background of the Study

Students are social beings, and as such, one of their basic, natural needs is to establish and maintain interpersonal connections and relationships with other people. The boarding

environment in secondary school is unique, usually exposing the students to unanticipated challenges. In many instances, living in the dormitory usually marks the first time a child leaves the comfort of the home environment for a setting devoid of the direct parental company they have enjoyed since birth. Adapting to such a situation usually becomes very difficult for many of the students. Among the various factors that can influence a student's stay in the boarding house are relationships with mates, senior students, school authorities, a regimented lifestyle, feeding habits, time use, and hygiene habits.

Guidance and counselling interactions in institutions with boarding facilities indicate that some students easily adjust to the boarding environment. However, others find it very difficult to get along with their colleagues. Some students easily connect with their contemporaries and seniors, while others may find it extremely difficult to relate to and get along with others in the school environment. However, the complexity involved in human relationships informs the need for students to make some adjustments so that they can get along with others meaningfully in the boarding environment.

It is imperative to be well adjusted to a new environment. As viewed by Lakhani et al. (2017), maladjustment leads to devastating lifelong impacts on the child's personality. College adjustment is a psychological process that new students pass through as they adapt to the next chapter of their early college lives (Zhuhra et al., 2022). Students at this early level of education are mainly in the early stages of adolescence. Social adjustment problems often appear among adolescents, who find themselves in new environments such as negligent families, orphanages, and broken homes (Simarmata and Rahayu, 2017). Adjusting to a new environment is difficult for teenagers, especially in early adolescence.

Students who fail to adjust to new environments or situations may become rigid and form unhealthy habits (Frederico and Casey, 2013). Students' adjustment to the boarding environment in secondary school could depend on their emotional intelligence skills. According to Goleman (1995), emotional intelligence has been suggested as a critical factor in successful adjustment to life in general and to work and academics in particular. Emotional intelligence is the ability to assess, classify, and monitor emotions. It also involves the ability to regulate one's emotions. According to

Goleman, emotional intelligence consists of five elements, self-awareness (understanding one's own emotions), self-regulation (controlling one's emotions), self-motivation (encouraging oneself), social skills (managing relationships), and empathy (identifying other people's emotions).

Humans possess the innate capacity to modify their behaviour, perceptions, attitudes, and beliefs. This adjustment helps one to adapt while in a strange environment. For this adjustment to occur, a certain level of self-awareness must be present (Ikpe, et. al, 2021a). Self-awareness entails being able to identify one's emotions and the impact they have. It embodies proper self-evaluation, which requires awareness of one's feelings and how they affect one, as well as self-confidence, which calls for a firm understanding of one's capabilities and limitations (Iruloh and Ukaegbu, 2018). A person's emotional state may have some level of influence on interactions within an environment.

Based on the foregoing, this present study is designed to determine how emotional intelligence competencies predict the adjustment of secondary school students to the boarding environment in Akwa Ibom North-West Senatorial District.

Conceptual Framework

Social Adjustment

In some scenarios or situations, things may not present themselves as envisioned by a person, therefore a need to adjust to reality. Adjustment refers to the psychological processes through which people manage or cope with the demands and challenges of everyday life. According to Rodriguez (2018), adjustment is the behavioural process by which people and other creatures maintain balance between their numerous demands or between those wants and the constraints imposed by their environments. Ikpe (2021b) opined that adjustment is the process whereby one's behaviour is altered to achieve a harmonious relationship with the environment. In its more general sense, adjustment denotes the process whereby an organ, organism, or individual entity enters into a relationship of harmony or equilibrium with its environment and the condition of having attained such a relationship.

Social adjustment is the degree to which an individual engages in skilled social behaviour and adapts to the immediate social situation. Gray et al (2013) stated that social adjustment is an ability of children to give responses precisely about social reality, situation, and circumstances.

Hurlock (2017: 287) has suggested aspects of social adjustment to include, the following;

i. Real appearance (overt performance shown by the individual according to the prevailing norms in the person's group expectations of the group, meaning that the individual can meet the expectations of his group and he is accepted as a member of the group), ii. Adaptation to various groups (Individuals are able to adjust or adapt well to each group they enter, both groups of peers and groups of adults), iii. Social attitude (Individuals can show a pleasant attitude towards others, are able to participate and can carry out their roles as good individuals in various social activities), iv. Personal satisfaction (Individuals have a feeling of satisfaction within themselves, marked by a sense of satisfaction and happiness, because they take part in group activities and are able to accept their own situation as it is in social situations).

Emotional Intelligence

Emotions are involved in everything people do, every action, decision and judgment. Emotional Intelligence (EI) concept has become a very important indicator of a person's knowledge, skills and abilities in workplace, school and personal life. The roots of emotional intelligence were traced by Darwin's early work on the importance of emotional expression for survival. In the 1900s, even though traditional definitions of intelligence emphasized cognitive aspects such as memory and problem-solving, later on several researchers in the intelligence field of study had begun to be aware of the importance of the non-cognitive aspects (Tripathy, 2019). Emotional intelligence studies the ability to perceive, understand and reflect on emotions. It also refers to the ability to perceive, control, and evaluate emotions.

Goleman (2006) defined emotional intelligence as the ability to recognize one's own feelings and those of others, to motivate self, and to manage emotions well within ones' self and in relationships with others. According to Salovey and Mayer (2002), emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in ways that promote emotional and intellectual growth. According to Nelson and Low (2003), emotional intelligence is the single most important variable in personal achievement, career success, leadership and life satisfaction.

Emotional intelligence describes abilities different from, but complementary to academic intelligence or the purely cognitive

capacities measured by intelligence quotient (Iruloh and Ukaegbu, 2018). Some key signs and examples of emotional intelligence according to Drigas and Papoutsi (2018), include an ability to identify and describe what people are feeling, an awareness of personal strengths and limitations, self-confidence and self-acceptance, the ability to let go of mistakes, an ability to accept and embrace change, a strong sense of curiosity, particularly about other people, feelings of empathy and concern for others, showing sensitivity to the feelings of other people, accepting responsibility for mistakes, and the ability to manage emotions in difficult situations.

Social Skills and Social Adjustment of Secondary School Students

Human beings do not live in isolation because they are sociable creatures and have developed many ways to communicate messages, thoughts and feelings with one another. The several ways of communicating are viewed as social skills. Different researchers have given their own perspective to what social skills are. According to Sander and Watkins (2022), social skills are ways of interacting with others that make it easier to succeed socially. Social skills are the tools that enable people to communicate, learn, ask for help, get needs met in appropriate ways,

get along with others, make friends, develop healthy relationships, protect themselves, and in general, be able to interact with the society harmoniously (Dowd and Tierney, 2017). Social skills include a set of abilities to initiate and maintain positive and productive social relationships, develop friendships and intimacy with peers, and create satisfying adjustments in school (Khodaei et al, 2021). Social skills therefore are tools, skills and abilities that would promote better interpersonal relationships among humans.

Students who have effective communication skills establish positive relationships with their teachers and classmates and create conducive environment for learning (Khodaei et al, 2021). Social and emotional skills can help students set goals for themselves and build positive relationships with peers. They can also lead to long-term societal benefits that extend far beyond the individual child. Maghsoudi et al (2010) indicated that lack of social skills can hinder adjustment with social conditions

Self - awareness and Social Adjustment

Self-awareness refers to a person's realistic perception of his or her strengths and limitations and consistent desire for self-improvement. Self-awareness is the ability to

observe and accurately identify own thoughts, feelings and impulses, and determine whether they are grounded in reality or not (Manson, 2022). It can make a person better at his jobs, better communicators in the workplace, and enhance one's self-confidence and job-related wellbeing (Allinson et al, 2015). Self-awareness allows a person to see things from the perspective of others, practice self-control, work creatively and productively, and experience pride in one's self and work as well as general self-esteem (Silvia & O'Brien, 2004). The underlined benefits of being self aware suggest that self awareness is an important self tool that benefits a person to adjust to a social environment and self, in relation to people.

Empirical Review

Akinwale and Okotino (2018) carried out a study on social skills and students' adjustment in secondary schools in Osun State. The study employed survey research design. The study population consisted of 6,922 secondary school students in Osun State while the sample for the study consisted 520 respondents from the nine local government areas selected using simple random sampling technique. Two instruments were used for the study, namely, Social Skills Questionnaire (SSQ) which was

used to elicit information on students' social skills and Students' Self-Awareness Questionnaire (SAQ) which was used to elicit information on students' self-awareness. The reliability of SSQ and SAQ were 0.75 and 0.72 respectively. Data were analysed using frequency counts, percentages and simple correlation statistics. The results showed that there was a significant relationship between social skills and adjustment in Osun State.

Chidi and Victor (2017) conducted a study on the relationship between self-awareness and students' social adjustment in secondary schools in Ebonyi State. The objective of the study was to determine the extent of relationship between self-awareness and students' social adjustment in Ebonyi State. The study adopted a correlation research design. The study population comprised 214,368 secondary school students in Ebonyi State. Stratified proportionate sampling technique was used to select 1,005 respondents from the population of the study. The researchers developed two sets of instruments titled Self-awareness Questionnaire (SQ) and Students' Social Adjustment Questionnaire (SSAQ) which were used for data collection.

The reliability of SQ and SSAQ are 0.76 and 0.77 respectively. The Pearson Product Moment coefficient was used in answering the research questions and independent t-test was used in testing the hypotheses. The findings of the study revealed among others that there is a high positive correlation between self-awareness and students' social adjustment in secondary schools in Ebonyi State. It also revealed that there was a significant relationship between self-awareness and social adjustment in secondary schools in Ebonyi State.

Ekpoh and Eze (2015) also conducted a study to investigate the relationship between self-awareness and students' social adjustment in Ikom Education Zone of Cross River State, Nigeria. The Ex-post facto research design was adopted for the study. The sample was 86 principals, 344 teachers and 1,376 students drawn from a population of 86 principals, 1829 teachers and 35,359 students in public secondary schools in the study area. Data collection was carried out with the use of two research instruments titled Self-Awareness Questionnaire (SAQ) and "Students' Social Adjustment Questionnaire (SSAQ). The reliability of SAQ and SSAQ were 0.74 and 0.78 respectively. The Pearson Product Moment Correlation coefficient (r) was used for data analysis and tested at .05

level of significance. Results obtained revealed that a significant relationship exist between self-awareness and students' social adjustment.

The study of Safora et al. (2018) is relevant to the present study because it investigated self awareness and self regulation as they relate to adjustment of students as considered in the present study. Correlation research design was adopted in both studies. The sample size in the present study was 660 respondents which was higher than that of the study in review being 346 respondents. Two instruments were employed in both studies, however the instrument were not the same. The present study adapted the "Student Adaptation to College Questionnaire (SACQ) by Baker and Siryk (1987)" and The National Health Service Emotional Intelligence Questionnaire (NHSEIQ). For the study in review, the respondents completed self-consciousness questionnaire of Fenigstein et al. (1975), the self-regulation learning questionnaire of Bouffard et al. (1995), and the social adjustment questionnaire of Sinha and Singh (1993). Pearson correlation coefficient and multiple regression statistics were used to analyze the data, but the present study analysed the collected data with the simple linear regression statistics. The present study was

carried out in North West senatorial district Akwa Ibom state whereas the study in review was carried out in Sari city.

A study was carried out by Nwokike (2012) in Nsukka Education zone of Enugu State to determine the influence of social skills of students on social adjustment in boarding schools. The study adopted a descriptive survey design. The population comprised 10,342 students in the zone. The sample size for the study was 600 respondents. A structured questionnaire by the researcher titled, Social Skills Questionnaire (SSQ) was used as the instrument for data collection. The items were based on a 4-point rating scale. The reliability of SSQ was 0.75. An r-value in simple correlation was used to analyse the research questions while significant value in simple correlation statistic was used in testing the null hypotheses. The findings revealed that students' social skills played significant roles in enhancing social adjustment among students in boarding schools.

Statement of the Problem

When people are exposed to various experiences, they grapple with the difficulties by adapting the abilities required to overcome them. Boarding homes seem to be a breeding ground for different forms of psychological stress and maladjustment for students, according to the researcher's experiences. The majority of antisocial behaviour, including bullying, victimization, sexual harassment, and physical assault, seem to be the result of maladjustment in boarding houses. Establishing and sustaining good interpersonal relationships with others is typically challenging for students who experience victimization, harassment, or abuse at boarding homes in one form or another. Additionally, this interferes with their ability to focus on their academic work, which may lead to poor performance and indiscipline. Students who have experienced antisocial behaviour may have trouble adjusting properly to their new surroundings. They might then start engaging in antisocial behaviour as a result. Conflicts may arise as a result of the development, which may make it challenging for boarding students, especially those in their first year, to be well adjusted. The researcher noticed that Akwa Ibom North West Senatorial District boarding students have a hard time adjusting to the boarding environment. This led the researcher to determine in this study whether emotional intelligence competencies predict social adjustment.

Purpose of the study

The purpose of this study is to determine the extent to which emotional intelligence

competencies predicts social adjustment of first year students to boarding environments in public secondary schools in Akwa Ibom North West Senatorial District. Specifically, the study seeks to:

1. Determine how social skills predict social adjustment to boarding environment of first year secondary school students in Akwa Ibom North-West Senatorial District.

2. Determine how self-awareness predicts social adjustment to boarding environment of first year secondary school students in Akwa Ibom North-West Senatorial District.

Research questions.

This study specifically seeks to answer the following questions:

1. To what extent do social skills predict the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District?

2. To what extent does self-awareness predict the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District?

Design of the study

A correlation research design was adopted for the study. As noted by Kpolovie (2010) in

Amajuoyi and Joseph (2016), correlation design is adopted for studies that investigate the magnitude and direction (positive or negative) of relationships that exist between a dependent variable and one or more independent variables. In this study, a correlation design will be used to examine the extent to which emotional intelligence competencies such as self-awareness, self-regulation, motivation, social skills, and empathy predict social adjustment.

Area of Study

The study was carried out Akwa Ibom North West Senatorial District, formally referred to as Ikot Ekpene Senatorial District. The senatorial district is made up of ten out of the thirty one Local Government Areas in Akwa Ibom State. These ten are: Abak, Essien Udim, Etim Ekpo, Ikot Ekpene, Ikono, Oruk Anam, Ini, Obot Akara, Ukanafun and Ika Local Government Areas The senatorial district is located in the south-south geopolitical zone of Nigeria. The senatorial district is located between latitudes 4" 37' and 5* 30' North of Equator and between longitudes 7*28' East of the Greenwich Meridian. It is the largest senatorial district in Akwa Ibom State with a land mass of 2, 357.133 sq.km.

The population of the senatorial district is 1,814,413 people (National Population

Commision, 2006). Covering these local government areas are nine local education committees controlling 86 public secondary schools (State Secondary Education Board, Directorate of Fields Services, Uyo, 2022). Among these schools are also boarding schools. Over the years, most of the government owned boarding schools have now been streamlined to running only day schools. The reason for this may not be far from the ills and maladjustments within the boarding houses. It is in this light that the researcher considers this area for a study on the extent to which emotional intelligence competences such as self-awareness, self-regulation, motivation, social skills and empathy predict social adjustment.

Population of Study

The population of the study comprised all the Junior Secondary one (JSS1) students in public secondary schools with functional boarding facilities in Akwa Ibom North West Senatorial District. According to Akwa Ibom State Secondary School Board (2022), there are 2,793 JSS 1 such students in the 2022/2023 academic session.

Sample and Sampling Technique

The purposive sampling technique was employed to select 210 first year students from five purposively selected schools in Akwa Ibom North West Senatorial District for the study. One most populated secondary schools in each of the four federal constituencies and one federal institution was selected.

Research Instrument

Two instruments were used for data collection in this study. The instruments were tagged Emotional Intelligence Questionnaire (EIQ) and Student Adjustment to Boarding Environment Questionnaire (SACQ)". The Emotional Intelligence Questionnaire (EIQ) was adapted to measure the students' emotional intelligence level. The original instrument consists of 50 items, 10 items for each sub-variable with scoring point of 1- 5 interpreted as 1 – does not apply, 3 – applies half the time, 5 – always applies. The original reliability coefficients of the instrument are stated as follows: 0.77 to 0.83 for social skills, 0.91 to 0.95 for self awareness, 0.81 to 0.90 for self regulation, 0.82 to 0.91 for self-awareness, 0.83 to 0.94 for motivation and 0.84 to 0.91 for empathy. The adapted version used for this study consisted 10 items, five items for each sub – variable (self – awareness and self –

regulations) of the study and scored as follows:

SA	-	Strongly Agree	-	4points
A	-	Agree	-	3 points
D	-	Disagree	-	2 points
SD	-	Strongly Disagree	-	1 point.

The second instrument, Student Adjustment to Boarding Environment Questionnaire (SACQ) was adapted to measure the students' social adjustment to boarding environment. The original SACQ is a 67 item assessment composed of four sub – scales measuring academic adjustment (24 items), social adjustment (20 items), personal – emotional adjustment (15 items) and institutional adjustment (15 items). The original reliability coefficients of the instrument are stated as follows: 0.81 to 0.90 for academic adjustment, 0.83 to 0.91 for social adjustment, and 0.77 to 0.86 for personal – emotional adjustment, 0.85 to 0.91 for institutional adjustment and 0.92 to 0.95 for the full scale. Scores are rated on nine point likert scale ranging from does not apply to me at all to all applies very closely to me.

The adapted version to be used shall consists 20 items drawn from the sub- scale measuring social adjustment and rated on a four point likert scale also scored as the first instrument.

Validation of the Instruments

The instruments were face validated. The face validation of the instrument was carried out by three experts, one expert in Guidance and Counseling in the Department of Guidance and Counselling and two experts in Educational Evaluation in the Department of Psychological Foundations. The departments are in the Faculty of Education, University of Uyo, Uyo. The experts scrutinized the items on the instruments to ensure that they were in line and suitable to the requirements for measuring emotional intelligence competencies and social adjustment of students. Their suggestions and restructuring were effected in the final copy of the instruments.

Reliability of the Instruments

To determine the internal consistency of the instruments, a trial testing on 35 students outside the sample size was carried out. The scores obtained were subjected to Cronbach Alpha Analysis for reliability coefficient. The reliability coefficients of 0.73 and 0.94 for NHSEIQ and SACQ respectively were obtained. These coefficients revealed that the instruments were reliable and suitable to be used for this study.

Method of Data Collection

The researcher obtained a letter of introduction from the Department of Guidance and Counselling, Faculty of Education, University of Uyo, Uyo, for permission to administer copies of the questionnaire on the participants in the selected secondary schools. The researcher explained the items in the questionnaire to the principals of the schools and the respondents on the importance of the study. After the explanation, the researcher with the help of a research assistant administered the questionnaire to the participants and allowed them to complete the instruments and returned for analysis.

Method of Data Analysis

Data collected was be analyzed using Simple Linear Regression Statistics in answering the research questions at 0.05 level of significance.

Results

Research Question 1

To what extent do social skills predict the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District?

Table 1:Simple Linear Regression Analysis of social skills and social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District

Variables	R	R^2	Extent of Prediction	AdjustedR^2	Remarks
Social skills					Very High Extent
	0.906	0.820	82.0%	0.819	
Social adjustment					of Prediction

Source: Researcher's survey (2023)

In Table 1, the results reveal that R-value is 0 .906 and R^2 is 0.820. The R-value of 0.906 indicates positive and very high extent of prediction, while R^2 value of 0.820 which is the coefficient of determination show the extent of prediction on how social skills predict the social adjustment of first-year secondary school students to the boarding

77

environment in Akwa Ibom North West Senatorial District. In addition, 82.0% variance in social adjustment of first-year secondary school students is predicted by social skills. This means that social skills highly predict social adjustment of first-year secondary school students in the boarding environment.

Research Question 2

To what extent does self-awareness predict the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District?

Table 2: Simple Linear Regression Analysis of self-awareness and the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District

Variables	R	R^2	Extent of Prediction	Adjusted R^2	Remarks
Self-awareness					Moderate Extent of Prediction
	0.403	0.162	16.2%	0.158	
Social adjustment					

Source: Researcher's survey (2023)

In Table 2, the results reveal that R-value is 0 .403 and R^2 is 0.162. The R-value of 0.403 indicates positive and moderate extent of prediction, while R^2 value of 0.162 which is the coefficient of determination show the extent of prediction on how self-awareness predicts the social adjustment of first-year secondary school students to the boarding environment in Akwa Ibom North West Senatorial District. In addition, 16.2% variance in social adjustment of first-year secondary school students is predicted by self-awareness. This means that self-awareness moderately predicts social adjustment of first-year secondary school students.

Discussion of Findings

Social skills do not predict social adjustment

The purpose of this study was to determine the extent to which emotional intelligence competencies predicts social adjustment of first year students to boarding environments in public secondary schools in Akwa Ibom North West Senatorial District. Data collected and analysed indicated that social skills highly predict social adjustment of first-year secondary school students in the boarding environment. This result is similar to the result of a study carried out by Nwokike (2012) in Nsukka Education zone of Enugu and Akinwale and Okotino (2018).

Self - awareness does not predict social adjustment

The second result obtained in this study showed that self-awareness moderately predicts social adjustment of first-year secondary school students. This is in line with the study carried out by Ekpoh and Eze (2015) to investigate the relationship between self-awareness and students' social adjustment in Ikom Education Zone of Cross River State, Nigeria, which revealed that a significant relationship exist between self-awareness and students' social adjustment. A result also obtained by Chidi and Victor (2017) and Safora et al. (2018).

Conclusion

The purpose of this study was to determine the extent to which emotional intelligence competencies predicts social adjustment of first year students to boarding environments in public secondary schools in Akwa Ibom North West Senatorial District. The findings of this study, it was concluded that social skills and Self-awareness highly and moderately respectively, predicted social adjustment to boarding environments of secondary school students in Akwa Ibom North West Senatorial District, Nigeria.

Contribution to knowledge

The study was able to use emotional intelligence competencies to solve the predicaments of students and parents towards students' adjustment to boarding environment. This also helps to build literature towards study in the areas of emotional intelligence towards predicting students' social, personal and environmental adjustments.

Limitations of the Study

The following limitations were encountered will obtaining data:

The school management did not easily allow access to their students because they could have been afraid that the data obtained would be used against them. The research assistant had to wait for a long while for the students to be done with their lunch and siesta before the instrument could be administered.

Recommendations

The following are recommendations made:

1. School counsellors should organize orientation for newly admitted students, which would give them a lead on the demands of the boarding environment.

2. School counsellors should run guidance services often, on issues that would assist students in developing emotional competencies.

3. School administrators and hostel managers should setup the boarding

environment in ways that would assist students to easily adjust to the demands of the boarding environment.

4. Students should be taught on how to develop and maintain sound interpersonal relationship with colleagues and staff members in the boarding environment.

REFERENCE

Akinwale, B. C. and Okotino, S. E. (2018).Social skills as predictor of students' self-awareness in secondary schools in Osun State. *Journal of Education and Practice*, 5(6): 10-17.

Allinson, C., W.,Sutton, A., and Williams, H. M. (2015). A longitudinal, mixed-method evaluation of self-awareness training in the workplace. *European Journal of Training and Development*, *39*, 610–627.

Ayeni, F. V. (2018) Empathy and students' social adjustment in public secondary schools in Ondo State, Nigeria. *The African Journal of comparative education, 21 (2): 14 – 21.*

Baker, R. N. and Siryk, B. (1987). *Student Adaptation to college Questionnaire (SACQ).*

Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press. Cambridge, Mass.

Chidi, H. N. and Victor, O. T. (2017). Students' Factors and social adjustment in secondary schools in Ebonyi State. *Journal of Education Administration and Policy Studies*, 2(6): 7-17.

Eguzo, S. B. (2020). Students'- based factors and social adjustment in boarding public schools, Abia State, Nigeria. Unpublished Doctoral Thesis in the University of Ilorin, Ilorin, Nigeria.

Farrar S., Stopa L., and Turner H. (2015). Self-imagery in individuals with high body dissatisfaction: The effect of positive and negative self-imagery on aspects of the self-concept. *https://pubmed.ncbi.nlm.nih.gov/25164092/.(* Retrieved on July 8th, 2022).

Goleman, D. (1995). *Emotional Intelligence*. Bantam Books, New York, 352p.

Goleman, D. (2006) Emotional Intelligence. Bantam Books, New York, 352 p.

Kpolovie, P. J. (2010). *Advanced Research Methods*. Springfield Publishers Ltd. Owerri, 206p.

Lakhani, P., Jian, K., and Chandel, P. (2017). School adjustment, motivation and academic achievement among students, *International Journal of research in Social Sciences*, 7(10),333 – 348.

NHS (National Health Service) (2016). *Emotional Intelligence Questionnare Leadership Toolkit.* London Leadership Academy, London. 4p.

Safora, B.,Tabaghdehi, H., Leila, S., and Hafezian, M. (2018). Relationship of self-awareness and self-regulated learning to social adjustment among girl high school students. *Journal of Education Psychology Studies, 15(30): 29 – 50.*

The Role of Educational Management Information System in the 21st Century Educational System in Nigeria

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ABSTRACT

Information is regarded as a fundamental resource to any organization. As such, its management is apparently one of the most strategic operational instruments for organizational efficiency. Educational Management Information System (EMIS) plays an indispensable role in the smooth running of secondary schools. This paper examined the concept of Educational Management Information System in Nigerian secondary schools from different perspectives. Furthermore, features, components and the roles of EMIS were examined. The challenges and strategies for effective EMIS implementation in Nigerian school system were also elucidated. The paper concluded that the school system requires an efficient management information system to take the secondary school a step further and to boosts students' academic success. It was recommended, among other things, that Seminars, conferences and workshops on Educational Management Information System should be periodically organized for relevant stakeholders in secondary education and intensive efforts should be made by stakeholders (E.g. Government, NGOs, Philanthropists) towards genuine integration of ICT policies in schools. Furthermore, Adequate funding should be provided for EMIS development: This should be given a priority by the government of all levels and other private individuals and principals should maximally integrate educational management information system towards making appropriate decision.

Keywords: *Educational Management,* Information System, Database, Technology, Communication

Introduction

The role of computer is essential in the 21st century. The computer technology has a deep impact on education. Its advantages include an efficient storage, processing and retrieval of information. Scientific and technological progress of the last few decades has brought not only the economic globalization and worldwide expansion of technologies but changes in social relations, culture and education. The development of information technology in the 21st century play an important role in education. Information and communication technology (ICT) is currently the main source of the powerful technologies

used in the educational institutions around the world (Anderson & Dexter, 2005). With the help of ICTs, access to educational knowledge is very easy and fast. ICT is used for information processing through computers, communication devices and software applications to convert, store, protect, process, transmit and retrieve information anytime there is demand for it. In school, it enables teachers and students to have access to course materials, lecture notes and digital libraries through remote devices. The use of ICT has changed our conventional ways of teaching and learning. Its capability is essential in helping both students and teachers have access and participate in modern information society. The use of ICT is helpful in finding, developing, analyzing and presenting information as well as modelling situations and solving problems.

ICT in education has been of great importance to students. Its purpose is to familiarize them with the use and workings of computers and related technologies. The invention of different information communication technologies has become inevitable for students in learning. Through ICT, students can retrieve their required educational information within a short time. They can access and disseminate electronic information like e-books, e-journals, and can

improve their learning by using different modern ICTs in forms of wireless networks, internet, search engines, databases websites etc. The introduction of ICT in schools has saved students the stress of travelling from one location to the other for admission purposes. Students can easily access the school's website and process their admission at the comfort of their homes. Therefore, this paper aims at highlighting the roles of Education Management Information System, its challenges and possible strategies for effective implementation in the 21st century educational system in Nigeria.

Conceptual Clarification

The use of information technology in educational management has rapidly increased due to its efficiency and effectiveness. School administrators and managers who used to spend large amount of time in solving complex problems and monitoring the school operations have now better options due to enhanced technology. Information technologies facilitate the decentralization of work tasks, allow for greater flexibility and interaction. For these to be achieved, Educational Management Information System (EMIS) becomes necessary. Telem (1999) defines EMIS as an executive information system planned to match the structure, management task,

instructional process and particular needs of the school. According to Obi (2003) EMIS is also relevant in non-progammed decisions as it provides support by supplying information for the search, analysis, evaluation and the choice and implementation process of decision making. Gehlawat (2014), defines EMIS as the term commonly used to refer to the study of how individuals, groups and organizations evaluate, design, implement, manage and utilize systems to generate information to improve efficiency and effectiveness of decision making. According to Moorty (2019), EMIS is a decision-making instrument used by top management comprising a set of controls to enable them give instructions, orders and commands in the formulation and implementation of schools' policies and programmes.

EMIS provides administrators and managers with the information required to manage schools and organizations efficiently and effectively. EMIS is used by school administrators and managers to support a range of administrative activities. For example, it is used in financial management, staff allocation, timetable, attendance monitoring, clocking in and out, reporting, assessment records and resources. The use of EMIS eases the task of administrators, teachers, staff and others through a multi-

function platform (Syifa, 2019). Furthermore, EMIS also manages school's interaction with the pupils and parents. This makes the communication between the three parties effective. For effective administration of the school, the use of EMIS becomes imperative.

The Role of Educational Management Information System in Schools

Educational Management Information System (EMIS) is a system for the collection, integration, processing, maintenance and dissemination of data and information to support decision making, policy-analysis and formulation, planning, monitoring and management at all levels of education. According to Ugwede (2020), EMIS is a web which provides information to key stakeholders in the education sector, helping them with important data needed to improve education at all levels. Administrators within the sector will settle comfortably on the platform with its simple, easy-to-understand interface and features that adequately equips them for precise human and resource planning, school mapping and important analytics for quality decision making. Gehlawat (2014), is of the view that EMIS provides information to manage the institution efficiently and effectively. It provides an objective system for recording

and aggregating information and supports the institution's strategic goals and direction. Since EMIS supplies the decision makers with facts, it supports and enhances the overall decision-making process of the school.

According to Balram (2018), EMIS is specially designed to monitor the performance of education programmes offered by the school and to manage the distribution and allocation of educational resources. EMIS is a central data repository capable of not only gathering, organizing and storing data but also processing and analyzing it and generating various reports from it.

EMIS increases effectiveness and efficiency by saving time and facilitates the development of alternative solutions for advanced problems. EMIS has forced major changes in school roles as well as work styles of managers. Also, it has changed school management in the areas of management, choice making, workload, human resources management, communication, responsibility and planning (Essay UK, 2018). According to Gehlawat (2014), EMIS does not only ease the office work but also ensures the efficient functioning of the schools is maintained. It is a more effective way of storage and distribution of information. Therefore,

realization of the importance of EMIS in schools and its successful implementation is a necessity.

EMIS stores crucial learners' data such as personal data, examination records and library details. It also keeps track of the day-to-day progress of learners which is eventually used to analyze and monitor the improvements or retrogression in pupils over time (Balram, 2018). Similarly, EMIS is helpful in managing the overall functioning of the school. It helps in making the programmes more effective. It ensures a professional teaching and learning process. It also enables teachers to exchange their experiences amongst themselves and possibly identifies the needs of the learners in a more systematic way. (Gurr; Pegler cited in Gahlawat, 2014). Also, Telem and Buvitski cited in Gahlawat (2014) are of the view that EMIS helps in supporting the school managers and other staff in doing their duties, developing their performances, effectiveness and efficiencies. EMIS helps to track attendance and performance of both teachers and students. More importantly, EMIS reduces the workload on teachers, by providing quick access to data on any learner or a group of learners which can be drilled-down, filtered and arranged accordingly within a few clicks (Balram, 2018). Also,

EMIS eases tracking and analyzing resources distribution and expenditure. The school management can fully control which teacher and staff have access to what kind of data, accessing the learners' financial records and their academic performances with some clicks.

Furthermore, the most commonly asked questions and enquiries regarding admission can be easily answered using automated solutions. This can free up a lot of time and resources which can be allocated elsewhere. Moreover, the initial admission process can be fully automated using EMIS and help track key data on student's applications. School administration has changed with the introduction of EMIS over the last few years. Earlier, a lot of work was performed manually which resulted in flawed administration. Currently, schools have started to adopt the EMIS to manage the administration and academic activities, which is bringing a positive change in the schools.

Despite its numerous benefits, EMIS is still faced with a lot of challenges. Mumtaz; Kirkman, in Shah, (2014) posited a number of challenges. They include lack of time, lack of training, lack of ICT resources and lack of staff individual confidence and motivation.

Some other barriers for ICT use in educational management are the lack of data analysis skills among administrators, lack of training in using ICT-based management tools, and lack of user-friendly software for analyzing test results at the school level (Carnoy, cited in Shah, 2014). Similarly, Nagar, Rahoo, Rehman and Arshad (2018), posited that the challenges of EMIS include lack of computers and computer laboratories, lack of internet connections, lack of technical support, problems regarding qualified computer software experts and inability of schools to purchase the management software.

Features of Educational Management Information System

Educational Management Information System is described as a specialized information system that conforms to numerous features or characteristics. These features are regarded as universal in nature and remain more or less the same even when the knowledge around such information management changes. (Wako, 2013). Specifically, the following are the common features of EMIS;

1. **Management Oriented:** The management-oriented feature of EMIS opines that top-down method needs to be charted for designing it. The top- down

methods denotes that the initiation system of improvement decides management desires as well as the set goals.

2. **Future Oriented:** The design and development features of EMIS is Future based and the system is not constrained to providing only the previous information.

3. **Integration:** EMIS colour combination of multiple subcomponents to offer the relevant information to enable a useful decision an integrated system which balance information on several operations area to create a necessary physical characteristics of management information system.

4. **Common Data Flow:** EMIS support various basic views of system analysis such as avoiding duplication, joining parallel function and streamlining operations. The enlargement of common data flow is cost-effective and logical idea.

5. **Central Database:** EMIS covers data in tabular base, which is accountable for set up like insertion, updating of records and deletion. In the same vein, it covers information that is related to personnel, vendors, inventory and data storing base.

6. **Strategic planning:** EMIS requires high degree of preparation, which goes in creating an effective organization in order to ensure its relevance to the present and future occurrence due to the dynamic nature of the society. It is designed to easily modify and accommodate growth or new types of processing activities.

7. **Comprehensiveness:** EMIS is comprehensive in nature. The process of information system is designed primarily for administrators at all levels of education. It also embraces other systems such as formal and informal system, manual and computer systems, project information system, intelligence information system, decision support system, and other computer models.

Components of Education Management Information System

Generally, EMIS is made up of three key mechanisms namely; Hardware, Software and the People. The mechanisms or components are explained below;

1. **Hardware:** Hardware is made up of the computer, printer, networking devices and other physical components of the computer. The hardware provide to the computing power for processing data, networking and printing proficiencies.

The hardware specs help the processing of data into information.

2. **Software:** This is a program that runs on the hardware which is fragmented down into two main classes (application software and system software). Specifically, system software denotes operating system like Mac, OS Windows and Ubuntu.

3. **People:** These are operators who make use of the EMIS to record the day-to-day organizational transactions of the school. They are normally described as qualified specialist such as accountants and educationist. The ICT unit staff of the organization usually have the support staff to ensure that the organization is running well.

Challenges and Strategies for Effective Implementation of Educational Manage ment Information System in Nigeria

Some of the challenges of EMIS in Nigeria are discussed below;

1. **Inadequate funding**: How to fund EMIS development and maintenance is no doubt the biggest challenge facing some countries including Nigeria. This is an issue beyond the scope of the current review. Inadequate funding has prevented most schools from having well equipped computer laboratories. Most schools cannot even afford a computer for secretarial functions. The management tend to depend on some teachers' personal computers for effective job delivery. However, the Government, corporate organizations and individual's intervention should be encouraged. Government should ensure that adequate funds is allocated to the education sector so as help in the provision of EMIS facilities in schools.

2. **Inability to Integrate Data and Data Systems:** Integration is the most significant supply side challenge facing those responsible for EMIS development in Nigeria today. As observed by Shooebridge (2006), most of the integration challenge has to do with organizational constraints. Haiyan and Herstein (2003) maintained that the development and maintenance of an integrated EMIS requires a high degree of coordination and collaboration at all levels in the educational system as well as with other ministries and with external agencies. This is not an easy task as organizations are as complex as educational systems tend to resist change. More timely integration of data across units will only be possible if standard

definitions and coding schemes are developed and put in place across the system. However. To ameliorate this challenge, appropriate coding systems, programmes and skills should be developed and installed in schools to enhance effective usage.

3. **Incompetence in EMIS:** Considerable knowledge and skills are required to build, maintain and use an EMIS. Lack of available human resource capacity significantly limits EMIS development. Building human resource capacity has long been known as a critical factor in the success of EMIS development. Limited capacity for more effective use of data in management and decision making, particularly at the school levels is often cited by local educators and external evaluators as a critical factor limiting the development of EMIS in Nigeria. The Government should ensure that teachers are given the necessary trainings in EMIS to enable their development of skills in data usage.

4. **Inability to Capture Expenditure and Budget Data in EMIS:** The lack of access to data on educational expenditures or even educational budgets are often cited as a major constraint to

more informed dialogue on education policy. The lack of budget transparency has been cited as a serious limitation to wider citizen's participation in policy debates in Nigeria. Schools administrators should ensure proper financial records in their schools. Furthermore, government should ensure transparency in budget allocation to education sector.

5. **Inability to Develop Student Record-Based EMIS:** The challenge, when building and maintaining a national EMIS based on individual student's records is how to manage the complexities involved with tracking and updating student records from year to year. Maintaining national level student record based EMIS requires a level of administrative and management discipline that is often beyond the means of current administrative-bureaucratic-management systems. Most systems are not disciplined enough to sustain such systems for a long time (AEPM, 2007). Experience in other countries suggests that the decision to build an EMIS up from individual student records should be weighed carefully against existing management capacities, administrative-bureaucratic discipline and available

resources (Stephen and Cummings, 2009). To achieve this feat, the government and other education stakeholders should review their administrative structures and available resources. Where there are weaknesses, efforts should be made in strengthening them in order to achieve the goals and objectives of EMIS implementation.

6. **Students' Destructive Tendencies**: This is another challenge facing the implementation of EMIS in Nigeria. Most schools that have these gadgets and facilities are often faced with destructive attitudes when crises occur. Some of the students in collaboration with the community youths target the destruction of EMIS facilities during crises. Some of them do cart away with these gadgets, all in the name of "government property" This goes a long way of militating against the implementation of EMIS in Nigeria. However, School management should employ the services of security personnel like the Police, Vigilante groups etc in their schools to help secure the facilities against destruction.

7. **Lack of Awareness:** This goes together with negative attitude of some people. For example, in some parts of the country, when teachers hear of introduction of e-learning, it generates a lot of debate that computer was coming to replace teachers from classrooms, hence rendering them to be jobless. To overcome this, all the stakeholders must be involved from the initial stage to the implementation stage. Courses and visits to successful programs need to be planned for, to create exposure and build positive attitudes to all the stakeholders.

8. **Lack of Administration Support:** Administrators are key to success of any project. They allocate necessary resources, develop & implement policy and give necessary support to projects. In some developing countries like Nigeria, some of the top administrators lack adequate ICT skills and suffer from technophobia. They want to maintain the status quo and do very little with technology. With such category of administrators, development and implementation of EMIS becomes very challenging. This can only be achieved through offering special courses to administrators such as school heads, school members of Board of Governors, Heads of departments, among others.

9. **The Pace of Technological Innovation**: The other very big challenge in developing and implementing EMIS in Nigeria is that technological innovation outruns the pace of institutional innovations. If planners do not think and act at the speed of the technological divide, they are likely to be left behind the technology. For instance, teachers who only know how to use Dos, Diskettes in storing data, when not exposed to technology, they are likely to be technologically obsolete. A school may buy a machine but if it delays to install the software, with time, the software is likely to be outdated.

10. **Lack of Adequate Resources**: Nigeria, just like other developing countries faces a big challenge of inadequate resources which is as a result of inflation and high level of poverty. Many institutions willing to develop or implement EMIS lack adequate resources to buy all the input required, software and train personnel. This has continually seen many institutions that have implemented EMIS experience high computer, student ratio and lack of proper maintenance mechanism, for example simple repairs, buying of antivirus, paying of internet services etc. This can be solved by the administrators prioritizing EMIS as a project and involving private individuals as donors.

Recommendations

Following the identification of these challenges, it is worthy to note that EMIS is an important aspect in the Nigerian educational sector. The provision and utilization of the EMIS facilities in our schools will not just aid learning, but will go a long way in easing some educational tasks thereby, leading the sector to an international standard. Furthermore, some recommendations have been made to help in the implementation of EMIS in schools in Nigeria. They are but not limited to;

1. Seminars, conferences and workshops on EMIS should be periodically organized for relevant stakeholders in secondary education and intensive efforts should be made by stakeholders (E.g. Government, NGOs, Philanthropists) towards genuine integration of ICT policies in schools.

2. Adequate funding should be provided for EMIS development: This should be given a priority by the government of all levels and other private individuals.

3. Principals should integrate EMIS towards making appropriate decision. Schools should endeavor to create a database for

students and teachers where information can be disseminated easily through technology.

4. There should be development of structures to improve coordination at the federal level and to focus resources on creating a sustainable EMIS at the state and local level.

5. Training and retraining of manpower should be embarked on to enable effective integration of data into the data system. Skills in data usage should be developed at all levels.

6. Principals should integrate EMIS towards making appropriate decision. Schools should endeavor to create a database for students and teachers where information can be disseminated easily through technology.

7. Budget data and expenditures capturing should be done by the concerned personnel so as to enhance effective implementation of the EMIS in schools.

8. Students should be warned against destroying school property during crises. Furthermore, strict sanctions should be made to anyone found guilty of destroying EMIS facilities in schools. This will serve as a deterrent to others.

REFERENCES

AEPM (2007). Educational Management Information System: http://www.aepm.gov. pk/EmisPurpose.htm. Government of Pakistan. Accessed 12th June, 2012.

Anderson, R.E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and effect. Educational Administration Quarterly, 41(1), 49-82.

Balram, K. (2018). Role of MIS in education sector. Retrieved from www.iitms.co.in on 20/02/20.

Chapman, D. and Mahlck, K. (1997). Changing what happens in schools: Central-Level Initiatives to Improve School Practices in Chapman, D. Mahlck, I. & Smauiders, A. (1997). Government Initiatives for Improving School-Level Practice: International Institute for Educational Planning. Paris.

Essays, UK. (2018). Management information systems (MIS) in schools. Retrieved 25th February, 2020. From https://www.ukessays.com/essays/education/school-management-informationsystems-in-primary schools. php?vref

Gehlawat, M. (2014). School management information systems: An effective tool for augmenting the school practices. New Frontiers in Education, 57-64.

Haiyan, A and Herstein, J. (2003). Educational Management Information System: Integrated Data and Information and their Implications. Paper presented at the Annual Conference of Comparative and International Education Society, New Olean, LA.

Mehdi, B. & Jafar, Baikzad (2013). Management information system: Challenges and solutions. European Online Journal of National and Social Sciences. 2(3), 374-381. ISSN 1805-3602.

Moorty, S. (2019). The concept of management information systems. Bizfluent.com. retrieved from https://bizfluent.com. Retrieval date 25/11/2019

Nagar, M. A. K., Rahoo, L. A., Rehman, H. A. & Arshad, S. (2018). Education management information system in the primary schools in Sindh. A case study of Hyderabad Division. IEEE; 5th International Conference on Engineering Technologies and Applied Sciences

Obi E, (2003). Educational Management: Theory and Practice. Enugu: JAMOE Nigeria Enterprises.

Salako, C. T.(2012). Educational Management Information System in Nigeria: Challenges and the Way Forward. Journal of Research in Education and Society; Volume 3, Number 2. University of Jos Demonstration Secondary School, Jos, Nigeria. Accessed on 9th December 2022.

Shah, M. (2014). Impact of management information systems MIS on school administration: What the literature says. Procedia-Social and Behaviour Sciences 116, 2799-2804.

Shooebridge, J. (2006). Educational Management Information System: Case Studies and Lessons Learnt. A Case Study of Nigeria.

Stephen, H. and Cummings, M. (2009). Challenges of Management

Information System. http//www.ehow.com/list 6869907.Accessed on 9th December 2022

Syifa, F. (2019). Reasons why school management system is important. Retrieved from www.ukessays.com /essays/education on 21/02/2020.

Telem, M. (1999). A case of the impact of school administration computerize tion on the department head's role.

Journal of Research on Computing in Education, 31(4), 385-401

Ugwede, A. & Ugwede, D. I. (2020). Challenges of Education Management Information System on Primary School Administration in Nsukka Local Government Education Authority of Enugu State. National Journal of Educational Leadership (NJOEL) Vol. 5 No. 2, 2020 (ISSN: 2251-0303) Accessed on 9th December 2022.

Impact of Youth for Healthy Communities Initiative on Community Social Capital in Kano State

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ABSTRACT

The study assessed the impact of Youth for Healthy Communities Initiative (Y4HCI) on Community Social Capital in Kano state. The objectives of the study were to examine the level of participation of youths in the Y4HCI project and to determine the impact of social cohesion, and social network among target communities. Three research questions were answered in this work. The research adopted the ex-post facto design, where a population of 4192 of different categories of youths who participated in the Y4HCI project was used. Meanwhile, 352 subjects were used as sample. Male and female respondents were selected proportionately. Random sampling was used to select eight (8) communities out of the sixteen (16) communities that the project covered. Three research instruments were used: Y4HCI Phase 1 Project Impact on Community Social Capital Questionnaire (YICSCQ), Focus Group Discussion Guide and Interview Schedule for Mentors/Trainers. The data collected were analyzed using frequency counts and percentages, while data collected from the Focused Group Discussion and Interview were transcribed, sorted and interpreted. The findings of the study revealed that the project enjoyed very high level of participation. It also revealed that there is a significant improvement in terms of social network as strong ties and bonds have been formed between members of the target communities. Based on the findings of the study it was recommended that the peace ambassadors and pace champions should be encouraged to intensify efforts in trying to reach more youths in their various communities through the various media formed during the project. So also, those that acquired various skills during the vocational training sessions should be encouraged to organize vocational guidance for members of their communities so as to further reduce idleness, crime, and violent behaviors in the communities.

Keywords: Youth for Healthy Communities Initiative, Community Social Capital, Kano state

Introduction

In the past two decades, there has been particular interest from policy makers who see social capital as a tool for poverty reduction and economic development. According Paul (2001), increasing evidence shows that social cohesion and social capital are critical for poverty alleviation and sustainable human and economic development Increased social capital has been linked to everything from vibrant civil

society, economic efficiency, reduced crime and poverty rates, higher educational achievement and better health. In some cases, the aid channeled to physical capital such as road, irrigation, systems, and public facilities could turn to crumbling ruins in the absence of social capital that is needed to maintain it. Colletta and Cullen (2000), are of the opinion that violence weakens social capital and the fabric of a community, divides community members, undermine interpersonal trust and collective action, destroys norms and values and if not addressed can lead to more communal strife. Community Social Capital is characterized by community social networks, sense of community and social cohesion. With the understanding of these issues that are confronting the achievement of sustainable development in the world through social capital many governments, agencies and NGO's around the world have become conscious of the possible role that sports, events, and leisure activities play in reducing social barriers, subduing inter-community strife, building capacities, and helping to give a semblance of normality to an otherwise divided and intermittently violent societies. Way Forward (2006), outlines that world leaders have now realized that sport activities not only contribute to creating physical wellbeing but they can foster peace and

development and can contribute to an atmosphere of tolerance and understanding. In Kano State, Nigeria, some of the major social problems the state is facing include; drug abuse, unemployment, violent extremism, violent behaviours and different forms of criminal activities among youths. As most of the youths are not aware of the dangers of such activities and lack skills that will help them engage in productive ventures that will not only be of benefit to them but to the society in general. Although projects like LAFIAJARI and other community-reorientation programmes for youths have been undertaken to curtail these problems in the past, it still persists.

Youth for Healthy Communities Initiative Project (Y4HCI) is an NGO based in Kano State, Nigeria. The organisation implemented a project addressing Youth Developmental issues as well as peace building. Youth for Healthy Community Initiative Project (Y4HCI) is a social capital initiative that was implemented by Inclusive Community Education and Development Association (ICEADA) with support from United States of America Embassy in Nigeria. The first phase of the project spanned from September 2016 to December 2017 and officially ended in January 2018. The project is aimed at developing youths, community organization

skills, through soccer values of team work, team building and game spirit. It is also aimed at raising awareness about tolerance, conflict mitigation and resolution through soccer competition teams as well as managing and preventing drug dependence among youths to mitigate involvement in crimes and violence. Y4HCI project implementation methodology include research (informal surveys, baseline surveys and end line surveys). Community forums and capacity development (consultations, dialogue, awareness and sensitization community theatre, training, mentoring, open days), relationship building (networking, advocacy, formation of alliances), soccer competition, use of social media (peace messages through Whatsapp, Facebook, Twitter), drug counselling and vocational guidance, and women empowerment support. In view of the focus of the Y4HCI project, which emphasized social capital strengthening, it would be appropriate to assess the impact of Y4HCI project on community social capital in Kano state. On the basis of the Asset Based approach to Community Development known as ABCD, achieving sustainable community development requires efforts towards addressing community capital assets. Social capital is one of the seven capital assets of the community that facilitates its

development. The Y4HCI project addresses the issues of social capital in its targeted communities.

Research Objectives

1. To examine the level of participation of youths in Y4HCI project activities in Kano state.
2. To determine the impact of Y4HCI project in building community social network among targeted communities.
3. To examine the impact of Y4HCI on level of social cohesion among targeted communities.

Research Questions

1. What is the level of participation of youths in Y4HCI project activities in Kano state?
2. What is the impact of Y4HCI project in building community social network among targeted communities?
3. What is the impact of Y4HCI on level of social cohesion among targeted communities?

Research Methodology

Research Design

This study adopted ex-post facto research design in order to assess the impact of Y4HCI project on community social capital in Kano State. The ex-post facto design was employed in the study to ascertain whether Y4HCI project had an impact on the participants of

the project who are mainly the youths of Kano state. This type of research design could not be avoided in view of the fact that all the activities of Y4HCI Project Phase I had been completed and its impact was investigated.

Study Population, Sampling and Sample

The population of the study consists of all the youths in the 16 communities considered targets that participated in the first phase of Y4HCI project. All the 4912 participants considered as primary targets of the Y4HCI project in Kano State represents the population for this research. The population consist of Peace Mentors, Peace Ambassadors, Peace Champions, and Drug and Substance abuse Dependent Youth reached. Table 1 shows breakdown of each category considered primary targets.

Table 1: Population of the Study

Participant Category	Number
Trained Peace Mentors	32
Trained Peace Ambassadors (PA's)	800
Peace Champions reached by PA	4000
Drug and Substance Abuse Dependents Youth Reached	80
Total	4912

Source: Inclusive Community Education and Development Association. ICEADA (2018) Y4HCI Phase I Project implementation Report, Kano; ICEADA/USA Embassy April P. 16

The population of direct target beneficiaries is (4880) while 32 are the trainers and mentors under the project. A total of 352 participants were used as the sample for this research. The sample was drawn from the different categories of participants of the Y4HCI Phase (4912) which comprises of male and female respondents. The sample size for the research was drawn based on the guidelines given by Kerjice and Morgan (1970), where they stated that for a population of 4500 to 4999 people a sample size of 352 will be more appropriate

Table 2: Sample size and sample selection

S/N	Participants Category	Population	Sample Size
1	Peace Mentors	32	2
2	Peace Ambassadors	800	56
3	Peace Champions	4000	286
4	Drug and Substance Dependents Youth Reached	80	8

Total		4912	352

Multi-stage sampling procedure was adopted. The first stage involves the selection of sample size from each category of the population. Proportionate sampling method was employed as in table 2. The second stage has to do with selection of sampled communities from a total of 16 communities covered by the Y4HCI project. In this case 50% of the communities (8) were selected through a simple random sampling procedure. A list of all the 16 communities was prepared and each of the communities were marked with a specific number. Using the lottery method, the number of each community was written on a piece of paper. These pieces of papers were then mixed and put into a box and then drawn out of the box in a random manner. In this case 8 pieces of papers were randomly drawn out to represent the 16 communities that were covered during the Y4HCI Project. In selecting participants for each community snow ball sampling was used, where the contact person in the community was first informed who later contacted peace ambassadors, peace mentors and drug and substance dependent youths. The number of participants selected for each community was 44 persons per community which was arrived at using;

$$\frac{352}{8} = 44 \text{ persons per community}$$

Research Instrument

The instruments that were used for this study is researcher's developed Questionnaire, Focus Group Discussion Guide and Interview Schedule for the trainers/mentors.

Questionnaire: The questionnaire used to generate data from respondents is called Y4HCI Project Impact on Community Social Capital Questionnaire (YIOCSCQ). It contains questions pertaining to social network, social cohesion, sense of community and empowerment. The first section (A) consist of identification of the respondents and their location which is close ended in nature, while the other sections (B-G) are both closed ended and open ended with options from which sample's responses will be selected. Section B consist of the socio-demographic data of the respondents, Section C is made up of the level of participation in the project, Section D is made up of the indicators social network, section E consist of the indicators of sense of community, Section F is made up of the indicators of social cohesion, while section G is made up of questions pertaining to

empowerment and overall rating of the impact of the project around Key Project themes.

Focus Group Discussion Guide: A focused group discussion guide was used to compliment the questionnaire. The researcher chose to use the FGD to further verify the findings of the questionnaire and also discuss other issues relevant to the study that the questionnaire did not cover. The FGD discussion guide includes questions pertaining to social network, social cohesion, sense of community and empowerment which was posed to discussants in order get in depth information from other beneficiaries that did not participate in the questionnaire exercise so as to get a clear picture of the research being carried out on the impact of Y4HCI project on community social capital in Kano State.

Interview Schedule for Mentors/Trainers
The interview schedule for Mentors/trainers was an open ended type and was made up of questions pertaining to objectives of the research. Two peace mentors that trained participants of the Y4HCI project were interviewed. The interview assisted the researcher to gather in more information required for the research. The interview schedule guide covered questions covering

areas of how the participants understand soccer values and its usefulness to peace building, whether participant of the project have become familiar with drug counselling issues and discussing it with members of their community so as to prevent violent behaviors. It also covers areas of how the peace mentor scores the level of understanding of participants of the project in terms of conflict resolution methods and how to execute it in their communities.

Validation of Research Instruments
To ensure the validity of the instruments, content validity process was used to certify how valid the instrument is in relation to the objectives of the study. The draft instrument, were presented first to experts in the Faculty of Education where they ascertained appropriateness of the instrument in terms of language and content in relation to the objectives of the study. Comments and observations made were incorporated and a final copy of what was considered valid instruments for the study was prepared for testing.

Reliability of the Instruments
To determine the reliability of the instrument test and retest method was used. The questionnaire and FGD guide were administered on Panshekara community one

of the communities that the first Phase of the project covered but not selected as sample originally. The instruments were administered within an interval of two weeks. The result from the administration of the instruments was correlated using Pearson's Product Moment Correlation. A Coefficient of 0.70 was obtained which confirmed the reliability of the instruments. The reliability of the FGD guide was confirmed qualitatively in terms of consistency and clarity of responses when it was administered after intervals of two weeks in line with the research focus (objectives).

Procedure for Data Collection

A letter of introduction was collected from the Department of Adult Education and Community Development, Bayero University, kanoto the target respondents to confirm status of the researcher and the research assistants. The sampled communities were first visited to establish rapport. The consent of community leaders and the project beneficiaries were also sought before instrument administration. The questionnaires were administered personally by the researcher with the aid of two research assistants. The research assistants were trained on the basic processes needed in administration of questionnaires including content and translation. The questionnaire was administered to members of the sampled communities that participated in the Y4HCI project, where the questions were translated into Hausa for better understanding. For the focused group discussion, groups were formed in each of the sampled communities where issues related to the research in their individual communities were discussed majorly focused on the impact of Y4HCI project. This was done so as to verify the findings of the questionnaire and other relevant Issues related to the study. It was carried out by the researcher with the aid of a note taker and a voice recorder to efficiently capture the views of the focused group participants.

Method of Data Analysis

The data generated for the purpose of this study was analyzed using descriptive statistics (tables, frequency counts and percentages) with the aid of IBM SPSS Version 20. Focus Group Discussion and Interview where transcribed and key information related to the study were sorted, interpreted and discussed.

Results

Demographic Characteristics of Respondents

Table 1: Demographic Characteristics of Respondents

S/N	Variable	Option	Frequency	Percentage (%)
1.	Age	15-20	107	30.4 %
		21-25	111	31.5%
		26-30	80	22.7%
		34-35	54	15.4%
2.	Sex	Male	178	50.6%
		Female	174	49.4%
3.	Marital Status	Single	186	52.8%
		Married	166	47.2%
4.	Educational Attainment	Primary	39	11.1%
		Secondary	184	52.3%
		Tertiary	87	24.7%
		Quranic Education	38	10.8%
		Basic Literacy	4	1.1%

Data from the table (1) indicates the age, gender, marital status and educational attainment of the respondents. It shows that 107 (30.4%) of the respondents are between the ages of 15-32, 111 (31.5 %) fall between the ages of 21-25, 80 (22.7%) are between the ages of 26-30, so also 50 (15.4%) are between the ages of 31-35. Similarly, the table reveals that 178 (50.6%) of the respondents are male while 174 (49.4%) of the respondents are females. Furthermore, the table also indicates that 186 (52.8%) of the sampled respondents are single while 166 (47.2%) are married. Finally, the table indicates that 39 (11.1%) of the sampled respondents have primary school education, 184 (52.3%) have secondary school education, 87 (24.7%) have tertiary education, and 38 (10.8%) have Quranic education and 4 (1.1%) have obtained basic literacy training.

Research Question One

What is the area of participation of youths in the Y4HCI project in Kano state?

This was answered through data on areas of participation, level of participation, level of Youths attendance at project activities and number of youths reached. This research question is answered and data presented in table 2

Table 2: Areas of Participation in Y4HCI Project

Variable	Frequency	Percent (%)
Areas of participation		
1. Network Meeting	6	1.7%
2. Whatsapp and other social media group	24	6.8%
3. Community Forum Meeting	19	5.4%
4. Community Theatre Attendance	4	1.1%
5. Community Level Training Workshop	29	8.2%
6. Mentoring	6	1.7%
7. Drug Counselling	26	7.4%
8. Entrepreneur Vocational Training	50	14.2%
9. Peace Ambassadors Network	178	50.6%
10. Community Experience Weekly Check	10	2.8%
Total	**352**	**100**
Participation		
1. Very Low	11	3.1%
2. Low	39	11.1%
3. High	202	57.4%
4. Very High	100	28.4%
Total	352	100
Level of Youths Attendance at Project Activities		
1. Poor	13	3.7%
2. Good	102	29.0%
3. Very Good	132	37.6%
4. Excellent	105	29.7%
Total	**352**	**100**
Number of Youths Reached		
1. Below 10	54	15.3%
2. 10-20	116	33.0%
3. 21-30	86	24.4%
4. >30	96	27.3%
Total	352	100

Table 2 indicates that 6 (1.7%) participated in network meeting activities, 24 (6.8%) participated in whatsapp and other social media group activities, 19 (5.4%) participated in community forum meetings, 4 (1.1%) participated in community theatre attendance, 29 (8.2%) participated in community level training workshop, 6 (1.7%) participated in mentoring activities, 26 (7.4%) participated in drug counselling,

50 (14.2%) participated in entrepreneur vocational training, 178 (50.6%) participated in the peace ambassadors network, while 10 (2.8%) participated in the community experience weekly check. Furthermore descriptive analysis on the level of participation by youths in the Y4HCI Project in which 11 (3.1 %) of the respondents reported a very low level of participation in the Y4HCI project, 39 (11.1%%) of the respondents reported low level of participation in theY4HCI project, 202 (57.4%) of the respondents reported a high level of participation in the Y4HCI project and 100 (28.4%) reported a very high level of participation in the Y4HCI project. From the foregoing it can be said that the project had a high level of Youths participation with a promising tendency of efficiently achieving its objectives and positively impacting youths in different communities of Kano State. So also the descriptive analysis on the level of youths attendance in the Y4HCI project, out of 354 respondents about 13 (3.7%) of them reported poor level of youth attendance, 102 (29%) reported good level of attendance, 132 (37.6%) of the respondents reported a very good level of attendance and 105 (29.7%) of the respondents indicated that the level of youths attendance could be graded as excellent. For the number of youths reached table 4.2 reveals that 54 (15.3%) of the respondents reported that the number of youths they reached is below 10, 116 (33%) of the respondents reported that they reached between 10-20 youths, 86 (24.4%) of the respondents reported that they reached 21-30 youths and 96 (27.3%) of the respondents reported that they reached >30 people. From the foregoing it can be said that on the average the Y4HCI project enjoyed a wide coverage during and after the project there by enhancing the possibility of the key objectives of the project to be to be achieved.

Research Question Two

What is the impact of Y4HCI project in building community social network among targeted communities?

This question was answered and presented in table 3 on the indicators of social network trying to portray the impact of Y4HCI project on community social capital.

Table 3 Impact on Community Social Network as an element of Community Social Capital

Options	Poor		Good		Excellent	
	Freq	**Percent %**	**Freq**	**Percent %**	**Freq**	**Percent %**
Neighborliness	21	5.9%	195	55.4%	136	38.6%
Emotional Assistance	18	5.1%	165	46.9%	169	48.0%
Commitment	13	3.7%	152	42.9%	187	53.4%
Reciprocal Exchange	18	5.1%	151	42.9%	183	52.0%
Cooperation	9	2.6%	136	38.6%	207	58.8%

Table 3 shows that 21 (5.9%) out of 354 respondents indicated the level of neighborliness after the Y4HCI was Poor in their communities, 195 (55.4%) indicated that the level of neighborliness in their communities was Good, while 136 (38.6%) indicated that the level of neighborliness in their communities was Excellent. In terms of Emotional assistance, 18 (5.1%) of the 354 respondents indicated that the level of emotional assistance in their communities was Poor, 165 (46.9%) of the respondents indicated that the level of emotional assistance in their communities was Good, while 169 (48.0%) of the respondents indicated that the level of emotional assistance in their communities is Excellent. Furthermore, results from table 4.6 shows that out 13 (3.7%) of the 354 respondents

indicated that the level of commitment to the key objectives of the Y4HCI project by youths in their communities was Poor, 151 (42.9%) of the respondents indicated that the level commitment by youths in their communities was Good, while 183 (52%) of the respondents indicated that the level of commitment by youths in their communities was Excellent. In the same vein, 18 (5.1%) of the respondents indicated that there was a Poor level of Reciprocal exchange in their communities, 151 (42.9%) of the respondents indicate that there was a Good level of Reciprocal Exchange in their communities, while 183 (52%) of the respondents indicate that the level of Reciprocal Exchange in their communities was Excellent. In the issue of cooperation 9 (2.6%) of the respondents indicated that the level of cooperation in their

communities was poor, 136 (38.6%) indicated it was Good, while 207 (58.8%) indicted it was Excellent.

Research Question 3

What is the impact of Y4HCI project on level of social cohesion among targeted communities? This question was answered and results presented in table 4. The table provides sampled respondent's opinion on indicators of social cohesion that portray the impact of Y4HCI project on community social capital.

Table 4: Impact on Social Cohesion as an element of Community Social Capital

Options	Ineffective		Effective		Very Effective	
	Freq	Percent %	Freq	Percent %	Freq	Percent %
Civic Engagement	29	8.2%	182	51.7%	141	40.1%
Crisis Management	10	2.9%	160	45.5%	182	51.6%
Crime Control	18	5.1%	165	46.9%	169	48.0%
Interpersonal Trust	12	3.4%	153	43.8%	187	52.8%
Selflessness	23	6.5%	163	46.3%	166	47.2%

Table 4.3 above indicates that 29 (8.2%) of the respondents are of the opinion that Civic Engagement in their communities after the Y4HCI trainings is Ineffective, 182 (51.7 %) of the respondents attested to the fact that it is effective, while 141 (40.1%) are of the opinion that it is Very effective. So also, 10 (2.9%) of the respondents indicated that Crisis management in their communities was Ineffective, 160 (45.5%) are of the view that it is Effective, while 182 (51.6%) are of the opinion that it is very effective. Furthermore, 18 (5.1%) of the respondents indicated that Crime control in their communities was Poor after the Y4HCI project trainings, 165

(46.9%) indicated that it is Effective, while 169 (48%) indicated that it is Very effective. In terms of Interpersonal trust 12 (3.4%) of the respondents indicated that Interpersonal trust is Ineffective in their communities, 153 (43.8%) of the respondents are of the opinion that it is Effective, while 187 (52.8%) are of the view that it is Very effective. In the same vein, 23 (6.5%) of the respondents indicated that the level of selflessness in their communities is Ineffective, 163 (46.3%) indicated that it is Effective, while 166 (47.2%) indicated that it is Very Effective.

Discussion

The findings of the study reveal that activities of peace ambassadors network, community level training workshop, whatsapp and other social media groups and drug counselling had a high level of participation during the Y4HCI project which are key areas that the project focused on the project and tend to portray that the project had a significant impact on the communities that were covered since those key areas of the project obtained the highest percentage. As this areas have a high potential of making sure the ideals of the project is efficiently spread around many communities in Kano State. When related to the result that shows a high level of participation the project enjoyed it becomes very evident that the project had a significant impact on Youths in different communities in Kano State, with a high tendency of reducing many social problems. So also the level of attendance also shows that most of the respondents scored the level of attendance were high as such there is a high probability that the project will have a great impact on Youth in the various communities the project covered. Furthermore, findings of the study reveal that indicators of social network such as neighborliness, emotional assistance, commitment, reciprocal exchange and cooperation were rated high in terms of being

based on the positive ratings of the respondents who are participants of the project. The high ratings have the potential of creating strong ties that will connect family members and neighbors and provide a platform of helping each other with aid in times of needs. Those indicators also have a high tendency of helping each other with links to information about different youth groups and services that are available both within and outside their communities. As such it can be said that the Y4HCI is touching the lives of many Youths in different communities in Kano state both urban and rural. This also has high potential of maintaining and sustaining peaceful communities. This findings is similar to the assertions of Idris and Agbim (2015), were they stated that Social capital provides networks and links (with suppliers, customers, competitors, governments, NGOs, family members and friends) that facilitate the identification, collection and distribution of information by promoting the discovery and exploitation of opportunities. Furthermore findings of the study indicate positive index in terms the indicators of Social cohesion like Civic Engagement, Crisis Management, Crime Control, Interpersonal Trust, Selflessness, Crime Control, Interpersonal Trust and Selflessness

in terms of the ratings they got from respondents who were participant of the project. This can be linked directly to the training Youths from the different communities the project covered got on soccer values. This indicates that youths have becoming honest, accountable of their actions, responsible, humble, disciplined, committed, organized, hardworking, and behaving in a matured manner, determined, coming up with strategies of stopping crime and violent behaviors and so on in creating conducive and progressive communities Indicators of social cohesion have the capability of bringing people of different backgrounds to be accepted and accommodated in a community without being discriminated. This is in consonance with a paper on Community Security and Social Cohesion: Towards a UNDP Approach (UNDP, 2009), where a review of UNDP's Community Security Social Cohesion programmes in 13 countries of Africa, Asia, the Caribbean, Europe, Latin America and the South Pacific. The paper buttressed that a lack of social cohesion results in increased social tension, violent crime, targeting of minorities, human rights violations, and, ultimately, violent conflict. While Social cohesion is all about tolerance of, and respect for, diversity (in terms of

religion, ethnicity, economic situation, political preferences, sexuality, gender and age) - both institutionally and individually. The paper also revealed how the Community Security and Social Cohesion Programme of the UNDP in one of its assessments in Haiti has helped where there was no local institution that had the trust of the population. The UN Mission established Community Forums that brought together local authorities, representatives of the population, NGOs, representatives of public services and community associations. The Community Security Project has worked with these forums to develop violence-reduction plans on the basis of a community security assessment. The FGD conducted in some of the selected communities further confirmed the results of this study among which while discussing with one of the participants of the FGD at Madobi Musa Mukthar who revealed that prior to the arrival of Y4HCI project phase I in his community he hardly comes out to participate in any activity that could lead to the growth and development of his community eg town hall meeting, drainage cleaning, voluntary vigilante activities and so on. But after the Y4HCI training, there was a shift on his perception and now participates actively in community activities having clearly understood the beauty and importance

of sense of community where in his words he stated that "I am now a patriotic indigene of Madobi". This show that the project had a significant impact on the Youths of the communities it covered in terms of sense of community. In the same vein focused group discussion sessions at Panshekara community, one of the discussant Aliyu Sani said that in the past he doesn't interact with his neigbours because he likes to mind his business, an went further to say that he didn't even know the names of some of his neighbors. But after the implementation of the Y4HCI project in his community, his eyes became opened to see the imperativeness of neighborliness and its numerous roles in promoting interpersonal relationships, togetherness healthy and peaceful community. He also stated that many youths in his community interact with one another freely by groups with progressive mindset which are spreading the gospel of maintaining peaceful communities.

The findings of the study on empowerment reveal that many youths across the communities the Y4HCI project covered after the participant and direct beneficiaries have been trained which formed the second module of the Y4HCI training manual indicating that there is a great tendency of reduction of youths that indulge in abusing drugs. So also many of the participants of the project who also formed the respondents of this study both male and female all stated that they have acquired a particular skill ranging from leather works, bead making, making cold starch, food and nutrition, bricks and interlock and so on, where there was no respondent that did not acquire any skill which shows that most of the participants of the project have become empowered with a potential of eliminating idleness that can lead to different social vices in many communities in Kano State. This is similar to the report of Islam (2014), where he appraised Non-Governmental Organizations' Role for Social Capital and Community Empowerment in Community Development in Bangladesh using two NGO's as case study. The finding of his study reveal that NGOs' interventions, such as loan support, training, technological support, social scheme, counselling, and advocacy, play an important role in achieving social capital and community empowerment and in turn lead to community development. So also the FGD conducted at Kumbotso community where Mallama Aisha Balarabe a peace ambassador said that in their community youth restiveness, drug addiction and political thuggery use to be rampant in their community due to high rate of unemployment

among youths. But when Y4HCI trained Youths (male and female) on beads making, bricks, and interlocks, leather works, food and nutrition, cold water starch and wedding fan etc., many youths have become productive members of Kumbotso community and peace vanguards. A peace champion in the person of Kabiru Rabiu also said that the vocational skills he acquired during the Y4HCI vocational training has really helped him tremendously. It has made him become self-reliant and has also sharpen his entrepreneurial skills. Furthermore, Ibrahim Isah a peace ambassador stated that he was jobless before the Y4HCI project was implemented in his community, but after the vocational training he got on leather works he is now an employer of labour. He specifically said that he is contributing immensely to the development of his community as he makes different types of shoes and sell them at affordable prices which confirms that the project had and is still having a significant impact on the lives of youth in Kano state in terms of empowerment. . It was discovered during an interview with two peace mentors that peace ambassadors and peace champions now appreciate the roles of soccer value in helping them to accommodate, respect and tolerate one another by putting aside their social differences, which has paved way for

them to easily associate with one another freely, become productive and also to easily discuss issues regarding to prevention of violent behaviours and conflict resolution strategies with members of their communities.

Finally, findings on the overall rating of the key themes of the Y4HCI project clearly shows that the project is without any doubt touching the lives of many youths in Kano Sate in different ways and most of all creating an atmosphere of peace and tranquility which has potentials of leading to healthy communities that are void of any social disorder, as such the impact of Y4HCI project on youths in Kano State cannot be overemphasized.

Conclusion and Recommendations
Conclusion
From the level of participation the project enjoyed as shown by the finding and the result of the ratings of indicators of the elements of social capital, it can be said that the Y4HCI has brought about a revolution in the way youths in different communities reason and behave in terms of drug abuse and violent behavior. So also, there is no doubt that the project has empowered many youths through the different vocational trainings making them productive and useful to their

self's and communities. The findings from the overall rating of the key project themes has proved beyond reasonable doubt the Y4HCI project has touched lives of many youths, as such it can be concluded the project had a significant impact on Youths in the different communities it covered.

Recommendations

The following recommendations were made based on the findings of the study.

i. Peace mentors should be tasked to encourage those in charge of whatapp and other social media group to recruit more members and put more effort in making sure that there is active participation among youths in those groups that will further help in having a wider spread of the gospel of soccer values in their communities.

ii. Peace ambassadors/champions should be encouraged to carry out a routine follow up on the members of their communities and other communities that they have sensitized so as to make sure that social network indicators such as neighborliness and emotional assistance are further strengthened.

iii. Peace ambassadors/ champions should create avenues in which areas of trustworthiness and emotional connectedness will be improved on and

where the new strategies of peace building and conflict resolution they have learned are discussed. iv. Community leaders and imams should be encouraged by peace mentors to come up with a schedule and a meeting points where youths will be invited and be further sensitized and be reminded on the need to stay away from criminal activities and violent behaviours as they are indicators of social cohesion that did not show any significant improvement in terms of impact.

v. Peace champions, peace ambassadors and drug dependents that acquired various skills and became empowered during the vocational training sessions should be encourage to organize vocational guidance for other members of their communities so as to further reduce idleness and crime in their communities

REFERENCES

Abubakar, A. (2018). A Ray of Hope: Fighting Codeine And Tramadol Abuse in Kano State; *Nigeria Health Watch.*

Adler, S., P. & Kwon, S., K. (2002). Social Capital: Prospects for a new Concept. Academy of Management Review. 27:17-40

Ali, A., S. (2014). Drug Abuse and Political Thuggery among the Youth in Kano

Metropolis: A Modern Civilization or Resource Mismanagement?; *Research on Humanities and Social Sciences*. ISSN 2222-1719 (Paper) ISSN 2222-2863 (Online) Vol. 4, No.4

Amoah, P., A. & Philips, D. R. (2017). Strengthening the Referral System through Social Capital: A Qualitative Inquiry in Ghana

Anderson and Malliingan (2006). Social Capital and Community Building in Andersons, K. F, and Auspos, P. (ed). Community Change: Theories, Practice and Evidence. The Aspen Insttute.

Anis, O. and Mohamed, F. (2012). How entrepreneurs identify opportunities and access to external financing in Tunisian's microenterprises? *African Journal of Business Management, 6*(12), 4635-4647.

Anthonissen A. (2006). Ethnic Diversity in organized Sport: Development of Social Capital by Dutch immigrants. *The Cyprus Journal of Sciences.*

Anthony, G. (2009). Social Work with drugs and substance misusers. Southern hay East Exerter EXI INX; Learning matters ltd. Boisot, M. (1995). Information space: A framework for learning in organizations, institutions and culture, London, Routledge

Bourdieu, (1983). "The Forms of Capital" Pp. 241-58 in Handbook of Theory and Research for the Sociology of Education, edited by J.G. Richardson. New York: Greenwood.

Buckner, J. C., (1988). The Development of an Instrument to Measure Neighborhood Cohesion. American Journal of Community Psychology 16, no. 6 771–91.

Catano, (1993). "Sense of Community and Union Participation," Psychological Reports 72

Chavis, David, M. & Abraham, W. (1990). Sense of Community in the Urban Environment: A Catalyst for Participation and Community Development." American Journal of Community Psychology.

Chua, V. & Ser, T. E. (2017). A Study on Social Capital in Singapore; Institute of policy Studies, national Univerisity of Singapore.

Cohen, l., Manion, L. & Morison, K. (2000). Research Methods in Education. London: Routledge Falmer

Coleman, J. (1988). Social capital in the creation of human capital. American Journal of sociology 94, p 95-120. Debate, 12(4), 781-806.

Colletta, N.J. & Cullen, M. L. (2002). The Nexus between Violent Conflict, Social Capital and Social Cohesion: Case Studies from Cambodia and Rwanda, Social Capital Working Paper 23.

Cooper, A. C., Gimeno-Gascon, F. J. & Woo, C. Y. (1994). "Initial Human and Financial capital as Predicators of New Venture Performance "Journal of Business Venturing, 9: 371-295

European Commission (2017). Youth, Empowered and Safe; Youth-Driven Community Empowerment in North-East Nigeria.

Fajonyomi and Fooson (2003). Towards a Good Proposal; Ango international publishing Abeokuta, Nigeria

Ferragina, E. (2010). Social Capital and Equality: Tocqueville's legacy. The Tocqueville Review, XXXI, 73–98

Fukuyama, F. (1992). The End of History and the Last Man, London, Penguin Glynn, "Psychological Sense of Community,"

Gholam, M.R. & Jalilvand, M.R. (2012). The Effect Of Training On Promoting Entrepreneurial Culture: Evidence from Iran. *Journal of Basic and Applied Scientific*

Research, 2(10), 10025-10030.

Glynn, T. J. (1981). Physiological Sense of Community: Measurement and Application. Human Relations, 34, 780-818 *Granovetter, M. S. (1973). "The Strength of Weak Ties". American Journal of Sociology. 78 (6): 1360–1380.*

Hazleton V. & Kennan, W. (2000). Social capital: Reconceptualizing the Bottom Line. Corporate Communications: An International Journal, 5 (2), 81-86.

Herbert, S. J. B. (1997). Community Based Initiatives: Gateways to opportunities.

Ibrahim, M., B. (2016). Participation in Decision Making, Social capital and Sustainability of Watershed Usage Among Peri-urban Agricultural Farmers of Kwadon, Gombe State, Nigeria. A thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia.

Idris, A., J. & Agbim K., C. (2015). Effect Of Social Capital on Poverty Alleviation: A Study of Women Entrepreneurs in Nasarawa State, Nigeria.

Idris, U. A. (2016). Social Capital and Community Change: An Example of Community Response to Poverty Reduction in Parts of Kano State in Nigeria; Nigerian Journal of Community Learning and Development. ISSN 2545 5087

Ijaya, M., A., Sakariyau, .O., B., Dauda, C., K., Paiko., I. I. and Zubairu , U., M. (2012). Social Capita and Poverty Reduction in Nigeria: A Case Study of Minna Metropolis. International journal of Business and Social Science International Narcotics Control Board Report (2013). Vienna; International Narcotics Control Board Publication

Islam. M., R. (2014). Social Capital and Community Empowerment in Community Development: Experience from Bangladesh; Asian Social Work and Policy Review 8 (2014) 261–274.

Kerlinger, F. N. (1986). Foundations of behavioral research (3rd. Ed0. Fort. W, tX; holt, Rinehart, and Winston.

Kithae, P.P., Nyaga, J.G. & Kimani, J.G. (2013). Role of microfinance factors on thesustainability of women managed micro andsmall enterprises (MSEs) in Kenya. International NGO Journal, 8(4), 94-99

Lawal, J. O. Omonona, b. T., Ajani, O. I. & Oni, O. A. (2009). Effect of Social Capital on Credit Access Among Cocoa Farming Households in Osun State, Nigeria. Agricultural Gholam, M.R. & Jalilvand, M.R. (2012). The effect of training on promoting entrepreneurial culture: Evidence from Iran.Journal of Basic and Applied Scientific Research, 2(10), 10025-10030.eJournal 4(4), 184-1919

McMillian, D. W., & Chavis, D.M. (1986). Sense of Community: A definition and theory, Journal of Community Phychology, 14, 6-33.

National Bureau of Statistics (2017). Labour Force Statistics – Volume I: Unemployment and Under employment Report

Ndung'u, W. (2006).The Role of Ngo,s in Conflict Prevention Crucial; Kenya Times May 2, 2006. Extracted from https://www.globalpolicy.org/compo nent/content/article/176/31296.html

Nega, F., Mathijs, E., Deckers, J. & Tollens, E. (2009). Gender, Social Capital and Empowerment in northern Ethiopia; Mekelle University. MPRA Paper No. 24629,

Nugent, P. S (2013). Survey Research. Extracted from: https://psychology dictionary.org/survey-research.

Ogundele, J.J.K., Akingbade, W.A & Akinlabi,H.B. (2012). Entrepreneur ship *Training* And Education As Strategic Tools For Poverty Alleviation In Nigeria. *American International Journal of Contemporary Research.*

Okunmadewa, Yusuf, S., A. and Omonona, B., T. (2007). Effect of Social Capital on Rural Poverty in Nigeria. Pakistan Journal of Social Sciences.4:3331-339

Paul, K. (2001). Social Capital, Participation and Sustainable Development: Recent examples of Conclusive Consultation in New Zealand. International Community Development Project.

Putnam, R.D (1993b). "The Prosperous Community: Social Capital and Public Life." The American Prospect 13:35-42.

Putnam & Robert, D. (1993). Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press, Princeton.

Putnam, R.D (2000). Bowling Alone: The Collapse and Revival of American Community. New York, NY: Simon & Schuster.

Putnam, R.D (1996). "Who Killed Civic America?" The American Prospect 7:66-72.

Salman, K. K. & Ekong, M. E. (2015). Effect of the use of Social Capital on Poverty. Evidence from Fish Farming Household in Akwa Ibom State, Nigeria. Global Journal of Human-Social Science.

Samuel, W. (2012). The Role of Social Capital in Community Based Urban Solid Waste Management: Case Studies From Ibadan Metropolis, Nigeria: A Ph.D Thesis Submitted to the University of Waterloo.

Simon, M. K. & Goes, J. (2013). Dissertation and Scholarly Research: Recipes for Success. Seatle, WA: Dissertation Success LLCs.

Taga, A. A. (2013). Social capital and poverty alleviation: Some qualitative evidences from Lahore district. *International Journal of Basics and Applied Sciences, 1*(3), 681- 693.

Tsauni, A., M. and Danlami, A. H. (2016). Social Capital Formation and Implication for the Achievement of Fadama II Project Development in Kano State. Hyperion Economic Journal

UNDP (2009). Community Security and Social Cohesion; Towards a UNDP Approach. United Nations Development Programme Bureau for Crisis Prevention and Recovery 11-13 Chemin des Anémones 1219 Châtelaine Geneva, Switzerland.

Unger, D. G. and Abraham, W. (1985). "The Importance of Neighbors: The Social, Cognitive and Affective Components of Neighboring." American Journal of Community Psychology 13, no. 2 139–6.

Wei, Y. D. & Simon, C. A. (2017). Social Capital, Race, and Income Inequality in the United States. World Bank (2002). Bosna and Herzegovina; Local Level Institutions and Social Capital Study.

World Bank (2002). Empowerment and Poverty Reduction: A Sourcebook

Yusuf. S. A. (2008). Social Capital and Household Welfare in Kwara State Nigeria.

Zimmerman, (2000). Empowerment Theory; "Empowerment and Utilization through Participatory Evaluation: Family Resource Organizations, Community,"

Information Literacy and Democratic Process in Bauchi State, Nigeria

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ABSTRACT

The paper examines the role of information literacy in the just concluded electoral process in Nigeria. Information has been a strong instrument that plays a great role in changing the lives of citizenry. The paper focuses on information literacy from a competency based set of standards being more holistic and reflects current trends in information literacy. Access to information has helped improve the lives of people who have been disenfranchised due to selection of wrong candidates in the electoral process. Social media has played a vital role in the Nigeria's electoral process recently. The wide spread information through social media had influence the choice of a number of candidates. University students were used as population of the study. The population comprises of 190 undergraduate students of two public universities in Bauchi State i.e. Abubakar Tafawa Balewa University and Bauchi State University, Gadau. A total of 120 samples was drawn based on sample size determinations of Krejcie and Morgan. Therefore, 60 respondents each were drawn from the above two universities. The data was analyzed using descriptive statistics. The result shows that social media has made a significant impact in influencing election outcome through information literacy, the result also help electorates gain critical thinking and applied skills in selecting candidates of their choice, and instill a sense of responsibility in electing the best candidate that will make life better and a difference in the world around them. It is concluded that information literacy is vital in the democratic process in Nigeria.

Keywords: Election, electorates, information, social change, social media,

Introduction

Information literacy aimed at empowering citizens for participatory democracy, particularly in developing countries (Hikwa, 2007; Johanna, 2017). The transformative power of information literacy is its ability to empower people with the capacity to make informed decisions; definitions of the concept which highlight the user's ability to learn how to learn emphasize its importance as a valuable resource for the exercise of responsible citizenship in a democratic society (Favier, 2010; Secker, 2018). Access to quality information empowers citizens to make informed decisions and encourage participation in the democratic

process of communities. Globally, information literacy has also received recognition, the United Nations Educational Scientific and Cultural Organisation's (UNESCO) Prague Declaration (2003) has reaffirmed its importance as a pre-requisite for effective participation in the information society and as part of the basic human right for developing lifelong learning.

The growing organization of information sources into digital forms and the emergence of a generation of people with relatively strong digital literacies, information literacy and the allied concept of the information society have become vital tools for empowering people with the needed skills for socio-economic development. Progressive economies are therefore capitalizing on these to set up institutions, organisations and policies that strengthen democratic processes for good governance in their countries (Hikwa, 2007; Secker, 2018). In Nigeria, changes in the information landscape in terms of the volume, format, content and the complexity of its delivery mechanisms have been significant. Increasing innovations in online information tools and resources have created a greater need for information literacy skills to enable users make informed choices for decision making (Owoeye & Abolarinwa, 2016). Consequently, improving information

literacy levels beyond the educational sector has become an important factor for improved national socio-economic outcomes which are essential for informed political participation and civic engagement in the democratic process.

Nigeria is a federal republic with a democratic system of government. The democratic process in Nigeria is based on the constitution of the Federal Republic of Nigeria, which was adopted in 1999. The constitution guarantees the fundamental rights of citizens, including the right to vote, the right to free speech, and the right to assembly (Amaechi, 2020). The democratic process in Nigeria is divided into three branches of government: the executive, the legislature, and the judiciary. Firstly, the executive branch is headed by the president, who is elected by popular vote for a four-year term. The president appoints cabinet ministers, and other top officials. Secondly, the legislature is bicameral, consisting of the Senate and the House of Representatives. The Senate has 109 members, three from each state. The House of Representatives has 360 members, with each state having at least one representative and additional representatives based on population. And lastly, the judiciary is headed by the Supreme Court, which has the power to interpret the constitution and to

rule on the legality of laws and actions of the government (Animashaun, 2021).

The democratic process in Nigeria is still evolving, and there are challenges to its full implementation. These challenges include corruption, voter apathy, and the influence of money in politics. And still there are challenges in the areas of leadership, transparency, and accountability which have hindered good governance and participatory democracy in the political system (Igali, 2014). However, there have been significant improvements in recent years, and Nigeria is considered to be a transitioning democracy.

For democracy to succeed, it is imperative that governmental institutions are strengthened to facilitate the democratic process as well as encourage participation by the citizenry. In the past few years, electoral reforms in governmental institutions have inspired improved participation by the Nigerian populace in political decisions and other policies that directly affect their lives. This was evidenced in the 2015 national elections which recorded over 50 percent participation in the electoral process as compared to previous elections; this was transformative in the nation's history (The Centre for Public Policy Alternatives, 2015). The implication of this development is that Nigerians are becoming more aware of their

civic rights and responsibilities, which is an indication of the need for greater participation and inclusion in the democratic process.

The political dimension of information literacy requires active participation by citizens in identifying, accessing, evaluating and using political information in all levels of governance which would influence the selection of credible leaders in the country (Attama & Igwe, 2015).

In view of the above the paper will examine the critical role of information literacy for social change in the just concluded electoral process in Bauchi State.

Objectives of the Study

This paper seeks to:

i.   Examines the role of information literacy in the just concluded electoral process in Nigeria.

ii. Analyse the importance of information literacy in changing the lives of citizenry based on competency set of standards

iii. Identify how information through social media assisted in improving the lives of people disenfranchised due to selection of wrong candidates.

Research Questions

i. What are the role of information literacy in the just concluded electoral process in Nigeria?

ii. What are the importance of information literacy in changing the lives of citizenry based on competency set of standards?

iii. How does information through social media assisted in improving the lives of people disenfranchised due to selection of wrong candidates.

Review of Related Literature

A vast amount of research in information literacy has been developed since its emergence. The central position articulated by some of the most important documents in information literacy is the concern with the individual's skills development through lifelong learning (American Library Association (ALA) Presidential Committee on Information Literacy Final Report, 1989; Association of College and Research Libraries (ACRL), Information Literacy Competency Standards for Higher Education, 2000; Framework for Information Literacy for Higher Education, 2015; The Alexandria Declaration (International Federation of Library Associations and Institutions (IFLA), 2015). The two concepts of information literacy and lifelong learning are considered of great

value in developing people's critical thinking and creative abilities that foster active participation on issues of democracy and governance. It is in this regard that studies on a critical approach towards information literacy as a tool for public empowerment, democratic participation and national progress is investigated by various researchers.

Libraries have long been established as institutions for promoting democracy by ensuring access and equitable distribution of information resources (Maguire, 2012). With the increasing popularity of democratic forms of governance, this role has further been emphasised by the need for them to provide quality information services for the collective benefit of their clientele. According to Hikwa (2007), the value of critical information literacy to good governance is the applicability of information services to national development. This is because the provision of quality information sources is the basis for good decision making by citizens as it can serve as a tool for empowering citizens with the needed competencies to implement national plans for collective development. Hence, where information is viewed as a valued commodity in a democratic process, the role of libraries in equipping citizens

with critical information literacy skills is highly encouraged for capacity building and sustainable development in a country (Sturges & Gastinger, 2010).

Lloyd, Lipu and Kennan (2010) in their study point out that active participation in all aspects of socio-economic and political life by citizens is one of the defining principles of an inclusive society particularly in a democratic setting. They argued that the ability to build peoples capacity to participate in the governance of their communities require a collaborative approach in which libraries as information providers and other governmental institutions can provide quality access to information, technological facilities as well as training that would motivate and enable people to develop the ability to understand how information is effectively used to avoid social exclusion and marginalization in the democratic process. Limited information access and information skills often inhibit the capacity of individuals to fully participate in democratic processes and make informed decisions. Through critical information literacy, people can be provided with the potential to be informed on the critical and reflective use of information resources to contribute effectively in how they are

governed in their communities.

In Nigeria, studies in information literacy by LIS researchers have examined different aspects of the concept as used by practitioners in various fields, for example, bankers (Amusa, Bello, Omotoso & Osunrinade, 2016), farmers (Sokoya, Alabi & Fagbola, 2014), religious groups (Phillip, 2013), political groups, Taiwo (2015), lawyers (Lawal, 2013), and so on. However, Attama and Igwe's (2015) article specifically provided an in-depth analysis of the dimensions of information literacy, particularly critical information literacy, in various contexts in Nigeria and the expected responsibilities of librarians in the multi-literacy era. According to the authors, the political dimension of information literacy requires active participation by citizens in identifying, accessing, evaluating and using political information in all levels of governance which could influence the selection of credible leaders in the country. They argued however, that this conception of information literacy can only be actualized through effective collaboration between the government, educational institutions and civil society organizations in developing pedagogies that promote user engagement with the cultural contexts of information literacy in the respective

communities where information is created and interpreted for the purpose of political empowerment.

Methodology

Survey research design was employed for the study. Surveys are useful for descriptive and exploratory purposes; and are essential in obtaining information on characteristics, opinions, attitudes or previous experiences of group(s) of people (Zechmeister & Zechmeister 2006). A simple random sampling technic was employed in selecting the respondents. Questionnaire instrument was used in generating the data. The population comprises of 190 undergraduate students of two public universities in Bauchi State i.e. Abubakar Tafawa Balewa University and Bauchi State University, Gadau. A total of 120 samples was drawn based on sample size determinations of Krejcie and Morgan. Therefore, 60 respondents each were drawn from the above two universities. The questionnaire has two sections; section one involves respondents' demographic information. While section two is made up of information that bother on the research topic. The stratified random sampling technique was used for the administration of the questionnaires and all the questionnaires were returned by the respondents. The instrument was validated by the experts in the area of measurement and evaluation to ensure content validity. Meanwhile the reliability of the instrument was based on the Cronbach Alpha which produced reliability co-efficient of 0.82. The result showed that the instrument was good enough to be used. The data was analyzed using descriptive statistics. Data collected were subjected to simple frequency count and percentage. Similarly, chi-squire statistical tools were used to find out impact of information literacy on democratic process.

Results and Analysis

The data collected from the respondent questionnaires were analysed using simple percentage. The demographic characteristics of the respondents such as age, gender, religion, marital status, educational qualification of the respondents. Below is Table 1.1 which indicates the age of the respondents:

Table 1.1: Frequency and Percentage Distribution of Respondents According to Age

Age	Frequency	Percentage (%)
20 - 29 years	44	37
30 - 39 years	36	30
40 – 49 years	22	18
50 years - Above	18	15
Total	120	100

Field work: 2021

Table 1.1 shows that out of the 120 respondents, 44 (37%) respondents belonged to the age group of 20 to 29 years. While, 36 (30%) of them were aged between 30 to 39 years of age and 22 (18%) of the respondents are of the age 40 to 49 years. Also, 18 (15%) respondents constitute 50 years and above. Therefore, the bulk of the respondents is between the ages of 20 to 29 years. This indicates that the majority of the respondents are at their younger age.

Table 1.2: Frequency and Percentage Distribution of Respondents According to Gender

Gender	Frequency	Percentage (%)
Male	77	64
Female	43	36
Total	120	100

Field work: 2021

Table 1.2 above indicates that out of the 120 respondents, 77 (64%) of them are males, while 43 (36%) respondents were females. This shows that majority of the respondent are males.

Table 1.3: Frequency and Percentage Distribution of Respondents According to Marital Status

Marital Status	Frequency	Percentage (%)
Single	72	60
Married	36	30
Widow/Widower	12	10
Total	120	100

Field work: 2021

Table 1.3 above indicates that out of the 120 respondents, 72 (60%) of them are single, while 36 (30%) respondents were married.

However, 12 (10%) of the respondents are widows. This shows that the majority of the respondents are single.

Table 1.4: Freq and Percent Distribution of Respondents According to Educational Status

Educational Status	Frequency	Percentage (%)
Under Graduate Students	120	100
Post Graduate Students	00	00
Total	120	100

Field work: 2021

Table 1.4 above indicates that 120 (100%) respondents are under graduate students, while none are post graduate students

The role of information literacy in the just concluded electoral process in Nigeria

Table 1.5: Does information literacy influence election outcome?

Options	Frequency	Percentage (%)
Yes	92	77
No	28	23
Total	120	100

Field work: 2021

Table 1.5 above indicates that 92 (77%) respondents agreed that information literacy through social media influence election

outcome, while 28 (23%) respondents say no to the question (i.e. they did not agree.

Table 1.6: Does people gain critical thinking and applied skills in selecting candidates of their choice through information literacy?

Options	Frequency	Percentage (%)
Yes	88	73
No	32	27
Total	120	100

Field work: 2021

Table 1.6 above indicates that 88 (73%) respondents agreed that people gain critical thinking and applied skills in selecting respondents say no to the question (i.e. they did not agree).

candidates of their choice through information literacy, while 32 (27%)

Table 1.7: Does information literacy instill a sense of responsibility in electing the best candidate?

Options	Frequency	Percentage (%)
Yes	120	100
No	00	00
Total	120	100

Field work: 2021

Table 1.7 above indicates that all 120 (100%) respondents agreed that information literacy instill a sense of responsibility in electing the best candidate that will make life better and a difference in the world around them, while none of the respondents say no to the question.

Table 1.8: Importance of information literacy

Importance	Frequency	Percentage (%)
Changing the lives of citizenry	96	80
No change in the lives of citizenry	24	20
Total	120	100

Field work: 2021

Table 1.8 above indicates that 96 (80%) respondents believed that the importance of information literacy is changing the lives of citizenry. While, 24(20) respondents believed that No change occurred in the lives of citizenry

Table 1.9: Does social media assist in improving the lives of people disenfranchised?

Option	Frequency	Percentage (%)
Yes	112	93
No	08	07
Total	120	100

Field work: 2021

Table 1.9 above indicates that 112 (93%) respondents agreed that social media assist in improving the lives of people disenfranchised due to selection of wrong candidates, while only 08 (07%) respondents say no to the question.

Discussion

The findings of the study are based on the data collected from the respondents. The data collected from the respondent questionnaires were analysed using simple percentage. The discussion covers the socioeconomic and

demographic characteristics of the respondents as well as the role of information literacy in the democratization process. The study revealed that information literacy influence election outcome. This correspond with the findings of Democratic Transition in Nigeria (2023), which stated that there is a high level of illiteracy and poverty in Nigeria. Many people lack the information literacy skills they need to participate effectively in the democratic process. This can make them more susceptible to misinformation and manipulation, and it can make it difficult for them to make informed choices about who to vote for. Similarly, the study revealed that people gain critical thinking and applied skills in selecting candidates of their choice through information literacy. This coincide with the findings of Amaechi (2020) which mention that people can gain critical thinking and applied skills through information literacy by accessing, evaluating, and using information effectively. Likewise, the study exposed that information literacy instill a sense of responsibility in electing the best candidate. This is akin with the findings of Anku (2023) which exposed that information literacy instills a sense of responsibility in electing the best candidate by providing individuals with the skills to access to accurate and comprehensive information

about candidates, their platforms, and their records. As well as assess the credibility of candidates' statements and campaign promises, enabling them to separate fact from fiction. Likewise, verifying the accuracy of information presented by candidates and campaigns should be promoted. This fact-checking helps voters identify misleading or false claims.

Moreover, the study find out that social media assist in improving the lives of people disenfranchised. This correspond with the findings of Animashaun (2022) who opined that social media improve the lives of people who are disenfranchised or marginalized providing a voice to individuals and communities that may not have had the opportunity to be heard through traditional media channels. Also social media enables disenfranchised individuals to connect with others who share similar experiences or challenges. Therefore, Social media serves as a powerful tool for advocacy and activism. Disenfranchised groups can use these platforms to raise awareness about their issues, organize protests, and mobilize for social and political change. In the same direction, Social media can bridge this gap by providing a platform for sharing educational content, news, and resources related to health, legal rights and employment.

Conclusion

The paper highlight the value of information literacy as an important factor in the exercise of democratic process in Bauchi State. Access to information literacy has assisted in improving the lives of people. In the same direction, social media has played an important role in the Nigeria's electoral process, in order to encourage political participation by citizens.

Similarly, the paper emphasized the importance of information literacy as an important policy agenda for providing access to quality information sources for informed decision making in the electoral process in Nigeria in general.

REFERENCES

Amaechi, C. M. (2020), Democratization in Nigeria: Nation Building Versus State Building. *International Journal of Development and Management Review (INJODEMAR)*. 5 (1) June, 2010

Amusa, O. I., Bello, T. O., Omotoso, A. O., & Osunrinade, O. A. (2016). Influence of information literacy skills on information needs and use among banking personnel in Ogun State, Nigeria. *Library Philosophy and Practice (e-journal).* Paper 1389. Retrieved from: http://digital commons.unl. edu/libphilprac/1389/

Analysis of the placement exercise. *International Journal of Legal Information*, *41* (3), 283-308.

Animashaun, K (2021). Regime Character, Electoral Crisis and Prospects of Electoral Reform in Nigeria. *Journal of Nigeria Studies*. 1 (1) pp 1-33

Association of College and Research Libraries (ACRL). (2000). Informa tion literacy competency standards for higher education. Retrieved from: *http://www.ala.org /acrl/stan dard/informationliteracycompeten cy*

Attama, R. O. & Igwe, K.N. (2015). Dimensions of information literacy and the expectations from librarians in diverse environments in Nigeria. *International Journal of Learning & Development,* 5, (2), 250-267. Retrieved from: http://dx.doi.org/10.5296/ ijld.v5i2.7608

Favier, L. (2010). Information literacy as a resource for citizenship: An interdisciplinary issue for information studies. 16th international conference of the City *Institute of Information and*

Library Science, 2010, France. Retrieved from: https://halshs.archives-ouvertes.fr/halshs- 00566106

Hikwa, L. (2007). Governance and information literacy: Pillars of sustainable development in southern Africa. Paper presented at a colloquium on information literacy and lifelong learning, Addis Ababa, Ethiopia, 29 - 30 April, 2007. Retrieved from: http://hdl.handle. net/10855/9454"

IFLA/UNESCO *guidelines for development/ [International Federation of Library Association and Institution]*. (2001). Munchen: K.G. Saur.

International Federation of Library Associations and Institutions (IFLA) (2015) Beacons of the information society: *The Alexandria procla mation on information literacy and lifelong learning.* Retrieved from: https://www.ifla. org/publications/ beacons-of-the-information-society-the-alexandria-proclamation-on-information-literacy

Johanna, R. E. (2017). Libraries, democracy, information literacy, and citizenship. *Journal of Docu mentation, 73*(5), 1010-1033.

Lloyd, A., Lipu, S., & Kennan, M. A. (2010). On becoming citizens: Examining social inclusion from an information perspective. *Australian Academic & Research Libraries*, *41* (1), 42-53.

Maguire, B. (2012). Information literacy: Information sharing, democracy and life-long learning.

Owoeye, J., & Abolarinwa, S. T. (2016). The role of libraries in the development and implementation

of national information policy in Nigeria. *Information and Knowledge Management, 6* (5), 10-18.

Secker, J. (2018). The revised CILIP definition of information literacy. *Journal of Information Literacy, 12* (1), 156–158. Retrieved from: http: //dx.doi.org/10.11645/12.1.2454

Sokoya, A. A., Alabi, A. O., & Fagbola, B. O. (2014). Farmers' informa tion literacy and awareness towards agricultural produce and food security: FADAMA III programs in Osun state Nigeria. Retrieved from: http://creative commons.org/licenses/by/3.0/

Taiwo, A. (2015). Media literacy and political campaigns in Nigeria. In: Singh, J., Grizzle, A., Yee, S. J., & Culver, S. H. (Eds.). *Media and information literacy for the sustainable development goals*. (pp. 250-262). Oslo: Nordicom.

The Centre for Public Policy Alternatives (CPPA). (2015). 2015 Presidential election outcome: Analyses and implications. Retrieved from: http://cpparesearch.org/wp-content/uploads/2015/04/2015-Presidential-Election-Outcome_-analyses-and-implications_FINAL-REVISED.pdf

The Democratic Transition in Nigeria. *https://apcentral.collegeboard.org/courses/ap-comparative-government-and-politics/classroom-resources/democratic-transition-nigeria.* Access on 5th September, 2023.

UNESCO (2003). The Prague declaration: Towards an information literate society. Retrieved from:http: //www. Unesco.Org/New/Filea dmin/MULTIMEDIA/HQ/CI/CI/P df/Praguedeclaratio n.Pdf

Library Resources Utilization as Determinant of Undergraduate Satisfaction in Ekiti State University Library, Nigeria

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ABSTRACT

The study surveyed Library Resources Utilization as determinant of undergraduate satisfaction in Ekiti State University Library Nigeria. The main purpose of the study is to find out the level of utilization of the library resources and its satisfaction by undergraduate students. The research design used for this study is the descriptive research design of the survey type and the instrument used was structured questionnaire administered to students in the university. The sample targeted 700 undergraduate students and from which six hundred and fifty eight (658) copies of questionnaire were returned and found useable/fit for the analysis representing a response rate of 94%. The study revealed that the undergraduates were highly satisfied with books, reference materials and library personnel, while averagely satisfied with journals and guides. The study also revealed the undergraduates were slightly satisfied with library resources such as lecture series, Government Publications, Magazines, Computers, internet facilities, Newspapers, Electronic gadgets, Databases, Bulletins, Audio Visual Materials. The study recommend on the need for the library management to improve on the provision of current and up-to-date information resources in Ekiti state university library: especially audio visual, multimedia, database, internet facilities, Newspapers, Magazines and bulletins. The university library management should make all information resources accessible to all Undergraduates and all categories of users to guide against poor satisfaction that may arose from underutilization of any information Resources in the Ekiti state university library.

*Keywords***:** *Library resources,* resource utilization, undergraduate satisfaction

Introduction

University libraries are usually established simultaneously with the university to fulfil the mission and vision of their parent institutions which is study, teaching, research and community services. The university library is central to the university community due to the fact that all academic information could be obtained from the library through physical or electronic means and other information which members of the university community may need.

The university libraries make available information from different sources in print and non- print format that aid lecturers in keeping abreast of development in their fields, they provide Library facilities necessary for the success of formal academic programs and instructions. They open the doors to the world of books that lie beyond the borders of individuals' field of

specialization and bring students and schools together under the same condition which encourage reading for pleasure, self-discovery, personal growth and sharpening of the intellectual curiosity of students.

Furthermore, the university libraries train students to work on their own and to participate in Intellectual discussions vital to the university as a community. The university libraries preserve the information resources in print and non-print format, so that they are protected from damage. This is done by arranging the information resources skilfully on the shelves, databases and the internet. Access is provided to the information resources through physical catalogue and the On-line Public Access Catalogue (OPAC).

Library resources is one of the most important reasons for the establishment of academic libraries. Without information resources a library can hardly be addressed as a library. Yeboah et al (2018) states that a library is a collection of both printed, non-printed materials and other information materials which are well organized, with competent staff that can assist users to meet their information needs. Abubakari, Dawuda and Abubakari (2019) further described the library as the nerve centre of an educational institution and a place where information is provided to serve all patrons

irrespective of their ages, political and ethical background, religion, sex, etc. The primary objective of libraries is to satisfy users information needs, Tiemo and Ateboh (2016) defined users' satisfaction as the means with which users determine that a product or service meet their required needs and expectations with evolving technological innovations and the variety and abundance of information that is becoming available to information users. Student expectations of library services in academic institution also vary, making it imperative to better understand and define specific student needs and providing the type and level of service that meets them. The element of quality library service is "the incorporation of users' personal needs and expectations into the development of programs and service. In an academic library where there are sufficient resources in which the undergraduates have more than enough resources to use, easily accessible, up-dated guides, skilful and approachable staff and current awareness service always available; these qualities could lead to high utilization of library resources.

Users' satisfaction is significant in academic libraries: the focus of every academic library is to satisfy the users which include the undergraduates. Satisfaction is when users are contented

with Library resources and even recommend it to others for use. The quantity of information in the library and the quality of library services available to access library information are factors which could contribute to undergraduate satisfaction. Library with large collections in which undergraduates can get what they want with the least effort, would led to users satisfaction. The adequacy in the organization of library resources in which undergraduates can walk into the library and locate any material they want without stress could make them to be satisfied with the library. The up-dating of library resources accessing tools in which, each time they want to use the library; it could adequately guide them, could lead to undergraduate satisfaction. The skilfulness of library staff and their readiness to assist the undergraduates and notify them of the resources available could lead to users' satisfaction.

Users' satisfaction is one of the prominent ways to measure library effectiveness. Iwhiwhu and Okorodu (2012) observed that the satisfaction of users is a function of the quantity of information products and the quality of information system. Thakira (2007) described some factors which contribute to users satisfaction. These factors include: availability of up-dated resources, library resources accessibility, and assistance from library staff.

The utilization of library resource is an indication of undergraduate and other users' satisfaction. A situation where hardly can they get the information they need either because the information resources are not properly organized to make them accessible or no staff to guide them to the use of information resources, the undergraduates and other users may not like to come to the library. This situation will bring about low patronage of the library which is an indication of undergraduates and other users' dissatisfaction. Every academic library should put all necessary services in place, so as to attract the undergraduate to make adequate use of the library.

Statement of the Problem

The focus of all academic libraries should be the provision of quality resources to meet the need of academic environment, for quality research and promotion of high academic standard among the undergraduates and other library users. However, literature have established that many libraries have failed to satisfy the academic needs of the undergraduates. This could be traced to insufficient library resources, poor organization and accessibility of library resources, unskilled

and unfriendly staff. These factors are enough for poor utilization and undergraduate's dissatisfaction. This study was carried out in Ekiti state university library to find out how library resources utilization correlates with undergraduates satisfaction.

Objectives of the Study

The general objective of the study is to investigate the influence of library resources utilization on undergraduate satisfaction in Ekiti State university library, Nigeria.

The specific objectives are to:

1. Ascertain the library resources utilized by undergraduate in Ekiti state university library

2. Examine the influence of library resources utilization on undergraduate satisfaction in Ekiti State University library.

Research Questions

To achieve the identified objectives of the study, the following research questions were raise:

1. What are the resources utilized by undergraduates students in Ekiti state university Library.

2. What is the level of undergraduate satisfaction of library resources in Ekiti state university library?

Hypothesis Testing

H_0: Library resources utilization has no significant influence on undergraduates Satisfaction.

H_1: Library resources utilization has significant influence on undergraduates Satisfaction.

Review of Related Literature

Josiah, Idachaba and Eruvwe (2022) examined utilization of the library and its effect on academic achievement of undergraduates in selected university libraries in South-South, Nigeria. A descriptive survey method was adopted for the study. Three research questions were formulated to guide the study. The study revealed that learning, research, preparation for exams are the benefit of utilizing the university libraries. Factors impeding the utilization of the library includes, obsoletes books, poor infrastructure, lack of proper orientation to library usage and as well as erratic power supply. Strategies to improve on utilization of the library to aid academic achievement are provision of current books; infrastructures, constant power supply as well as library orientation to under-graduates.

Tom-George (2022) investigated the relationship between library services provision and use of resources by undergraduate students in federal university

libraries, South-South Nigeria. The findings of the study showed that that there is significant relationship between user education services and utilization of resources by undergraduate students in Federal University libraries in South-South geo-political region of Nigeria [(P=0.0000; p<0.05)]; further findings showed that that there is significant relationship between provision of internet services and undergraduates' utilization of resources in Federal University libraries in South-South geo-political region of Nigeria [(P=0.0000; p<0.05)]. Based on the findings, it was concluded that provision of library services such as user education services, internet services, reprographic services and current awareness services relates significantly to the utilization of library resources by undergraduates in Federal University Libraries in South-South, Nigeria.

Adesanya and Oluwafemi (2021) investigated students' satisfaction on the utilisation of library resources in university affiliated programmes in federal colleges of education in south-west, Nigeria. This is to reveal that effective use of library material will bring users satisfaction and in turn improve student academic achievement. The descriptive research design was adopted, while a simple random sampling method was used in selecting samples for the study. The results showed that students

frequently use library resources for academic and personal development and they derive high level of satisfaction. Also, the finding revealed that there is no difference in gender use of library resources and that there is relationship between library materials utilisation and student satisfaction. Therefore utilisation of library resources is necessary to enhance academic progress in academic institutions globally.

Eze and Uzolgue (2013) observed that University libraries are expected to provide to users a range of Information and Communication Technologies and resources necessary for creating a need for library cooperation and consortium pleasant and comfortable among other things. Andaleeb and Lisonm (2014) added that providing access to information is being advocated as a more desirable measure of quality as reflected in the size and diversity of a holdings as being increasingly questioned.

Mukesh and Gohan (2013) observed that the study of information seeking behaviour of library users has great impact on the use of library resources and users satisfaction. Sohail and Pandye (2012) added that in the use of library resources by students of the university of Kalyeni, guidance in the use of library resources was necessary to help students and staff meets their information

need. These authors also found that journals, textbooks and lecture series were the most popular sources of information for student The study by incory and Webs (2012) found out that the use of books and audio visual materials positively correlated with graduation GPA 65% of the 48 subgroups examined. Webs and incory also found that programs that offered more library session to students also tended to show positive correlation between students attendance and graduating GPA.

Olajide and Adio (2017) investigated how well under-graduate students at the Federal University of Oye-Ekiti in Nigeria used university library resources. They discovered that library resources such as abstracts, indexes, yearbooks, and atlases were neither adequate nor readily accessible. Library information resources are used for a variety of purposes in academic institutions. In their study, Agyekummer and Filson (2012) discovered that the majority of undergraduates use library resources and services to supplement their class notes, assignment and helped them in examination preparation.

Methodology

This research is of descriptive and survey methodology. The statistical population includes the undergraduate in Ekiti State University Library who have spent at least an academic session. For the purpose of this study, random sampling technique was used in order to give each person in the sampling frame an equal chance of being selected for the study. To evaluate the utilization of resources by students, a survey instrument in the form of self-administered questionnaire was developed for the purpose of eliciting the main data for the study. Copies of questionnaire were administered on the respondents (students), in their respective classes in the different departments across the faculties. Seven hundred (700) students were randomly selected which gave each person in the sampling frame an equal chance of being included in the sample. Some of the students were personally interviewed to complement the questionnaire used for data collection for this study. Six hundred and fifty eight (658) copies of questionnaire were returned and found useable for the analysis, representing a response rate of 94%. The descriptive statistics involving frequency counts, tables and percentages presented in charts were used for the data analysis. For effective understanding of the analysis, highly utilized, averagely utilized, seldom utilized, highly satisfied, averagely satisfied and seldom satisfied were used for the analysis.

Data Analysis

Research Question one: What is the level of library resources utilized by undergraduates in Ekiti State university library?

Table 4.1: Level of use of library resources in Ekiti State University Library.

How do you utilize the following?	Highly Utilized N%	Averagely utilized N%	Slightly utilized N%	Mean	SD
Books	534(81.0)	114(17.3)	11(1.7)	2.79	0.44
Dictionaries & Encyclopedia	376(57.1)	196(29.7)	87(13.)	2.44	0.71
Library Personnel	346(52.5)	236(35.8)	77(11.7)	2.41	0.69
The guides	262(39.8)	236(35.8)	161(24.4)	2.15	0.79
Journals	208(31.6)	296(44.9)	155(23..5)	2.08	0.74
Lecture Series	183(27.8)	258(39.2)	218(33.1)	1.95	0.78
Government Publication	183(27.8)	249(37.8)	299(45.4)	1.93	079
Magazine	148(22.5)	278(42.2)	232(35.2)	1.89	0.83
Computer	187(28.4)	190(28.8)	282(42.8)	1.86	0.83
Internet Facilities	172(26..1)	201(30.5)	286(43.4)	1.83	0.82
Newspaper	131(19.9)	273(41.4)	255(38.7)	1.81	0.74
Electronic gadgets	159(24.1)	214(32.5)	286(43..4)	1.81	0.80
Databases	158(24.00)	203(30.8)	298(45.2)	1.79	0.80
Bulletin	111(16.8)	249(37.8)	299(45.4)	1.71	078
Audio Visual Materials	127(19.3)	198(30.0)	334(50.7)	1.69)	0.78

Source: Field Survey, 2022

Table 4.1 Revealed the level of utilization of library resources by undergraduates in Ekiti State University Library, the overall mean for library resources utilization was 2.0. The study revealed that books were the resources most utilized with average mean = 2.79 followed by the dictionary and encyclopedia with a mean of 2.44 and library personnel with a mean of 2.41, guide with a mean of 2.15, journals with a mean of 2.08 were utilized respectively. Others are audio visual materials with a mean of 1.69, bulletin with a mean of 1.71, database with a mean of 1.79 and electronic gadgets with a mean of 1.81. This implies that

books, dictionaries and encyclopedias, and library personnel are the most utilized library resources, while resources such as journals and guides were averagely utilized and others such as lecture series, government publications, magazines, computers, internet facilities, newspapers, electronic gadgets, databases, bulletin, and audio visual materials were slightly utilized.

Research Question two: What is the level of library resources satisfaction by undergraduates in Ekiti state university library?

Table 4.2: Level of library resources satisfaction by undergraduates in Ekiti State university library

How satisfied are you with the following resources	Highly satisfied	Averagely satisfied	Slightly satisfied	Mean	SD
Books	550(85.0)	110(12.3)	11(1.7)	2.79	0.44
Dictionaries and encyclopedia	380(57.1)	190(25.7)	87(13.2)	2.44	0.71
Library personnel	350(56.5)	232(31.8)	77(11.7)	2.41	0.69
The guides	266(43.8)	232(31.8)	161(24..4)	2.15	0.99
Journal	213(39.6)	246(36.9)	155(23.5)	2.08)	0.74
Lecture series	188(32.8)	253(34.2)	218(33.1)	1.95	0.78
Government publication	189(35.8)	244(32.8)	299(45.4)	1.93	0.79
Magazine	153(27.5)	273(37.2)	232(35.2)	1.93	0.83
Computers	192(38,4)	185(23.8)	282(42.8)	1.86	0.83
Internet	177(131.4)	196(25.5)	286(43.4)	1.83	0.82
Newspaper	136(24.9)	268(36.4)	255(38.7)	1.81	0.74
Electronic gadgets	164(29.1	209(27..5)	286(43.4)	1.81	0.80
Database	158(24.00)	203(30.8)	298(45.2)	1.79	0.80
Bulletin	111(16.8)	249(37.8)	299(45.4)	1.71)	0.71
Audio Visual ,materials	127(19.3)	198(30.0)	334(50.7)	1.69	0.78

Source: Field Survey, 2022

Table 4.2 revealed the satisfaction level of the undergraduates with library resources in Ekiti State university library. The table showed that the undergraduates were highly satisfied with books with mean of 2.80, dictionaries and encyclopaedias with a mean of 2.45, and library personnel with a mean of 2.40.

The table also revealed that the undergraduates were averagely satisfied with guides with a mean of 2.16, Journals with a mean of 2.10. The table further revealed that the undergraduates were slightly satisfied with audio visuals with a mean of 1.69, bulletin with a mean of 1.71, database with mean of 1.79, electronic

Gadget with a mean of 1.81 and government publication, magazine, computers, internet, newspaper with the mean of 1.93, 1.92 1.86, 1.83 and 1.81 respectively.

Discussion of findings

The study examined library resources utilization as determinants of under-graduates' satisfaction in Ekiti State University Library, Ado Ekiti Nigeria

Research Question one sought to find out library resources utilized by under-graduates' student in Ekiti state university library. The study revealed that books, dictionaries and encyclopaedias and library personnel were highly utilized than other

library resources. Incory and web (2012) found out that the use of books and other audio visuals materials correlated with students high GPA. Adeleke and Okey (2003) posited that for a library to perform its' role adequately, its resources must be effectively utilized. Furthermore, Tom-George (2022) investigated the relationship between library services provision and the use of resources by undergraduate student in Federal university library south south Nigeria. Further findings showed that there is significant relationship between provision of internet services and undergraduate utilization in federal university libraries in south south region of Nigeria. This finding agreed with the finding of incory and webs (2012), that the used of books and other audio visual materials correlated with student high GPA. Therefore audio-visual materials and internet services should be accompanied with the use of books for effective utilization of library resources. Josiah Idachaba and Eruvwe (2022), also found out that provision of currents books infrastructures constant power supply, as well as library orientation are strategies to improve on library utilization by undergraduates

Question two seeks to know the level of satisfaction of library resources in Ekiti state university library.

The study revealed that the undergraduates were highly satisfied with books, reference materials and library personnel, while averagely satisfied with journals and guides. The study also revealed that the undergraduates were slightly satisfied with other library resources such as lecture series, Government Publications, Magazines, Computers, internet facilities, Newspapers, Electronic gadgets, Databases, Bulletins, Audio Visual Materials. Adeleye I. O. (2018) found out that utilization of library resources is an indication of undergraduate and other user satisfaction. This study corroborated with the finding of Iwhihu and Okorodu (2012) which also observed that the satisfaction of user is a function of the quantity of information products and quality of the information system. Therefore audio-visual materials and internet services should accompanied the use of books for library resources effectiveness and satisfaction.

Conclusion

The study examined library resources utilization as determinants of undergraduates' satisfaction in Ekiti State University Library, Ado Ekiti Nigeria. This study therefore concluded that there is adequate provision of current books, internet facilities, and audio visual material and accessibility are necessary for effective utilization of library resource's and

satisfaction by undergraduate and other users.

Recommendations

Based on the finding of this study the following recommendations are made:

- The library management should improve on the provision of current and up-to-date information resources in Ekiti state university library: especially audio visual, multimedia, database, internet facilities, Newspapers, Magazines and bulletins. The university library management should make all information resources accessible to all Undergraduates and all categories of users to guide against underutilization of any information Resources in the Ekiti state university library.

- The library management should improve on current awareness services to promote the use of internet services and the database to align with the use of books and reference services.

The library management should ensure that all information resources are highly organized and users guide always up-dated, to provide easy accessibility to the undergraduates and other Users of Ekiti state university library.The university management should make policies that would provide on-the-job training for staff, so as to motivate and equip them for quality services delivery. The stake holders should ensure that the Ekiti state university library is brought to the standard of 21st century library to enable it to perform its function of meeting users need effectively.

REFERENCES

Adeniran, P. (2011): Users satisfaction with academic libraries services: academic library staff and students Perspectives. *International Journal of library and information Science. 3(10), 201-216.*

Adesanya, S.O. &Oluwafemi, M. O. (2021). Teaching effectiveness, availability, accessibility and use of library and information resources among teaching staff of schools of nursing in Osun and Oyo State, Nigeria. Library Philosophy and Practice. Retrieved on the 24 may, 2022 from www.webpages. uidaho. edu/~mbolin/adeoyepopoola.htm

Adeleye, I. O. (2018). *Library resources and services utilization as determinant of undergraduate satisfaction in Ekiti State University, Ado-Ekiti, Nigeria*. (Unpublished Thesis).Pp 56-67.

Adomi E.E. (2010): Application ICT in secondary schools. Library Philo sophy and practice, 15(1)55-62.

Eze, J.U. and Uzolgwe, E.U. (2013): The place of academic libraries in Nigerian universities education contribution to the 'Education For All Initiative'. *International Journal Library and information. 1-5(10), 132-438.*

Iwhiwhu, O. and Ikolo, V. E. (2015): Users satisfaction with library services: a case study of Delta State univer sity Library. *International Journal of information and communi cation technology education, 11(2), 80-89.*

Mukesh, S. U. &Gohan, T. (2013). Evaluation of library materials usage and services in private universities in Nigeria. Kuwait Chapter of Arabian Journal of Business and Management Review, 2 (8), 33-41.

Pandye, S. (2012). Information seeking behaviour of B. Tech and M.B.B.S students in Lucknow: a comparative study. International research: *Journal of Library and Information Science* (1):55-69.

Olajide, O. &Adio, F. (2017).Lecturers' perception of the adequacy of resources and services of University of Ado-Ekiti Library. Library *Philosophy and Practice*. Available at: http://unilib.unl.edu/LLP/

Oluwunmi, A. O., Durodola, O. D., Ajayi, C. A. (2016). Students' perceived quality of library facilities and services in Nigerian private universities. *Journal of Education and Training Studies*. 4(5), 41 – 50.

Tom-George, Z. (2022). Users'satisfaction of resources and services of libraries: a case study of the narh-bita college library, *Tema, Ghana*. NOCC

Sohail, M. D., Pandye, A. and Upadhya, A. K. (2012): Use of library resources in university by students: a survey with special reference to the university of Khan. *Asiatic bulletin 57(2) 122-128.*

Examining Thematic Realization through Word Frequencies: A Corpus Stylistics Analysis of Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare*

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ABSTRACT

This study focuses on examining the thematic realization in Wole Soyinka's memoir, *You Must Set Forth at Dawn,* and Prince Harry's memoir Spare through a corpus stylistics analysis. The study employs the use of a voyant tool to analyze word frequencies, allowing for a quantitative exploration of the thematic patterns in the texts. By analyzing the distribution and frequencies of thematic words, this research aims to uncover the underlying thematic structures and themes employed by the authors. The findings from this analysis shed light on how the authors employ different thematic choices and strategies to convey their messages effectively. Through this corpus stylistics analysis, the research provides insights into the role of word frequencies in revealing thematic realization and enhances our understanding of the stylistic choices and communicative strategies utilized by Soyinka and Prince Harry in their respective texts. The findings contribute to our understanding of how word frequencies can illuminate thematic choices and provide a quantitative perspective on the thematic realization in memoir literature. This research enhances the field of corpus stylistics by showcasing the application of word frequency analysis as a valuable tool for investigating thematic content in memoir texts.

Keywords: Corpus stylistics, Voyant tools, Frequencies, thematic choices, thematic realization.

Introduction

1.1   Background to the Study

Stylistics is a branch of linguistics that focuses on the study of language choices and their impact on the overall meaning and effect of a text. By examining the linguistic and stylistic features of a literary work, it aims to uncover the intricate relationship between form and meaning. In recent years, corpus stylistic analysis has emerged as a valuable tool to delve deeper into the linguistic patterns and stylistic choices made

by authors. To comprehend the concept of stylistics, it is crucial to understand that it involves the study of linguistic choices and their artistic effects. According to Leech and Short (1981:1) stylistics "is concerned with the ways in which language choices are used to produce particular effects. This definition emphasizes the essential connection between language choices and their intended impact on the reader. By employing specific stylistic devices, authors can shape their writing to evoke emotions, convey meaning, or highlight certain aspects of their message.

Simpson (2014) further posits that stylistics "is concerned with how writers use language to achieve particular effects, or the impact of their linguistic choices on readers". It delves into the creative and strategic deployment of linguistic resources, highlighting the role of language in conveying meaning, expressing emotions, and engaging with the intended audience.

In the context of this research, the focus is on the thematization, which is a key aspect of stylistic analysis. Thematization refers to the ways in which topics or themes are introduced. Developed, and emphasized within a text. It involves the selection and positioning of thematic information, including the choice of subjects (Wales 1989). By examining the thematization

patterns in Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare*, this study aims to uncover the stylistic features and rhetorical strategies employed by the authors in constructing their themes.

This study explores the corpus stylistic analysis of Prince Harry's *Spare*. Through this analysis, we will gain insights into the linguistic and stylistic features employed by Prince Harry and their contribution to the overall impact of the text. By examining the corpus data, we will uncover recurring patterns and unique stylistic elements, shedding light on the author's expressive intentions and his manipulation of language.

In the case of corpus stylistic analysis, a corpus refers to a large collection of texts that can be analyzed systematically. The examination of Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare* will involve the use of the Voyant tool, which allows for the analysis of word frequencies, provides a quantitative approach to explore the distribution and prominence of thematic keywords in the texts. By focusing on word frequencies, this research provides a systematic and data-driven analysis of the thematic realization in the selected memoir, shedding light on the thematic structures employed by the authors.

When it comes to the analysis of corpus stylistics, there are several computational tools that can be used to assist in the process. These tools provide functionalities for processing and analyzing large corpora of texts. Some of the software include, AntConc, Stylo, Voyant Tools, Linguistic Inquiry and Word Count (LIWC) and Natural Language Processing (NLP) Libraries. AntConc is a widely used corpus analysis tool that offers a range of features for stylistic analysis. It provides concordance analysis, keyword analysis, collocation analysis, and word frequency analysis. These features allow researchers to identify patterns and examine the distribution of specific linguistic features within a corpus. Stylo on the other hand, is a software package specifically designed for stylometric analysis. It employs various statistical and computational techniques to analyze textual features such as word frequency, vocabulary richness, and n-grams. Stylo enables researchers to explore authorship attribution, genre classification, and other stylometric analyses.

Furthermore, Voyant Tools is a web-based text analysis tool that offers visualizations and analytical capabilities. It can be utilized for corpus stylistics to explore word frequency, collocation, and other textual patterns. Voyant Tools allows users to examine the distribution and usage of linguistic features across a corpus. LIWC is a software tool that analyzes text for various linguistic and psychological dimensions. It provides insights into the presence of linguistic categories such as emotions, cognitive processes, and social behaviors. LIWC can be valuable for studying stylistic variations in the use of language in different genres or contexts. NLP libraries such as NLTK (Natural Language Toolkit), SpaCy, or CoreNLP offer a wide range of tools and functionalities for processing and analyzing textual data. These libraries provide capabilities for part-of-speech tagging, syntactic parsing, named entity recognition, sentiment analysis, and more. Such tools can be applied to examine stylistic features within a corpus.

1.2   Research Questions

The following research questions will guide this analysis:

1. What are the dominant thematic elements in Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare*, as revealed through a quantitative analysis of word frequencies?

2. How do variations in word frequencies, particularly the presence of keywords and their contextual usage, contribute to the overall thematic realization in Wole

Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare*?

3. To what extent do the thematic realizations in Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare*, as uncovered through a corpus stylistics analysis of word frequencies, reflect the cultural, social, and historical contexts in which these texts were written?

4. How do these reflections contribute to our understanding of the authors' perspectives and the broader societal issues addressed in the works?

1.3   Research Objectives

This study aims to investigate and analyze the thematic realization in two distinct literary texts, Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare,* through the application of corpus stylistics. The following research objectives will guide the study:

i) determine the dominant thematic elements present in Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare* by conducting a comprehensive analysis of the texts;

ii) to employ corpus stylistics techniques to analyze word frequencies within the texts, focusing on key thematic terms and their collocates to gain insights into how

these terms contribute to the overall thematic realization;

iii) to explore the contextual significance of thematic realization in *You Must Set Forth at Dawn* and *Spare* by considering factors such as the authors' backgrounds, historical contexts, and cultural influences on their writing;

iv) to contribute to the growing body of knowledge in corpus stylistics by demonstrating its applicability to the analysis of literary and non-literary texts, thus expanding the scope of this interdisciplinary approach.

By pursuing these research objectives, this study aims to shed light on the nuanced ways in which thematic realization is achieved in different types of texts, ultimately contributing to the broader fields of corpus linguistics, stylistics, and literary criticism.

1.4   What is Corpus Stylistics

First of all, the Latin word corpus (plural "corpora") refers to a collection of texts. It has the meaning of "body". The texts are stored in an electronic database. Baker, Hardie & MacEnery (2006) maintain that "Although a corpus does not contain new information about language by using software packages which process data, we can obtain a new perspective on the familiar"(48-49). Corpus stylistics is a branch

of computational linguistics as Wales (1989) points out. It was developed in the late 1960s. It helps to investigate certain characteristics of the data like the length of words and sentences based on statistical and computer-aided tools to study a number of issues related to style (85).

One important issue needs to be given attention to here in the study, McIntyre (2015) sheds the light on the difference between corpus stylistics and corpus linguistics. The paper asserts that many works have developed the sub-branch of stylistics namely, corpus stylistics, but none of them give an accurate definition of corpus stylistics and differentiate it from corpus linguistics (60). Then, he defines corpus stylistics as "simply corpus linguistics with a different object of study (literature as opposed to non-literary language)". Besides, he demonstrates that the difference between them is that corpus stylistics is not only borrowing tools from corpus linguistics but it makes itself unique by using qualitative tools and techniques of stylistics to analyze texts with the help of computational methods (McIntyre 60). Semino and Short (2004) assert that doing a corpus-based work is highly quantitative in nature, but this matter of fact does not mean that qualitative analysis should be excluded. On the contrary, if both

are combined, they help to reach to a higher degree of understanding of literary works or any other selected data (7).

1.2   Methodology

Mainly, this work aims at examining keywords, word clouds, and thematic representation from frequency of word occurrence. Firstly**,** keywords can be defined as the most frequent or repeated words in a single text or group of texts in comparison to a reference corpus. Words are the crucial part of any corpus study. In this paper, the researcher will use this model as a basis for the study in examining keywords of the memoir. These Keywords serves as a guide to readers to the meaning of the text.

2.1 What is Voyant Tools? How does it Work?

Voyant Tools is a web-based text analysis and visualization tool that allows users to explore and analyze large bodies of text. It provides various features and visualizations to help researchers, scholars, and students gain insights from textual data. Voyant Tools works by processing text input and generating a set of interactive visualizations and textual analysis results. Firstly, users can either paste their own text or provide a URL to a webpage or a corpus of documents. Voyant Tools supports various file formats, including plain text, HTML, XML, PDF, and

more. Secondly, Voyant Tools organizes the text input into a corpus, which is a collection of individual documents. The corpus can include a single document or multiple documents, depending on the input. Thirdly, the tool performs preprocessing tasks such as tokenization, stop word removal, and stemming. Tokenization breaks the text into individual words or terms, while stop word removal eliminates common words (e.g., "the," "is") that don't carry significant meaning. Stemming reduces words to their base or root form (e.g., "running" to "run"). Fourthly, Voyant Tools offers various visualizations that allow users to explore the corpus. Some of the key visualizations include word clouds, word frequency charts, word trends over time, document frequency plots, and term co-occurrence networks. These visualizations provide insights into the frequency, distribution, and relationships between words and terms in the text. In addition to visualizations, Voyant Tools offers analysis tools to further explore the text. The word clouds are represented in different sizes of fonts large and small fonts. The larger items are more important and have more significance. Users can perform operations like searching for specific terms, comparing word frequencies across documents, generating collocation data

(words that appear together), and more. Fifthly, it provides an interactive interface where users can dynamically interact with the visualizations and analysis results. They can adjust parameters, zoom in or out, select specific terms or documents, and explore the data in a way that suits their research needs.

3.1 Data Presentation

3.1.1 Analysis of Prince Harry's *Spare*

Spare is a memoir by Prince Harry, Duke of Sussex. The book was ghostwritten by J. R. Moehringer and first published in January 2023. The memoir's title highlights Prince Harry's position as Prince Charles's "Spare" (i.e., contingency heir), in contrast to Prince William's role as "Heir." The narrative recounts the prince's struggle to come to terms with his mother's death and his pursuit of love and purpose. Outlining his reasons for breaking with the royal family and leaving Britain, Prince Harry highlights the restrictions of royal life, the effects of press harassment, and his strained relationships with his father and brother. The memoir's tone is frank, informal, and straight to the point. Born in 1984 and christened Henry Charles Albert David of Wales, he's the younger son of Prince Charles and the late Princess Diana of Wales. *Spare* recounts Prince Harry's memories from age 12 to age 38, beginning with the death of his mother

and concluding with his departure from the British royal family. Prince Harry's memory The reasons for choosing this particular memoir – *Spare* – include: firstly, the memoir gained a noticeable appeal from the audience and it got several downloads within few hours of publication/released, being a book written by a celebrity, it attracts readers heavily. Also, the text is available in electronic form freely without any copyright restrictions.

3.1.2 Thematic Signals and representation in Word frequency in Prince Harry's *Spare*

There are certain words used to indicate in a direct or indirect way the main theme of the text, these are called 'thematic signals'. These words have importance over others. They are simply the carriers of meaning or the clues to the hidden codes in the text. Basically, the memoir has the following thematic events:

and point of view, shape his memoir, thus, creating a subjective narrative perspective. death, pursuit of love, purpose restrictions of royal life, and the effects of press harassment.

The memoir comprises 144,381 total words and 19,727 unique word forms. The word 'like' for example, occurs (334) times throughout the text. It leads to the basic theme of love in the novel. As mentioned above, the story is about the effect of press harassment as well as theories created by the press. Similarly, the word 'press' with (139) occurrences has a noticeable thematic value. The word 'granny' and 'mummy' occurs (135) and (131) times respectively. These two characters are death and the copious use of the word in the memoir links ultimately to the theme of death in the novel. The collection of word clouds is shown in the Appendix as Figure 1.

i'd (553); said (520); didn't (416); just (344); like (334); meg (312); time (309); told (290); willy (283); pa (275); wasn't (271); felt (241); thought (240); day (223); went (219); got (211); he'd (205); wanted (187); couldn't (184); we'd (180); looked (177); people (175); know (173); asked (173); way (170); knew (168); going (167); maybe (158); came (151); she'd (144); say (142); press (139); life (139); granny (135); think (133); long (133); mummy (131); night (123); took (121); new (120); family (120); away (120); come (119); good (118); room (115); want (112); right (112); royal (108); house (108); they'd (107); things (106); place (106); palace (106); don't (105); called (105).

Figure 1: Word Cloud of Prince Harry's Memoir Corpus

3.1.3 Visual Word Clouds

This study visualizes Prince Harry's *Spare* in a word cloud to present its most possible themes as a previewing technique. It generates word cloud with Cirrus tool. It produces interactive word cloud and a number of themes which can be searched from 25 to 500 but in this research the first 55 most frequent words are used for results and discussion. So, the word cloud in Figure 2 attached shows topic modelling and most possible theme extraction. Furthermore, Harry's language in his memoir corpus represented his main themes. These 55 words as shown in Figure 3 are Prince Harry's most frequent 55 words/themes found in Voyant Tools after summary tool analyses.
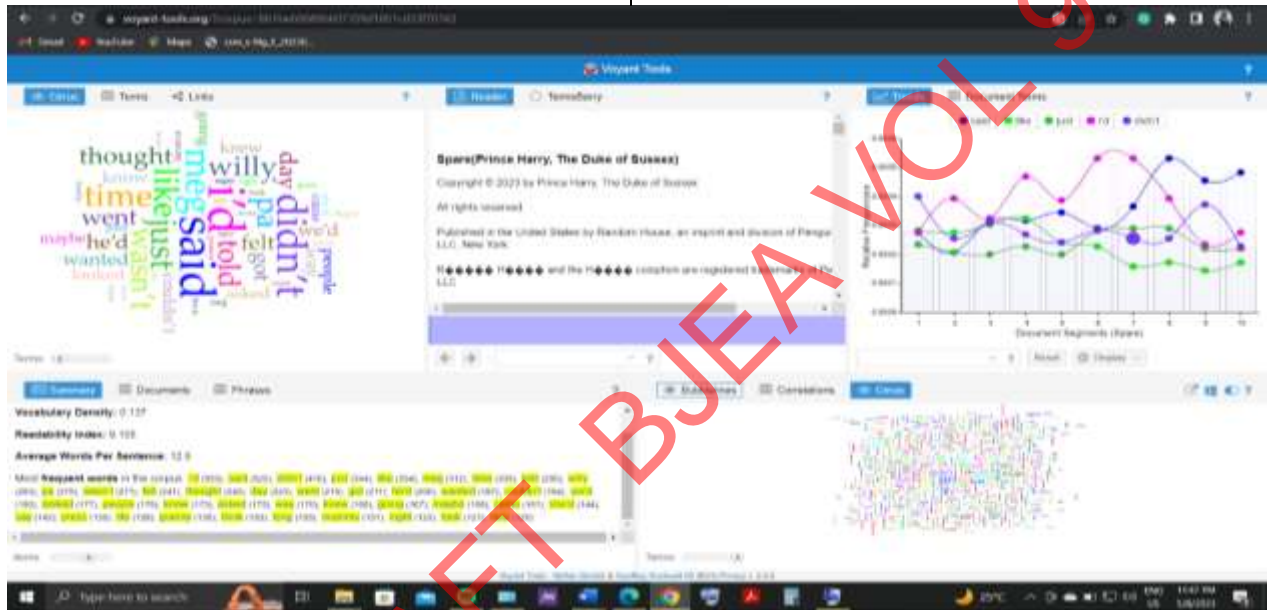
Figure 2: Voyant Tool Interface Showing Prince Harry's *Spare* Interface

Figure 3: Visual Word Cloud in Prince Harry's *Spare*

Analysis of Wole Soyinka's *You Must Set Forth at Dawn*

You Must Set Forth at Dawn (2006) is a memoir written by the renowned Nigerian playwright, poet, and Nobel laureate, Wole Soyinka. The book essentially, provides a personal account of Soyinka's experiences and reflections on his life, political activism, and the socio-political landscape of Nigeria. The memoir delves into Soyinka's early years, his education, and his emergence as a prominent writer and activist during Nigeria's struggle for independence from British colonial rule. He vividly describes his encounters with key figures in Nigerian politics and the literary world, offering valuable insights into the cultural and political climate of the time. Soyinka's memoir also covers his experiences as a political prisoner during the Nigerian Civil War (1967-1970) and his eventual exile from Nigeria due to his criticism of the military government. His reflections on these events highlight the challenges faced by intellectuals and artists under oppressive regimes. The book explores themes of identity, integrity, and the role of the artist in society. Soyinka grapples with questions of personal and national identity, and the complexities of navigating his dual roles as an artist and an

activist. He reflects on the power of literature and the responsibility of the artist to engage with social and political issues. Soyinka's writing style in *You Must Set Forth at Dawn* is rich and evocative, combining personal anecdotes with profound philosophical insights. He skillfully weaves together historical events, cultural observations, and introspection, creating a multi-layered narrative that invites readers to contemplate the complexities of Nigeria's history and its impact on his own life. On the whole, *You Must Set Forth at Dawn* is a thought-provoking memoir that offers a unique perspective on Nigeria's history and the life of one of its most celebrated literary figures. It serves as a testament to Soyinka's intellectual prowess, his unwavering commitment to truth and justice, and his enduring contribution to African literature and activism.

3.2.1 Thematic Signals and representation in Word frequency in Wole Soyinka's *You Must Set Forth at Dawn*

Wole Soyinka's Memoir among other themes reflects the issue of identity, integrity, and the role of the artist in society. This issue of identity is both personal and national identity, as well as the complexities of handling his dual roles in the society first as an artist and second as an activist, thus, buttressing the power of literature in the society.

The corpus (Soyinka's memoir) has 200,992 total words and 27,972 unique word forms. Soyinka's language in hismemoir corpus represented his main preoccupation and themes. These 55 words are Soyinka's most frequent 55 words/themes found in Voyant Tools after summary tool analyses. The visual word cloud is shown in Figure 4 while the word cloud list is shown in figure 5 that follows in the appendix. From the corpus analysis, it is seen that the most frequent word as used in the Soyinka's memoir is "time" with 407 occurrences and "just" follows it closely with 208 occurrences, thus, painting a clear picture of identity and justice (activism) in the memoir.

time (407); just (208); home (203); head (201); lagos (196); way (190); government (189); nation (186); long (182); man (179); took (174); know (174); came (169); state (167); place (167); later (165); day (165); like (163); moment (159); world (158); nigeria (152); abacha (150); left (146); nigerian (139); military (138); right (136); come (136); set (135); mind (131); new (130); taken (129); police (125); face (125); years (123); night (121); femi (120); thought (119); make (119); simply (118); said (118); away (118); political (116); house (115); people (114); appeared (112); life (111); return (110); course (110); quite (109); self (108); death (106); turned (105); end (105); case (104); power (102)

Figure 4: Word Cloud of Wole Soyinka's Memoir Corpus

Figure 5: Visual Word Cloud in Wole Soyinka's *You Must Set Forth at Dawn*

Table 1: Themes Representation in Frequency

S/N	Themes	Words	Frequency
1	Theme of identity and belonging	Time	407
	Theme of Justice and activism	Just, government, political	208, 189, 116
	Theme of Art and Literature	mind, new, thought, power	131, 130, 119, 102
	Exile and Imprisonment	Abacha, military	150, 138

Table 1 above, shows the possible themes in *You Must Set Forth at Dawn*, this includes the theme of identity and belonging. The frequent occurrence of the word "time" (407) can be utilized to establish and prove the theme of identity and belonging. The repetition of this word throughout the text reflects Soyinka's exploration of the relationship between time, personal identity, and a sense of belonging. Firstly, the concept of time can be seen as a metaphorical representation of the passage of one's life and the various stages of personal development. By examining how Soyinka references time in the book, such as through memories, reflections, and anecdotes from different periods, readers gain insights into the evolution of his identity. The repetition of "time" highlights the significance of personal experiences and how they shape one's sense of self. Furthermore, the word "time" can also evoke a sense of displacement or dislocation, which is closely tied to the theme of belonging. Throughout the memoir, Soyinka discusses his experiences of exile and political turmoil, which disrupt his sense of

belonging to a particular place or community. The repeated references to time emphasize the transitory nature of his existence and the challenges he faces in finding a stable sense of identity and belonging.

To establish and prove the theme of justice and activism in Wole Soyinka's *You Must Set Forth at Dawn*, we can examine the occurrence of the words "government," "political," and "justice" throughout the book. The frequent occurrence of the words "government" and "political" suggests that Soyinka engages extensively with political themes in his memoir. By discussing these topics, he sheds light on the socio-political landscape of Nigeria during his lifetime and emphasizes his own active involvement in political affairs. This supports the theme of activism, as Soyinka portrays himself as a participant in political movements and an advocate for change. As an activist and intellectual, Soyinka consistently confronts issues of injustice and inequality within the Nigerian society. His experiences, particularly during his imprisonment and exile, emphasize his unwavering

commitment to principles of fairness and accountability. By examining the significant occurrence of words related to government, politics, and justice, we can establish a strong connection between the theme of justice and activism in Wole Soyinka's *You Must Set Forth at Dawn*.

To establish and prove the theme of Art and Literature in Wole Soyinka's *You Must Set Forth at Dawn* using the mentioned word counts, we can examine how the recurring themes of the mind, new thoughts, and power align with the central ideas of artistic expression and the role of literature in society. The word "mind" appears 131 times in the book. This emphasizes the importance of intellectual engagement, critical thinking, and the power of ideas. In the context of Art and Literature, the mind represents the intellectual capacity and creativity that artists and writers bring to their work. Soyinka's memoir likely explores the workings of his own mind as he reflects on his experiences, engages with social and political issues, and expresses his thoughts through his literary output. "new" appears 130 times in the book. This suggests a constant pursuit of novelty, innovation, and fresh perspectives. In the realm of Art and Literature, the concept of the "new" is vital. Artists and writers strive to challenge conventions, introduce new ideas,

and push the boundaries of their respective mediums. Soyinka's memoir may discuss his own endeavors to create new forms of expression, challenge established norms, and contribute to the literary landscape of Nigeria and beyond.

The word "thought" o the other hand, appears 119 times in the book. This signifies the significance of deep contemplation, introspection, and intellectual exploration. Within the theme of Art and Literature, thought represents the process of conceptualizing and refining ideas, the introspective nature of artistic creation, and the power of thought-provoking literature to stimulate minds and initiate discussions. Soyinka's memoir likely delves into his own thoughts and reflections, shedding light on how he shaped his artistic vision and engaged with complex societal issues through his writing. "Power" appears 102 times in the book. This suggests an exploration of power dynamics, both personal and political, and their impact on artistic expression and the reception of literature. In the context of Art and Literature, power can refer to the ability of literature to challenge authority, bring about social change, and empower individuals to voice their experiences and perspectives. Soyinka's memoir may address power struggles he encountered as an artist

and activist, his efforts to resist oppressive forces, and the transformative potential of literature to effect change. By analyzing the frequency of these words in *You Must Set Forth at Dawn,* we can see how they reinforce the theme of Art and Literature.
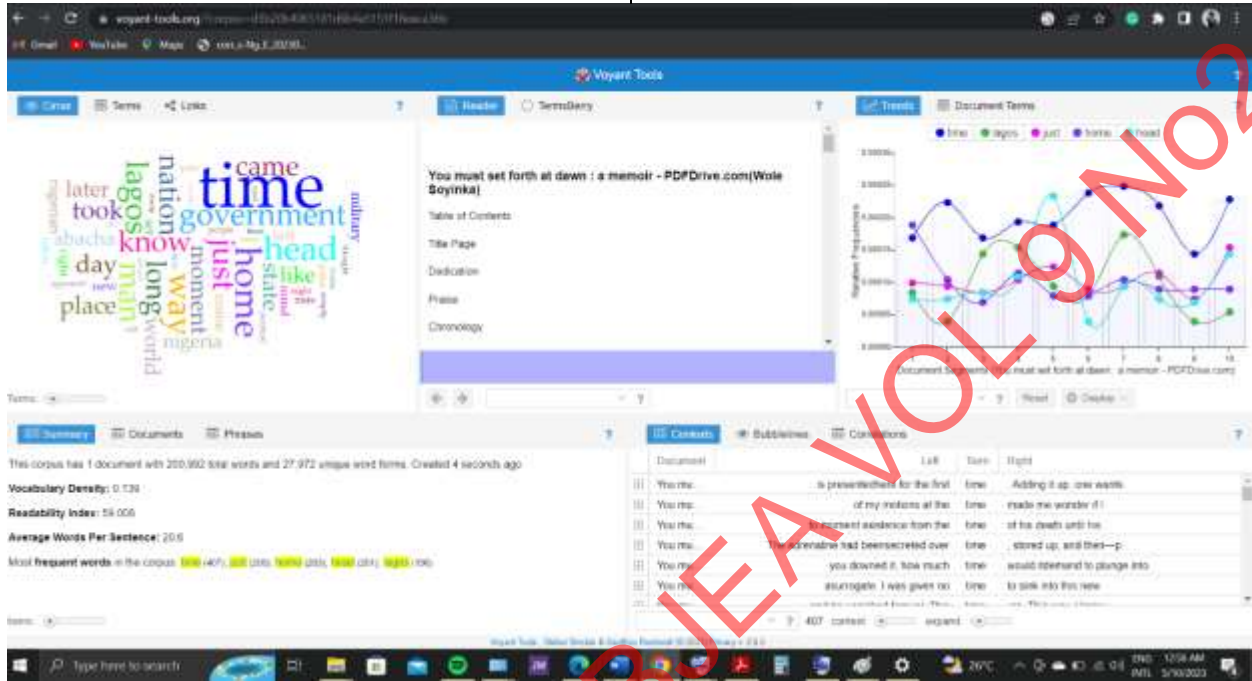
Figure 6: Voyant Tool Interface Showing Wole Soyinka's *You Must Set Forth at Dawn*

Conclusion

In conclusion, the corpus stylistics analysis of Wole Soyinka's *You Must Set Forth at Dawn* and Prince Harry's *Spare* using word frequencies has provided valuable insights into the thematic realization in these two memoirs. By examining the distribution and frequency of words related to specific themes, we have gained a deeper understanding of how themes are realized and emphasized within the texts. The analysis revealed distinct patterns of thematic realization in both memoirs. In Wole Soyinka's *You Must Set Forth at Dawn*, certain themes emerged prominently, supported by high word frequencies, indicating their significance in the narrative. These themes allowed readers to delve into the author's personal experiences, reflections, and socio-political commentary. On the other hand, Prince Harry's *Spare* demonstrated a different set of themes, reflective of his own personal journey and advocacy work.

On the whole, this corpus stylistics analysis of Wole Soyinka's *You Must Set Forth at*

Dawn and Prince Harry's *Spare* has deepened our understanding of thematic realization in memoir literature. By focusing on word frequencies, we have gained valuable insights into the thematic choices made by the authors, enriching our understanding of their personal narratives, motivations, and communicative goals. This research contributes to the field of corpus stylistics by demonstrating the power of quantitative analysis in uncovering meaningful patterns within literary texts.

Suggestions

To enhance the depth and breadth of this analysis, future research could benefit from expanding the corpus to include more works by Wole Soyinka and Prince Harry. This would provide a more comprehensive understanding of their respective writing styles and thematic preferences. A comparative analysis with other authors and texts could shed light on broader stylistic trends and thematic realizations within different literary traditions and genres. This approach would help in contextualizing the findings within the larger literary landscape. Furthermore, this study suggests and recommend further, a multimodal analysis, such as examining the use of visual elements in Prince Harry's memoir or the performative aspects of Soyinka's works, this could add another layer to the understanding of thematic realization through different modes of communication.

REFERENCES

Baker, Paul, Andrew Hardie, and Tony McEnery. (2006). *Glossary of Corpus Linguistics*. Edinburgh: Edinburgh University Press.

Harry, P. (2023). *Spare*. Random House, New York.

Leech, Geoffrey N., and Mick Short. (1981). *Style in Fiction.* London & New York: Longman Press.

Oluikpe, B. O. (1979). *Stylistics: A practical coursebook*. Macmillan Publishers, New York.

McIntyre, Dan. (2015). "Towards an Integrated Corpus Stylistics." *Topics in Linguistics* 16.1. London & New York: Longman Press.

Wales, Katie. (1989). *A Dictionary of Stylistics*. London: Routledge.59-68.

Semino, Elena, and Mick Short. (2004). *Corpus stylistics: Speech, Writing and Thought Presentation in a Corpus of English Writing.* London: Routledge.

Soyinka, W. (2006). *You Must Set Forth at Dawn*. Random House, New York.

Influence of Library Anxiety on the Use of Library among New Undergraduate Students, Federal University of Technology, Akure, Ondo State

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ABSTRACT

This study investigated influence of library anxiety on the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State. The research was guided by the objectives on affective barriers that can cause library anxiety and strategies to mitigate anxieties among new undergraduate students, Federal University of Technology, Akure, Ondo State. Survey research method was adopted for the study while the population of the study was the four thousand five hundred (4,500) new undergraduate students that secured admission in 2017/2018 academic session. A simple random sampling technique was used to select eight hundred and fifty five (855) students. The instrument used for data collection for this study was questionnaire. It was found out that not knowing how to conduct research in the library caused anxiety for new undergraduate students. The strategies employed by management were the use of social media in interacting with new students to influence their frequent use of the library and organization of talk shows as a way of encouraging the students to visit and make use of the library. The study recommends that management should make it a must for new undergraduate students to attend the yearly library orientation programme for new undergraduate students. Secondly, the management of the Federal University of Technology Library, Akure, Ondo State, Nigeria, should use strategies such as social media in interacting with new students to influence their frequent use of the library and organize talk shows as a way of encouraging the students to visit and make use of the library.

Keywords: *Influence,* library anxiety, use of library, undergraduates.

Background

Libraries are important institutions in preserving the culture of human being. Users go to libraries to access information to satisfy their needs. Library users are today faced with avalanche of information otherwise known as information explosion or information smog and the inability to seamlessly locate the needed information in the library would lead to anxiety among new undergraduate students. Anxiety is a feeling of nervousness, or worry that can be experienced by every human being. Crosta (2016) defined anxiety as the feeling of fear or panic. In his research, Erfanmanesh (2011)

explained that library anxiety consists of any negative emotional symptoms such as fear, worry, uncertainty, perceiving lack of ability and efficiency, sense of loneliness, consternation, etc. Typically, library-anxious undergraduate students will experience negative emotions that include ruminations, tension, fear, and mental disorganization, which could prevent them from using the library effectively thereby leading to poor academic performance. Farhadpoor (2016) observed that other things that can cause library anxiety for new undergraduate students include space and time constraints. Undergraduate students need to learn how to use their university libraries effectively and productively.

Ability to use the library and its resources is crucial for the attainment and maintenance of high level academic performance and achievement and one of the solutions to this is the ability to know what kind of information a user need, where to access it, how to evaluate it and how to intelligently marshal and articulate relevant facts for desired purpose. This can best be done through the knowledge of information literacy and library orientation programme. The Association of College and Research Libraries (2015) stated that information literacy is a key to educational component

now used by tertiary institutions to prepare their students in this fast-changing 21st century for all round learning and comprehension. Kuhlthau (2006) pointed out that "Librarianship for this information age goes beyond services for locating information, to creating services for assisting students in the process of learning and how to use the resources they have located." This remark suggests a holistic approach to teaching information literacy that incorporates cognitive, affective, and behavioural aspects of learning. While relating library instruction programme to library environment, Marshall, Burns and Briden (2007) stated that Library instruction programmes conducted in the library have the benefit of introducing students to the library's physical space as well as intangible services. Such programme will help new undergraduate students to make informed decisions about the library and to even see the library as a comfortable place to study and undertake researches.

Most students don't know that some librarians are subject experts or research experts whom they can interact with when faced with difficulties of using the library resources and services. In fact there are librarians who are subject specialists in other subject fields apart from librarianship. While

students interact with their lecturers under fear and trepidation, the reverse is the case with librarians who will teach them under a relaxed atmosphere and enlighten them on how to go about their assignments.

Another good programme of academic library that has been attracting new undergraduate students to the library is library orientation programme. Library orientation programme is part of a university's yearly orientation programme organized to introduce new undergraduate students to university environment and to help them adjust to university life.

This study investigated the influence of library anxiety on the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State.

Statement of the Problem

Library as an important part of every academic institution is used by students, staff and members of the university's local environment. Academic libraries have been described as the heart of any educational institution where diverse information resources both print and e-resources are acquired, processed and preserved for the advancement of human knowledge. It is indeed a storehouse of information and a record of human experience to which users

especially students turn to for their information needs. It immense benefits in the provision of information resources and services for both new and returning students in the university cannot be overemphasized. Observations have however revealed the existence of library anxiety which has come to exert great influence on the use of library by the newly admitted students of the universities. The present study investigated the influence of library anxiety on the use of library by newly admitted undergraduate students of the Federal University of Technology, Akure.

Research Questions

This study was guided by the following research questions:

1. What are the causes, the affective Barriers, of library anxiety towards the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State?

2. What are the strategies employed to reduce library anxiety in the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State?

Objectives of the Study

While the general objective of the study is to investigate the influence of library anxiety on

the use of library by new undergraduate students, the specific objectives are:

1. To identify the causes, the affective barriers, of library anxiety towards the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State.

2. To identify strategies towards reducing the library anxiety in the use of library among new undergraduate students, Federal University of Technology, Akure, Ondo State.

Literature Review

Undergraduate students have been described by Kiilu and Otike (2016) as the largest stakeholders of any university library but empirical evidences have shown that they do not make good use of library resources and services. In fact it has been discovered that the low rate of use of academic libraries by undergraduate students has nothing to do with how well equipped or how well organized or how well funded the library is. In a study carried out by Tella (2009) at the University of Botswana, it was discovered that though the library was very well equipped, well-furnished and highly organized, undergraduate students seldom use the library. This has been a major concern to Librarians all over the world and lots of

researches have been and are still being conducted on reasons behind this. The current area of focus is the influence of library anxiety on the use of library resources and services by new undergraduate students of the Federal University of Technology, Akure. It has been discovered that seventy five (75%) to eighty five (85%) percent of undergraduate students expressed fear and anxiety when using the library (Mellon, 1986). The findings from Mellon's research indicated the following causes of library anxiety: large size of the library, lack of knowledge about the location of materials, and not knowing how to start and continue their research. Their initial interaction with the library has been found to be that of fear, trepidation, anxiety, and confusion, overwhelmed by a feeling of being lost, scared and helpless. Academic libraries have been evolving several strategies in order to reduce anxiety among new undergraduate students. Some of such strategies are usually treated under sub-topics such as; library environment; information literacy and library orientation programme.

Library Environment

Academic library environment has been described to include all the circumstances, people, things and events around the library which could have potential effects either

positive or negative on the use of library. Discussing library environment and the library users' experience, Buck and Houzé (2014) explained that library anxiety is a state in which library users stress about satisfying their information needs in an unfamiliar, perhaps overwhelming research environment which can create significant barriers to successful library experience. This observation can only be relevant to new library users especially new undergraduate students who are making use of big and complex academic libraries for the first time. The library environment according to the authors includes landscape, architecture, interior layout, the décor, lighting, air quality and temperature. It also includes human relationships and interactions in the library. These according to the researchers can cause tension for new library users and prevent them from enjoying the information-seeking experience in the library.

Information Literacy

Information literacy is a system by which librarians educate new users on how to make the best use of all the resources in a library both print and electronic resources. Information literacy forms the basis for lifelong learning and enables learners to master content and extend their investigations to become more self-directed,

thus assuming greater control over their own learning. The teaching of information literacy to new undergraduate students will introduce them to the known and unknown information sources for their educational advantage. Lee (2011) advised that when developing information literacy instruction sessions or programmes, librarians should consider both cognitive and affective issues with a focus on the research process

Library Orientation Programmes

Library orientation programme is part of a university library's yearly programme organized to introduce new undergraduate students are welcomed to the university library. It is a programme where the university librarian and his or her subordinates introduce the university library and all its' facilities, resources and services to new undergraduate students. During such programme, students are taken round the various sections of the library and are shown shelves arrangements, informed of the library's opening hours, how to borrow books, the number of books they can borrow and the number of days such books can be with them before they can return the books to the library or renew the borrowing. It is during such programme that students are told of the penalties of not returning the borrowed books from the library at the stipulated time

159

which usually is not more than two weeks otherwise known as overdue fine and other rules guiding the use of the library. Students are also exposed to how to use OPAC, how to access databases and are taught how, when and where to access other library services and resources for their educational benefits. Gregory and Broussard (2011) expressed that however short or brief the library orientation programme could be, it has been reported as a means of reducing anxiety in new undergraduate students.

Research Method Adopted for the Study

The present study adopts the survey research method in order to elicit the need responses from the set of students admitted during the 2017/2018 academic session whose population numbered 4,500 and spread across School of Agriculture and Agricultural Technology, 793; School of Earth and Mineral Sciences, 498; School of Engineering and Engineering Technology,

1,203; School of Environmental Technology, 970 and School of Sciences, 1,036. The study also adopted the proportionate and simple random sampling technique. A sample size of 19% was used for this study to arrive at 855, with each of the five schools. The School of Agriculture and Agricultural Technology having158, School of Earth and Mineral Sciences 98, School of Engineering and Engineering Technology 215, School of Environmental Technology 180 and School of Sciences, 204 respectively. The instrument used for data collection for this study was questionnaire and the data was analyzed using frequency and percentage.

Data Presentation, Analysis and Discussion of Findings

This section presents the data analyzed in this study. The data was analyzed, presented and discussed in order of the research questions. The presentation is as follows.

Table 1.1: Affective Barriers that can Cause Library Anxiety among New Undergraduate Students of the Federal University of Technology, Akure, Ondo State

S/No	Affective barriers that can cause Library Anxiety	Responses			Total
		A	D	U	
1.	I have difficulties in finding my ways through the library because I did not participate in the library orientation programme	388 (49.1%)	263 (33.2%)	140 (17.7%)	791
2.	I don't know what to do when I am in the library because the use of library course (Gens 103) is not helpful	299 (37.8%)	266 (33.6%)	226 (28.6%)	791
3.	The library rules and regulations are too strict for me to follow	283 (35.8%)	320 (40.5%)	188 (23.8%)	791
4.	The library orientation has been beneficial to me	274 (34.6%)	287 (36.3%)	230 (29.1%)	791
5.	I enjoy learning new things about the library	319 (40.3%)	381 (48.2%)	91 (11.5%)	791
6.	I do not understand how to start my research in the library	436 (55.1%)	260 (32.9%)	95 (12.0%)	791
7.	I cannot see the relevance of library orientation to my academic programme	249 (31.5%)	315 (39.8%)	227 (28.7%)	791

KEY: A=Agreed, representing Agreed and Strongly Agreed. D=Disagreed, representing Disagreed and Strongly Disagreed. While U=Undecided representing only undecided

The first findings on the affective barrier that gave most new undergraduate students concern was the issue on how to commence a research in the library. The reason behind this is very obvious. This is because conducting research is very fundamental to university education. It is a must prerequisite for all levels of university education before a university degree is awarded. The high value attached to this can be seen from the high number of respondents 436(55.1%) who agreed that they do not understand how to start a search for information resources in the library. This finding indicates that not knowing how to conduct research in the library causes anxiety. On second affective barrier statement, 388(49.1%) respondents agreed that the difficulties they experienced in locating information resources in the library were as a result of their inability to participate in the library orientation programme. This shows how important library orientation is to new users who are coming to the university environment for the first time and trying to make use of big and complex library like academic library. This finding is in agreement with Ben-Jacob and Liebman (2009) findings which revealed that first year undergraduate students experienced library anxiety in their new environment when trying to use the library. Therefore, full participation of new students in library

orientation programme should be intensified with a view to reduce anxiety. Respondents were asked whether they will enjoy learning new things about the library. 381 (48.2%) of the respondents believed that they will not enjoy learning any new thing about the library. This negative reaction might not be unconnected with wrong perception that library is solely meant for reading and to borrow books. On the rules and regulations guiding the use of the library, 320(40.5%) of the respondents did not believe that the library rules and regulations are too strict, as such the rules do not influence their use of the library. This shows that no system can function without some rules and regulations guiding its operations. The acceptance of the rules and regulations must have been due to the fact that such rules and regulations had passed through many refinements due to long years of implementation which must have put into consideration human factors. This will make students enjoy their use of library services, facilities and resources for the attainment of their educational pursuit.

Table 2.1: Strategies to Reduce Anxieties among New Undergraduate Students of the Federal University of Technology, Akure, Ondo State

S/N	Strategies to reduce library anxieties	Responses			Total
		A	**D**	**U**	
1.	Organization of talk shows for new students by the library will encourage them to visit and make use of the library	388 (49.1%)	263 (33.2%)	140 (17.7%)	791
2.	The use of multimedia as one of the methods used in delivering Use of Library lecture will motivate new undergraduate students to visit the library	379 (47.9%)	246 (31.1%)	166 (20.9%)	791
3.	Creation of a webpage and publication of a manual that explains library terminologies will allay the fears of new students in making use of the library	283 (35.8%)	320 (40.5%)	188 (23.8%)	791
4.	Appointment of librarians as liaisons officers to faculties will bring closer rapport between faculty and librarians which can also draw new undergraduate students to the library.	274 (34.6%)	287 (36.3%)	230 (29.1%)	791
5.	Creation of social media platforms where new students can interact with librarians will attract new students to the library	421 (53.2%)	279 (35.3%)	91 (11.5%)	791
6.	Building strong relationship with students' union government and declaring interest in students' union activities will attract them to the library	342 (43.2%)	271 (34.3%)	178 (22.5%)	791

KEY: A=Agreed, representing Agreed and Strongly Agreed. D=Disagreed, representing Disagreed and Strongly Disagreed. While U=Undecided representing only undecided.

The findings on how to mitigate anxieties among new undergraduate students of the Federal University of Technology, Akure, Ondo State showed that new undergraduate students would wish that academic libraries apply the emerging new information technologies in the discharge of their functions. This was proved in the reaction of the new undergraduate students to the use of social media platforms by librarians as a means of interacting with students. Reacting to this, 421(53.2%) of the respondents agreed that the use of social media in interacting with new undergraduate students will influence their frequent use of the library. This finding is in agreement with Thanuskodi's (2012) survey where he reported that100% accepted the use of social media in conducting library instruction or information literacy programmes for new library users. On the organization of talk shows as a way of encouraging new undergraduate students to visit and make use of the library 388(49.1%) of the respondents agreed that introduction of talk shows will influence them to patronize the library. It will engender closer rapport between students and the librarians and afford students to know the librarians more closely and boost their confidence to approach the librarians any time the need arises.

The application of multimedia includes the use of Information and Communication Telecommunication Technology (ICT) in teaching and learning**.** It also involves the use of both verbal and visual presentations of course contents which could provoke deeper understanding of the concept. On the use of multimedia as one of the ways of delivering the Use of Library lectures in order to motivate new undergraduate students, 379 (47.9%) of the respondents agreed that it would encourage them to make use of the library. This finding is in agreement with that of Chioran (2016) who revealed in her article titled "Five Benefits of Multimedia Learning," that 95-percent of students have access to internet use to search for information. With ease of access to internet, computers, smart phones and tablets, libraries are now introducing innovative lending services such as loaning of Calculators, Headphones; Laptops; Phones Chargers; USB drives to users (students). In support of this innovative idea, Adegbilero-Iwari (2018) reasoned that students of this age have better access to information than ever before.

On the use of "Webpage and publication of manual to explain library terminologies, 320(40.4%) of the respondents disagreed that this effort will allay their fear of making use of the library. This shows that what can cause

anxiety in the library is **not** limited to the use of library jargons only.

Summary of the major Findings

Based on the data collected and analyzed in this study, the following are the major findings of this study:

1. It is discovered that not knowing how to conduct research in the library caused anxiety for new undergraduate students. It was also discovered that the difficulties new undergraduate students experienced in locating information resources in the library were caused by their inability to participate in the library orientation programme.

2. The strategies employed by the management were the use of social media in interacting with new undergraduate students to influence their frequent use of the library and organization of talk shows as a way of encouraging students to visit and make use of the library.

Conclusion

From the analysis and summary of findings of this research, it is concluded that library anxiety influenced the use of library by new undergraduate students in Federal University of Technology Akure, Ondo State, Nigeria. This is because sometimes the new undergraduate students especially those who have not had previous knowledge of library usage would experience difficulties in tapping the knowledge inherent in such programme and the inability to use library may lead to frustration, procrastination and total abandonment of library. This can affect their academic performance. This is because information is necessary for all students in order to be able to pass their examinations.

Recommendations

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

1. The management of the Federal University of Technology Library, Akure, Ondo State, Nigeria, should make it a must for the new undergraduate students to attend the library orientation. This will help them to acquire knowledge on how to use the library with ease interact with the librarians and other library staff members thereby reducing the anxiety they faced in using the information resources and services in the library.

2. The management of the Federal University of Technology Library, Akure, Ondo State, Nigeria, should use strategies such as social media in interacting with new students to influence their frequent use of the library and organize talk shows as a way of encouraging the students to visit and make use of the library and all its resources.

REFERENCES

Adegbilero-Iwari, I. (2018). Libraries and Librarians: Nexus of Trends in Librarianship and Social Media. A paper presented at the 2018 Symposium organized by the Nigerian Library Association (NLA), Ekiti State Chapter held at the Polytechnic Digital Library. The Federal Polytechnic, Ado-Ekiti, Wednesday, 14th November.

Aliyu, A. (2011) Information Anxiety among Internet Users in Ahmadu Bello University, Zaria. Unpu blished MLS Thesis, Zaria. Department of Library and Information Science. ABU.

Buck, V. M. & Houzé, A. (2014). Healing library anxiety: How comparing libraries to hospitals can improve service to multicultural populations. http://creativecommons.org/license s/by/3.0/

Ben-Jacob, M. G & Liebman, J. T (2009) Technophobia and Effective Use of Library Resources at the College/ University Level. *Journal of Educational Technology Systems,* 38(1), 35-38.

Crosta,P.(2016).Anxiety: Causes, Symptoms and Treatment http:// www.medicalnewstoday.com. Retrieved 5th March,2016.

Chioran, A. (2016). 5 Benefits of Multi media Learning. Snowflake Multi Tech http//www.nuiteg.com.

Erfanmanesh, M. (2011). Use of Multidimensional Library Anxiety Scale on Education and Psychology Students in Iran.Library Philo sophy and Practice.

Farhadpoor, M.R. (2016). Relationship between Library Anxiety and Attitudes toward Computer based on an Integrated Model of ATC and BELCAT of Public Libraries' Users. *Library Philosophy and Practice* (e journal)..http;//digital commons. unl.edu//libphilprac/144

Gregory, A. S. & Broussard, M. J. S (2011).Unraveling the "Mystery" of the Library: A Big Games Approach to Library Orientation. ACRL, 471-476

Kiilu, P. W. &Otike, J. (2016). Non Use of Academic Library Services. A Literature Review. International Journal of Library Science, 51,7-13.

Kuhlthau, C. C. (2006). Information Search Process: A Search for Meaning Rather Than Answers Available online @ www.scils. rutgers.edu/~kuhlthau/Search%20P rocess.htm. Accessed 5 Sept, 2015.

.Lee, S. W. (2011). An Exploratory Case Study of Library Anxiety and Basic Skills English Students in a California Community College District. An unpublished Doctoral Dissertation.University of California, Los Angeles.

Marshall, A; Burns, V. & Briden, J. (2007). Know your Students: Rochester's two- year Ethnographic Study Reveals what Students do on Campus and how the Library fits in. *Library Journal, 132*(18), pp.26 – 29.

Mellon, C. A. (1986). Library Anxiety: A Grounded Theory and its Development. *College and Research Libraries*, *47*(2), 160-165.

Tella, A. (2009) Correlates of Undergraduates' Information Seeking Behavior.*College and Undergraduate Libraries*, 16. 1-19

Thanuskodi, S. (2012). Awareness of Library 2.0 Applications among Library and Information Science Professionals at Annamalai Univer sity, India. International Journal of Library Science 1(5): 75-83.

The Association of College and Research Libraries (2015).Information Literacy Competency Standards for Higher Education, 2000.

Study Habits Profile as Predictors of Students' Academic Performance of Secondary School Students in Kwara State, Nigeria

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ABSTRACT

The main objective of this study is to examine the effect of study habit profiles on secondary school students' academic performances in Kwara State, Nigeria. The descriptive research design approach was used in the study. The population of this study comprised all Senior Secondary School students in Kwara state with a sample size of Three hundred and ninety respondents selected from public and private senior secondary schools using a simple random sampling technique. Two major research instruments were used for this study: The study Habits Questionnaire (SHQ) and Senior Secondary School Performance Test (SSSPT). SHQ was a self-designed questionnaire used to gather the required details from the respondents about their personal information and their study habit profile while SSSPT was used to test their academic performances. Data were analysed using percentages, mean, standard deviation, while regression analysis was used to test the hypothesis formulated for the study. The findings from this study showed that the Average Mean Score of the study habits profile of senior secondary school students was 3.01 and, the Average Mean Score of academic performance was 43.5. The regression results indicate that the study habit profiles have a significant influence on students' academic performance. Therefore, the paper concluded that students with high study habit profiles could have a high academic performance. Based on these findings, it was recommended that students should be encouraged to read from electronic materials along with traditional methods. The study also recommended that students should be encouraged to find a conducive environment devoid of distracting agents. Finally, more regular counselling services be introduced to sensitize the students on ways to improve their study habits to boost their academic performances

Introduction

Study habits is an action such as reading, taking notes, and holding study groups, among others, which students perform regularly and habitually to accomplish the task of learning. It is a process from which an individual gets proper input to feed his hunger and quench his thirst for knowledge. Study habits can be described as effective

or ineffective depending on whether or not the habit serves the students well (Lili, Mengmeng, & Huebner 2014). Many of the issues concerning school achievements revolve around developing good study habits. Reading habit refers to the behaviour which expresses the likeness of reading of individual types of reading and taste of reading (Jato et al., 2014). It is a pattern with which an individual organizes his/her reading to cope with new knowledge in the ever-changing world. In some previous studies such as Ajai,Shiaki, and Bulus (2020), Badau (2018), Ebele and Olofu (2017), Nuvetha (2016), and Osa-Edoh and Alutu (2012), study habits as a variable responsible for superior academic performance or otherwise has been examined vicariously in conjunction with other factors that interface with it to exert a tremendous impact on academic achievement. Variables such as gender, class type, and school type have been suggested to interplay with study habits to determine academic achievement. The results of studies on study habit as a function of gender have been very interesting and illuminating though findings have differed from one study to another. For example, the Nuvetha (2016) study found that girls scored higher on the study habits measure whereas the Robinson study reported masculine characteristics as being more strongly related to effective study habits than feminine ones. On the other hand, the studies by Osa-Edoh and Alutu (2012) found no significant difference in the study habits of male and female students.

Despite the seeming exhaustiveness of literature on the determinants of academic performance of learners, there seem to be more areas of interest to be investigated. Understanding the relationship between study habits and senior students' academic performance can be an important vehicle to equip them and enable productive participation in the school. The present study, therefore, sought to investigate the effect of study habits profile on the senior secondary school students academic performance in Kwara State, Nigeria.

The importance of education for national development has placed secondary schools at the centre of the efforts of governments to increase the rate of literacy level in Nigeria. Students' success at this level depends on their academic achievement after taking the organized national examinations conducted by the West African Examinations Council (WAEC) and National Examinations Council (NECO). The National Policy on Education (NPE, 2013) stipulated that secondary school education is an instrument for national development that fosters the worth and development of the individual for

further education and development. The development of the society and equal educational opportunities for all Nigerian children, irrespective of any physical or marginal disability. However, this aim of secondary school education in Nigeria is being threatened by students' poor academic performances.

Anakwe (2018) defined student's academic performance as the process of developing the capacities and potentials of individual to be successful in a specific society or culture. From this perspective, education serves as a process of individual and societal development. It is also important to keep in mind that academic performance may largely be a function of the context in which it takes place. Therefore, the necessary abilities may also vary according to the context. In this regard, it may be concluded that the concept, meaning, and criteria of academic success may also vary according to the context in which it is found. Despite the importance of education vis-à-vis academic performance, most Nigerian secondary school students are at greater risk of poor academic performances in internal and external examinations (WAEC and NECO).

Statement of the Problem

In the last three decades, there is a public discourse that something is fundamentally amiss with the educational system in Nigeria. The problem of poor academic performance of secondary school students in Nigeria is a great concern to stakeholders in education due to the considerable investment in the sector. Furthermore, despite all the various efforts by parents, teachers, State and Federal Governments to improve students' academic performance, the results remained poor. Daily Post (2018) reported that in 2017 and 2018 January/February WAEC private examinations, only 26.3% and 17.1% of candidates got 5 credits in Mathematics and English language respectively. Thus, over 70% of these candidates could not get the basic requirements to secure admission into any Nigerian University. In Kwara state, the statistical analysis of candidates' academic performance in 2018 showed that only 49.2% of 35,380 students in public schools and 15.7% of 1,855 students in private school got five credits and above in English language and Mathematics (WAEC Results Statistics, 2016-2018). This ugly trend was not pleasing. Poor academic performance could be linked to attitudinal variables of introversion and extroversion which may constitute a vital input that may have a direct relationship with the academic performance of students (Oche, 2018). Hence, a lasting solution is needed because poor academic performance could lead to frustration, school dropout, and truancy to mention but a few. It is on this note that this

research investigated the study habits and academic performance of senior secondary school students in Kwara State, Nigeria.

Purpose of the Study

The study determined the students' study habit profile and academic performance of senior secondary school students in Kwara State, Nigeria.

Research Question

A research question was answered in the study, thus;

1. What is the study habits profile of senior secondary school students in Kwara state?
2. What is the level of students' academic performance in Kwara state?
3. What is the relationship between study habits and academic performance of senior secondary school students in Kwara state?

Research Hypothesis

Ho: Study habit profile is not a significant predictor of academic performance of secondary school students in Kwara State, Nigeria.

Methodology

Research Design

The research design that was adopted for this study is the descriptive survey of correlational type because it shows the relationship between the variables. Sekaran and Bougie (2016) stated that descriptive research represents and attempts to provide an accurate description or picture of a particular situation or phenomenon at one or more points in time. Given these assertions, the descriptive survey approach was considered appropriate for the study since the researcher was interested in collecting information from a representative sample of senior secondary school students based on their study habits and academic performance of senior secondary school students in Kwara state.

Population and Sample

The population for this study was 383 students of both public and private senior secondary schools in Kwara State. The enrolment figures from Kwara State Ministry of Education and Human Capital Development indicated that, in 2020, there are 100,168 students in public and private senior secondary schools in Kwara State. The techniques used in selecting the sample of the study were simple random and stratified sampling techniques. According to Research Advisor (2006),when a population is 1000, then 278 are taken as a sample, when the population is 10,000, the sample will be 370, but when the population is 100,000, the sample will be 383. Based on the above, the sample size selected through simple and stratified random sampling techniques for the study was 383.

Research Instrument

Two major research instruments used for the study were: (a) Study Habits Questionnaire (SHQ) and (b) Senior Secondary School Performance Test (SSSPT).

(a) Study Habits Questionnaire (SHQ)

Study Habits Questionnaire (SHQ) was designed by the researcher after a careful review of the related literature. The instrument comprises two sections; A and B. Section A focuses on demographic data of the respondents which include information on gender, school type, and class type. Section B contains items to elicit responses from the respondents on the nature of students' study habits using the adapted four-point Likert-type rating scale format of Very True of Me=4 points, True of Me =3 points, Not True of Me=2 points, and Not Very True of Me=1 point.

(b) Senior Secondary School Performance Test (SSSPT)

The Senior Secondary School Performance Test (SSSPT) is a 20-item multiple-choice objective test with four options (A-D) for each English Language and Mathematics. The items cover all the topics in the senior secondary school (SS-II) Mathematics and English Language syllabus with 20 questions in each subject. Students were not asked to indicate their names on the questionnaire so as to make the responses anonymous. The average point was

$1 + 2 + 3 + 4 = \frac{10}{4} = 2.5$. Hence, the mean for decision making was 2.5. All scores below 40 marks were considered 'Low Performance', 40 - 69 marks were considered Average Performance while 70 and above were considered 'High Performance'.

Method of Data Analysis

The analysis of the data was done in line with the research questions. Means, Standard Deviation, and rank order were used for the descriptive data. The study was predicted values on or in a single dependent variable using several predictor variables (independent variables) by combining the correlation of each independent variable with the dependent variable. Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables also called the predictors (Sekaran & Bougie, 2016). Therefore, the hypothesis that sought to determine significant predictors of academic performance and students' study habit profile of senior secondary school students were tested using multiple regressions.

Result of Findings

Research Question 1: What is the study habits profile of senior secondary school students in Kwara state?

Table 2: Mean and Rank Order of Study Habits profile of Senior Secondary School Students in Kwara State.

S/N	As far as I am concerned	X	SD	Rank
3	I study past questions for my examinations.	3.34	1.53	1st
10	I study in an environment that is well lighted.	3.06	1.15	2nd
11	I study in a quiet environment devoid of distraction.	3.01	1.16	3rd
1	I do my assignments regularly.	2.99	1.31	4th
13	I take a break when I am tired.	2.88	1.24	5th
4	I participate in tutorials after school hours.	2.87	1.09	6th
14	I review my class notes within one day after the class in which they were taken	2.86	1.23	7th
9	At the start of each week, I carefully plan my study schedule for the week.	2.70	1.19	8th
7	I use the library to acquire more knowledge adequately.	2.64	1.19	9th
6	I consult with the subject teachers when having challenges.	2.62	1.24	10th
2	I always use the dictionary while studying.	2.23	1.50	11th
5	I engage in co-curricular activities such as quizzes and debates.	2.20	.94	12th
8	I prefer reading electronic materials to print materials.	2.13	1.19	13th
12	I study facing a corner to minimize distracting sights.	2.04	.71	14th
15	The chair and tables used for studying are always clear	1.38	.51	15th
Grand Mean Score				**2.60**

Table 2 shows the means, SD and Rank Order of Study Habits profile of Senior Secondary School Students in Kwara State. The table shows that the study past questions has the highest mean score of 3.34, followed by study in an environment that is well lighted which has a mean score of 3.06, followed by study in a quiet environment devoid of distraction which has a mean score of 3.01 while the least is The chair and tables used for studying are always clear which has a Mean score of 1.38. The grand mean score is 2.60 which is higher than the Average Mean score for making a decision is 2.5, it can therefore be stated that the study habits profile of Senior Secondary School Students in Kwara State is high.
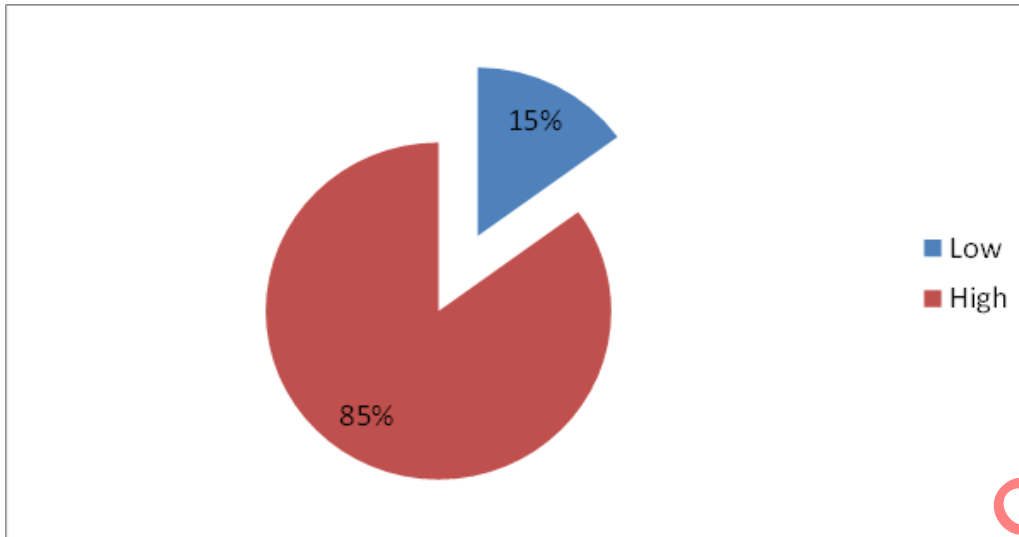
Figure 1: Percentage distribution of Study Habits profile of senior secondary school students in Kwara state

Figure 1 represents the study habits profile as expressed by senior secondary school students in Kwara state. This shows that the study habits profile as reported by senior secondary school students in Kwara State implies that 85% of respondents reported having a high study habits profile, while 15% of respondents reported having a low profile of study habits.

Research Question 2: What is the level of academic performance of senior secondary school students in Kwara state?

Table 2: Frequency Distribution of Students' level of Academic Performance in SSSPT

Interval Scores	Frequency	Percentages	Remark
0 – 39	148	37.9	Low Performance
40 – 69	158	40.5	Average Performance
70 – 100	84	21.5	High Performance

The results in Table 2 revealed that the highest frequency distribution of students' academic performance in Kwara State, Nigeria is Average (40 to 69) 40.5%. This was followed by Low(0 -39) 37.9% and the least was High (70 - 100) 21.5%. The Average Mean Score of academic performance was 43.5 which show the average academic performance of the senior secondary school students in Kwara State passes the SSSPT.
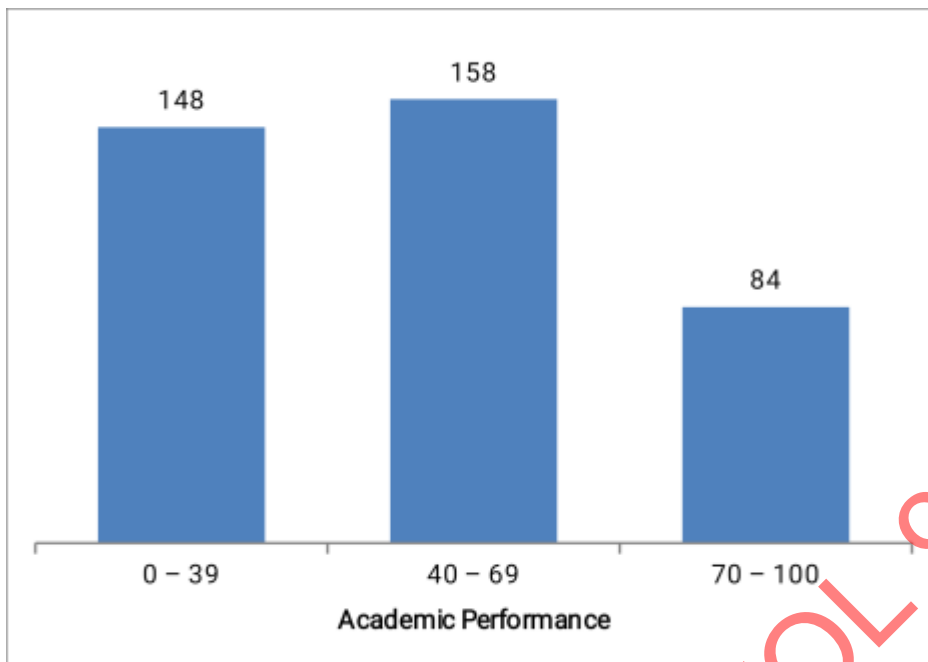
Figure 2: Levels of Students Academic Performance in SSSPT

Figure 2 presents the frequency distribution of students' academic performance of senior secondary school students in Kwara State. The result showed that the highest frequency was number two, which is Average Performance, followed by number one, which is Low Performance, while the lowest is number three which is High Performance.

Hypotheses Testing

Null Hypothesis: Study habit profile will have no significant effect on the academic performance of senior secondary school students in Kwara State, Nigeria

To test hypothesis 5, regression analysis is conducted to know the effects of Students' study habit profiles on the academic performance of senior secondary school students in Kwara State, Nigeria where academic performance is a dependent variable and study habit profile is a predictor. Tables 4, 5 and 6 show the model summary, ANOVA and coefficients of regression.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Errors of the Estimate
1	.353[a]	.782	.122	.45371

a. Predictors: (Constant), MeanSH

In the above Table 4, R Square = 0.782, which implies that 78.2% of the variation in the dependent variable (study habit profile) was explained by the constant variables (academic Performance) while the remaining 21.8% is due to other variables that are not included in the model. This means that the regression model formulated is very useful for predicting the value of R^2 is close to 1.

Table 5: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.365	1	11.365	55.209	.000[b]
	Residual	79.869	388	.206		
	Total	91.234	389			

a. Dependent Variable: Mean Perfb. Predictors: (Constant), Mean SH

ANOVA table was analyzed to see if any of the variables are significant. Hence, from Table 5 above, P-value = 0.000 < 0.05, this means the null hypothesis cannot be accepted. This shows that at least one of the items of study habits was useful for the student's academic performance. This test implied that study habits alone may not be significant to influence students' academic performance.

Table 6: Coefficients'

Model	Unstandardised Coefficients		Standardized Coefficients	t-stat	Sig. (P-value)
	B	Std. Error	Beta (β)		
(Constant)	2.409	.125		19.227	.000
MeanPerf	.334	.045	.353	7.430	.000

a. Dependent Variable: MeanPerf

The result in Table 6 shows that the t-stat coefficient of students' academic performance is 7.430. Since the P-value is 0.000 which is less than 0.05, it means that students' study habit profile is statistically significant at a 5% significant level. Hence, the overall summary of this regression outcome is that study habit profiles will significantly affect students' academic performance. This means a high students' study habit profile could lead to high students' academic performance.

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Decision Rule: As a result of this outcome, the null hypothesis will not be accepted on the basis that the P-value is less than 0.05. Hence, the alternative hypothesis is accepted, that is, there is a relationship between study habit profile and students' academic performance.

Summary of the Findings

This study investigated the study habits and academic performance of senior secondary school students in Kwara State, Nigeria. From the result, the study habits profile reported by senior secondary school students in Kwara state revealed that 85% of respondents have a high study habits profile, while 15% of respondents have a low study habits profile. The results of the study also revealed that senior secondary school students in Kwara state have average performance in the test organised for them during the cause of the research. However, the result of the hypothesis tested revealed a relationship between study habits and academic performance of senior secondary school students in Kwara State.

Discussion

The current findings suggest that there is a relationship between study habits and academic performance among senior secondary school students in Kwara State. The findings of this study indicated that ten out of fifteen items were above 2.50. The

study habits profile exhibited by senior secondary school students in Kwara state in research question one implies that 85% of respondents have a high study habits profile, while 15% of respondents have a low study habits profile. This shows that senior secondary school students in Kwara state have high study habits. This also indicates that 'study past questions', 'study in an environment that is well lighted', and 'study in a quiet environment devoid of distraction' have a high influence on the academic performance of senior secondary school students in Kwara state. However, factors such as 'reading electronic materials', 'study facing a corner to minimize distracting sights', and 'chair and tables used for studying are always clear' have low influence on the academic performance. The results of research question two show that most of the senior secondary school students in Kwara state have average academic. This means that the majority of the students just struggle to exceed the fail score but do not exceed the average score (50%) in the test given. Generally, the performance of senior secondary school students in the Kwara state was on average in the test organised for them. The results of the hypothesis tested revealed a significant relationship between study habits and academic performance of senior secondary school students in Kwara state. This implies that

students' performance was significantly related to study habits. This indicated that students' average performance in the test was highly influenced by their high study habits profile. The result of this study is similar to the one obtained by Oluwatimilehin and Owoyele (2012) who found out that students 'study habit influences their academic performance in the Ondo state of Nigeria. However, this result does not align with the study of Siahi and Maiyo (2015) which investigated the significant relationship between study habits and academic achievement of higher secondary school students in India. Siahi and Maiyo (2015) revealed the result that has no statistically significant relationship between study habits and the academic performance of the respondents.

Conclusion

The outcome of this study reveals that there was a positive correlation prevailing between the study habits and the academic performance among senior secondary school students in Kwara state. The result also showed the high academic performance of senior secondary school students in the Kwara state. The regression result indicates that the study habit profile has a significant influence on students' academic performance. This result answers the questions and hypothesis of the study. Therefore, the paper concluded that

students with high study habit profiles could have a high academic performance.

Recommendations

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

3. The student should be encouraged to read from electronic materials along with traditional methods
4. Students should also be encouraged to find a conducive environment devoid of distracting agents
5. More regular counselling services be introduced to sensitize the students on how to improve their study habits to boost students'academic performance.
6. Teachers and school counsellors should always organise an orientation programme for the students on the importance of study habit

Limitations and Suggestions for Further Studies

The present study has its limitation in the sample size and the sample population that was taken. The sample population focused on senior secondary school students in Kwara state hence cannot be generalized to other students' populations in other states of the federation. Future researchers should also try to conduct more researches on the factors affecting academic performance to other levels of education.

REFERENCES

Ajai, J. T., Shiaki, B. O., &Bulus, T. C. (2020). Study habits and academic achievement: a case study of secondary school science students in the Jalingo metropolis, Taraba State, Nigeria. *American Journal of Educational Research, 8*(5): 282-285. DOI: 10.12691/education-8-5-9.

Badau, M. K (2018). Managing study habits and its impact on secondary school students academic performance in Nigeria, *European Journal of Educational and Development Psychology, 6*(2), 15-24, Retrieved on Nov 15th, 2019 from http://www.eajournals.org

Ebele, U. F &Olofu, P. A. (2017). Study habits and its impact on secondary school students academic performance in biology in the federal capital territory, *Abuja. Educational Research and Reviews, 12*(10), 583-588.

Jato, M, Ogunniyi, S. O & Olubiyo, P. O (2014). Study habits, use of school libraries and students' academic performance in selected secondary schools in Ondo West Local Government Area of Ondo State. *International Journal of Library and Information Science, 6*(4), 57-64, http://DOI: 10.5897/IJLIS2012.0412

Lili, T., Mengmeng, H, & Huebner, E. S (2014).Preliminary development of the Adolescent Students' Basic Psychological Needs at School Scale. *Journal of Adolescence, 37* (2014) 257–267, Retrieved on Nov 15th, 2019 from http://www.elsevier.com/locate/jad

Nuvetha, S. K. (2016), "A study on the relationship between study habits and personality traits of higher secondary students" *International Journal of Research – Granthaalayah*, *4*(5), 40-43.

Oche, F. O. (2018). *Relationship among extroversion, introversion and academic performance of senior secondary school students in SabonGari local government area, Kaduna state*. A Dissertation. Ahmadu Bello University, Zaria. Nigeria

Oluwatimilehin, J.T.B., &Owoyele, J.W. (2012).Study habits and academic achievement in core subjects among junior secondary school students in Ondo State, Nigeria Bulgarian *Journal of Science and Education Policy (BJSEP)*, 6(1), 155-169. Retrieved on Oct. 10th, 2019 from http://bjsep.org/getfile.php?id^l 12

Osa-Edoh, G.I. &Alutu, A.N.G. (2012). A survey of students study habits in selected secondary schools: implication for counselling, *Current Research Journal of Social Sciences, 4*(3), 228-234

Sekaran, U. &Bougie, R. (2016) *Research Methods for Business: A Skill-Building Approach. 7th Edition*, Wiley & Sons, West Sussex.

Siahi, E.A &Maiyo, J. K (2015). Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, *India. International Journal of Educational Administration and Policy Studies.7*(7), 134-141, DOI: 10.5897/IJEAPS2015.0404

Institutional Policies and Gender ICT Literacy in Colleges of Education in Northwest Zone, Nigeria

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ABSTRACT

The role of management policies in ICT literacy level and usage in tertiary educational institutions could not be under-estimated. Therefore, this study examined among others the relevance of institutional policies in stimulating ICT literacy level and difference in ICT literacy level between male and female staff members in colleges of education in northwest zone of Nigeria. A cross-sectional form of descriptive survey design was adopted. A combination of simple random and proportional sampling techniques was adopted to select a sample of 610 for this study and data was collected through a self-completion structured questionnaire. Simple linear regression and student-test statistics were used to test the three alternate hypotheses of the study at 95 per cent confidence level. Data analysis revealed that institutional policies exert significant influence on staff members' level of ICT literacy/usage rate. Significant difference exists between the ICT literacy levels of male and female staff members. Thus, it was recommended, among others, that concerted efforts should be made to meet employees' basic technology needs with special attention to female staff members. It was also recommended that sufficient supports be provided for both male and female staff members in colleges of education to make them feel comfortable when using technology in their daily official work.

Keywords: *ICT literacy level,* ICT usage rate, colleges of education, institutional policies, staff members

Introduction

In this twenty-first century, Information and Communication Technology (ICT) has become indispensable in the development and execution of corporate strategies in Nigeria, and ICT is being increasingly applied in the search for competitive advantage across the globe (Kotler and Keller, 2013). This has made ICT to be seen not just as a useful tool for management but also something that

represents a strategic challenge for them to manage. Thus, every individual who wants to excel in his/her chosen career must embrace this reality, as 'information is power' and whoever has access to it gets power. ICT innovation adoption can be considered only a success to the extent that innovation is accepted and integrated into the organization, and the target individual adopters demonstrate commitment by continuing to use the technology over a period of time (Bhattacherjee, 2016).

Educational institutions are 'information dissemination and exchange centres' and the crucial role of ICT in this direction has come to stay with all members of these institutions. As such, the importance of computer-related devices as media for providing effective college management, effective teaching and learning activities and for providing information to researchers and scholars is obvious. Educational planners now are under pressure more than ever before to invest resources to move their institutions towards more technology-based approaches to teaching and learning. Higher education news is rich with claims about the power of ICT to revolutionise teaching and learning within tertiary educational institutions. Interestingly, the availability of Internet facilities in academic institutions offers a wide range of access to information

globally without geographical barriers. The arrival of Internet has granted unlimited access to all facets of information, but knowledge of ICT usages places limit on one's access to information and information is knowledge! According to Gallimore (2006), practitioners of tertiary educational institutions must be up-to-date with the latest systems and software if they must keep pace with the current demands in the knowledge economy. It is believed that ICT literacy level and usage rate are two sides of the same coin being influenced by institutional policies. Therefore, in this study, three variables namely, institutional policies, ICT literacy level and ICT usage rate were taken into consideration in assessing the adoption of ICT between male and female staff members of colleges of education in northwest zone of the country. Consideration of ICT adoption (literacy level and usage rate) by members of tertiary educational institutions was taken to be computer-related devices (specifically, PC, laptop, mobile phones and other handheld devices) used for teaching, learning and administrative activities. This is an empirical study, hence the remainder of the paper highlighted the problem statement, objective of the study, a review of relevant literature, methodology adopted for the study, data presentation/discussion thereon and conclusion/recommendations.

Problem Statement

Few studies have been carried out to investigate the state of ICT in Nigerian tertiary educational institutions. In Oketunji, Daniel, Okojie and Abdulsalam (2012), they were concerned with determining the state and future of ICT in libraries and information services in Nigeria. Studies such as Ngorgo (2012), Oguche (2014) and Nkamnebe, Okeke, Udem & Nkamnebe (2015) have shown that there is still a gap between literacy and competence among staff in Nigerian educational institutions which calls for attention. It was against these backdrops, that this study was embarked upon to assess the role of institutional policies in ICT adoption by staff members in colleges of education in northwest zone of Nigeria. Also, it is believed that the study would confirm the presence or otherwise of significant difference in ICT literacy level and usage rate between male and female staff members. Thus, it is assumed that findings from this study would serve as inputs into Federal Government's policy on ICT for tertiary educational institutions in the country. Staff members' ICT literacy level and ICT usage rate would also be empirically established and this would enable school administrators have an understanding of the patterns of ICT adoption between male and female staff members.

Objectives of the Study

This study was devoted to achieve the following objectives:

(a) To assess the patterns of institutional supports for ICT adoption by staff members in colleges of education in northwest zone of Nigeria.

(b) To examine the difference in ICT literacy level and usage rate between male and female staff members in these institutions.

Research Hypotheses

The following alternate hypotheses were tested at 95% confidence level:

H1$_1$: Institutional policies significantly affect staff members' ICT literacy level and usage rate.

H1$_2$: There is significant difference in ICT literacy level between male and female staff members in colleges of education.

H1$_3$: There is significant difference in ICT usage rate between male and female staff members in colleges of education.

Literature Review

Application of ICT in Tertiary educational institutions

The basic ICT knowledge and skills that an ICT literate person should have are constantly evolving and people need to

improve themselves to follow the rapid development of information and communication technologies (Adetimirin, 2012; Amua-Sekyi & Asare, 2016). Every discerning mind will easily be convinced that teaching and learning in tertiary educational institutions is undergoing a technological revolution. Higher education news is rich with claims about the power of ICT to revolutionise teaching and learning within tertiary educational institutions. Given that ICT has been defined to refer to computers and computer-related applications in teaching, types of technologies that can be used in the classroom environment include electronic-mail (e-mail), internet, computer-assisted tutorial materials, computer simulations and interactive multi media packages, and many more. How can these technologies be effectively integrated and applied to teaching and learning in tertiary educational institutions? The nature of these technologies is diverse as is the nature of the ways in which they could be incorporated into teaching approaches. Thus, classrooms that employ technology in educational ways may look and feel very different from those classrooms that do not embrace the use of ICT in teaching and learning. In Nigeria, for example, privately owned universities such as American University of Nigeria (formerly ABTI-America University) in Adamawa state,

Covenant University at Sango-Otta, Ogun state and Afe Babalola University, Ado Ekiti, Ekiti state have carved special niches for themselves because of their wide application of ICT to teaching and learning activities.

In the process of applying ICT to teaching and learning, the link between educational outcomes and information technology may be problematic. Adelabu and Adu (2014) stress that ICT of itself does not have an educational value unless it is put to work in educationally sound ways. This is perhaps quite true since technology can be misused by teachers just like any other teaching tool. In effect, the application of ICT does not guarantee enhanced teaching and learning. The main aim therefore is to use ICT in ways that will enhance teaching and learning; by identifying educational problems or areas where teaching and learning should be enhanced and employing ICT to overcome those problems or at least support teaching and learning in specific ways. In this regard, Adelabu and Adu (2014) suggest that any move to use ICT must be driven by educational needs rather than a desire to use technology for its own sake.

The successful integration of ICTs into teaching and learning depends on the ability of lecturers to structure their learning environments to merge technology in non-

traditional ways. A lecturer's lack of expertise in using ICTs will therefore hinder his/her confidence in using it (Hennessy, Harrisson & Wamakote, 2020). A lecturers' ICT literacy is influenced by his/her knowledge and use of computer based technologies, access to these technologies and his/her competence or skill in using computer based technologies. Knowledge can be explained as the lecturers' familiarity with computer technologies and their use. Hennessy et al., (2020) observe that the lecturers' knowledge of ICT operations is an important step towards integrating ICT into teaching. They noted that the degree of familiarity and the ability to manipulate ICTs help lecturers to incorporate technology into classroom activities and appreciate the technologies' versatility as an important tool in teaching and learning. This implies that lecturers with enough knowledge about ICT are more prepared and able to integrate computer technology in teaching.

In Nigeria, the reality of the university classroom for most of the students remains what it was for many years – a large lecture theatre in which the professor delivers a lecture, possibly aided by overhead transparencies, microphones or white marker-boards. Spotts and Bowman (2015) report that in USA, faculty knowledge of computer technology and related use of instructional technology was found to be low. The results in Nigerian universities (especially publicly-owned types) might not be any better, and situations in colleges of education and polytechnics might even be worrisome. A number of reasons could be adduced for the failure of academics to integrate new technologies into their teaching. In studies of factors influencing effective adoption of ICT in Nigeria universities libraries, poor funding, frequent power outage, lack of trained personnel, negative attitude of management to ICT, lack of awareness of ICT potentials and attitudinal problems are among the key factors identified as militating against its adoption (Ani, Esin & Edem, 2006; Adelabu & Adu, 2014).

Importance of Information Technology to Teaching and Learning

The ever increasing dependence of education upon the computer seems inevitable because it helps to meet the needs of the students for greater individualization of instruction and greater relevance of subject matter. It also provides platform for a higher degree of accountability and efficiency in schools. In the teaching and learning of accounting in tertiary educational institutions, Information Technology is providing opportunities for the use of Computer Aided Learning (CAL)

system to assess the education and training of students (Nwosu, 2015). The nation's educational system from the pre-primary level to the highest level is in effect faced with the challenge of training pupils and students on how to use the information technology to maximise educational opportunities.

Before the advent of information technology in classroom setting, teacher used to be the master and imparter of knowledge. With the introduction of information technology however, the teacher's role is now that of a guide. The role of students has consequently changed from being passive receivers of knowledge from the master to active participants seeking and analyzing knowledge from various sources (Nwosu, 2015). Indeed, information technology is changing the nature of educational institutions. With the application of information technology, we now have schools without classrooms or walls, and this makes teaching and learning even more effective (Benedict, 2015). Information technology thus makes it possible for students to acquire a huge amount of experiences. In such a way, they can learn by doing things themselves and, students/learners become creators not just the receivers of knowledge. Benedict (2015) asserts that information technology in teaching and learning accounting

provides an opportunity for learners to come up with different innovations and has also helped in one way or the other to give an answer to some questions that were left unanswered. Application of information technology in teaching and learning similarly helps students to come up with innovations that will be of high educational value to the school and education sector in general (Falaye, 2009).

ICT has the capability to enhance teaching and learning through improved interaction across cultures, between students, academics and between both. In the view of Adetimirin (2018), ICT use by undergraduates therefore becomes inevitable for academic excellence in their various disciplines. Students' use of technology in education is expected to improve educational outcomes, increase skills in the use of technology and decrease inequalities between groups as employers expect graduates who will be prospective employees to possess some ICT skills. In order to remain relevant in the current information age, Adetimirin (2018) counseled that university lecturers and students have to adopt ICT to enhance their teaching, learning and research activities. However, the use of such technologies by the students is however, dependent on accessibility, skills and ease of use to such technologies.

Research Methodology

This study was conducted in the fourteen (14) government owned colleges of education located in Northwest zone of Nigeria**.** The zone covers a total land area of 216,065sq km and comprises seven (07) states of Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto and Zamfara**.** The plan adopted for this study was a cross-sectional form of descriptive survey design**.** The population of this study comprised all staff members (male and female) in these colleges. Altogether, the population of the study was 13,219, comprising 5,116 and 8,103 academic and non-academic (administrative) staff respectively (as at June 2022)**.** A sample of 610, adjudged to be representative of the population, was chosen**.** A combination of simple random and proportional sampling techniques was used to select a well inclusive sample for this study. Proportional sampling technique was adopted for the determination of ratio of the instrument to be administered between male and female staff members while simple random sampling technique was subsequently used to administer the instrument**.** Data was collected through the use of a self-completion structured questionnaire. The instrument was subjected to both face and content validity. Test-retest reliability and internal consistency measures were used to ensure reliability of the instrument. For the internal consistency of the instrument, Cronbach's alpha reliability coefficient was computed and reliability scores greater than 0.6 were obtained. Administration of the instrument was carried out with the aid of research assistants and the retrieved copies of the questionnaire were collated and edited**.**

The three key variables of the study, i.e. institutional policies, ICT literacy level and ICT usage rate were measured on a 5-point Likert type scale. An index of the responses for each respondent was subsequently obtained and used for the computation of inferential statistics. Consequently, 390 usable copies of the questionnaire were serialized and numerically coded for computer processing and data analysis**.** Standard type of simple linear regression model was used to test hypothesis one while student t-test statistics was used to test hypotheses two and three, all at 95 per cent confidence level.

Findings

The relevance of institutional policies in ICT literacy level of staff members in colleges of education was the central focus of this study**.** Hence, hypothesis 1 which states that "Institutional policies significantly affect staff members' ICT literacy level" was tested using simple linear regression**.** The aim was to determine how much change in ICT literacy level

(dependent variable) is accounted for by institutional policies (independent variable), i.e. does ICT literacy level depend on institutional policies? The presentation and analysis of the result of

simple linear regression was corroborated with computation of Pearson correlation coefficient (r) which aimed at establishing the presence or otherwise of association/ relationship between the two variables.

Table 1: Test of statistical relationship between Institutional policies and lCT literacy level

Simple Linear Regression				Pearson Correlation coefficient	
r^2	Adjusted r^2	F-ratio	sig. level	r	sig. level
.139	.145	25.028	.031	-.373	.031

Source: Field Survey (2022)

Finding revealed that institutional policies have strong correlation with ICT literacy level (r = -.373, p = 031). This confirms presence of a strong association between the two variables. Corroboratively and more importantly is the computation of coefficient of determination (r^2 = 0.139) which suggested that institutional policies (independent variable) explained only 13.9% of change in ICT literacy level (dependent variable). The unexplained variation of 86.1% in level of ICT literacy level is accounted for by other extraneous variables (factors) not included in the model (error term = e). Therefore, there is presumption that such factors could include age, educational level, access to and ownership of technology, requirements of the jobs, income among others. Since r^2 and adjusted r^2 values are very similar (adjusted r^2 decreased by only 0.006), the regression model in this study has very

good explanatory power of the dependent variable.

In testing the statistical significance of the result, the obtained F-ratio of 25.028 and significance value of p = 0.031 (significant at p < 0.050) suggested that result of the linear regression model could have not occurred by chance and the independent variable significantly predicted dependent variable. In effect, the finding of this study supported hypothesis 1 and the hypothesis is hereby upheld.

It was also considered pertinent to ascertain if there is any difference in staff ICT literacy level between genders. Hence, hypothesis two which states that "there is significant difference in ICT literacy level between male and female staff in colleges of education" was tested using statistical test of difference between means of independent samples. The summary of the result was presented in table 2.

Table 2:Statistical test of difference between means of ICT literacy level of male and female staff

ICT literacy level	N	Sample mean	sample std. dev.	t-value	df	sig.	Eta Square
Male	240	3.59	.401	11.001	610	.032	.238
Female	150	3.21	.371				

Source: Field Survey (2022)

The result presented in table 2 indicated a t-value of 11.001 which was found to be significant at p < 0.050 (computed sig. value = .032). The result thus indicated a significant difference in the mean scores of ICT literacy level for male and female staff at p = .032. This means that significant difference exists in the ICT literacy level between male and female staff in colleges of education. Thus, hypothesis two was supported by this finding and is thereby upheld. However, it must be stated that ICT literacy level of male staff is higher than of the female staff as depicted by higher sample mean and sample standard deviations values.

$$\text{Eta square} = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$
$$= 0.238$$

The Eta square of .238 represents a "large effect" and by extension it suggested that the magnitude of the difference in the means was very large. Also, it indicated that 23.8 per cent variation in level of ICT literacy is explained by gender. The study also sought to confirm empirically the

Sequel to the presence of significant difference in the mean scores of ICT literacy level of male and female staff, an attempt was further made to determine the "effect size" (strength of association) which provides an indication of the magnitude of the difference between the groups (not just whether the difference could have occurred by chance). Therefore, there is need to calculate the "Eta square" in order to ascertain the proportion of variation in the dependent variable that is explained by the independent variable. According to Pallant (2001), the formula for calculating Eta square is given as:

$$= \frac{11.001^2}{11.001^2 + (240 + 150 - 2)}$$

assumption that the presence of significant difference in ICT literacy level between genders would lead to corresponding difference in their ICT usage rate. Thus, the hypothesis which states that there is significant difference in ICT usage rate between male and female staff members in

colleges of education was tested**.** Student t-test of difference between means of independent samples was also used and the

summary of the result was presented in table 3.

Table 3:Statistical test of difference between means of ICT usage rate of male and female staff

ICT usage rate	N	Sample mean	sample std. dev.	t-value	df	sig.	Eta Square
Male	240	3.52	**.3**04	10**.**004	622	**.**041	**.**205
Female	150	3.29	**.**281				

Source: Field Survey (2022)

The data reported in table 3 indicated a t-value of 10.004 which was found to be significant at p < 0.050 (computed sig. value = **.**041). The result thus indicated a significant difference in the mean scores of ICT usage rate for male and female staff at p = **.**041. This means that significant difference exists in the ICT usage rate between male and female staff in colleges of education**.** Thus, hypothesis three is supported by this finding and is thereby upheld. Finding revealed further that ICT usage rate of male staff is higher than of the female staff as shown by higher sample mean and sample standard deviation values.

$$\text{Eta square} = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$
$$= 0.205$$

The Eta square of **.**205 represents a "large effect" and by extension it suggested that the magnitude of the difference in the means was very large. Also, it indicated

Sequel to the presence of significant difference in the mean scores of ICT usage rate of male and female staff, an attempt was further made to determine the "effect size" (strength of association) which provides an indication of the magnitude of the difference between the groups (not just whether the difference could have occurred by chance)**.** Therefore, there is need to calculate the "Eta square" in order to ascertain the proportion of variation in the dependent variable that is explained by the independent variable**.** According to Pallant (2001), the formula for calculating Eta square is given as:

$$= \frac{10.004^2}{10.004^2 + (240 + 150 - 2)}$$

that 20.5 per cent variation in ICT usage rate is explained by gender.

Discussion of the Findings

The philosophies and actions/inactions of school managements spur/hinder staff

members' desire to be ICT literate and equally impinge on the depth of ICT usage by staff members in various institutions. Therefore, this study sought to examine the impact or relevance of institutional policies in fostering ICT literacy among staff members in colleges of education in northwest zone of Nigeria**.** Finding revealed that institutional policies have strong correlation with ICT literacy level and this confirmed the presence of a strong association between the two variables**.** Thus, the findings showed that the presence or absence of supportive institutional policies has impact on ICT adoption, ICT literacy level and usage rate by staff members. In a study on the ICT literacy among academics in Enugu state, Nigeria by Ugwuanyi (2019), it was revealed that the level of ICT literacy skills among the academics is low due to non-availability of ICT infrastructure in most of the tertiary institutions thereby hindering meaningful acquisition of ICT literacy skills.

The possibility of any difference in ICT literacy level along gender line was another focus of the study and the finding indicated a significant difference exists in the ICT literacy level between male and female staff in colleges of education. Also, the study showed that male staff members have higher ICT literacy level than their female counterparts. This finding agreed with that

of Awodeji's (2007) and Bebetsos and Antoniou's (2018) that there was gender disparity in ICT literacy in favour of males. However, the finding was at variance with that of Nwosu's (2015) and Amua-Sekyi and Asare's (2016) studies which found that lecturers' use of computer is not influenced by gender. Similarly, the finding was at variance with that of Thakur (2014) who discovered that there is no significant difference in the level of ICT literacy among the male and female trained teachers. Chaman and Sanjay (2016) also concluded that gender variable did not affect students and faculty opinions towards information and communication technology awareness/literacy and as such there is no statistically significant difference between male and female faculty towards ICT awareness/usage. Generally, researchers such as Agyekum, Haifeng and Agyelwaa (2015) and Jiriko, Obianuko and Jiriko (2015) confirmed that users' gender has profound influence on their level of innovation perception and adoption.

There was a presumption that higher ICT literacy level would lead to higher ICT usage rate, thus the presence of significant difference in ICT literacy level between genders would lead to corresponding significant difference in their ICT usage rate. Therefore, the study sought to empirically establish this assumption by

testing for significant difference in ICT usage rate between male and female staff members in colleges of education. Corroboratively, the finding indicated the existence of a significant difference in the ICT usage rate between male and female staff in colleges of education. Specifically, the finding further revealed higher ICT usage rate of male staff than that of the female staff members. This finding confirmed the submissions of Frias-Martinez and Virsesa (2012) that there is strong relationship between socio-economic factors and cell phone usage. However, the finding is at variance with Amua-Sekyi and Asare (2016) who concluded, among others, that gender of staff do not influence their level of IT adoption. In a study conducted by Beena (2012), it was found that there was no significant difference between opinions of male and female students about the use of ICT in education. Male students showed higher ICT usage rate as compared to female students for the use of ICT in education (Beena, 2012).

Conclusion

Based on the findings of this study and the discussions thereon the following conclusions are drawn:

There was a strong relationship between institutional policies and staff members' level of ICT literacy and usage rate. In other words, institutional policies exert significant influence on staff members' level of ICT literacy and usage rate in colleges of education in northwest zone of Nigeria.

Significant difference exists between the ICT literacy level of male and female staff members in colleges of education in the northwest zone of Nigeria. Male staff members have higher rate of ICT versatility than their female counterparts.

The study also affirmed the presence of significant difference in the ICT usage rate between male and female staff members in these educational institutions. ICT usage rate is a function of ICT literacy level and given that male staff members have higher ICT usage rate, it was thus concluded that male staff members have higher ICT usage rate than their female counterparts in these educational institutions.

Recommendations

Given the level of ICT literacy in tertiary educational institutions, heads of institutions should strive to meet staff members' basic technology needs and provide sufficient supports for all categories of staff members to feel comfortable using technology in their daily official work. In this regards, accessibility to ICT hardware and software should be made easy. Thus, technological friendly

environment should be created and sustained by school administrators in order to engender robust adoption and application of ICT in teaching and learning activities in tertiary educational institutions.

Deliverables of ICT literacy and usage such as sponsorships to ICT syndicated workshops, seminars, conferences, short and medium terms ICT courses should be envisioned and implemented for all staff members in general and for female staff members in particular. Thus, effective and evolving deployment of ICT resources in the administration and academic activities of the institutions should be embraced and sustained.

REFERENCES

Adelabu, O. and Adu, E. (2014). "Assessment of accessibility and utilization of Information and Communication Technology (ICT) for effective teaching of Biological science in secondary schools". *Mediterranean Journal of Social Sciences*, 5(23),1439-1444.

Adetimirin, A. E. (2018). "ICT Literacy among undergraduates in Nigerian universities", *Education Information Technology*, 17, 381-391.

Agyekum, C. K., Haifeng, H. and Agyelwaa, A. (2015). "Consumer Perception of Product Quality", *Microeconomics and Macroeconomics*, 3(2), 25-29.

Amua-Sekyi, E. T. and Asare, Y. (2016). "A Survey of Information Communication Technology Literacy among Lecturers", *Information and Knowledge Management*, 6(8), 1-7.

Ani, O. E.; Esin, J. E. and Edem, N. (2006). "Adoption of Information and communication technology (ICT) in academic libraries: a strategy for library networking in Nigeria". *The Electronic Library*, 23(6),701-708.

Awodeji, B. A. (2007). *Planning human resource development*. Ibadan: Heinemann.

Bebetos, C. and Antonio, S. (2018). Why use information and communication technology in schools? Some theoretical and practical issues. *Journal of Information Technology for Teacher Education*, 10(1:2), 7-18.

Beena, M. M. (2012). A study on the ICT awareness of M.Ed. trainees. *International Journal of Business Management Economic Research,* 3(4),573–578.

Benedict, N. (2015). *Educational Technology: Implication for Teacher Education*, Lagos: Julhen Publishers.

Bhattacherjee, A. (2016). "Managerial influences on intra-organisational information technology use: a principal agent model", *Decision Sciences*, 29(1), 139-52.

Chaman, V. and Sanjay, D. (2016). "Gender difference towards information and communication technology awareness in Indian universities. *Springerplus*, 5:370-379.

Falaye, A. S. (2009). *Essential of Computing and Data Processing*, Lagos: West African Books Publishers.

Frias-Martinez, V. and Virsesa, J. (2012). *Relationship between socio-economic factors and Cell phone Usage*, Atlanta, GA, USA: In ICTD.

Gallimore, A. (2006). "A public library IT strategy for the millennium", *Journal of Librarianship and Information Science*, 28(3), 149-51.

Hennessy, S., Harrison, D. and Wamakote, L. (2020). "Teacher factors influencing classroom use of ICT in Sub-Saharan Africa", *Itupale Online Journal of African Studies*, 2, 39-54. (accessed 20 December, 2022).

Jiriko, R. K., Obianuko, J. C. and Jiriko, K. G. (2015). "Socio-economic factors affecting ICT utilization by Youths in Fish farming in Kaduna state, Nigeria", *Global Journal of Agricultural Research*, 3(4), 12-22. (accessed on 12 October 2022).

Kotler, P. and Keller, K. L. (2013). *Marketing Management*, 14th edition, New Delhi: Prentice Hall of India Private Ltd.

Ngorgor, R. (2012). "Information and Communications Technology Literacy skill level of staff of National Library of Nigeria". MLS Thesis, Department of Library and

Information Science, University of Nigeria, Nsukka.

Nkamnebe, E., Okeke, I., Udem, O. and Nkamnebe, C. (2015). "Extent of Information and Communication Technology skills Possessed by librarians in University libraries in Anambra state, Nigeria". *Information and Knowledge Management*, 5(9), 22-31.

Nwosu, K. L. (2015). "Sex and skill: Notes towards a feminist economics", *Feminist Review.* 2, 65-73.

Oguche, D. (2014). "Effect of Information and Communication Technologies Literacy Competence on Job Performance of Library Staff in Nigerian Federal University Libraries". MLS Thesis, Department of Library and Information Science, Ahmadu Bello University, Zaria.

Oketunji, I.; Daniel, J. O.; Okojie, V. O. and Abdulsalam, R. (2012). "40 years of library and information service to the nation". A compendium of papers presented at 40th National Annual Conference and AGM of Nigerian Library Association, Lagos, 3-11.

Pallant, J. (2001). *SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows.* Maidenhead - Berkshire: Open University Press.

Spotts, T. and Bowman, M. (2015). "Faculty use of instructional technologies in higher education", *Educational Technology*, 5(3), 56-64.

Thakur, N. (2014). A study on awareness of trained teachers in relation to information and communication technology. *International Journal of Research Method in Education.* 4(1), 6–11.

Ugwuanyi, C. (2019). "Information and Communication Technology (ICT) literacy among academic librarians in Enugu State", *International Journal of Information and Communication Technology*, 6(1), 123-132.

Sensorineural Hearing Loss as an Impediment to Learning

By

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ABSTRACT

Sensorineural Hearing loss (SNHL) happened as a result of damage to the inner ear or the nerve from the ear to the brain. It is usually permanent but can be prevented. It affects more than 100 thousand people per year in Nigeria thereby making learning difficult to them. Therefore, this paper discussed mechanism of hearing, pathophysiology of SNHL, prevalence of SNHL, causes of SNHL, diagnosis of SNHL, prevention of SNHL, recommended noise exposure limits, conclusion and lastly recommended among others that government should make it compulsory on everybody to seek periodic hearing evaluation by a licensed audiologist or other qualified professional, especially if there is concern about potential hearing loss.

Introduction

Hearing is the active ingredient for effective learning process. According to Ghazavi, Kargoshaei and Jamshidi-Koohsari (2019) sensorineural hearing loss (SNHL) is a type of hearing loss in which the root cause lies in the inner ear or sensory organ (cochlea and associated structure) or the vestibulocochlear nerve (cranial nerve VIII). SNHL accounts for about 90% of reported hearing loss and is usually permanent which can be mild, moderate, severe, profound, or total. Different ways can be used in its description depending on the shape of the audiogram, such as high frequency, low frequency, U-shaped, notched, peaked, or flat (Bayoumy, Van der Veen & De Ru, 2018).

Wichmann and Moser (2015) found out that sensory hearing loss usually happens as a consequence of damaged or deficient cochlear hair cells. A common cause or exacerbating factor in SNHL is prolonged exposure to environmental noise, or noise-induced hearing loss. Exposure to a single very loud noise such as a gunshot or bomb blast can cause noise-induced hearing loss. Using headphones at high volume over time, or being in loud environments regularly, such as a loud workplace, sporting events, concerts, and using noisy machines can also be a risk for noise-induced hearing loss (Papadakis, Hajiioannou, Kyrmizakis & Bizakis, 2003).

Gelfand (2004) expatiated that retrocochlear or Neural hearing loss occurs because of damage to the cochlear nerve (CVIII). The most common kind of sensorineural hearing loss is age-related (presbycusis), followed by noise-induced hearing loss (Suckfuell, Lisowska, Domka, Kabacinska, Morawski, Bodlaj, Klimak, Kostrica & Meyer, 2014).Newman, Weinstein, Jacobsonand and Hug (1991) revealed that similar symptoms are also associated with other kinds of hearing loss; audiometry or other diagnostic tests are necessary to distinguish sensori-neural hearing loss.

The diagnosis of sensorineural hearing loss is usually made by performing a pure tone audiometry (an audiogram) in which bone conduction thresholds are measured. Tympa nometry and speech audiometry may be helpful. Testing is performed by an audiolog ist (Li & Yike, 2017).

Oishi, Naoki, Schacht and Jochen (2011) stated that although there is no proven or recommended treatment or cure for SN cochlear HL and management of hearing loss is usually by hearing strategies and hearing aids. In cases of profound or total deafness, a implant is a specialized hearing aid that may restore a functional level of hearing. SNHL is at least partially preventable by avoiding environmental noise, ototoxic chemicals and treating or inoculating against certain triggering diseases and conditions like meningitis and drugs, and head trauma.

Mechanism of hearing

Teele, Klein and Rosner (2020) explained that for effective learning to take place, sound waves have to enter the outer ear and travel through the external auditory canal until they reach the tympanic membrane, causing the membrane and the attached chain of auditory ossicles to vibrate. The motion of the stapes against the oval window sets up waves in the fluids of the cochlea, causing the basilar membrane to vibrate. This stimulates the sensory cells of the organ of Corti, atop the basilar membrane, to send nerve impulses to the brain (Salawati, Le Prell, Popper, 2012).

Prevalence of SNHL

Centers for Disease Control and Prevention (CDC) (2007); Hoffman, Dobie and Losonc-zy, Themann and Flamme (2016); Black well, Lucas and Clarke (2012); Teele, Klein and Rosner (2020) reported the current statistics on SNHL as follows:

- More than 100 thousand cases per year in Nigeria

- About 2 to 3 out of every 1,000 children in the United States are born with a detectable level of hearing loss in one or both ears.
- More than 90 percent of deaf children are born to hearing parents.
- Approximately 15% of American adults (37.5 million) aged 18 and over report some trouble hearing.
- Among adults aged 20-69, the overall annual prevalence of hearing loss dropped slightly from 16 percent (28.0 million) in the 1999-2004 period to 14 percent (27.7 million) in the 2011–2012 period.
- Age is the strongest predictor of hearing loss among adults aged 20-69, with the greatest amount of hearing loss in the 60 to 69 age group.
- Men are almost twice as likely as women to have hearing loss among adults aged 20-69.
- Non-Hispanic white adults are more likely than adults in other racial/ethnic groups to have hearing loss; non-Hispanic black adults have the lowest prevalence of hearing loss among adults aged 20-69.
- About 18 percent of adults aged 20-69 have speech-frequency hearing loss in both ears from among those who report 5 or more years of exposure to very loud noise at work, as compared to 5.5 percent of adults with speech-frequency hearing loss in both ears who report no occupational noise exposure.

- One in eight people in the United States (13 percent, or 30 million) aged 12 years or older has hearing loss in both ears, based on standard hearing examinations.
- About 2 percent of adults aged 45 to 54 have disabling hearing loss. The rate increases to 8.5 percent for adults aged 55 to 64. Nearly 25 percent of those aged 65 to 74 and 50 percent of those who are 75 and older have disabling hearing loss.
- Roughly 10 percent of the U.S. adult population, or about 25 million Americans, has experienced tinnitus lasting at least five minutes in the past year.
- About 28.8 million U.S. adults could benefit from using hearing aids.
- Among adults aged 70 and older with hearing loss who could benefit from hearing aids, fewer than one in three (30 percent) has ever used them. Even fewer adults aged 20 to 69 (approximately 16 percent) who could benefit from wearing hearing aids have ever used them.
- As of December 2019, approximately 736,900 cochlear implants have been implanted worldwide. In the United States, roughly 118,100 devices have been implanted in adults and 65,000 in children.
- Five out of 6 children experience ear infection (otitis media) by the time they are 3 years old.

Causes of SNHL

Sensorineural hearing loss may be genetic or acquired (i.e. as a consequence of disease, noise, trauma, etcetera). People may have a hearing loss from birth (congenital) or the hearing loss may come on later in life as many cases are related to old age (age-related).

Congenital

Matsunaga (2009) described Cytomegalo-virus (CMV) infection; Toxoplasmosis, Congenital rubella syndrome (CRS) as causes of SNHL. Secondly, Crispino and Horwitz (2017) reported that Globin Trans-cription factor 2 (GATA2) deficiency, a grouping of several disorders caused by common defect, viz., familial or sporadic inactivating mutations in one of the two parental GATA2 genes. These autosomal dominant mutations cause a reduction, i.e. a haploinsufficiency, in the cellular levels of the gene's product, GATA2. GATA2 deficiency-induced abnormalities in the lymphatic system are proposed to be responsible for a failure in generating the perilymphatic space around the inner ear's semicircular canals, which in turn underlies the development of sensorineural hearing loss (Hirabayashi, Wlodarski, Kozyra & Niemeyer, 2017). Thirdly, Mills

and Going (1982) added that Hypoplastic auditory nerves or abnormalities of the cochlea as another cause of SNHL. Abnormal development of the inner ear can occur in some genetic syndromes such as LAMM syndrome (labyrinthine aplasia, microtia and microdontia), Pendred syndrome, branchio-oto-renal syndrome , CHARGE syndrome.

Presbycusis

Rosen, Bergman, Plester, El-Mofty and Satti (1962) expatiated that progressive age-related loss of hearing acuity or sensitivity can start as early as age 18, primarily affecting the high frequencies, and men more than women. Such losses may not become apparent until much later in life. Presbycusis is by far the dominant cause of sensorineural hearing loss in industrialized societies. Goycoolea, Goycoolea, Farfan, Rodriguez, Martinez and Vidal (1986) explained that researchers have argued that factors other than differences in noise exposure, such as genetic make-up, might also have contributed to the findings. Hearing loss that worsens with age but is caused by factors other than normal aging, such as noise-induced hearing loss, is not presbycusis, although differentiating the individual effects of multiple causes of hearing loss can be difficult. One in three

persons have significant hearing loss by age 65; by age 75, one in two. Age-related hearing loss is neither preventable nor reversible.

Noise

According to Thornton, Abbas and Abbas (2001) Noise and ageing are the primary causes of presbycusis, or age-related hearing loss, the most common kind of hearing loss in industrial society. The dangers of environmental and occupational noise exposure are widely recognized. Numerous national and international organizations have established standards for safe levels of exposure to noise in industry, the environment, military, transportation, agriculture, mining and other areas. The louder the noise is, the shorter the safe amount of exposure is. NIHL can be either permanent or temporary, called a threshold shift. Unsafe levels of noise can be as little as 70 dB (about twice as loud as normal conversation) if there is prolonged (24-hour) or continuous exposure. 125 dB (a loud rock concert is ~120 dB) is the pain level; sounds above this level cause instant and permanent ear damage c

An increase of 6 dB represents a doubling of the sound pressure level (SPL) or energy of the sound wave, and therefore its propensity to cause ear damage. Because human ears hear logarithmically, not linearly, it takes an increase of 10 dB to produce a sound that is perceived to be twice as loud. Ear damage due to noise is proportional to sound intensity, not perceived loudness, so it's misleading to rely on subjective perception of loudness as an indication of the risk to hearing, i.e. it can significantly under-estimate the danger (Newman, Weinstein, Jacobsonand & Hug, 1991).

- Ambient environmental noise: Populations living near airports, railyards and train stations, freeways and industrial areas are exposed to levels of noise typically in the 65 to 75 dBA range. If lifestyles include significant outdoor or open window conditions, these exposures over time can degrade hearing.

- Personal audio electronics: Personal audio equipment such as iPods (iPods often reach 115 decibels or higher), can produce powerful enough sound to cause significant NIHL.

- Acoustic trauma: Exposure to a single event of extremely loud noise (such as explosions) can also cause temporary or permanent hearing loss. A typical source of acoustic trauma is a too-loud music concert.

- Workplace noise: The OSHA standards 1910.95 General Industry Occupational

Noise Exposure and 1926.52 Construction Industry Occupational Noise Exposure identify the level of 90 dB(A) for 8 hour exposure as the level necessary to protect workers from hearing loss. (Terkildsen, 2001).

Disease or disorder

Ghazavi, Kargoshaei and Jamshidi-Koohsari (2019) described the following diseases/ disorders such as suppurative labyrinthitis or otitis interna (inflammation of the inner ear); diabetes mellitus; Ménière's disease; bacterial meningitis (such as pneumococcal, meningococcal, haemophilus influenza); viral infections such as AIDS & ARC, mumps(epidemic parotitis), measles, Ramsay Hunt syndrome type II (herpes zoster oticus); tumor like cerebellopontine angle tumour (junction of the pons and cerebellum), acoustic neuroma (vestibular schwannoma), meningioma (Wichmann & Moser, 2015).

Ototoxic and neurotoxic drugs and chemicals

Thornton, Abbas and Abbas (2001) supported that some over-the-counter as well as prescription drugs and certain industrial chemicals are ototoxic. Exposure to these can result in temporary or permanent hearing loss. The most important group is the aminoglycosides Long term hydrocodone (Vicodin) abuse is known

to cause rapidly progressing sensorineural hearing loss, usually without vestibular symptoms. Methotrexate, a chemotherapy agent, is also known to cause hearing loss. In most cases hearing loss does not recover when the drug is stopped. Paradoxically, methotrexate is also used in the treatment of autoimmune-induced inflammatory hearing loss (Hirabayashi, Wlodarski, Kozyra & Niemeyer, 2017).

Gelfand (2004) cautioned that Various other medications may reversibly degrade hearing. This includes loop diuretics, sildenafil (Viagra), high or sustained dosing of NSAIDs (aspirin, ibuprofen, naproxen, and various prescription drugs: celecoxib, etc.), quinine, and macrolide antibiotics (erythromycin etc.). Cytotoxic agents such as carbo-platinum, used to treat malignancies can give rise to a dose dependent SNHL, as can drugs such as desferrioxamine, used for haematological disorders such as thalassaemia; patients prescribed these drugs need to have hearing monitored.

According to Mill& Going (1982) prolonged or repeated environmental or work-related exposure to ototoxic chemicals carbon monoxide; carbon disulfide; styrene; heavy metals (such as tin, lead, manganese, mercury); hexane; butyl nitrite –chemical used recreationally known

as 'poppers'; ethylbenzene; trichloro-ethylene; organophosphate pesticides; toluene and xylene can lead to SNHL.

Perinatal conditions

These are much more common in premature babies, particularly those under 1500 g at birth. Premature birth can be associated with problems that result in sensorineural hearing loss such as anoxia or hypoxia (poor oxygen levels), jaundice, intracranial haemorrhages, meningitis. Fetal alcohol syndrome is reported to cause hearing loss in up to 64% of infants born to alcoholic mothers, from the ototoxic effect on the developing fetus, plus malnutrition during pregnancy from the excess alcohol intake (Mills & Going, 1982).

Brain stroke

Matsunaga (2009) affirmed that brain stroke in a region affecting auditory function such as a posterior circulation infarct has been associated with deafness.

Head trauma

There can be damage either to the ear itself or to the central auditory pathways that process the information conveyed by the ears. People who sustain head injury are susceptible to hearing loss or tinnitus, either temporary or permanent (Wichmann & Moser, 2015).

Iodine deficiency / Hypothyroidism

Kochupillai, Pandav, Godbole, Mehta and Ahuja (1986) stated that Iodine deficiency and endemic hypothyroidism are associated with hearing loss. If a pregnant mother has insufficient iodine intake during pregnancy it affects the development of the inner ear in the foetus leading to sensorineural deafness. This occurs in certain areas of the world, such as the Himalayas, where iodine is deficient in the soil and thus the diet. In these areas there is a high incidence of endemic goitre. This cause of deafness is prevented by adding iodine to salt.

Vestibulocochlear nerve pathology

Moore (2004) itemized congenital deformity of the internal auditory canal, neoplastic and pseudo-neoplastic lesions, with special detailed emphasis on schwannoma of the eighth cranial nerve (acoustic neuroma) and non-neoplastic Internal Auditory Canal/ CerebelloPontine Angle pathology, including vascular loops as causes of SNHL.

Cochlear dead regions in sensory hearing loss

Hearing impairment may be associated with damage to the hair cells in the cochlea. Sometimes there may be complete loss of function of inner hair cells (IHCs) over a certain region of the cochlea; this is called a

dead region. The region can be defined in terms of the range of characteristic frequencies (CFs) of the IHCs and/or neurons immediately adjacent to the dead region (Moore, 2004).

Diagnosis of SNHL

SNHL can be diagnosed through the following ways:

Case history

According to Centers for Disease Control and Prevention (2007) before examination, a case history of major concern, pregnancy and childbirth information, medical history, development history and family history provides guidance about the context of the hearing loss.

Otoscopy

Direct examination of the external canal and tympanic membrane (ear drum) with an otoscope, a medical device inserted into the ear canal that uses light to examine the condition of the external ear and tympanic membrane, and middle ear through the semi-translucent membrane (Terkildsen, 2001)..

Differential testing

Differential testing is most useful when there is unilateral hearing loss, and distinguishes conductive from sensorineural loss. These are conducted with a low frequency tuning fork, usually 512 Hz, and contrast measures of air and bone conducted sound transmission:

- Weber test, in which a tuning fork is touched to the midline of the forehead, localizes to the normal ear in people with unilateral sensorineural hearing loss.

- Rinne test, which tests air conduction vs. bone conduction is positive, because both bone and air conduction are reduced equally.

- less common Bing and Schwabach variants of the Rinne test.

- absolute bone conduction (ABC) test. (Gelfand, 2004).

Other, more complex, tests of auditory function are required to distinguish the different types of hearing loss. Bone conduction thresholds can differentiate sensorineural hearing loss from conductive hearing loss. Other tests, such as oto-acoustic emissions, acoustic stapedial reflexes, speech audiometry and evoked response audiometry are needed to distinguish sensory, neural and auditory processing hearing impairments (Gelfand, 2004).

Tympanometry

A tympanogram is the result of a test with a tympanometer. It tests the function of the middle ear and mobility of the eardrum. It can help identify conductive hearing loss due to

disease of the middle ear or eardrum from other kinds of hearing loss including SNHL (Newman, Weinstein, Jacobsonand & Hug, 1991).

Audiometry

An <u>audiogram</u> is the result of a hearing test. The most common type of hearing test is <u>pure tone audiometry</u> (PTA). It charts the thresholds of hearing sensitivity at a selection of standard frequencies between 250 and 8000 Hz. There is also high frequency pure tone audiometry which tests frequencies from 8000-20,000 Hz. PTA can be used to differentiate between conductive hearing loss, sensorineural hearing loss and mixed hearing loss (Gelfand, 2004).

Magnetic Resonance Imaging (MRI)

Meyer (2014) reported that MRI scans can be used to identify gross structural causes of hearing loss. They are used for congenital hearing loss when changes to the shape of the inner ear or nerve of hearing may help diagnosis of the cause of the hearing loss. They are also useful in cases where a tumour is suspected or to determine the degree of damage in a hearing loss caused by bacterial infection or auto-immune disease. Scanning is of no value in age-related deafness.

Prevention of Sensorineural Hearing Loss (SNHL)

According to Hoffman, Dobie and Losonczy, Themann and Flamme (2016) presbycusis is the leading cause of SNHL and is progressive and nonpreventable, and at this time, we do not have either somatic or gene therapy to counter heredity-related SNHL. But other causes of acquired SNHL are largely preventable, especially nosocusis type causes. This would involve avoiding environmental noise, and traumatic noise such as rock concerts and nightclubs with loud music. Use of noise attenuation measures like <u>ear plugs</u> is an alternative, as well as learning about the noise levels one is exposed to. Currently, several <u>accurate sound level measurement</u> apps exist. <u>Reducing exposure time</u> can also help manage risk from loud exposures.

Oishi, Naoki, Schacht and Jochen (2011) explained that hearing loss caused by exposure to loud sound is preventable. To reduce their risk of noise-induced hearing loss, adults and children can do the following:

- Understand that noise-induced hearing loss can lead to communication difficulties, learning difficulties, pain or ringing in the ears (tinnitus), distorted or muffled hearing,

- and an inability to hear some environmental sounds and warning signals
- Identify sources of loud sounds (such as gas-powered lawnmowers, snowmobiles, power tools, gunfire, or music) that can contribute to hearing loss and try to reduce exposure
- Adopt behaviors to protect their hearing avoiding or limiting exposure to excessively loud sounds, turning down the volume of music systems, moving away from the source of loud sounds when possible and use hearing protection devices when it is not feasible to avoid exposure to loud sounds or reduce them to a safe level[5]
- Seek hearing evaluation by a licensed audiologist or other qualified professional, especially if there is concern about potential hearing loss

OSHA also sets legal limits on noise exposure in the workplace. These limits are based on a worker's time weighted average over an 8-hour day. With noise,

Recommended Noise Exposure Limits

According to **Chuck Kardous, Christa, Themann, Thais, Morata and Gregory Lotz (2016) the** Occupational Safety and Health Administration (OSHA's) 2018 permissible exposure limit (PEL) is 90 dBA for all workers for an 8-hour day. Occupational standards specify a maximum allowable daily noise dose, expressed in percentages. For example, a person exposed to 85 dBA per NIOSH or 90 dBA per OSHA over an 8-hour work shift, will reach 100% of their daily noise dose. The noise dose is based on both the sound exposure level and how long it lasts (duration) so for each increase or 3-dB (NIOSH) or 5-dB (OSHA) in noise levels, the duration of the exposure should be cut in half (this is what's referred to as exchange rates in standards). The following table illustrates the relationship between sound exposure levels and durations for both NIOSH and OSHA.

Time to reach 100% noise dose	Exposure level per NIOSH REL	Exposure level per OSHA PEL
8 hours	85 dBA	90 dBA
4 hours	88 dBA	95 dBA
2 hours	91 dBA	100 dBA
1 hour	94 dBA	105 dBA
30 minutes	97 dBA	110 dBA
15 minutes	100 dBA	115 dBA

Content source: <u>National Institute for Occupational Safety and Health</u> (2018).

Conclusion

Sensorineural deafness is a type of hearing loss that occurs as a result of damage to the inner ear, the nerve that runs from the ear to the brain (auditory nerve, cranial nerve VIII), or the brain. SNHL accounts for about 90% of reported hearing loss SNHL is usually permanent and can be mild, moderate, severe, profound, or total. It affects the learning process in more than 100 thousand people per year in Nigeria. SNHL may be genetic or acquired (i.e. as a consequence of disease, noise, trauma, etcetera), from birth (<u>congenital</u>) or may come on later in life as many cases are related to old age (age-related). The most common kind of sensorineural hearing loss is age-related (presbycusis), followed by noise-induced hearing loss. SNHL can be diagnosed through a case history, audiogram, tympanometry, magnetic resonance and imaging, etcetera. There is no proven or recommended treatment or cure for SNHL but can be managed by hearing aids or cochlear implant which may restore a functional level of hearing. SNHL is preventable by avoiding environmental noise, ototoxic chemicals and treating or inoculating against certain triggering diseases and conditions like meningitis.

Recommendations

This paper recommends that:

All hearing impaired students should be given special consideration in schools, thereby making learning easier to them.

Since SNHL develops over time, people should avoid or limit exposure to excessively loud sounds.

Everybody should use hearing protection devices when it is not feasible to avoid exposure to loud sounds or reduce them to a safe level.

Government should make it compulsory on everybody to seek periodic hearing evaluation by a licensed audiologist or other qualified professional, especially if there is concern about potential hearing loss.

All infections should be treated promptly and all ototoxic drugs should be used with caution.

REFERENCES

Bayoumy, A.B, van der Veen, EL., & De Ru, J.A. (2018). Assessment of Spontaneous Recovery Rates in Patients With Idiopathic Sudden Sensorineural Hearing Loss. *JAMA* Otolaryngology–Head & Neck Surgery. 144 (8): 655–656. doi:10. 1001/jamaoto.2018.1072. PMID 2993 1029.

Blackwell, D.L, Lucas J.W., & Clarke T.C. (2014). Summary health statistics for U.S. adults: National Health Interview Survey, 2012 (PDF). National Center for Health Statistics. Vital Health Stat 10(260).

Centers for Disease Control and Prevention (CDC). (2007). Identifying infants with hearing loss - United States, 1999-2007. MMWR Morb Mortal Wkly Rep. 59(8): 220-223. Vohr B. Overview: infants and children with hearing loss, part I. *Ment Retard Dev Disabil Res Rev.* 2003;9:62–64.

Chuck Kardous, Christa, Themann, Thais, Morata., & Gregory Lotz. (2016). Criteria for a recommended standard: occupational noise exposure. DHHS (NIOSH) 98-126 https://www.cdc. gov/niosh/docs/98-126/

Crispino, J.D., & Horwitz, M.S. (2017). GATA factor mutations in hematologic disease". Blood. 129 (15):2103–2110. doi:10.1182/blood-2016-09-687889. PMC 5391620. PMID 28 179280.

Gates, G.A., & Mills, J.H. (2005). Presbycusis. Presbycusis (or presbyacusis) is a general term that refers to hearing loss in the elderly and, as such, represents the contributions of a lifetime of insults to the auditory system. Of these, ageing and noise damage are the chief factors, plus genetic susceptibility, otological disorders, and exposures to ototoxic agents. Lancet; 366 (9491): 1111–20. doi:10.1016/S0140-6736(05)67423-5. PMID 16182900.

Gelfand, S.A. (2004). Hearing: An Introduction to Psychological and Physiological Acoustics. 4th ed. New York: Marcel Dekker, 23-45.

Ghazavi H,Kargoshaei A-A,Jamshidi-Koohsari M. (2019). Investigation of vitamin D levels in patients with Sudden Sensory-Neural Hearing Loss and its effect on treatment, *American journal of otolaryngology and head and neck medicine and suegery,* https://doi.org/10.1016/j.amj oto. 102327

Goycoolea, M. V.; Goycoolea, H. G.; Farfan, C. R.; Rodriguez, L. G.; Martinez, G. C.; Vidal, R. (1986). Effect of life in industrialized societies on hearing in natives of Easter Island". The Laryngoscope. 96 (12): 1391-1396. doi:10.1288/000055 37-198612000-00015. ISSN 0023-852X. PMID 3784745.

Hirabayashi, S., Wlodarski, M.W., Kozyra, E., & Niemeyer, C.M. (2017). Heterogeneity of GATA2-related myeloid neoplasms, *International Journal of Hematology,* 106 (2): 175–182. doi:10.1007/s12185-017-2285-2. PMID 28643018.

Hoffman, H.J., Dobie, R.A., Losonczy, K.G., Themann, C.L., & Flamme, G.A. (2016). Declining Prevalence of Hearing Loss in US Adults Aged 20 to 69 Years. *JAMA Otolaryngology – Head & Neck Surgery,* 6(8): 12-30.

Kochupillai, N., Pandav, C.S., Godbole, M.M., Mehta, M., & Ahuja, M.M. (1986). Iodine deficiency and neonatal hypothyroidism. *Bulletin of the World Health Organization;* 64 (4

): 547 51. PMC 2490891. PMID 3490 923.

Li, &Yike. (2017). Interventions in the management of blood viscosity for idiopathic sudden sensorineural hearing loss: A meta-analysis. *Journal of Health Research and Reviews;* 4 (2): 50–61. doi:10.4103/jhrr.jhrr_125_16.

Matsunaga, T. (2009). Value of genetic testing in the otological approach for sensorineural hearing loss, *The Keio Journal of Medicine;* 58 (4): 216–22. doi:10.2302/kjm.58.216. PMID 2 0037285.

Mills, J.H., & Going, J.A. (1982). Review of environmental factors affecting hearing, *Environmental Health Perspectives;* 44: 119–27. doi:10.1289/ehp.8244119. PMC 1 568958. PMID 7044773.

Moore, B.C. (2004). Dead regions in the cochlea: conceptual foundations, diagnosis, and clinical applications, Ear and Hearing. 25 (2): 98–116. doi:10.1097/01.aud.0000120359.49711.d7. PMID 15064655.

National Institute for Occupational Safety and Health. (2018). Noise and Hearing Loss on the NIOSH Science Blog, Understanding noise exposure limit, *Journal of Health Research and Reviews;* 4 (2): 50–61. doi:10.4103/jhrr.jhrr_125_16.

National Institute on Deafness and Other Communication Disorders. (2007). Noise Induced Hearing Loss. Bethesda, MD: NIH Pub No. 97-4233.

Newman CW, Weinstein BE, Jacobson GP, Hug GA (October 1991). Test-retest reliability of the hearing handicap inventory for adults, *Ear and Hearing;* 12 (5): 355–7. doi:10.1097/00003446-199110000-00009. PMID 1783240.

Oishi, N., & Schacht, J. (2011). Emerging treatments for noise-induced hearing loss, *Expert Opinion on Emerging Drugs;* 16 (2): 235–245. doi:10.1517/14728214.2011.552427. ISSN 1472-8214. PMC 310256. PMID 21247358.

Papadakis, C.E., Hajiioannou, J.K., Kyrmizakis, D.E., & Bizakis, J.G. (2003). Bilateral sudden sensorineural hearing loss caused by Charcot-Marie-Tooth disease, *The Journal of Laryngology and Otology;* 117 (5): 399–401. doi:10.1258/002221503321 626465. PMID 12803792.

Rosen, S., Bergman, M., Plester, D., El-Mofty, A., & Satti, M. H. (1962). Presbycusis study of a relatively noise-free population in the Sudan, *The Annals of Otology, Rhinology, and Laryngology;* 71 (3): 727–743. doi:10.1177/0003489462071003 13. ISSN 0003-4894. PMID 13974856.

Salawati, L., Le Prell, C.G., Henderson, Fay, R.R., Popper, A. (2012). Noise-Induced Hearing Loss, *Jurnal Kedokteran Syiah Kuala. Springer Handbook of Auditory Research;* Vol. 40. pp. 45–49. doi:10.1007/978-1-4419-9523-0. ISBN 978-1-4419-9522-3.

Suckfuell, M., Lisowska, G., Domka, W., Kabacinska, A., Morawski, K., Bodlaj, R., Klimak, P., Kostrica, R., & Meyer, T. (2014). Efficacy and safety of AM-111 in the treatment of acute sensorineural hearing loss: a double-blind, randomized, placebo-controlled phase II study, *Otology & Neurotology;* 35 (8): 1317–26. doi:10.1097/mao.0000000000000 466. PMID 24979398.

Teele, D.W, Klein, J.O., & Rosner, B. (2020). Epidemiology of otitis media during the first seven years of life in children in greater Boston: a

prospective, cohort study. *Journal of Infectious Diseases;*160(1):83-94.

Terkildsen, K. (2001). Hearing impairment and audiograms, Scand Audiol. 10: 27–31. Cited in: Moore BC (June, 2022). Dead regions in the cochlea: diagnosis, perceptual consequences, and implications for the fitting of hearing AIDS. *Trends in Amplification;* 5 (1): 1–34. doi:10.1177/10847138010050010 2. PMC 4168936. PMID 25425895.

Thornton, A.R., & Abbas, P.J. (2001). Low-frequency hearing loss: perception of filtered speech, psychophysical tuning curves, and masking, *The Journal of the Acoustical Society of America;* 67 (2): 638–43. Bibcode:1980ASAJ...67..638T. doi:10.1121/1.383888. PMID 7358904.

Wichmann, C., & Moser, T. (2015). Relating structure and function of inner hair cell ribbon synapses, *Cell and Tissue Research;* 361 (1): 95–114. doi:10.1007/s00441-014-2102-7. PMC 4487357. PMID 25874597.

Challenges impeding effective Primary Healthcare Services Delivery in Zamfara State, Nigeria

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ABSTRACT

The study examines the challenges impeding the effective service delivery in Primary healthcare in Zamfara State, Northwestern Nigeria. A cross-sectional approach was adopted with multistage random sampling selection of 72 health workers in 12 Primary Healthcare facilities (PHC) as a sampling frame. Data were collected using self developed questionnaire. To ensure validity of the research instrument, a pilot study was carried out. Descriptive statistics such as frequency, percentage and 5point Likert rating scale was used to analyze the data. Results revealed that the major identified challenge impeding effective service delivery is inadequate medical personnel and understaffing of the PHC (n=52; 72.2%), which has led to the low utilization of PHC facilities in Zamfara State. Other challenges include: inadequate funding; lack of motivation and low salary; lack of essential drugs and consumables; deteriorating buildings and facilities and inadequate monitoring and supervision. The study recommendes that there is need to recruit and boost the training of health workers; there is need to increase the budgetary allocation to the health sector by all tiers of government; there is the need for adequate supervision and evaluation of programmes in order to ensure that wastage, abuse and misappropriation of funds are avoided.

Keywords: local government, primary healthcare, health services, delivery, medical personnel, health funding.

Introduction

Primary Healthcare as conceptualized by the Alma Ata Declaration of 1978 is a grass-root approach towards universal and equitable healthcare for All (World Health Organization-United Nations International Children's Emergency Fund) (WHO-UNICEF, 1978). Primary Healthcare (PHC) addresses the main health problems in the community which covers healthcare services such as maternal care, child care, family planning, immunization, communicable and infectious diseases such as tuberculosis, HIV/AIDS, Malaria and other essential healthcare (World Health Organization) (WHO, 1978)).

Globally, Primary Healthcare is accepted as a decentralized medical service at the local

community area to improve efficiency and responsiveness of the health system. Each country adopts and implements the primary healthcare policy differently. Most developed countries in Europe started implementing this policy after the Second World War while most developing countries started later in the 1990s (Onyekpere,2019). It is not surprising therefore that, the huge successes recorded in some countries such as Indonesia, Philippine, Thailand, China, Cuba, Mexico, Honduras among others can be attributed to political, administrative and fiscal decentralization adopted for empowering primary healthcare service delivery to their populace (Jongudomsuk & Srisasalux (2012), Bailey (2016) Miharty, et al (2016), Liwanag and Wyss (2018)).

In Nigeria, the phenomenon of decentralization as contained in 1979 and 1999 constitutions recognized Local Government Council as the lowest tier of government. According to the 1999 constitution of the Federal Republic of Nigeria, the three – tiers of government are vested with the responsibilities to promote and support health in coordinated manner as three – tier system of healthcare: Primary Healthcare – Local Governments; Secondary Healthcare – State Governments and Tertiary Healthcare – Federal Government (Adeyemi, 2005).

The provision of healthcare at the Primary Healthcare level is largely the responsibility of Local Governments with the support of States' Ministries of Health and within the national health policies. The fundamental health services expected to be provided by the primary healthcare are preventive, promotion, curative and rehabilitative nature to the communities as the entry point of the healthcare system (Awofeso and Ogunne, 2020). The establishment of primary healthcare centers in both rural and urban areas in Nigeria with the intention of equity and easy access was a strategy meant to address the main health problems in the community. Primary healthcare therefore, serve as the first level contact of individual, the family and community with the national health system bringing healthcare as close as possible to where people live, workplace and constituting the first element of a healthcare process (Akinsola, 2003 and Azuh, 2019). Healthcare delivery at the primary level in Nigeria is strategically established to achieve health for all through cost – effective interventions (Adepoju et al, 2017). However, this level of healthcare in Nigeria has enjoyed commendable attention with recognition across the globe by government

of various nations both in the developed and developing countries (Rasak, 2013).

Several studies had revealed that the PHC has collapsed in Nigeria, leading to very poor and less than desirable National health system (Rasak,2016; Adepoju, 2017 and Azuh et al, 2019). Among identified factors that hinder its effectiveness and delivery of quality service are: lack of political will; inadequate funding; ill-motivated workforce; inadequate inter-sectoral collaboration; poor infrastructural facilities; insufficient medical personnel and heavy dependence on foreign donors (Adeyemo (2005); Abdulraheem et al,(2012); Alenoghena et al, (2014); Azuh et al, (2019). According to Obembe et al (2014); O'Neil et al (2014) and Abimbola et al (2015), health workers are the major problem in the PHCs service delivery. They perceive rural life as difficult and lack the desire to work in PHCs located in rural communities because of lack of basic amenities in rural areas; poor facilities and equipment, leading to difficult working conditions and dissatisfaction; poor quality care and performance, which are considerable constraint to service delivery. Adeyemo (2005) stated that insufficient number of medical personnel, inadequate transportation for them to the rural areas, inadequate funding and misuse and abuse of scarce

resources allocated to Primary Healthcare in Nigeria. Similarly, Ojeifo (2008) concluded that, only very few Primary healthcare centers in Owan east and Owan west Local Government areas of Edo States were adequately equipped thereby causing many individuals to suffer from different diseases. Poor service delivery at the Primary healthcare centers in Nigeria was acknowledged, among other causes (Rasak (2013); Abimbola (2012); Alenoghena, et al (2014)). Many studies conducted on National healthcare system revealed that the quality of healthcare in Nigeria, especially at the primary healthcare level still remains less than desirable (Ikeji (2013); Olusimbo and Nwachukwu (2010)).

Despite the collaborative efforts of National Government, Donor Agencies and Non – Government Organizations to provide an efficient and effective primary healthcare delivery at the grassroots level, the PHC has collapsed. This has led to the overall health outcome indicators in Nigeria to be unacceptably high. Average Life expectancy at birth is 61.33. Maternal mortality ratio is 814 per 1000 live births. Mortality rate for infants and children under five years is 70 and 104 per 1000 live births respectively (WHO.2022)

With the introduction of primary healthcare in Nigeria, Zamfara state government had adopted several measures to enhance efficient and effective primary healthcare service delivery. Among these are: the construction and equipping of 678 PHCs across the 14 LGAs, which include 14 Women and Children Welfare Clinics (WCWC) in each LGA (Zamfara State Ministry Of Health (ZSMOH, Healthcare Data base, 2022). Despite these efforts, the maternal mortality rate of 1,100 per 100,000, under five children mortality rate is 210 per 1,000 and infant mortality rate of 104 per 1,000 live births are been recorded in Zamfara state (UNICEF, 2020). This showed that Zamfara state is one of the states in Nigeria with highest rate of mortality (Onwuzoo, 2020).

In view of the present state of the primary healthcare in Nigeria, this paper examines the challenges impeding the effective service delivery in Primary Healthcare facilities in Zamfara state, Northwest Nigeria.

Materials and Methods

Study Design: A descriptive cross-sectional study design was employed. Is a type of observational study design that allows researchers to compare many different variables at the same time. Most cross sectional studies are quantitative in nature. Researchers gather data through interview, questionnaire and focus groups over a certain period of time.

Population of the Study: The study population comprises of Community Health Extension Workers (CHEW), Community Health Officers (CHO), pharmacist technicians, laboratory technicians and medical records officers.

Sample and Sampling Technique

A sample size of seventy two (72) respondents was selected based on Cochran's formula of sample size determination. This will be calculated using the formula for minimum sample size.

$$n = \frac{Z^2 pq}{d^2} \ - - - - - - eq \ \ 1$$

Where n = Minimum sample size; Z = Standard Normal deviation corresponding to 95% confidence interval on the Normal Distribution Curve = 1.96; p = Prevalence obtain from previous similar study = 5% = 0.05; q = Complementary Probability of p = 1 – p; d = Degree of precision or margin of error allowed at 95% confidence limit = 5% = 0.05

Therefore,

$$n = \frac{Z^2 pq}{d^2} = \frac{(1.96)^2 \times 0.05 \times 0.95}{(0.05)^2} = 72.$$

The sample size determined yield represen tative sample for proportions of large sample.

This suggests the administration of 6 copies of questionnaires (respondents) in each selected PHCs, to make a total of 72 respondents.

Sampling Procedure

A multistage random sampling technique was adopted for the selection of sample.

The first stage involved the division of the state into the known three senatorial zones of the state.

At the second stage, 3 LGAs were selected from each senatorial zone. This includes:- Anka; Gusau and Kaura – Namoda Local Government Areas.

Stage three was the random selection of 4 Primary Healthcare facilities from each of the selected 3 LGAs, which gave a total of 12 PHCs as a sampling frame.

Instrument for Data Collection: Questionnaire and in-depth interview were used for collection of data. The instrument was divided into two sections as outlined below:

Section A: The socio-demographic data of the respondents

Section B: The challenges impeding effective services delivery of the PHCs

The response mode was organized in a likert five point scale of: Strongly Agree (SA); Agreed (A); Disagreed (D); Strongly Disagree (SD) and Undecided (U).

A pilot testing of instrument was done by the field team. This involved the distribution of questionnaire to health workers in a non-selected PHCs and feedback were incorporated into the final questionnaire. Data were collected from June 2022 to August, 2022.

Method of Data Analysis

Descriptive statistics such as frequency, percentage and 5point Likert rating scale was used to analyze the data. The 5 point likert scale follows the order: Strongly agree (5); Agreed (4); Disagreed (3); Strongly Disagreed (2); Undecided (1). The decision for the rejection and acceptance of the questionnaire item was based on Criterion-mean of 3.0. Cumulative grand mean was also employed to determine the strength or weakness of responses.

Results

The retrieved questionnaire (72) were analysed and the outcome presented in tables 1 and 2 below.

Table 1: Socio Demographic Characteristics of the Respondents

Questionnaire items	Response mode	Frequency	Percentage
Gender	Male	37	51.3
	Female	35	48.6
	Total	72	100
Age Range	Below 25years	2	2.77
	26 – 40years	12	16.6
	41 -- 55years	41	56.9
	56years and above	17	23.6
	Total	72	100
Marital Status	Single	None	00
	Married	64	88.88
	Divorced	2	2.77
	Widowed	6	8.33
	Total	72	100
Work Experience in Years	Less than 1year	None	00
	1—3years	4	5.5
	4 – 6years	15	20.83
	7 – 9years	24	33.33
	10years and above	29	40.27
	Total	72	100
Job descriptions	CHEW/CHO	30	41.66
	Pharmacists	6	8.33
	Lab technicians	18	25
	Medical Records Officers	18	25
	Total	72	100

Source: Field survey, 2022

Table 1 shows the socio- demographic data of the respondents. The proportion of the respondents based on gender, showed 37 were male (51.3%) and 35 were female (48.6%), with majority (56.9%) within the age range of 41-55years while only (3%) were below the age of 25years. Also 88.8% of respondents were married, 2.7% were divorced while 8.3% were widow. The table further revealed that majority of the

respondents (40.2%) has more than 10years working experience as PHC staff and (5.5%) has between 13years working experience. Subsequently, their job descriptions showed that, majority of the respondents (41.6%) were community health workers (CHEW/CHO). This is inconsonance with the Federal Ministry of Health that, majority of health workers in PHC facilities across all the states are Community Health Workers (CHEWs). Doctors, Nurses and Midwives are more available in non – Primary Healthcare centers (FMOH, 2007).

Table 2: Challenges facing PHC Service Delivery in Zamfara State

Questionnaire items	SA	A	D	SD	U	Mean score	Criterion Mean	Decision
Inadequate Funding, over and heavy dependence on donors and NGOs	36.1% (26) 130	20.8% (15) 60	27.7% (20) 60	11.11% (8) 16	4.16% (3) 3	3.73		Accepted
Lack of Community participation	2.77% (2) 10	4.16% (3) 12	27.7% (20) 60	63.8% (46) 92	1.4% (1) 1	2.40	3.0	Rejected
Lack of Motivation in workplace and poor Salaries to workers	27.7% (20) 100	63.8% (46) 184	4.16% (3) 9	4.16% (3) 6	00 (00) 00	4.15		Accepted
Lack of equipment needed to offer basic services	40.27% (29) 145	18.1% (13) 52	20.83% (15) 45	16.66% (12) 24	4.16% (3) 3	3.73		Accepted
Lack of essential drugs and consumables	34.7% (25) 125	33.3% (24) 96	12.5% (9) 27	13.88% (10) 20	5.5% (4) 4	3.77	3.0	Accepted
Inadequate medical personnel and understaffing of PHC	72.2% (52) 260	19.4% (14) 56	1.4% (1) 3	00 (00) 00	6.4% (5) 5	4.50		Accepted
Deteriorating Buildings and Infrastructural facilities	31.94% (23) 115	30.5% (22) 88	18.05% (13) 39	15.2% (11) 22	4.16% (3) 3	3.70		Accepted
Inadequate monitoring, supervision and evaluation of PHC activities by LGA Authorities	13.88% (10) 50	52.8% (38) 152	13.88% (10) 30	8.3% (6) 18	11.11% (8) 8	3.58		Accepted

Grand Mean = 3.3

Source: Field survey, 2022

Table 2 shows the responses on the identified Challenges impeding services delivery in PHCs in Zamfara State. Response mode were arranged using the 5 Likert rating scale. The results showed that all questionnaire items recorded a mean score above 3.0 expect

questionnaire item 2 with mean score of 2.40. The decision rule is to accept all questionnaire items above 3.0 and reject item with mean score below 3.0. The responses that showed the challenges impeding effective primary healthcare services delivery in Zamfara include: inadequate funding; lack of motivation in workplace; lack of essential drugs and consumables; inadequate medical personnel; deteriorating buildings and inadequate supervision and monitoring. However, Non-participation of community people in healthcare was not necessarily considered a challenge in primary healthcare services delivery.

Discussion

The data showed that majority of respondents were Community Health Extension Workers (CHEW) with more than 10years working experience within the age range of 41-55years.

The major challenge impeding the effective service delivery at the Primary Healthcare (PHC) level was identified as the inadequate medical personnel and understaffing of the PHC (n=52 : 72.2%). This is in line with Adepoju et al (2017), which reported that the health workers employed in the healthcare facilities were not adequate to attend to the numbers of patients that visit healthcare facilities. This is inconsonance with the Federal Ministry of Health that, majority of health workers in PHC facilities across all the states is Community Health Extension Workers (CHEWs). Doctors, Nurses and Midwives are more available in non – Primary Healthcare centers (FMOH, 2007). Usaini et al (2020), concluded their study on Assessment of Health service Delivery Parameter in Kano and Zamfara States in Nigeria that, at health posts in Zamfara State, 409 (46%) of the staff are CHEW and 270 (30%) were health assistants. Abdulraheem et al (2012); Alenoghena et al (2014) and Udenta and Udenta (2018), also established this as a major problem facing service delivery in PHC in Nigeria.

Lack of equipment needed to offer basic services (n=29; 40.27%). This indicated that some medical and non-medical equipment considered basic and important are lacking which hindered effective service delivery in the PHC. From Medical equipment such as : suction machine (mucus extractor); sterilization equipment; weighing scale (for both adult and baby); clinical thermometers; ambubag; stethoscope etc to Furniture : benches; wheelchair; delivery bed; observation beds; screen; curtains etc. This outcome is in line with Adepoju et al (2017); Adeyemo (2005); Udenta and Udenta (2018) and World Bank (2010) that, communities

were not satisfied with the services of PHC due to lack of basic medical equipment. Ojeifo (2008) equally identified inadequacy of basic medical equipment as one of the effects why there is low patronage especially in rural health centers.

Furthermore, the study showed that, inadequate funding and heavy dependence on donor organizations is a challenge to healthcare delivery at the community level. PHC relied heavily on donor agencies (both local and international), for maintenance and sustainability of service delivery across the state. Among such donors are: United Nation Children's Fund (UNICEF); Management Sciences for Health (MSH) through USAID; Society for Family Health (SFH); Presidential Malaria Initiative (PMI); Sight Savers etc. These donor organizations contribute more to the sustainability of PHC in Zamfara State when compared to local government funding. This outcome is in line with studies conducted by Abdulraheem et al (2012); Adepoju et al (2017); Adeyemo (2005) and Azeez (2011), concluded that Primary healthcare in Nigeria relied greatly on donor's agencies for their maintenance and sustainability.

In addition, the fourth ranked identified challenge impeding effective service delivery at the PHC is the deteriorating buildings and infrastructural facilities. The poor condition of buildings and infrastructural facilities can be seen from their physical deterioration as result of normal wear and tear that buildings experience as they age. This finding is in consonance with the Azuh et al (2019) and World Bank Group (2008) that infrastructure of PHC facilities are in very poor condition leading to many constraints in the delivery of PHC services in Nigeria. Also of significant in the facilities management of PHC is transportation. The study observed that there are not enough means of transportation for workers to perform their task especially in the rural areas. Existing means of transportation (vehicles and motorcycles) are in poor condition due to bad maintenance while functioning vehicles are used for other purposes other than health related activities. Eguagie and Okosun (2010) and Adeyemo (2005) confirmed the problem of transportation in their studies, that workers have not enough vehicles to perform their task especially in the rural areas.

On the availability of drugs and consumables, it was found that some drugs that are considered essential are not available in the PHC across the state. The study revealed that, the supply of drugs and consumables are mostly through the donor agencies to sustain the PHC. The donors finance the

procurement and distribution of essential medical and non-medical supplies to PHC in the state. Among the supplies are: Anti-Malarial drugs (ACT); Seasonal Malaria Chemoprevention (SMC); Insecticide Treated Mosquito Net (ITN); Ready-to-Use therapeutic Food (RUTF); COVID-19 response commodity supplies etc. this finding is in line with the study conducted by WHO (2010) in four states in Nigeria (Lagos, Kaduna, Bauchi and Kogi) that unavailability of drugs leads to low satisfaction of services provided by Primary Healthcare. Similarly, Adepoju et al (2017) and Azuh et al (2019) revealed that, the supply of essential (drugs and vaccines) is poor in their area of study.

However, the study revealed that, lack of motivation in workplace and poor salaries to workers also hinder service delivery at the Primary Healthcare. The effects of poor motivation in workplace are well attested to have led to the lower levels of engagement by health personnel; diminishing productivity as well as making their workplace to become a toxic environment. This finding corroborates with WHO (2010) that, low satisfaction with primary healthcare services in local government areas is as a results of lack of adequate motivation of the health personnel which include no incentives to respond to community's demands, delay in payment and

non-payment of salaries, thereby pushing the workers to engage in other form of livelihood. Monitoring, supervision and evaluation of PHC activities by LGA in terms of allocated human and material resources, is also considered as a challenge to effective service delivery at the community level. This is in line with the study conducted by Eguagie and Okosun (2010), on the problems and prospects of Primary Healthcare in Nigeria, which revealed that the general misuse and abuse of the scarce resources inform of human, material and finance is as result of inadequate supervision, monitoring and evaluation of programmes and interventions at the PHC level. On community participation and involvement, (n=46; 63.8%) respondents strongly disagreed that is a challenge to PHC service delivery at the community level. This shows that community participation is one of the key to the successful continuity in PHC services delivery in the state. Individuals and families assume responsibility for their own health and welfare and for those of the community and develop the capacity to contribute to their community's development (WHO, 1978). The importance of community involvement in PHC activities has also been observed by earlier studies (Hilary et al (2014); Azuh et al (2017); Abdulraheem et al (2019).

Conclusion and Recommendations

Despite the collaborative efforts of Nigerian Government, Donor Agencies and Non-Governmental Organizations (NGOs) to provide efficient and effective primary healthcare service delivery in Zamfara state, several challenges render these efforts much less than desired. These challenges constrain the health workers' effectiveness in the discharge of their duties. The major identified challenge is the inadequate medical personnel and understaffing of PHC, which has led to the low utilization of PHC facilities in Zamfara state. While other identified challenges are: inadequate funding and heavy dependence on donor agencies; lack of basic medical equipment; deteriorating buildings and infrastructural facilities; lack of essential drugs and consumables; inadequate monitoring and evaluation of PHC activities and lack of motivation and poor salaries. Based on the study findings, the following recommendations are made:

i. There is need for increase in budgetary allocation to the health sector by all tiers of government in Nigeria. The local government should reduce the dependence culture on federation account, by generating more inward finance in the area of internally – generated revenue. This will go a long way to boost the health sector within their jurisdiction.

ii. There is need to recruit and boost the training and re-training of health workers as well as to improve their deployment and retention. This will discourage the growing migration of health workers trained in Nigeria to developed nations. Also Priority should be given to training of rural health workers, to prevent rural to urban drift.

iii. Adequate and continuous monitoring, supervision and evaluation of interventions and programmes at the PHC level of health systems would facilitate change to improve service delivery and reach the desired outcomes unlike the traditional supervisory visit focused on inspection and fault finding.

iv. There is need for Political will to provide enabling environment for implementation of government policies and programmes on healthcare delivery. This is to reduce unsuccessful and abandoned projects in the PHC.

REFERENCES

Abdulraheem, I., Oladipo, A.R., &Amodu, M.O.,(2012) Primary Healthcare Services in Nigeria: Critical Issues and Strategies for Enhancing the use by the Rural Communities. *Journal of Public Health and Epidermiology.* 4(1), 5-13.

Abimbola, O., (2012) Nigerians talk. http://nigeriantalk.org/2011. retrieved June,2022

Abimbola, S., Olanipekun, T., Igbokwe, U., Negin, J.,Jan, S., & Martiniuk, A., (2015) How decentralization influences the retention of primary healthcare workers in rural Nigeria. *Global Health Action*.

Adepoju, O.O., Opafunso, Z.O., Lawal, A.F., & M.O.Ajayi (2017). Accessing the Challenges impeding effective primary healthcare delivery in Southwest, Nigeria. *International Journal of Basic, Applied and Innova tive Research (IJBAIR),* 6(3), 65-71

Adeyemo, D., (2005) Local Government and Healthcare Delivery in Nigeria. A case study. *Journal of Human Ecology* 18(2), 149 – 160.

Akinsola, H.A., (2003) *Community Health and Social Medicine in Medical and Nursing Practice,* A.M. Communications, Ibadan.

Alenoghena,I., Aigbiremolen, A.,& Agbejegah, C.,(2014) Primary Healthcare in Nigeria. Strategies and Constraints in Implementation. *International Journal of Community Research,* 2(2), 74 – 79.

Awofeso,O.,& Ogunne, K.,(2020) Politics of Local Government Administration and the Challenges of Primary healthcare system in Nigeria. *Advances in Social Sciences Research Journal.* 7(9), 95 – 108.

Azeez, Z.A., (2011), An appraisal: Local Government and Healthcare Delivery. A case study of Ilorin East Local Government, Kwara State. Unpublished Research Project , University of Ilorin.

Azuh,D.E., Chinedu, S.N., & Azuh, A.E.,(2019) Factors influencing primary healthcare service utilization among Women in rural communities in Ogun State, Nigeria. *A conference proceedings of 6th International conference on Education and Social Sciences, (INTCESS),* 4th – 6th February, Dubai, UAE.

Azuh,D.E., Azuh, A.E., Iweala, E.J., Adeloye, D., Akanbi, M., & Mordi,R.C.,(2017) Factors influencing Maternal Mortality among Rural Communities in Southwestern Nigeria. *International Journal of Women's Health,* 9, 179-188.

Bailey, E.,(2016) Heathcare access under health system decentralization in Hondurais: A mied methods study. Unpublished masters thesis in Arts in the Graduate School of The Ohio State University.

Eguagie,I., & Okosun, V.,(2010) The role of Primary Healthcare in Nigeria, Healthcare Delivery Systems: Problems and Prospects. Knowledge Review 2(1) pp71-76.

Hilary, A., Thomas, I., Akaninyene, O., Ekanem, B., Okpok, O., Edet, I., Charles, J., Alexander, D., & Johannes, S., (2014). Strengthening Primary Healthcare through Community Involvement in Cross River State, Nigeria: A Descriptive Study, *Pan Africa Medical Journal,* 17:221

Ikeji, C.C.,(2013) A Policy Analysis of the Primary Healthcare Delivery Programme in Calabar South Local Government Area ,*Journal of Humanities and Social Sciences,* 14(3),52-59.

Federal Ministry of Health(FMOH)(2017) National Human Resources for Health Strategic Plan 2008 to 2012, Abuja.

Jongudomsuk, P., & Srisasalu, A. (2012) A decade of healthcare decentralization in Thailand : What lessons can be drawn? *WHO South – East Asia Journal of Public Health,* 1(3) ,347 – 356

Liwanag, H., & Wyss, K., (2018) What conditions enable decentralization to improve the health system? Qualitative analysis of perspectives on decision space after 25years of devolution in the Philippines. PLoS ONE 13(11) : eo206809.

Miharty, S., Holzhacker, R., &Wittek, R., (2016). Decentralization and Primary Healthcare Innovations in Indonesia. In R.L. Holzhacker et al (eds), *Decentralization and Governance in Indonesia. Development and Governance 2.*

Ojeifo, M., (2008) Problems of Effective Primary healthcare Delivery in Owan East and Owan West Local Government Areas of Edo State, Nigeria. *Journal of Social Sciences,* 16(1), 69 - 77

Olusimbo,K.I., & Nwachukwu , C.C., (2010) Areas of Dissatisfaction with Primary Healthcare Services in Government owned Health facilities in a Semi Urban Community, Nigeria. *Journal of Rural and Tropical Public Health.* Vol. 9, 19-23.

Onyekpere, E., (2019) NFIU and Local Government Finance Integrity. Punch Newspaper

Obembe,T.A., Osungbade, K.O., Olumide, E.A., Ibrahim,C.M., & Fawole,O.I., (2014) Staffing Situation of Primary Healthcare facilities in Federal Capital Territory, Nigeria:Implications for attraction and retention policies. *American Journal of Social and Management Sciences.* 5(2) pp 84-90.

O'Neil, C., Edim, M., & Obarein, B., (2014) Causes of prolonged waiting time in Public health facilities among healthcare workers in Calabar Municipal Council of Cross River State, Nigeria.*Research on Humanities and Social Sciences,* 4 : pp 43-47.

Onwuzoo,A., (2020) In Zamfara, its one doctor to nearly 14,000 patients. http//healthwise. Punchng.com/in-zamfara-its-one-doctor-to-nearly-14000-patients/, Retrieved on 21/09/2022

Rasak, O.,(2013) Patrons' Perception of Quality of Healthcare Services in Primary Healthcare Centres in Oyo State, Nigeria. *Journal of Developing Countries* 3(1), pp 75-83

Udenta, J., and Udenta, N., (2018) Local Government and the challenges to Primary Healthcare Delivery in Enugu State East Local Government Area , Nigeria. *International Journal of America Management Science Research (IJAMSR),* 2(11), pp 18-33.

UNICEF (2020) "Humanitarian Action for Children – Nigeria" https://www.unicef.org/appeals/files/2020-HAC-Nigreia-revised-2.26pdf.Retrieved 8/8/2022

Usaini, B., Ajumobi, O., Umar, A., Adewole, A., Waziri, N., Gidado, S., Mohammed, A.B., Uhomoibhi, P., Muhammad, B., Ismail, M., Kachur, S.P., Cash, S. & Asamoa, K. (2020) Assessment of Health Service Delivery Parameters in Kano and Zamfara States, Nigeria. *BMC Health Services Research*, 20(874): 1-9.

World Bank (2010), Improving Primary Healthcare Delivery in Nigeria: Evidence from four states. Washington .D.C.

World Health Organisation (WHO) and UNICEF (1978), Declaration of Alma—Ata: Adopted at the International Conference on Primary Healthcare, Alma-Ata, USSRS, 6-12

World Health Organisation (WHO) (1978), Primary Healthcare: Report on International Conference on Primary Healthcare, Alma-Ata. Geneva: World Health Organisation

World Health Organisation (2022) Healthcare System Ranking

Zamfara State Ministry of Health (2022), Healthcare System Data base

E-Library Skills for the Implementation of E-Learning in Niger Delta University, Bayelsa State

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ABSTRACT

This study examined the electronic library skills needed for implementation of e-learning in Niger Delta University. The descriptive design of the survey type was adopted for this study. The population of the study is 29 lecturers. It consist of all the lecturers in two different Departments: Library and Information Science and Computer Science. The entire population was used for this study. A self-developed questionnaire was used for data collection. The questionnaire was validated, subjected to reliability test, test-retest method was used and Person Product Correlation Coefficient yielded and r index of 7.50. Mean and standard deviation were used in analyse data collected for research question while the hypothesis was tested using t-test. All were tested at 0.05 level of significance. The results showed that the following e-library skills; A-Z online databases, e-dissertation, e-theses, e-reference materials, Online Public Access Catalogue, e-serials publication materials, e-serials publication materials, institutional repository materials, e-journals, downloading of materials, lecture materials, online books and printing online information skills are need by students to effectively implementation e- learning. Practical workshop should be organized on e-library skills needed for efficient execution of e-learning programme among students' to increase their academic achievement was advised as a result of the research findings.

Introduction

Libraries serves as an agent of innovation, whatever policies been made regarding teaching and learning in higher institutions, libraries are major stakeholders. So, when implementing e-learning in higher institutions the libraries play a greater role in sustaining the e-learning. E-learning are carried out without wall so also the e-library services are rendered without walls. A major function of the e-library services is the provision of comprehensive online learning materials irrespective of the students and teachers' location, this is achieved without stress to support e-learning activities.

Electronic library also known as e-library, it provides opportunities for students, lecturers, researchers and faculty members to have access to steady learning materials that enhances and facilities teaching and

learning more productive. The ability to effectively use online libraries has long been an important part of e-learning initiatives in universities and colleges. Libraries and other resource centres are increasingly using ICT to various services and information resources rendered in this digital age require up-to-date ICT skills in order to be able to access online information resources. According to Bajpai and Madhusudhan (2019) ICT has revolutionized the way information users seeks for information in libraries and information centres. There is need to acquire current ICT skills that will enable users quick and easily access wide range of information resources world-wide. Furthermore, Jamogha, Jamogha and Godwin (2019) stated that up-to-date ICT are faster means for students to make adequate use of educational resources in the e-library, which in turn will enhance the standard of education in higher institutions of learning. There is every tendency that if library users ICT skills are poor, his/her capacity to gain access to resources such as online database, e-books, e-journals and other internet resources will be limited.

Maxwel (2018) stated that the back bone of e-learning in any higher institution is electronic information resources via the e-library which goes beyond the traditional classroom. E-library skills is seen as a pinnacle for the development of e-learning

system. Isreal and Edesiri (2013) e-library skills is a necessary condition for pupils and teachers to operate in the knowledge society in this present information age. E-library skills has eliminated the distance or physically been present in libraries, thus providing scholars with easier access to international research output, help in coping with information explosion, information handling, greater speed and accuracy than the manual methods of searching for information.

Quadiri (2012) describes this electronic library skills as the ability to collect, process store transmits and disseminate information effectively with the incorporation of computing and associated technology into daily life, education, and the workplace.

This study investigates the electronic library skills needed among library and information science students for effective implementation of e-learning in Niger Delta University, Amassoma.

Objectives of the study.

The main focus of this study is investigate the electronic library skills for implementation of e-learning in Niger Delta University, Bayelsa State. Specifically, this study is

1. To identify electronic library skills needed for implementation of e-learning in Niger Delta University.

2. To determine the mean difference rating between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University.

Research Question

The following research questions were formulated:

1. What are the electronic library skills needed for implementation of e-learning in Niger Delta University?

2. What is the mean difference rating between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University.

Hypothesis

1. There is no significant difference between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University.

Statement of Problem

The adoption of e-learning technologies in higher institution has made it possible for students and teachers to learn and teach irrespective of their various locations, to consult libraries for educational materials for their academic activities. E-library is one of the components of e-learning platform, the e-library provide relevant materials for students and lecturers to remain vibrant in the e-learning platform.

Niger Delta University Library subscribe to some e-database resources which can be accessed from any location. During flood season, it was mandatory for all students and lecturers to use the e-learning platform irrespective of their location for teaching and learning.

It was observed that one major setback among some students to use online resources was e-library skills to access the e-databases subscribed by the university library to update their knowledge, work on their assignments, sharing knowledge, group discussion etc. According to Umukoro and Tiamiyu (2017); Sadiku, Issa, and Mohammed (2019) that the full utilization of e-libraries in Nigerian higher institutions is still hindered by some low level of ICT skills.

This online e-library resources are available 24 hours and can be access via any technological devices connected to the internet by students. All this depends to a large extent the e-library skills possessed by students. E-library skills is a key component to a fluid deployment of e-learning because students must seek online information resources for their daily activities. Students require this skills that would make them relevant and useful in participating in e-learning. It is in light of this that this study is conducted to determine the electronic library skills

needed for implementation of e-learning in Niger Delta University, Bayelsa State.

Review of Related Literature

Research conducted by Agwu (2015) on use of internet, Microsoft word processing and use of online library skills among business educators in secondary schools in Enugu State.

The finding shows that 3.31 mean score of respondents had proficiency in doing online information searches using Library databases.

A study conducted by Malliari and Kyriaki-Manessi (2007) showed that there were low percentage of use of Online Public Access Catalogue (OPAC) among students and faculty members. A similar study conducted by Mulla and Chandrashekara (2009) on effective use of library OPAC skills to search for materials. The study revealed that students' low usage of OPAC was as a result of lack of OPAC skills to search for online information resources.

Researchers Shidi and Nwachuckwu (2015) examined how library workers in Benue State, Nigeria, learned to use digital resources. The research includes all eight colleges and universities. There are 248 people who work in libraries. Information was gathered by questionnaire. Researchers found that librarians had an average proficiency in word processing tasks of 3.02 mean score, saving information on flash drives had 3.00 mean score, searching the internet for information had a mean score 0f 2.80 downloading information from the internet had a mean score 2.80.

In a study on skills and professional training requirements for librarians at Ahmadu Bello University by Esew et. al. (2014), the study showed that 5.7% percentage of librarians accepted been proficient in the use of online-books, 14.3% agreed that they can use the electronic journals while 5.7% accepted that they are skilled in the use of online databases. This show how proficient the library staff are in using the electronic resources.

Ezeme and Leonard (2016) conducted research on how students at the Federal College of Education in South East, Nigeria, use electronic information resources. Total participants numbered 526. Averages and dispersion plots were used to examine the study's variables. These results show that proficient users of e-books have a mean score of 3.27, users of e-resources reports have a mean score of 3.19, users of electronic notes have a mean score of 3.04, users of e-projects have a mean score of 3.04, users of e-newspapers have a mean score of 2.95, and users of e-journals have a mean score of 2.74. It could be seen from the above findings that respondents accepted having skills to utilize these resources in their libraries.

The administration of institutional repositories in Nigeria has been the subject of a research by Adam and Kiran (2019). The research revealed, for example, that librarians lack the information technology (IT) and expert knowledge necessary to build and operate an organizational repository.

Methodology

This research used a descriptive survey-style approach in which the entire population was adopted, this population comprised of a total of 29 instructors which are all the lecturers from two different Departments: Library and Information Science and Computer Science. The reason for including lecturers in the Department of Computer Science in this study is because they are computer professionals that have knowledge of e-library skills needed for e-learning. The instrument developed and used was titled ''Electronic Library Skills Needed for Implementation of E-learning in Niger Delta University Questionnaire (ELSNIENDUQ)''. The questionnaire consists of section A and B. Section A: background information of respondents. Section B: contains 27 items meant to collect information on extent of electronic library skills needed for implementation of e-learning in Niger Delta University, Bayelsa State. The questionnaire was based on 4 points rating scale, which ranges from Highly Needed (HD) = 4 points, Needed (N) = 3 points, Not Needed (ND) =2 points and Highly Not Needed (HNN) = 1 points. The face and content validities of ELSNIENDUQ were subjected to screening by some experts in the area of ICT and the reliability of the instrument was tested using the test-retest procedure, analysed with Person Product moment correlation coefficient (PPMC) analysis which yielded a reliability coefficient of 0.75. Mean and standard deviation were used to analyse data collected for research question 1(one), while the hypothesis was tested using t-test at 0.05 level of significance.

Analysis of Results.

The total number of questionnaire distributed was 29 (twenty-nine). The researchers personally administered the questionnaire and monitored it via WhatsApp, phone calls and SMS to ensure that the questionnaire were adequately responded to and returned. As a result of this, the 29 (twenty-nine) questionnaires were accurately returned and used for the study.

Research question 1: What are the electronic library skills needed for implementation of e-learning in Niger Delta University?

Table 1: Shows that mean rating of the electronic library skills needed for implementation of e-learning in Niger Delta University.

S/NO.	Electronic library skills needed for implementation of e-learning in Niger Delta University.	Highly Needed	Needed	Not Needed	Highly Not Needed	X	SD
1.	A-Z online databases skills.	20	9	-	-	3.6897	.47082
2	Online Public Access Catalogue skill.	13	16	-	-	3.4483	.50612
3	E-serials publication materials skills	10	19	-	-	3.3448	.48373
4	E-reference materials Skills	15	14	-	-	3.4828	.57450
5	E-content management skills	-	-	18	11	1.6207	.49380
6	Networking skills	-	-	17	12	1.5862	.50123
7	Printing online information skills	6	23	-	-	3.2069	.41225
8	Google analytics skills	-	-	7	22	1.2414	.43549
9	Downloading of materials skills	11	18	-	-	3.3793	.49380
10	Digital marketing skills.	-	-	17	12	1.5862	.50123
11	Online books skills usage	7	12	-	-	3.2414	.43549
12	E-journals skills.	12	17	-	-	3.4138	.50123
13	Photo editing skills	-	-	10	19	1.3448	.48373
14	Electronic maps skills	5	20	4	-	3.0345	.56586
15	Institutional repository materials skills.	10	19	-	-	3.3448	.48373
16	E-theses skills	15	14	-	-	3.5172	.50855
17	E-dissertation skills	16	13	-	-	3.5517	.50612
18	E-inaugural lecture materials Skills	4	20	5	-	2.9655	.56586
19	Electronic images skills	-	10	5	14	1.8621	.91512
20	Online video materials skills	3	12	6	8	2.3448	1.00980
21	Audio materials skills	6	3	12	8	2.2414	1.09071
22	E-conference proceeding materials skills	8	10	5	6	2.6897	1.10529
23	Graphic design skills	-	-	10	19	1.3448	.48373
24	E-lecture materials skills	12	17	-	-	3.4138	.50123
25	Multimedia materials skills	-	17	10	2	2.5172	.63362
26	E-manuscripts skills	5	8	10	6	2.4138	1.01831
27	App Management skills	-	-	17	12	1.5862	.50123

Table 1 shows that the average acceptance rate for the statement "A-Z online databases skills is needed" is 3.69 average score, while the acceptance rate for the statement "e-dissertation skills are needed" is 3.55 average score and the acceptance rate for the statement "e-theses skills are needed" is 3.55 average score. electronic reference sources The average score for required skills was 3.48; the average score for Online Public Access Catalogue skills was 3.44; the average score for e-serials publication skills was 3.44; the average score for institutional repository materials was 3.44; the average score for e-journals skills was 3.41; the average score for downloading materials was 3.38; and the average score for lecture materials skills was 3.38. It could also be seen that electronic images skills had a mean score of 1.86 indicating not needed, e-content management skills had a mean score of 1.62 indicating not needed, App Management skills had a mean score of 1.58 not needed, photo editing skills had a mean score of 1.34 not needed, google analytics skills had a mean score of 1.24 not needed.

Table 2. What is the mean difference rating between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University

Gender	N	Mean	Mean Difference	Standard Deviation
Male	19	73.30	2.300	13.3695
Female	10	71.00		.870

Table 2 showed the mean difference rating between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University, Bayelsa State. The mean difference between male and female scores was 2.300.

Hypothesis Testing.
Hypothesis 1. There is no significant difference between male and female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University, Bayelsa State.

Table 3. Shows the t-test analysis of significant difference between male and female lecturers perceived electronic library skills for implementation of e-learning in Niger Delta University.

Gender	N	df	t.	Alpha Level	P. Val	Remark
Male	19	27	.435	0.05	.667	Not Sig
Female	10					

Table 3 shows that the observed P.val of .667 is higher than the chosen alpha level of 0.05 ($t_{(27)}$ =.435 P > 0.05) There is no significant difference between male and

female lecturers perceived electronic library skills needed for implementation of e-learning in Niger Delta University is accepted.

Discussion of Findings.

The findings of this study showed that the following e-library skills needed for implementation of e-learning in Niger Delta University: A-Z online databases, e-dissertation and e-theses. The study of Ezeme and Leonard (2016) showed that students need e-project skills to be able to access previous works online. It was also seen that e-reference materials skill is needed for effective use of e- library resources.

The research confirmed the importance of OPAC skills. Students' poor OPAC utilization, as shown in research by Mulla and Chandrashekara (2009) on efficient library utilization of OPAC services, may be attributed to an absence of OPAC expertise on their part. It could be seen that from this study OPAC skill is therefore needed for implementation of e-learning. It was also seen from this study that e-serials publication materials skill is needed among the students.

The study's results also highlighted the need of having repository materials expertise at institutions. Adam and Kiran (2019) investigated the prevalence of institutional repositories in Nigeria and gathered empirical data on their use. Among the findings of the study is that librarians are lacking institutional repository skills. This could be the reasons why some institutions in Nigeria are yet to establish repository in their institutions. It could be seen from this study that institutional repository materials skills are needed for participation in e-learning and teaching.

Other skills needed as stated in the findings of this study are electronic journals, downloading of materials and printing online information skills. This study is in line with the Shidi and Nwachuckwu (2015), Ezeme and Leonard (2016) that among the e-library skills needed is downloading information resources, lecture materials, online books in a similar study conducted by Esew, Jimada Hussaini, Alkasin and Mahadi (2014) result showed that librarians need online book skills to be able to effectively access book materials online.

The results also showed that students majoring in Library and Information Science do not necessarily require expertise in areas like picture editing, photo manipulation, Google Analytics, or e-content management to successfully implement e-learning.

The data also revealed the mean disparity rating: men (10 total) averaged 73.30, whereas girls (19 total) averaged 71.00, yielding an average disparity of 2.300.

The null hypothesis of there is no significant difference between male and female lecturers perceived electronic library skills as needed for effective implementation of e-learning in Niger Delta University, Bayelsa State is accepted.

Conclusion

The study revealed that lecturers rated majority of the e-library skills as needed for implementation of e- learning with few others rated as averagely needed and some not needed.

These skills that are needed are; A-Z online databases, e-dissertation, e-theses, e-reference materials, Online Public Access Catalogue, e-serials publication materials, e-serials publication materials, institutional repository materials, electronic journals, downloading of materials, lecture materials, online books and printing online information skills. Students need this skills to function well in e-library information resources. The needed skills will contribute to their academic performance in this era of information age which is a driving force for e-teaching and learning in developing countries like Nigeria.

Recommendations

Based on the forgoing, it is recommended that in order to enhance the needed skills for effective implementation of e-learning in Niger Delta University, Bayelsa State. The following should be considered:

1. Practical workshops should be organized by University management to train students on the various e-library skills needed. The university Library should also organize users education programme for ICT skills training, use of e-library resources can be taught to library users for effective implementation of e-learning programme that will improve their academic performance.

2. E-library skills should be integrated into the curriculum of students programme in Nigerian Universities to avail the students of the opportunities of acquiring the needed skills for effective e-learning implementation.

REFERENCES

Adam, U. A., & Kiran, K. (2019). *Empirical evidence of the practice of institutional repository in Nigeria.* Paper presented at the International Conference on Libraries, Information and Society (ICoLIS), Malacca, Malaysia.

Agwu, A. (2015). Networking and word processing skills needed by business educators in secondary schools in education zone of Enugu state. *International technology Research Journal*. 3 (1), 200-208.

Bajpai V. K., & Madhusudhan, M. (2019). ICT skills and competencies of library and information science professionals working in college libraries university of Delhi. A study. *Library philosophy and practice (e-journal).* 2275. http://digital commons. Uni. edu/ lib practice /2275.

Esew, M., Jimada, A., Hussani, S., Alkasim, H., & Mahadi, B.A. (2014). Skills and professional training required for librarians of the Mtn-net library of Kashim Library, Ahmadu Bello University Zaria. *Journal of Humanities and Social Science*. 19 (7), 55-60

Ezema, R.I.E., & Leonard, A. (2016). Access to electronic information resources by students of Federal College of Education in South East-Nigeria. *Journal of the Nigeria Library Association*. 49 (12), 53-61.

Israel O., & Edesiri E. (2013). ICT skills and internet usage among library and information science students in Delta and Edo States, Nigeria. *International Journal of Library and Infor Science.* 6 (5), 98-107

Jamogha, O., Jamogha, E., & Godwin, L.S. (2019). Influence of ICT skills on library information resources utilization by undergraduates in two universities in South West, Nigeria. *Information Impact: Journal of Information and Knowledge Management*. 10 (2), 67-81

Malliari, A., & Kyriaki-Manessi, D (2007). Users' behavior patterns in academic libraries OPACs: a multivariate statistical analysis. *New Library World,* 108.

Maxwell, C.E.O. (2018). Print information resources utilization for social science research in state universities in North Central Zone, Nigeria. *The Information Technologist: an International Journal Information and Communication Technology (ICT). 15*(1), 18-35

Mulla, K. R., & Chandrashekara, M. (2009). A study on the effective use of online public access catalogue at the libraries of engineering colleges in Karnataka (India). *International Journal of Library and Information Science,* 1(3).

Quadiri, G.O. (2012). Impact of ict skills on the use of e-resources by information professionals: A review of related literature. *Library Philosophy and Practice (e-journal)*. 762.https://digitalcommons.unl.edu/libphilprac/762

Sadiku, S. A., Issa, A. O., Mohammed, M. K (2019). The use of electronic library resources in Nigerian universities: a review of the literature. *International Journal of Library and Information Services.* 8 (2), 41-50

Shidi, H., & Nwchukwu, V. (2015). Acquisition of digital library skills by librarian staff in Benue State, Nigeria. *Journal of Inform and Knowledge Managt*. 5(11),5-10

Umukoro, I. O., & Tiamiyu, M. A. (2017). Determinants of e-library services' use among university students: A study of John Harris Library, University of Benin, Nigeria. *Journal of Librarianship and Information Science , 49*(4), 438–453.

The Roles of Manpower Planning and Management in an Organization

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ABSTRACT

Manpower planning in an organization is one of the most important factors to consider, especially during the recruitment process. The specific objective of this research are to improve the roles and challenges for selecting staff who are unspecialized in their field, as well as to anticipate the impact of employee performance and appraisal in the organization. The nature of this paper is conceptual. The study identified the importance of manpower planning for employee performance in an organization, as well as the need for organizations to be very careful during any recruitment process in order to promote good staff selection. The purpose of this study is to investigate the full concept of manpower planning, its impact on organizations, and the rationale for its advocacy in organizations, which includes: lowering labor costs by identifying excess staff and avoiding overstaffing; recognizing available talents in the organization and designing training programs to enhance those talents. The study recommends that the organization should review their respective human resources departments and encourage the unit by providing whatever is needed to the managers, and also organization's managers are responsible for motivating and caring for the employees in the organization, and the organization is constantly training its employees on the division of labor in order to avoid a lack of manpower planning, and the organizational managers are responsible for implementing strategies and policies to support manpower planning in an organization.

Keywords: manpower planning, human resources, the organization, management

Introduction

Human resources is at the core of any organization in any business or industry, and human resources is defined as an individual's skill and experience in order to fulfill organizational goals. In this regard, the corporation must use extreme caution when running its human resources department. As we all know, organizations affect individuals and people influence organizations, thus manpower planning must be supported in this regard. Human resources departments play a significant role in the recruiting process since it must be done in a step-by-step manner, starting with the recruitment advertisement and ending with the training of selected employees before they are assigned to various positions. In order to enhance manpower planning in the firm, human resources staff must be qualified and experienced in executing the recruitment

process. If the organization has a good manpower strategy, good management must be considered; if the organization has a good management practice, human resources must be developed in order to achieve desired organizational goals. The bulk of our company at the time did not implement workforce planning, which is why they have mismanagement in their day-to-day operations. If a firm considers manpower planning during any recruitment process, they must have a strong human resources development program that aids in the achievement of desired goals in our businesses, particularly in Nigeria. The need for manpower planning in any organization must increase in order to meet standard industrial practice. If we look at our companies in Nigeria, we can find people who studied Chemistry working in banks and people who studied Accounting working in teaching positions without any experience in education. This is one of the challenges that our beloved Nigeria faces. Every firm in the country needs a human resources department to improve manpower planning.

Large corporations frequently work on forecasting and upcoming opportunities. If these opportunities become viable businesses, they will require manpower to get started. But what if they hired a large number of people to work on an almost certain project, but the project didn't start on time at the last minute? What would the company do with the extra skilled labor? Another issue is that if they wait until the last minute to start a project, they may not have enough manpower to complete it. The process of manpower planning answers these questions. Manpower planning also includes specifics such as how and when new employees will be hired. This entire process is carried out while keeping the organization's goals in mind, as well as future business predictions and changing technology trends. This aids the organization in being prepared for the future with the appropriate manpower for business success.

Human resource development or manpower planning it is one of the most important aspects of an organization; when there are employers, there is an organization; when there are no employers, there is no organization. Both work hand in hand for effective self-sufficiency. Employees are the backbone of any firm, which is why good recruitment procedures must be highlighted in order to pick a suitable and qualified applicant who can make a significant contribution to the growth of staffing in any organization. Employees are prepared to do their jobs when they are assigned to their respective fields based on their

specialization. Any organization considering staffing should be encouraged to avoid mismanagement.

Concept of Manpower Planning

The process of estimating the optimal number of people required to complete a project, task, or goal on time is known as manpower planning. Number of personnel, various types of skills, time period, demand and supply trends, organizational strategy, and so on are all factors in manpower planning. It's a never-ending process to ensure that the company has the best resources available when they're needed, taking into account upcoming projects as well as the replacement of departing employees. Human Resource Planning is another name for it. in other words, manpower planning or human resources planning is the process of selecting people at the appropriate time and placing them in the appropriate location in order to achieve the organization's goals and objectives. (2019, S. Aminu).

Manpower planning, according to Alex (2012), is the development of strategies to match manpower supply to job availability at the organizational, regional, and national levels. Reviewing current manpower resources, forecasting future requirements

and availability, and taking steps to ensure that the supply of people and skills meets demand are all part of manpower planning. Manpower planning entails estimating or projecting the number of personnel with various skills needed over time or for a specific project, as well as determining how and when they will be acquired.

Reasons for manpower planning

1. Proper staffing arrangements:- The manpower planning required the organization to place the staff according to their field of study and specialization in order to provide adequate services in an organization. This will be an added advantage to access the management to an organization, because when they posted staff in the various roles that play it is very important in an organization for the purpose of promoting a good human resources development. The correct arrangements are based on the employee responsibilities that they perform, their academic qualifications, and the position applied for during the recruitment process; management decides to examine the above mentioned point for the proper arrangements of an employee.

2. The growing scale of business and industrial:- Organizations has widened and complicated management's activities to the

point where it needs to make many adjustments to its organizational structure. The completion of the enterprise's objectives necessitates the use of a variety of people with varying competencies. Manpower Planning makes it easier and more effective to fulfill the goals of a business.

3. Making Employee Development Programs: Manpower Planning aids in the estimation of future workforce requirements. It also aids in identifying the capabilities of prospective individuals to be hired. It also aids in determining how much training they require. On the basis of Manpower Planning, effective programs for employee development can be developed. Employees will benefit from this as well, as it will allow them to develop their skills and experiences in the workplace.

4. Establishing Effective Labor-Capital Coordination: Manpower Planning aids in the establishment of effective labor-capital coordination. It also aids in the early and best feasible labor and capital solutions. It also aids in the earliest and best possible resolution of the enterprise's labor difficulties, because Manpower Planning supplies the enterprise's labor force in such a way that they agree to cooperate with management in the achievement of organizational goals. This also encourages a positive labor-capital connection.

5. Reduction in cost of production:- Manpower planning aids in the recruitment of the best potential workers and staff, lowering production costs. It lowers the rate of employee turnover. It also helps to reduce the company's waste. It aids management in getting the most out of the company's resources. In addition, the human resources department will assist in controlling the cost of production in any firm because the essence of manpower planning is that personnel are constantly placed in the appropriate location for organizational development.

6. Encouraging the policy of recruitment:- The foundation of establishing a plan for staff recruitment is manpower planning. Such a recruitment policy aids in the timely recruitment of staff. It also enables an organization to select the appropriate employees in order to achieve their desired goals.

7. Other Objectives: Manpower planning can also help with other objectives such as the implementation of a modernization scheme, the expansion of a firm or an industrial enterprise, the improvement of labor relations, and the increase in productivity.

Manpower Planning Process

Every company's human resources department must keep a steady check on the company's human resources. Every feasible occurrence, such as changes in industry dynamics, increased business requirements, skills necessary for a particular technology, and so on, increases the need for improved resources. Because the human resources department is the heart of any department in an organization due to the department's contribution to all departments in the organization, both departments in the organization are independent of this department. As a result, this department must be very careful when selecting staff, and management is advised to do everything possible to make the department very active and responsible for its duties.

The process and steps for manpower planning are as follows:

1. Recognizing the current workforce:- The Human Resources department must have a deep understanding of the company's manpower. They should look at the background, skill set, qualification, geography, and other factors of the entire workforce to have a good sense of the company's talent pool. This will also assist management in determining their posting and in scheduling a seminar for the personnel.

With constant changes in business requirements, companies must understand the future trend and which type of employees would be best suited for their organization.

2. Selection and recruitment: This is the most important process in an organization in terms of cost. Manpower planning leads to a much more well-thought-out recruitment and selection pattern, depending on the business requirements. This is entirely dependent on the forecasts provided and the needs of the company. As a result, individuals with better qualifications, skill sets, experience, and so on are shortlisted to best meet future needs. And, in order to improve organizational accomplishment, managements are continually on the lookout for the proper employers and candidates for their positions.

3. Employees must be trained: Employees that work for the company are trained to have the best skills, expertise, and understanding of both the current and future employment requirements. All of the phases outlined above in personnel planning enable firms better prepare to adapt to new technologies, future industry advances, and even compete. This will assist a company in achieving its desired goals. The organization's management should encourage regular training for new employees, since this will

enable them to become more competent in their jobs while also improving their skills and experiences.

4. Motivation and well-being of employees: Employee motivation is another aspect to consider in every organization, because when employers are completely content with their earnings and benefits, the organization gains another advantage. Even in the workforce, things would be so excellent and energetic for their work, unlike when they were not entirely content. In terms of benefits, employers might stay in one company for a long time before moving on to another. To attain their desired aims, managers should inspire welfare and motivation in their firm.

Literature review

John Wiley & Sons, (2019) Human Resource Management addresses the challenges faced by human resource managers, integrating traditional theory with real-world strategy to equip students with the knowledge, perspective, and skills they need to thrive in the ever-changing global business environment. Presented in a clear and relatable style, this text emphasizes how effective human resource management and strategic planning work in concert to allow organizations to achieve maximum success. The focus on practical application illustrates the essential link between strategic planning and implementation, providing an inside look at how real-world companies increase effectiveness through world-class human resources management practices. A wealth of case studies, discussion topics, and exercises reinforce key concepts, strengthening student's ability to think strategically and integrate core HR management principles into the decision-making process. By mirroring the current landscapes increased reliance on smart people-management strategy, this text underscores the importance of HR management in attracting and retaining the top talent that drives an organization forward.

Reilly (1999) highlighted that there are several reasons why organization chooses to engage in human resource planning. Michael (2006) contended that, the aims of human resource planning in any organization will largely depend on its context. The purpose of human resource planning is to forecast organizational needs for employees taking into account the internal and external supply of labour to meet staffing requirements; that is, identifying the gap between what is needed and what is available (Santos et al. 2009). Noe (2012) highlighted that other factors that influence forecasting demand for personnel include budget constraint, turnover

due to resignations, contract terminations, transfers and relocations, retirement, new technology in the field, decisions to upgrade the quality of services provided and minority hiring goals. That when it comes to the human resource planning context, a mathematical formula is used to project future demands of human resources based on an established relationship between an organization employment level and some measurable factors of output such as revenue, sales or production level. Walker (1980) established that human resource planning occupies an important role to forecast future demands of business and environmental factors in the organization and it also helps to generate and manage the human resource demands as required and as conditions depict. Imison et al. (2009) contended that getting the balance right between labour demand and supply is the most common objective of human resource planning.

According to Unugbro (2012, p.98), planning can be defined as the process of deciding what objectives will be pursued within a future time frame and what will be done in order to achieve those objectives". It involves deciding in advance what to do, how to do it, when to do it and who is to do it (Weihrich et al, 2008). Agabi and Ogah (2010) define planning as a managerial process directed at

the optimal utilization of time and resources in the attainment of clearly identified goals. From the above analysis, planning can be described as a profitable activity directed at the management of human and other essential resources with the aim of achieving an identified set of goals and objectives.

Manpower planning has been defined variously by different authors. According to Agabi and Ogah (2010), Manpower (human resource) planning involves forecasting the human resource needs of an economy, setting objectives that will lead to the realization of such needs, designing strategies for the achievement of the set objectives, identifying resource needs, and defining modalities for plan implementation; manpower planning is the process of determining the policies and programmers that will develop, distribute, and utilize human resources with a view to attaining a nations broader goals of socio-economic and political development (Anyanwu, et al., 1997); it is referred to as the process by which an organization ensures that it has the right number of people, at the right place, at the right time, doing things for which they are economically most useful (Ibojo, 2012). Chandan (2005) posits that human resource planning involves objective and systematic assessment of present staffing needs of an organization, identifying the

available personnel to satisfy the current needs, forecasting the future demand and supply of employees, formulating staffing strategies with a view to both short range as well as long range strategic plans and continuously monitoring, evaluating and updating these needs and resources of supply; it is a rational approach to the effective recruitment, retention and deployment of people within an organization, including, when necessary, arrangement for dismissing staff" (Cole, 2004, p.169).

Noe (2012) highlighted that other factors that influence forecasting demand for personnel include budget constraint, turnover due to resignations, contract terminations, transfers and relocations, retirement, new technology in the field, decisions to upgrade the quality of services provided and minority hiring goals. That when it comes to the human resource planning context, a mathematical formula is used to project future demands of human resources based on an established relationship between an organization employment level and some measurable factors of output such a revenue, sales or production level. Walker (1980) established that human resource planning occupies an important role to forecast future demands of business and environmental factors in the organization and it also helps to generate and

manage the human resource demands as required and as conditions depict. Imison et al. (2009) contended that getting the balance right between labour demand and supply is the most common objective of human resource planning. Ulrich (1987) advocated that human resource planning is recognized as a source of development of organizational functions based on missions and objectives of the business. Like most organizational practices, the effectiveness of human resource planning depends on the perspective within which it is utilized (Walker, 1990).

Methodology

The study is based on secondary source of data books and journals and other secondary data to examines and analyze the roles of manpower planning in an organization

Method of Data Collection

In dealing with any real life problem, it is often observed that there are inadequacies therefore; it becomes necessary to collect data that are appropriate. However, the methods of data collection in this paper is contextual historical method was used to analyze data. The justification for adopting this method for the analysis is because contextual analysis involves the use of the texts contents to analysis how the study is applied. It also entails the critical reading and

observations of information contained in texts in order to understand the data from the literature and to arrive at a more valid conclusion.

The Roles of Manpower Planning in an Organization

Manpower planning, also known as human resources planning, is an important aspect of any organization, particularly during the recruitment process. The following roles help the organization improve in terms of adequate human resources and the cost of production in the services provided. Here are some of the most important roles of manpower planning in any organization for organizational development:

3. Organizational improvement: This is a situation in which an organization's management encourages the human resources department to provide adequate training to employees for the purpose of workforce development. It is also a situation in which an organization sets up and posts its staff in their field of specialization to enable organizational improvement. When everything in an organization is in order, the organization's goals and objectives will be on track. Furthermore, the improvement of the organization benefits the management and is sufficient for the employer.

4. Improve the cost of production: - A good manpower planning will improve the cost of production in the organization. This department in an organization has total control of any department in the organization, including the production department, purchasing department, and other departments that deal with production. The level of production needs to improve even more, especially the labor cost, for adequate organizational output in the market.

5. Good Selection and recruitment process:- This is the most important process in an organization in terms of cost. Manpower planning leads to a much more well-thought-out recruitment and selection pattern, depending on the business requirements. This is entirely dependent on the forecasts provided and the needs of the company. As a result, individuals with better qualifications, skill sets, experience, and so on are shortlisted to best meet future needs. And, in order to improve organizational accomplishment, managements are continually on the lookout for the proper employers and candidates for their positions.

6. Establishing Effective Labor-Capital Coordination: Manpower Planning aids in the establishment of effective labor-capital

coordination. It also aids in the early and best feasible labor and capital solutions. It also aids in the earliest and best possible resolution of the enterprise's labor difficulties, because Manpower Planning supplies the enterprise's labor force in such a way that they agree to cooperate with management in the achievement of organizational goals. This also encourages a positive labor-capital connection..

7. Organizational management:- Professionals in human resources are skilled managers. They get along well with others and are aware of what pushes them to do their best work. Entrepreneurs, CEOs, and vice presidents are excellent at starting and running businesses, but they may lack experience or expertise in managing people. The HR team relieves the leadership team of the obligations of training, development, compliance, and employee productivity, allowing them to focus on what they do best.

Result and Discussion

In light of the foregoing literature study from various authors, the majority of them stated that manpower planning or human resources development is the key to meeting the demand for recruitment in a company. However, in my opinion, there is a research gab between their literature and this research view, because human resources is at the core of any organization in any business or industry, and human resources is defined as an individual's skill and experience in order to fulfill organizational goals. In this regard, the corporation must use extreme caution when running its human resources department. As we all know, organizations affect individuals and people influence organizations, thus manpower planning must be supported in this regard. Human resources departments play a significant role in the recruiting process since it must be done in a step-by-step manner, starting with the recruitment advertisement and ending with the training of selected employees before they are assigned to various positions. In order to enhance manpower planning in the firm, human resources staff must be qualified and experienced in executing the recruitment process. If the organization has a good manpower strategy, good management must be considered; if the organization has a good management practice, human resources must be developed in order to achieve desired organizational goals. The bulk of our company at the time did not implement workforce planning, which is why they have mismanagement in their day-to-day operations. If a firm considers manpower planning during any recruitment process, they must have a strong human resources

development program that aids in the achievement of desired goals in our businesses, particularly in Nigeria. The need for manpower planning in any organization must increase in order to meet standard industrial practice. If we look at our companies in Nigeria, we can find people who studied Chemistry working in banks and people who studied Accounting working in teaching positions without any experience in education. This is one of the challenges that our beloved Nigeria faces. Every firm in the country needs a human resources department to improve manpower planning.

Conclusion and recommendation

Human resources management is a universal of any firm, so many reviews have been done and it will be unlimited for manpower planning, but according to this research, manpower planning should be considered in any industry to reach desired goals. The study recommend that;

1. The organization should review their respective human resources departments and encourage the unit by providing whatever is needed to the managers.

2. The organization's managers should responsible for motivating and caring for the employees.

3. The organization should constantly training its employees on the division of labor in order to avoid a lack of manpower planning.

4. The organizational managers are responsible for implementing strategies and policies that support manpower planning.

REFERENCES

Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2012). Quantitative and qualitative research in the built environment; application of mixed research approach. Work Study, 51(1), 17-31.

Anya, C.J.P., Umoh, G.I., & Worlu, G.(2017). Human Resource Planning and Organizational performance in Oil and Gas firms in Port Harcourt, International Journal of Academic Research, 3(9), 110-129.

Anyim, F., Mba, S. & Ekwoaba, J. (2012). The imperative of integrating corporate business plan with manpower planning. International Journal of Business and Management, 7(8), 56- 62.

Arsad, M. (2012). Human Resource Management Practices and Organizational Performance: A study on Administrators in Universiti Teknologi Mara. (Unpublished MSc Dissertation). Universiti Utara Malaysia.

Aslam, H.D., Aslam, M., Ali, N., Habib B., & Jabeen, M. (2013). Human Resource planning practice in managing human resource: A literature Review. International Journal of Human Resource Studies, 3(1), 200-212.

Bogdan,R. C., & Biklen,S.K. (2012). Qualitative Research for Education: An Introduction to theory and Methods. Boston; Ally and Bacon.

Bulla, D.N., & Scott, P.M. (1994). Manpower requirement forecasting: A case example in (eds) Ward, TP Bechet & Tripp, Human Resource forecasting and modeling, The Human Resource Planning society, New York.

Butter & Lynch. (2002). Human Capital Investments and Productivity, American Economic Review (papers and proceedings) 86, pp263-267.

Cakar, F., Bititci, U., & MacBryde, J. (2012). A business process approach to human resource management. Business Process Management Journal, 9, (2), 190-207.

Cascio, W. F. (1992). Managing human resources : Productivity, quality of work life, profits. (3rd ed.). New York: McGraw-Hill.

Chan, A.P.C., Chiang, Y.H., Mak, S.W.K., Choy, L.H.T., & Wong, J.M.W. (2006). Forecasting the demand for construction skills in Hong Kong. Construction Innovation, 6(1), 3-19.

Chand, M., & Katou, A. A. (2007). The impact of HRM practices on performance in the Indian hotel industry. Employee Relations, 29 (6), 576- 594.

Choudhury, E. H. (2007). Workforce planning in small local governments. Review of Public Personnel Admini-stration, 27(3), 264-280.

Cole, G.A. (2002). Strategic Management. (3rd Ed.). London and New York

Colley, L. & Price, R. (2010). Where have all the workers gone? Exploring public sector workforce planning. Australian Journal of Public Administration, 69(2), 202-213.

Craft, J. (1980). A critical perspective on human resource planning. Human Resource Planning, 3-197-211.

Craft, J. (1988). Human Resource Planning and strategy. In L. Dyer & G. Holder (Eds.),

De Cenzo, D., & Robbins, S.P. (1988). Personnel/Human resource Management. Prentice-Hall, New Jersey. Dessler, G. (2001) .Human Resource Management (7th Ed.). New Delhi: Prentice Hall.

Dessler, G., & Varkkey, B. (2009). Human Resource management. Dorling Kindersley, India Pty, Ltd.

Dwivedi, R.S. (2012). A text book of human resource management. Vikas Publishing. New Delhi. India.

Edwards, G., Pearce, E. (1988). "Inevitable Forces for Change in America".

Edwards, J. (1983). A survey of manpower planning Models and their application. The Journal of the Operational Research Society,34(11), 1031-1040.

Ghazala, I., & Habib, J. (2012). Human Resource Strategies. Journal of Business and Management, 3(6): 6-13.

Giffords, E. D., & Dina, R. P. (2011). Strategic planning in non-profit organizations: Continuous quality performance improvement - a case study. International Journal of Organization Theory and Behaviour, 7(1), 66- 80.

Harbison, F., & Myers, C. A. (1973). Human Resources as the Wealth of Nations. New York: Oxford University Press.

Hassan, O. (2003). SCM and Organizational Performance: Strategy and Innovation Aspect (PhD). University of Engineering and technology. Lahore.

Hiti, K.A. (2000). Human Resource Management: A strategic Entrance. Oman: Dar Hamid Library.

Human Resource Management: Evolving roles and responsibilities. Washington, DC: Bureau of National Affairs.

Imison, C., Buchan, J.,& Xavier, S.(2009). NHS Workforce Planning. Limitations and Possibilities. London: The King's Fund.

Izueke, E. M. (2009). Strategic Human Resources Management in the Nigerian Public Service and the Millennium Development Goals (MDGs): The Nexus. Nigerian Journal of Public Administration and Local Government, 14(1 & 2).

Jacobson, W. (2010). Preparing for tomorrow: a case study of workforce planning in North Carolina municipal governments. Public Personnel Management, 39(4), 1-21.

Jahanian, R. (2009). Improving method of Tehran training and education, knowledge in training science, lesson planing. Islamic Azad University of Khorasgan (Esfehan),24(6): 61- 84

John, E. (2008). HRMS: Helping HR out of the cost centre rut: Retrieved from http://www. hrworld.com/features/erp-planning-table-070 208/

Johne, A. (2009). Insurance product development: Managing the Changes. International Journal of Bank Marketing, 11(3) 5.

Katua, T., Mukulu, E., & Gachunga, H. (2014). Effect of employee resourcing strategies on the performance of commercial banks in Kenya. International Journal of Education and Research, 2(1): 1-20. [37] Khadka, S. (2009). Foundation of Human Resource management, Pradhan Book International (p) Limited, Publishers, New Delhi, India.

Koubek, J. (2007). Human resource management : the basics of modern human resource management. (4th ed.). Praha: Management Press.

Leng, T. (2005). Human Resource Planning and Human Resource Development in Construction (Master's thesis). University Technology of Malaysia, Kuala Lumpur.

Lunenburg, F.C. (2012). Human Resource Planning: Forecasting demand and supply. International Journal of management, Business, and Administration, 15(1).

Meehan, R., & Ahmed. S. B. (2002). Forecasting Human Resources Requirements: A Demand Model. Journal

of Human Resources Planning, 13(4), 297-308.

Mello, J.A. (2001). Strategic Human Resource Management. Cincinnati: South Western.

Michael, A. (2006). Human Resource Management Practice. Cambridge University Press.

Mildred, K. (2012). The influence of human resource management practices on financial performance of commercial banks in Kenya. School of Business, University of Nairobi- College of Humanities and Social Sciences (CHSS). Retrieved from http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789 /11 014.

Milkovich, T.G., & Boudreau, J.W.(1993). Human resource management. Praha:Grada Publishing.

Mondy, W. R., & Noe, R.M. (2006). Human Resource Management. Pearson education. New Delhi. India.

Mullins, J. (2003). Human Resource Planning. (6th ed.). Vikas New Delhi. India.

Mursi, J. (2003). The strategic management of human resources: The entrance to achieve Competitive advantage to joining the twenty- first century. Alexandria: University House.

Ngui, T.K., Elegwa, K., & Hazel, G.G. (2014). Effect of employee resourcing on the performance of commercial banks in Kenya. International Journal of Education Research, 2(1), 1-20. [50] Noe, R.A. (2012). Human Resource Management: Gaining a Competitive Advantage. New York, NY: McGraw-Hill.

Ogunrinde, R. O. (2001). Strategic Human Resource Planning and Organisational Effectiveness: An Empirical Analysis and Recommendations (Master's thesis). Nova Southeastern University. Retrieved from http:// ecu.summon. serials solutions.com.

Paradeesh, N.M. (2011). Human Resource Planning and Development: Study material VI Semester, School of Distance Learning, and University of Calicut.

Parker, B., & Caine, D. (1996). Holonic modelling: human resource planning and two face of janus. International Journal of Manpower, 17(8)30-45.

Randall, S. (2000), Human Resource Planning, Vikas Publishers, New Delhi India.

Randhawa, G. (2007). Human resource management for public and non-profit organizations: A strategic approach. USA: A Wiley Imprint.

Reilly, P. (1999). The Human Resource Planning Audit, Cambridge Strategy Publication. Cambridge.

Reilly, P. (2003). Guide to workforce planning in local Authorities, Employer's organization for local Government, London.

Santos, A., Zhang, A., Gonzalez, M.,& Byde, A. (2009). Workforce Planning and Scheduling for the HP IT Services Business. Paper presented at the Multidisciplinary International conference on Scheduling: Theory and Application. Dublin, Ireland.

Ulrich, D. (1987). 'Strategic human resource planning: why and how?' Human Resource Planning, 10(1), 37-56.

Walker, J. (1980). Human Resource Planning. New York, MC-Graw Hill.

Walker, J. (2009). Human Resource Planning. New York: McGraw-Hill Book Co.

Walker, J. W. (1990).'Human resource planning, 1990 style'. Human Resource Planning, 13(4), 229-240.

Walker, J.W. (2002). Perspectives. HR Human resource planning, 25(1)12-14.

Werner, S., Jackson, S. E.,& Schuler, R. S. (2012). Human Resource Management: South- Western Cengage Learning.

The Pedagogical Principle of Test Items for Testing Grammar in Language Class

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ABSTRACT

This paper discusses the pedagogical principle of test items to be used in testing grammar in a language class, it focuses on the ways grammar are evaluated or tested. The paper further explains qualities of a good language test, multiple choice test and principles of constructing multiple choice test items. It examines error recognition items, rearrangement items, completion items, word changing items, composition based grammar items and authentic assessment items. The major conclusion of the study is that grammar tests take different forms and the availability of these different formats provides varieties. It is expedient that grammar test constructors begin to look for a more realistic approach to testing grammar that can have some semblance to the real world usage of language.

Keywords: Tests Items, grammar, multiple choice tests, Communicative Language Teaching and validity.

Introduction

Language assessment is an integral part of language instruction as it keeps curriculum implementers and custodians of the level of attainment, of set goals. Language tests are invaluable tools which do not only measure attainment, but standard of attainment of set goals as such in test construction. It is expedient that the test constructor considers some pertinent questions that would make the items appropriate, reliable and valid. The how, the what, at what level, for whom, when and where of a test instrument must be borne in mind for the test to fulfill some qualities of a good test. But it is quite unfortunate that some instructors are quite laissez-faire in their test construction as they do not consider it an integral part of instruction, as such, it leads to instructional incoherence. Atuhurra and Kaffenberger (2020) state that there exists a pattern of instructional incoherence in developing countries whereby misalignment between classroom instruction, curriculum standards, and high-stakes assessments reduces the likelihood that students will achieve mastery across a range of core competency areas. The abysmal performance of students in most tests is at most times, as a result of the incoherence in instructional components: the contents of the curriculum standards, test items, and the

actual teaching delivered in the classroom. This underscores the importance of language test as an integral part of instruction planning and delivery. Grammar test, the mainstay of language testing, is not left out of this trend as at most times test standards are not in congruence with classroom or curriculum standards (Kathleen & Kitao, nd). This incoherence could be evident in the test measuring something other than the ability intended to measure the knowledge that is trivial in real life. Most grammar tests test the ability to either recognize, or produce correct grammar and usage, as little or nothing is done about the ability to use the language to express effectively in practical terms. However, it can be argued that a basic knowledge of grammar underlies the ability to use language to express meaning, and so grammar tests have an important part to play in language programmes. Because of this, traditional grammar tests are mostly structural in nature, providing frames for students to supply grammatically correct options. These tests test competence rather than performance.

But with the advent of Communicative Language Teaching and by extension, Discourse Approach to instruction. Other approaches to language test such as Communicative and Integrative Approaches are currently advocated, though not fully deployed by language teachers, probably as a result of lack of required test skills for their applicability, time constraint or nonchalant. This paper is not judgmental of the best approach to test grammar, but advocates an eclectic approach to test of grammar. In essence, it focuses on the ways grammar are evaluated or tested. It further explains qualities of a good language test, multiple choice test and principles of constructing multiple choice test items, error recognition items, rearrangement items, completion items, word changing items, composition based grammar items and authentic assessment items.

Qualities of a Good Language Test

It is necessary here that the qualities of a good language test are highlighted. The main qualities of a language test are validity, reliability and practicality. These are psychometric properties of any standard test instrument.

Reliability

Reliability of an assessment tool has the extent to which it measures learning consistently. The reliability of an assessment tool is the extent to which it consistently and accurately measures learning (Hutauruk, 2015). When the results of an assessment are reliable, we can be confident that repeated or

equivalent assessments will provide consistent results. This puts us in a better position to make generalised statements about a student's level of achievement. This especially important when we are using the results of an assessment to make decisions about teaching and learning, or when we are reporting back to students and their parents or caregivers. There are various factors that affect that reliability such as the length of the assessment, the time allowed, the test environment, the test instructions, the marking scheme, and so on.

Validity

Validity of an assessment tool is the extent to which it measures what it is designed to measure (Hutauruk, 2015). Educational assessment should always have a clear purpose. Awotunde and Ugodulunwa (2014) define validity as appropriateness, meaningfulness, and usefulness of inferences a researcher makes. Validity is the extent to which results of an evaluation procedure serve the particular uses for which they are intended (Awotunde & Ugodu-lunwa, 2014). Nothing will be gained from assessment unless the assessment has some validity for the purpose. For that reason, validity is the most important single attribute of a good test. The validity of an assessment tool is the extent to which it measures what it is

designed to measure, without contamination from other characteristics.

Practicality

This is another important feature of language tests as language is basically acquired for communication as such; language tests need to promote functional use of language. They are not merely traps to make student fail but should be able to help students to use the language proficiently. Hutauruk (2015) considers practicality as the feasibility of administra-tion of the test. While constructing language test in an era of functional and interactional approaches to instruction, test constructors must consider the administration of the test in the course of test construction.

Grammar Test Items

The most common types of structural and objective test items used to test awareness of the grammatical features of language are multiple-choice items, error-recognition items, rearrangement items and completion items. Others are transformation items, items involving the changing of words, broken sentence items, combination items and addition items. These test items test mostly the ability to recognize or produce correct form of language rather than the ability to use language to express meaning, attitude, emotions and others. Though at

present, emphasis is on communicative and integrative test of grammar, many teachers are still using structural grammar test items. Nevertheless, it is essential that students master the grammatical system of the language they are learning but it is clear these days that students need discourse, cultural, sociolinguistic competence, and others to be able to communicate effectively in the target language. This is because main essence of language instruction is communication and grammatical competence is just a part of the competence needed for effective communication and not everything that is needed (Shohamy, 2011). Some of the objective and structural grammar assessment items are discussed below.

Multiple Choice Tests

Multiple choice tests are probably the most common way of testing grammatical knowledge. These tests have the advantage of being easy to grade and being able to cover a lot of grammatical points quickly (Wiggins, 2010*).*

Principles of Constructing Multiple Choice Test Items

According to Adisutrisno (2008) the following are the basic guidelines for constructing multiple-choice test items:

1. present a single clearly formulated problem in the stem;
2. make certain that the intended answer is correct and clearly stated:
3. make all alternatives grammatically consistent with the stem of the item and parallel in form;
4. avoid verbal clues that might enable test takers to select the correct answer or to eliminate an incorrect alternative;
5. make certain that each item is independent of the other items in the test;
6. avoid tricky questions;
7. avoid mixed content;
8. avoid negative wash back through non-occurrent forms;
9. avoid convergence and divergence cues;
10. put as much of the wording as possible in the stem of the item;
11. in the assembling, items must be arranged in order of increasing difficulty; and
12. for instructional purposes, in the assembling, items of the same type should be grouped together.

It is obvious that assembling and constructing a multiple choice test set are difficult tasks for the teacher to do. In addition, these activities consume much time. But these have to be done based on the purpose of the test and aspect of language the test is about.

The most common type of multiple choice test items in grammar is the one in which the test maker gives the testee a sentence with a blank space and four or five options of words or phrases which one completes the sentence correctly (Phillips, 2016). These grammar test items are of various formats. For example:

Type 1: Because my mother was sick, I-----to go home last week.

- A. had
- B. has
- C. have
- D. hadn't

Correct answer: D

Type 2: Because my mother was sick, I----to go home last.

A. had

B. has

C. have

D. hadn't

Correct answer: A

Type 3: Because my mother was sick, I------ to go home last week.

A. had

B. has

C. have

D. hadn't

Correct answer: A

Type 4: Because my mother was sick, I had to go home last week.

A. No change
B. Have
    C. Has

D. Hadn't

Correct answer: A

Type 5:

A. My mother was sick last week and I went home.

B. My mother is still sick this and need to go home.

C. My mother was sick last week because I went home.

D. My mother became sick because I went home.

Correct answer: A

Type 6: John ought not to have told anyone the secret.

A. So ought you
B. B. Neither you oughtn't

C. Neither ought you

D. So oughtn't you

Correct answer: C

Type 7: John ought not to have told me.

A. John did not tell me but he should.

B. Perhaps John may not tell me.

C. John told me but it was wrong of him.

D. It was necessary for John not to tell me.

Correct answer: C

To give more contexts, some multiple choice items sometimes make use of a short dialogue, with one person saying something and the other person responding. This method of testing short answers and responses is to give the testees an utterance, and have them decide which of four or five utterances is an

appropriate response (Phillips, 2016). This can be either a test of comprehension or a test of grammar. For example:

Type 8: "I think that tuition is much too high here."

A. I do so.
B. Do I so.
C. I so do.
D. So do I.

Correct answer: D

Another way to test grammatical knowledge using multiple choice items is to give testees a sentence and ask them to choose which of the four or five alternatives has the same meaning.

The school should have expelled him.

A. The school didn't expel him, which was wrong.
B. The school expelled him, because it was necessary.
C. The school might have expelled him, if it had known.
D. The school will probably expel him in the near future.

Again, this is a test of reading comprehension as well as grammar, but in order to understand the meaning of the sentence, the reader has to understand the grammar.

Error Recognition Items

Error correction items are also useful for testing grammar. An error correction item is one in which the testee is given a sentence with an error. Four words or phrases in the sentence marked with letters and the testee needs to decide which of the words or phrases has the error. According to Brown (2012) there are different types of error recognition items as exemplified below.

Type 1: In this example the sentence is broken down into different parts lettered A-D and the testees are to choose the option that contains error.

A. Most of students

B. believe that they

C. should be getting better grades

D. than they are getting now.

Correct answer: A

Or

Type 2: In this example a statement is written with a deliberate blank space in an area where students are likely to make mistakes from contrastive analysis. Then the students are required to choose the option that best completes the blank space.

Most of _____ believe that they should be getting better grades than they are getting now.

- A. the students
- B. students
- C. student
- D. the student

Correct answer: A

The teacher may also mix in some sentences that have no errors, and students are required to indicate that there is no error. In addition, the students might be required to correct the error. Errors from students' actual writing are a good source of ideas for this type of exercise.

Rearrangement Items

These items can be used to test testees' knowledge of word order. The traditional way is to present the testee with four alternative word orders, then the testee chooses the right one (Canale & Swain, 2014). For example:

I wonder how she knows _____.

- A. how it costs much.
- B. how much it costs.
- C. it costs how much.
- D. it how much costs.

Correct answer: B

Another possibility is to give testees the four words and ask them to put the words in order. For example:

I wonder how she knows _____

A. how

B. it

C. much

D. costs

/A___/C___/B___/D___/

According to Brown (2012) this can also be done in a way that actually requires the writer to do some writing. The testees are to write the words in the correct order of the space provided. For example:

I   wonder   how   she   knows _____.

how / it /much / costs

Understanding of the appropriate sentence order can also be tested in a similar way by giving testees several sentences and asking them to put them in order (Hancock, 2013). This type of test tests knowledge of references, cohesive devices, and others. This type of item tests the student's ability to write full sentences from a series of words and phrases, and thus does not allow the test writer to concentrate exclusively on testing those particular grammatical features which

might have just been practiced in class. It is nevertheless a useful device for testing grammar provided that the tester is aware that several other areas of the language are being tested in addition to those on which he or she wishes to focus attention.

In this type of test item, students should be instructed to make whatever changes are necessary to form good sentences, adding articles, prepositions, and others where required and putting verbs in their correct tenses. For example:

Take/drug and stimulants/keep awake / while revise examination/often be very harmful/it be far better/lead / balanced life/and get enough sleep/every night. / There/be/limit/degree and span/ concentration/which you be capable/ exert. / Brain/need rest / as much body. / Indeed, / it be quality / than quantity work / that be important.

Completion Items

Completion items are items in which the testees are asked to fill in blanks in sentences. For the purpose of a grammar test, the words which fit in the blanks should be function words, such as articles and prepositions. Completion items intended to test reading ability or vocabulary knowledge use content words. The advantage of completion items is

that they test production, not just recognition. The disadvantage is that they need to be marked by hand and there will be some cases where the marker needs to make judgements about whether a response is correct or not. It is not always easy to write items for which there is only one possible answer. Using a piece of continuous prose rather than disconnected sentences is one way of cutting down on possible different interpretations of what goes into a particular blank, but it is probably impossible to entirely eliminate the possibility of different answers.

Also, it is possible to require a phrase instead of a word in each blank. However, while this method presents a more realistic situation, it becomes more difficult to mark. While it is probably not realistic for a large- scale testing situations, it is something that is useful for classroom teachers who want to help their students to develop an ability to produce appropriate grammatical forms in context (Canale & Swain, 2014). For example:

1. Give the book to _____ woman in the blue dress.
2. The old man enjoys looking ……..the children playing.
3. That car belongs ……….. Helen's mother.
4. I hope you are not angry ……me.

It can take the form of choosing appropriate words from a set of words to complete some blanks in sentences (Hancock, 2013). Example: Put *a, the,* or *some* in each blank only where necessary. If you think that no word should be placed in the blank, put a cross (x) there.

1. Can you see ……sun shining through the clouds?
2. I saw your uncle …..day before yesterday.
3. What have you been doing since I saw you ……last summer?

There are different ways to reduce divergent answers in completion tasks. If the aim of this particular item is to force the use of the present perfect tense, there are three ways of restricting the choice available to the testees (Hancock, 2013) (although the first two ways depend heavily on reading comprehension):

(a) by providing a context:

Kim usually goes to the cinema about once a week but she …….four films already this month and it's only the 20th today. (Possible answers: has seen/will have seen/must have seen)

(b) by providing data:

I go to the cinema regularly, but its ages since I last saw a play.

I go to the cinema regularly, but I ……….to the theatre for months.

(Possible answers: haven't been/haven't gone/haven't been going/haven't been able to go)

(c) by using multiple-choice techniques:

I ……to the theater three times since I last saw you.

A. go   C. had gone

B. have been   D. went

Transformation Items

Another type of grammar test item makes use of transformations. In this type of item, testees are given a sentence and the first few words of another sentence to change the original sentence without changing the meaning (Hancock, 2013). For example:

1. Jim hasn't been home in a long time.

It's been a long time _____.

2. I don't need to go to the grocery store this week.

It _____ isn't _____

3. It is difficult to study when it is so noisy.

Studying _____

Again, this type of test is difficult to grade because the teacher has to be aware of the

variety of possible answers. Another problem is that it does not in any way test the testees' knowledge of when each of the possible transformations would be most appropriate. For example, the testee might be able to transform an active sentence to a passive sentence but not know when to use passive rather than active. However, it is still sometimes a useful test of grammatical knowledge.

The transformation type of item is extremely useful for testing ability to produce structures in the target language and it helps to provide a balance when included in tests containing multiple-choice items. It is the one objective item type which comes closest to measuring some of the skills tested in composition writing, although transforming sentences is different from producing sentences.

According to Hancock (2013) other transformation items involve changing sentences by using selected words. Examples:

(a) You are advised that you listen to instructions in class. (ADVISABLE)

…………………………………………………

b) Most doctors also recommend exercise as alternative treatment. (SUGGEST)

……..……………………………………………

(c) I don't need to go to the grocery store this week. (NECESSARY)

Word Changing Items

This type of grammar test items test students' knowledge of different word forms and how they are used in sentences. In this type of grammar test, testees are given a sentence and a word which they need is to fit into the sentence by changing the form of the word (Hancock, 2013). For example:

1. I have never_____to Australia. (be)
2. I will be with you _____. (moment)
3. Word building as in the extract below.

Students who were given the drug for a fortnight did considerably (1. well) in tests than others. The tests

(1) …………… included the (2. memorize) of lists of words as well

 (2) …………… as of (3. inform) from two messages transmitted at the

(3) …………… same time. During the first week there is no (4. notice)

(4) …………… difference between the two groups, but after a fortnight the group of the drug was found to have increased its

(5.able) to learn by almost twenty per cent.   (5) ……………

Constructing Combination and Addition Items

Sentence combining exercises can play a part in testing grammar as well as its more traditional use as part of composition testing and training. These objective-type items have been in use for long. They should be used sparingly, however, as they involve largely mechanical responses on the part of students. Note that although the separate sentences are linked to one another by theme, the items can hardly be described as being contextualized in any real way (LeLoup & Pontiero, 2011).

For example, testees might be instructed to combine the following sentences using a relative pronoun:

I met a man. The man went to the same high school I did.

I met a man who went to the same high school I did.

Students may be instructed to join each pair of sentences using the word in brackets.

(a)   You finish the exam then check your answers carefully. (AFTER)

(b)   Some tasks may be very difficult. They should be left until later. (WHICH)

Addition Items

In this case, students may be instructed to insert the word in capitals in the most appropriate place in each sentence. For example:

(a) YET

 Have you solved all the tasks?

(b) STILL

Some students had not mastered the right skills for answering

examination questions.

(c) OCCASIONALLY   There may be little choice of questions.

Sentence Diagramming

Sentence diagramming is another activity that students might be asked to do on grammar tests. To do this, they must make a graphic representation of the parts of speech in a sentence. Students draw lines and write the words from the sentence in a predetermined format to show how each word functions as a certain part of speech. Example:

1. I love Mary.
2. Peter loves football and reading.

Write the words in the above sentences in the appropriate word classes.

S/N	Noun	Pronoun	Verb	Conjunction
1	Mary	I	Love	
2	Peter, football and reading		loves	And

Composition Based Grammar Items

Composition-based grammar tests are other way to check for students' learning and mastery of grammar concepts. For these types of tests, students might be asked to write sentences, paragraphs or even a short essay in which they incorporate various rules and types of grammar elements correctly. In this kind of test, for example, students might be asked to take two sentences and combine them correctly. They also might be asked to take a paragraph that is written incorrectly and write it in a grammatically correct way. Rubrics for assessment are constructed to ascertain the students' mastery of some specific aspects of grammar. This form of assessment is communicative and integrative in approach (Genesee, Fred & John, 2016).

Authentic Assessment Items

Authentic assessment is another way to check for students' understanding of grammatical rules. For example, they might be asked to take a newspaper article and make corrections or improvements. The difference between this and other types of grammar tests is that it tests using grammar and language in their natural format and authentic contexts (Genesee, Fred & John, 2016). Although this is still an academic activity, it is more related to real-life use of grammar rules than other types of grammar tests.

Conclusion

It is evident that grammar tests take different forms and majority of them test grammatical competence in decontextualized manner. Although the availability of these different formats provide varieties, it is expedient that grammar test constructors begin to look for a more realistic approach to testing grammar that can have some semblance to the real world usage of language. This will help test takers to see the link between grammar tests and the utility of knowledge gained in real life rather than perceiving grammar tests as mere academic boredom.

REFERENCES

Adisutrisno, D.W (2008). Multiple choice English grammar test items that aid English grammar learning for students of English as a foreign language. *Kata* 10(1), 36-52.

Atuhurra, J. & Kaffenberger, M. (2020). System (In) coherence: quantifying the alignment of Primary Education Curriculum Standards, Examinations, and Instruction in Two East African Countries. *RISE Working Pap er* 20/057

Awotunde, P. O. & Ugodulunwa, C. A. (2014). *Research methods in education*. Jos: Fab Anieh (Nig.) Ltd

Brown, J.D (2012). *New ways of classroom assessment: Teachers of English to speakers of other languages (TESOL)*. Alexandria: Virginia.

Canale, M. & Swain, M. (2014). Theoretical bases of communicative approaches to second-language teaching and testing. *Applied Linguistics*,l(1),1-47.

Genesee, F. & John A. U. (2016). *Classroom-based evaluation in Second Languag e Education.* Cambridge University Press

Hancock. C. R. (2013). *Teaching, testing, and assessment: Making the connection. Northeast Conference Report*. Lincolnwood, IL: National Textbook Company

Heaton, J. B. (1988). *Writing English language tests*. London: Longman Group UK limited.

Hutauruk, B. S. (2015). A compilation material of English language testing.

Kathleen, S. & Kitao, K. (nd). Testing Grammar. *The Internet TESL Journal*.

LeLoup, J. W. & Pontiero, R. (2011). FLTEACH listserv, State University of New York (SUNY) at Courtland website

Phillips, J. K. (2016). Assessment now and into the future. In *2005-2015, Realizing our vision of languages for all*. Pearson-Prentice Hall Publishers. Upper Saddle River, NJ.

Shohamy, E. (2011). *The power of tests: A critical perspective on the uses of language tests*. Essex, UK: Pearson Education.

Wiggins, G.P. (2010). Creating tests worth taking. *Educational leadership*, 49, (8), 26-33.

Managing Borno State University in the Fourth Industrial Revolution 4.0 for Sustainable National Development

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ABSTRACT

The study examined Managing Borno State University in the Fourth Industrial Revolution 4.0 for Sustainable National Development. The objectives of the study were to determine the benefits of the fourth IR 4.0 and how it influences the management of Borno state university for sustainable national development. Two research questions were answered and a survey design was employed to carry out the study. The population of the study comprises of 25 principal management staff of Borno state university and the sample size of 20 management staffs were selected in line with Research Advisor Table using simple random sampling technique. The instrument used for data collection was constructed by the researchers titled: IR 4.0 in Management of Higher Education (IRMHE) and reliability index of 0.91 was obtained. The data collected were analyzed using descriptive statistics and the study revealed efficiency and effectiveness as the benefits of IR 4.0 which have led to the wide utilization for administration and management of Borno state university for sustainable development. The findings of the study also indicated that, from the management point of view, Borno state university in fourth IR 4.0 creates a well-organized system and clearly produces superior results, by reducing inefficiency in management for sustainable national development. Based on the above findings, the study concluded that, fourth IR 4.0 reduces inefficiency in management and therefore the study recommended among others that Higher education management needs to recognize the necessity of adapting this FIR 4.0 forms of education to assure the sustainability of our environment, as well as to sustain the relevance of higher education as a responsive and vital component of society's response.

Keywords: Management, Fourth Industrial Revolution and Sustainable National Development

Introduction

Managing Higher Education is key in achieving sustainable national development and for any society to achieve sustainability, the quality of its education, at the tertiary

level should be improved. Education is regarded as key to human development and is the backbone of any national development. A goal of any educational system is to provide or develop a balanced individual capable of surviving in his environment and contributing meaningfully towards the survival of the society to which he belongs (Onyenemezu, 2012). Management of higher institutions entails the application of techniques and expertise of efficient organization, planning, direction, and controls to the operations of the school, its students, teachers and immediate environment. It entails the effective administration of the school in order to achieve sustainable development. This is because the efficiency of a school system depends to a large extent on how human and material resources are motivated and effectively utilized within a conducive environment.

Sustainable national development can be seen as the capability of a particular nation or country to achieve comprehensive improvements or refinement in all ramifications of its existence (economic, political, cultural, religious etc) and set, maintain and continue affairs at that level for a long time (Abraham, 2012). This simply means the ability of a particular country to

plan and achieve betterment and improvements in its socio-economic, political, cultural and environmental lives both now and in the future. Higher education is a cardinal tool for sustainable development that create a quality workforce, instill in individuals the value of achievement, Promote life learning, support business and industries. The issue of sustainable development has become an inherent problem in the mind of an average Nigerian as well as the international community over many decades ago. Aina, (2020) noted that, a nation is said to have attained sustainabile development when it has reached a level of equilibrium in economic, social and environmental factors of her economy. Higher education for sustainable national development views "Education" as the only key to unlock the golden hidden treasures of which sustainability is all about for any developing nation such as Nigeria.

The Industrial Revolutions (IR) appeared as a result of developing science, technology, and community culture; aimed to improve human life, education, management and administration in order to enhance sustainability. In each of the revolutions, the IR has its characteristics and implications on management of higher education system and overall sustainable national development.

The first IR 1.0 started at the end of the 19th century and passed through introduction of mechanical production facilities powered by water and steam. The educational system in the first IR 1.0 were memorization and practice. Although the IR1.0 increased the quality of life in many sectors, but it increased discrimination in the society and the outbreak of disease, due to inability to meet rapid urbanization and fail to develop the health sector in parallel (Haradhan, 2021).

The second IR 2.0 which started at the beginning of the 20th century dealt with mass production assembly lines requiring labor and electrical energy. The education system in the second IR 2.0 was Learning through Internet. At the start, computers shared with the steam engine, the internal combustion engine, and the electric motor for the many-faceted benefits of replacing human effort, less boring, making jobs stress-free and less monotonous (Taalbi, 2019).

The third IR 3.0 was considered as the movement from mechanical and analogue electronic technology to digital electronics, such as green buildings, electric cars, and distributed manufacturing. The Digital Revolution is based on energy transition, digital technologies, and the internet. The world has been moving from information

society to knowledge society and also to ubiquitous knowledge society where the IR 3.0 emerges from the corporate industry's opportunity that brings on by nanotechnology, intelligent systems, robotics for industrial production and domestic services (Taalbi, 2019).

In the center of IR 3.0 there were two technologies; the microelectronics and the internet. The combination of digital manufacturing and personal manufacturing began that enhanced the smoothness in the global economy (Troxler, 2013). The IR 3.0 is built upon a foundation of increased energy efficiency. The modern computer, lean production, internet, and biotechnology were invented. In the IR 3.0 great inventions were semiconductors, mainframe computer, microprocessors, MOS transistors, worldwide web, internet (a renewable energy internet, and a driverless mobility internet), renewable electricity, e-commerce and later developed Smartphone, e-education, e-library, e-lectures, e-board, e-examinations (Gordon, 2012). It is believed that bio, and IT technologies, artificial intelligence, robotics, etc., are the most important drivers of the IR 3.0 and has highly influenced in the various modern sectors, such as advanced manufacturing, education, information and communication technologies (ICT), defense,

health, financial, and administrative sectors (Roberts, 2015).

Currently, humans try to accommodate the fourth IR 4.0 which is characterized by interaction between human and machines (Lee, Yun, Pyka, Won, Kodama, Schiuma, Park, Jeon, Park, Jung, Yan, Lee & Zhao, 2018). Higher Education in the IR 4.0 has enables education to create change. A lot of technologies formed the main features of IR 4.0 which could be applied in education and the management of higher education system especially university. Internet of Things (IoT) is an example, is internet-connected sensor embedded in products that allow things to connect, interact and exchange data (Waghid, Waghid & Waghid, 2019). Another example of IR 4.0 products is Cloud Computing which refers to the use of a network to host massive volumes of data collected by IoT systems on the internet rather than on your personal computer. Analysis of the Big Data leads to smarter decisions and drive innovations (Menon & Castrillon, 2019; Neves & Ambassador, 2017).

Artificial Intelligence AI is also an example of IR 4.0 products which are formed by computer science learning algorithms capable machines like robots to perform complex tasks such as visual perception,

speech recognition, and decision making (Liaoa, Louresa, Deschampsa, Brezinskia & Venancioa, 2018; Mezied, 2016). The IR 4.0 technologies are predicted to have an impact on the 2030 sustainable national development in the management of university system and cannot be isolated from IR 4.0 technologies which are predicted to have a significant effect on learning opportunities, educational policies, management and instructional procedures (Al Lily, Elayyan, Alhazmi & Alzahrani, 2018). Managing Higher Education for sustainable national development in the Fourth IR 4.0 is an open, rational and dynamic door that can change the thinking of university community and upgrade effectiveness and efficiency of university management. The fourth IR 4.0 was triggered by counterfeiting and altered the working environment in the central workplace and the combination of human and machine reduces the separation between humanistic and sociological disciplines and between science and innovation (Priya, 2019). The IR 4.0 not only shakes the existence of managers of higher education, but also challenges the progress of better education in the future. As the presence of the IR 4.0, managers of higher education must be aware of being able to prepare graduates who

are mentally prepared to create knowledge based learning.

Managing Higher Education in the fourth IR 4.0 is based on the optimum use of technological or digital tools and resources and these tools are developed to increase the efficiency and effectiveness of university management systems, in order to overcome educational institutions problems. From the management point of view, tertiary education in fourth IR 4.0 creates a well-organized system, clearly produces superior results and reduces inefficient in management. Many experts believe that we are now in the early stages of the Fourth IR, an era combining digital, physical and biological systems in a way never seen before. Priya S. (2019) opined that, virtual reality (VR), Augmented Reality (AR), Artificial Intelligence (AI) and robotics are changing the way that we live, work and manage higher institutions. Technological advancements are undoubtedly increasing productivity, efficiency and effectiveness in the management of universities (Waghid, Waghid & Waghid, 2019).

The numerous advantages of IR 4.0 and its contribution to increase access to digital planning and management of tertiary education, has promoted educational

management both inside and beyond the physical space of educational institutions (Burton, Cobb, Kateeb, Tsay, Seay, Graham, & Bou, 2013). The benefits of IR 4.0 in terms of efficiency and effectiveness have led to the wide utilization for the operation, administration and management of universities. IR 4.0 usage in educational administration and management at all level is rapidly increasing. There is national recognition for the need to use these devices in management of tertiary institutions as we are in digital, paperless and the era of globalization where the free flow of information via satellite and the internet hold sway in global information dissemination of knowledge (Buck, McInnis, & Randolph, 2013). It is therefore imperative for this study to investigate the management of tertiary education in the fourth IR 4.0 for sustainable national development.

Statement of the Problem

Managing higher education constitutes the major instrument for sustainable national development and fulcrum around which every other activity revolves and for a Nation to have tremendous sustainable national development, the management of higher education have to embraced and key into the fourth IR 4.0 (Priya, 2019). Most higher education in the world have started changing

their educational policies and plans to prepare the management staff, lecturers and students for the future as a result of paradigm shift from the third educational IR 3.0 to the fourth IR 4.0 for effective and efficient educational planning and management. Based on the researchers' observation the old methods, systems, and approaches to management is not effective and efficient while digital revolution 4.0 is more effective and efficient in management of education. The study therefore investigated Managing Borno State University in the Fourth IR 4.0 for Sustainable National Development

Objectives

The objectives of the study were to determine:

1. The benefits of the fourth IR 4.0 in managing Borno state University for sustainable national development
2. The ways the fourth IR 4.0 influences the management of Borno state university for sustainable national development

Research Question

The following research questions were answered:

1. What are the benefits of the fourth IR 4.0 in managing Borno state University for sustainable national development?
2. In what ways does the fourth IR 4.0 influences the management of Borno

state university for sustainable national development?

Research Design

The study employed survey research design and the method was considered most appropriate for the study because of its strengths. According to Cohen, Manion & Morison, (2018) Survey research is descriptive in nature and data are gathered at a particular point of time in order to 'describe the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationships that exist between specific events'

Population of the Study

The population of the study were all the Management staff of Borno state university, while the estimated population were 25 management staffs.

Sample and Sampling Technique

The sample size of 20 management staff was selected in line with Research Advisor Table (2006) using simple random technique.

Research Instrument

Data collection Instrument was constructed by the researchers and was divided into two sections. The instrument was titled: IR 4.0 in Management of Higher Education (IRMHE). Section A: consisted of items statements on Benefits of IR 4.0 in Management of Higher

Education for sustainable national development; While Section B: consisted of item statements on Ways IR 4.0 Influence the Management of Higher Education for sustainable national development.

Validity of Research Instrument

Face and content validities of the instrument were established by presenting the instrument to experts in the field of Educational Administration and Planning and Test and Measurement, department of education, University of Maiduguri, Borno state, Nigeria. The content validity Index (CVI) was 0.89.

Reliability of Research Instrument

The reliability of the instrument was established by administering the instrument in one of the departments in university of Maiduguri to determine the reliability index of the instrument. The data collected was analyzed and the reliability coefficient of 0.91 was obtained

Method of Data Collection and Analysis

Questionnaire was used to collect data on the benefits of the fourth IR 4.0 and the ways it influences the management of Higher Education for sustainable national development. Data collected were analyzed using descriptive statistics Mean and Standard Deviation.

Results

Research Question One: What are the benefits of the fourth IR 4.0 in managing Borno state University for sustainable national development?

Table 1: Benefits of the Fourth IR 4.0 for Sustainable Development

	N	Sum	Mean	Std. D
Block chain	20	57.00	2.85	.812
Cybersecurity	20	50.00	2.50	.827
Interaction	20	56.00	2.80	1.239
HRM	20	62.00	3.10	.967
NHRM	20	61.00	3.05	.510

Table1 above revealed that, the lowest mean score was 2.5 while the highest mean score was 3.1 which is above the average mean score of 2.5. This implies that, the benefits of IR 4.0 in terms of efficiency and effectiveness have led to the wide utilization in the operation, administration and management of Borno state university for sustainable development.

Research Question Two: In what ways does the fourth IR 4.0 influences the management of Borno state university for sustainable national development?

Table 2: Ways Fourth IR 4.0 Influences Management for sustainable Development

	N	Sum	Mean	Std. D
Finance	20	63.00	3.15	.745
Monitoring	20	48.00	2.40	1.046
HRM	20	62.00	3.10	1.071
Communication	20	71.00	3.73	.452
Non HR	20	64.00	3.20	.767
Management Experience	20	66.00	3.30	.801
Education Planning	20	60.00	3.00	1.076
Decision making	20	66.00	3.30	1.218

Table 2 above shows that; the lowest mean score was 2.4 while the highest mean score was 3.7 which is above the average mean score of 2.5. This implies that, from a management point of view, Borno state university using fourth IR 4.0 creates a well-organized system and clearly produces superior results through reducing inefficiency in management for sustainable development.

Discussion

The fourth Industrial Revolution 4.0 is found to be strategic in the management of Higher Education for Sustainable National Development as such, the findings from research question one revealed that the highest mean score was 3.1 which is above the average mean score of 2.5. This indicates that, the benefits of IR 4.0 in terms of efficiency and effectiveness for sustainable development have led to the wide utilization for the operation, administration and management of Borno state university. The fourth Industrial Revolution 4.0 in management of higher education globally is increasing rapidly, as such the study further shows the benefits of IR 4.0, was the increase in the efficiency and effectiveness of university management systems, that overcame educational institutions problems. The study indicated the numerous advantages of IR 4.0 and its contribution to increase access to digital planning and management of

Borno state university, it has promoted educational management both inside and beyond the physical space of educational institutions. This assertion is in line with the study conducted by Taalbi, (2019) on Origins and Pathways of Innovation in the Third Industrial Revolution. In Taalb's findings, he emphasized that, computer has replaced human effort, making jobs stress-free, and less monotonous. However, Priya, (2019) observed that, the fourth Industrial Revolution is shaking the physical existence of managers of higher education and this serves as challenges to administrators to of higher education to plan for better education for the future. This indicated that, the presence of the IR 4.0, managers of higher education must be aware of being able to prepare graduates who are mentally prepared to create knowledge based learning.

The findings from research question two shows the ways the fourth industrial revolution 4.0 influences the management of Borno state university in terms of planning, monitoring and decision making. The findings indicated the lowest mean score 2.4 while the highest mean score was 3.7 which is above the average mean score of 2.5. This implies that, from the management point of view, Borno state university in fourth IR 4.0 creates a well-organized system and clearly

produces superior results, by reducing inefficiency in management. Many scholars asserted that we are now in the early stages of the Fourth IR 4.0 an era combining digital, physical and biological systems in a way never seen before and Virtual Reality (VR), Augmented Reality (AR), Artificial Intelligence (AI) and robotics are changing the way that we live, work and manage higher institutions. Technological advancements are undoubtedly increasing productivity, efficiency and effectiveness in the management of universities (Waghid, Waghid & Waghid, 2019). The study indicated that, fourth IR 4.0 has significantly influences the management of human, non-human resources, finance, communication, decision making and educational planning in Borno state University. This finding is in line with that of Al Lily, Elayyan, Alhazmi & Alzahrani, (2018), who established that, the management of university system cannot be isolated from IR 4.0 technologies which are predicted to have a significant effect on learning opportunities, educational policies, management and instructional procedures.

Conclusion

Based on the above finding the researcher's concluded that:

Fourth IR 4.0 reduces inefficiency in management, this means that it creates a well-

organized system and clearly produces superior results, in terms of management efficiency and effectiveness for sustainable national development.

Recommendations

Based on the above findings the researchers recommended the following:

1. Higher education management needs to recognize the necessity of adapting this new FIR 4.0 forms of education to ensure the sustainability of our environment, as well as to sustain the relevance of higher education as a responsive and vital component of the society

2. The revolution of higher education is a key factor in the digital transformation of IR 4.0. Higher education must ensure that their foundations are computerized, open the doors created by IR 4.0, and have a high level of commitment and agility. In this way, to be successful in the workplace of the future, people must have appropriate digital and virtual education.

REFERENCES

Aina, J. S. (2020) The Roles Of Higher Education For Sustainable National Development Of Nigeria World New.www.universityworldnews.com

AlLily, A.E., Elayyan, S.R., Alhazmi, A.A. et al. (2018) Understanding the public temper through an evaluation of rumours: an ethnographical method using educational technology. *Palgrave Commun 4*, 141 https://doi.org/10.1057/s41599-018-0197-2

Buck, J. L., McInnis, E., & Randolph, C. (2013). The new frontier of education: the impact of smartphone technology in the classroom. *Proceedings of the ASEE Southeast Section Conference*, Atlanta, GA, United States, 3(7)120-126.

Burton, L., Cobb Jr., R., Kateeb, I. A., Tsay, Li-S., Seay, C., Graham, T. E., & Bou, C. (2013). Mobile teaching: merging smart phones, cloud, and desktop to achieve content specific instruction in a generic environment. *Proceedings of the ASEE Annual Conference and Exposition*, Atlanta, GA, United States, 120, 12 p.

Dino, M. & Ong, I. (2019). Research, Technology,Education & Scholarship in the Fourth Industrial Revolution [4IR]: Influences in Nursing and the Health Sciences. *The Journal of Medical Investigation*, 66(6) 3-7.

Gleason, N. (2018). Singapore's Higher Education Systems in the Era of the Fourth Industrial Revolution: Preparing Lifelong Learners. *Higher Education in the Era of the Fourth Industrial*. Chapter 7(9) 145-169. Singapore: Palgrave Macmillan.

Gordon, R. J. (2012). Is US Economic Growth Over? Faltering Innovation Confronts the Six Headwinds. *Policy Insight No. 63*. London: The Centre for Economic Policy Research.

Haradhan K. M. (2021) Industrial Revolution: Journal of Social Sciences and Humanities, Vol. 7, No. 4, 2021, pp. 239-251 of North Carolina Press.

Lee, M., Yun, J., Pyka, A., Won, D., Kodama, F., Schiuma, G., Park, H., Jeon, J., Park, K., Jung, K., Yan, M., Lee, S. & Zhao, X. (2018). How to Respond to the Fourth Industrial Revolution, or the Second Information Technology Revolution? Dynamic New Combinations between Technology, Market, and Society through Open Innovation. *Journal of Open Innovation: Technology, Market & Complexity*, 4(21), 1-24. doi:10.3390/joitmc 4030021

Liaoa, Y., Louresa, E., Deschampsa, F., Brezinskia, G. & Venancioa, A. (2018). The Impact of the Fourth Industrial Revolution: A cross-country/region comparison. *Production*, 28, 1 18. DOI: 10.1590/0103-6513.20180061

Menon, K. & Castrillon, G. (2019). Reimagining curricula for the Fourth Industrial Revolution. *The Independent Journal of Teaching and Learning*, 14(2), 6-19.

Mezied, A. A. (2016). *What role will education play in the Fourth Industrial Revolution?* Retrieved from https://www.weforum.org/agenda/2016/01/what-role-will-education-play in-the-fourthindustrial- revolution/

Neves, M., & Ambassador, S. (2017). *The (unknown) Impact of the Fourth Industrial Revolution in Education*. Retrieved from http://blog.scientix.eu/2017/07/the-unknown impact-of-the-fourth industrial- revolution-in-education

Roberts, B. H. (2015). The Third Industrial Revolution: Implications for Planning Cities and Regions. *Urban Frontiers Working Paper 1*. Canberra Urban and Regional Futures (CURF), University of Canberra, Australia.

Priya S. (2019) Digital Revolution of Education 4.0 International Journal of Engineering and Advanced Technology (IJEAT) (Online), 9(2) 3558-3564 Retrieval Number: A1293109119/2019©BEIESP DOI: 10.35940/ijeat.A1293.129219 Journal Website: www.ijeat.org

Taalbi, J. (2019). Origins and Pathways of Innovation in the Third Industrial Revolution. *Industrial and Corporate Change*, 28 (5), 1125-1148.

Troxler, P. (2013). Making the 3rd Industrial Revolution. In J. Walter-Herrmann & C. Büching (Eds.), *Fab Labs: Of Machines, Makers and Inventors*, Transcript Publishers, Bielefeld.

Waghid, Y., Waghid, Z. & Waghid, F. (2019). The Fourth Industrial Revolution Reconsidered: On Advancing Cosmopolitan Education. *South African Journal of Higher Education*, 33(6), 1-9. http://dx.doi.org/10.20853/33-6-3777

Cognitive Styles and Personality Traits as Correlates of Academic Performance among Undergraduates of Bayero University Kano

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ABSTRACT

The study examined the relationships of Cognitive styles, Personality Traits and Academic performance among Undergraduate Students of Bayero University Kano. (B.U.K). Ex-post factor design was used as the design for the study. The population of the study consisted of the entire level two hundred Undergraduate students from Faculty of Education B.U.K with a total number 2675, while three hundred and seventy-seven students were sampled for the study, using simple random sampling technique. Two instruments were used for data collection. Kazembe sorting test questionnaire for Cognitive Styles and Eysenck's Personality Inventory were adopted and administered to the samples through on the spot test administration. Data collected was analyzed using descriptive statistics of simple percentage and frequency count as well as inferential statistics of Pearson product moment correlation coefficient. Research questions were answered, and hypotheses were tested at $p = 0.05$ level of significance. Research findings showed that there are more Introverts (254, representing 67% of the sample size) students than Extroverts (123, representing 33% of the sample size) among B.U.K Undergraduate Students. Also one personality variable namely Extrovert moderately correlates with Academic Achievement, and the other (Introvert) has weak correlation with academic achievement. From the findings it was concluded that extraversion personality trait and field dependent cognitive style are good predictors of academic performance. On this grounds the study recommended that Since individual differences on personality dimensions or traits is a factor that account for much of the variance we observe in our higher institutions of learning, both university counselors and academic staff should Collaborate in devising meaningful and efficient procedures that would identify each individual personality status so as to enhance concerted efforts towards addressing academic problems as they may arise.

Keywords:-Cognitive Styles (field dependent/field independent), Personality traits, (extrovert/ introvert) Academic Performance

Introduction

Cognitive style or "thinking style" is a term used in cognitive psychology to describe the way individual's thinks, perceives and remember information. Cognitive style differs from cognitive ability or level; as the latter is being measured by aptitude tests or so-called intelligence tests. According to the Oxford Dictionary of Psychology (2003), the

term cognitive ability is an ability to perform any of the functions involved in cognition, more generally, another name for intelligence. While cognitive style refers to a characteristic and self-consistent mode of intellectual and perceptual functioning. Psychologists have failed to agree on a common conception of cognitive style, though many believed that it is bipolar in nature, but its operations are many. For example field dependent and field independent conceptions, impulsive versus reflective as well as global versus analytical are all variant conceptualizations of cognitive styles with diverse operations.

While the term "Trait" is referred to as the characteristic or quality distinguishing a person or thing, especially a more or less consistent pattern of behavior that a person possesses, the characteristic would be likely displayed in relevant circumstances, e.g. shyness, stupidity, and so on. Oxford dictionary of psychology, (2003). Both cognitive styles and personality traits may have an interaction and positive correlation that exist between the two concepts, as each is trying to explain individual's characteristics and how the individual uses those characteristics in their perception, thinking, problem solving and so on.

Review of Related Literature

A number of studies within and outside Nigeria were conducted on the associations between personality traits and academic achievement as well as on the relationship between cognitive styles and academic performance among students of various levels. For instance, (Mangal, 2012). Ramallah (2014) explored the relationship between Students' Cognitive Style (Field Dependent and Field–Independent Cognitive Styles) with their Mathematic achievement in Primary School. The objective of the study was to examine the relationship between students' cognitive styles with student's achievement in mathematics among year 6 students from selected primary schools in Selangor Malaysia. The methodology of the study was survey. Data were collected using the Group Embedded Figures Test (GEFT). GEFT was used to identify students' cognitive styles either Field Dependent (FD) or Field-Independent (FI). A total of 150 students in year 6 from selected schools were selected as participant of study. Data were analyzed using statistical package for social sciences. Two types of analysis used in the study, descriptive and inferential statistical analysis. The finding showed that 112 students were of Field-Dependent cognitive styles (FD) compared to 38 students of Field-

Independent (FI) cognitive styles. The study also showed that there was a low positive correlation between students' cognitive styles and their mathematics achievement. There was also a significant difference in cognitive styles between boys and girls in the school. In a similar study, Altun & Cakan (2006) conducted a study on Undergraduate Students' Academic Achievement, Field Dependent/Independent Cognitive Styles and Attitude toward Computers. The objective of the study was to investigation of cognitive styles, achievement scores and attitudes toward computers among university students. A standardized Group Embedded Figures Test was used to assess field dependency among 130 teacher trainees. Overall, it was found that there was no significant relationship between cognitive styles and academic achievement ($r= .14$, $p= .15$); cognitive styles and attitudes toward computers ($r = .01$, $p= .84$); and, cognitive styles and attitudes toward computers when their academic achievement scores were covariate ($F (2,126) = .40$, $p > .05$). The findings indicate that students' attitudes toward computers are not associated with field dependency, even when their achievement levels were controlled. Attitude toward computers is found to function independently from cognitive styles.

In a similar way Akhtar & Arif (2007) explore the relationship of cognitive styles with students' academic achievement in the subject of science at elementary level. A sample of 511 students, studying in 8th class, was taken from five Pakistani public sector secondary schools. The data collected through the study instruments were analyzed by using Pearson product moment correlation, partial correlation and t test. Results indicate that male students tended to be more field dependent, while female students were more inclined towards field independence and the low achievers were found to be field dependent while high achievers tended to be field independent. Results have many implications for teachers, e.g. teachers may help field dependent children act more fields independently to achieve well in those subject areas where field independence is required.

In a study by Bassey, Umoren & Udida (2008) in which they explored cognitive styles of secondary school students' attitude and academic performance in chemistry in Akwa Ibom State Nigeria. Two hypotheses were formulated to guide the study. The Ex post facto research design was adopted for the study. Simple random sampling was done to select 200 senior secondary (SS3) students. A students' questionnaire containing three

sections viz Siegels Cognitive Style Test, Chemistry Students Attitude Test and Chemistry Achievement Test was administered to the 200 randomly selected senior secondary three (3) students offering chemistry. The data collected were subjected to data analysis using Analysis Variance, Fishers LSD Multiple Comparison Test and Pearson Product Moment Correlational Analysis. The findings of the study revealed that there is a significant difference in student academic performance in chemistry due to their cognitive styles; students with analytic cognitive styles performed significantly higher than relational and inferential. There is a significant positive relationship between students' attitude to chemistry and their performance in chemistry, based on these results.

In another study, Ahmad zade & Shojae (2011) investigated the relationship between Cognitive Style (Filed Dependence/ Independence) and Academic Achievement in Male and Female Students of Behbahan Islamic Azad University. The population of this study consists of 7500 students entering this university in 2010-2011 academic years. The sample used in their study consists of 1009 students selected by means of cluster sampling. The latent patterns test developed by witkin et al. was used to measure cognitive

style (field dependence/independence).Test-retest method was utilized to measure the reliability of the latent patterns test which was .82 for both men and women. In order to describe the sample, descriptive statistics were used and in order to answer the research questions, inferential statistics, such as Pearson correlation coefficient, independent samples t-test, one-way ANOVA, and Scheffe post hoc test were run. The findings of this research project showed that there is a significant positive relationship between male and female students' field dependence and field independence and their academic achievement. In addition, regression analysis revealed that cognitive style is a significant predictor of academic achievement. Finally, it was found that girls outperform boys as regards to academic achievement. Kamaruddin, Abubakar, Surif & Li (2004) explore the relationship between cognitive styles, levels of cognitive thinking and chemistry achievement among form four science students. The objective of their study was to identify the cognitive styles, level of cognitive thinking and the chemistry achievement of form four science students in Johor Bahru. The research also investigated the relationship between the cognitive styles, the level of cognitive thinking and chemistry achievement. The Group Embedded Figures

Test (GEFT), the Group Assessment of Logical Thinking (GALT) and the Chemistry Achievement Test (CAT) were used to determine the students' cognitive styles, level of cognitive thinking and chemistry achievement respectively. A sample of 163 form four science students was involved in the research. The collected data were analyzed using the SPSS version 10.0 for Windows software. Results showed that most of the students were Field Dependent and they were at the concrete level of cognitive thinking. The analysis of CAT indicated that their achievement was low. There was a weak relationship between the students' cognitive styles, the level of cognitive thinking and the chemistry achievement. This indicated that the chemistry achievement among the students was not very much influenced by the cognitive styles and the level cognitive thinking. Results also indicated that there was no significant difference between the cognitive styles, the level of cognitive thinking and the chemistry achievement. The current conducted similar investigation but using different subject from the above mentioned subjects, and in different location from the above i.e. In kano and among Undergraduate students of B.U.K from Faculty of Education and is generalizing the result of the findings among all undergraduate students of Bayero University Kano.

Problem Statement

The ugly trend in student's performance with many having to carry-over courses and majority earning low grade point among undergraduate is a worry some situation which calls for the attention of all stake holders. Recent outcome of student's performance as observed during the first semester faculty board for result consideration informed the researcher that there is paucity in the student's performance which could be attributed to factors inherent among the learners. The recent session of 2021 followed after the inevitable covid 19 pandemic and its unavoidable impacts among which include school closure for almost a session. Notwithstanding, student could have taken advantage and study well during the period by virtue of their innate potentialities in terms of personality traits and cognitive styles so as to augment and supplement activities ahead of school resumption. In addition the growing interest among psychologist to understand and explain how innate abilities within the individual interacts and influences behavior have stimulated the need to examine the relationship of personality traits , cognitive styles and

academic achievement among under-graduates of Bayero University kano.

Objectives of the Study

The following objectives have been addressed in the study:

➢ To determine the most prevalent cognitive styles (field dependent/ field independent) among B.U.K Undergraduate Students.

➢ To determine the most prevalent personality traits (introversion/ extroversion) among B.U.K Under-graduate Students.

Research Questions

The study answered the following questions:

➢ Which is the most prevalent cognitive style among B.U.K undergraduate students?

➢ Which personality trait is most prevalent among B.U.K undergraduate students?

Research hypotheses

The study test the following hypotheses

➢ Ho1- There is no significant relationship between field independence (FI) and academic performance among B.U.K undergraduate student.

➢ Ho2- There is no significant relationship between field dependence (FD) and

academic performance among B.U.K undergraduate students.

➢ Ho3- There is no significant relationship between extraversion and academic performance among B.U.K undergraduate students.

➢ Ho4- There is no significant relationship between introversion and academic performance among B.U.K under graduate students.

Methodology

The study employed correlational research design. The population of the study comprised of all level two hundred undergraduates of faculty of education of Bayero University kano with a total number of 2675 as at 2019/2020 academic session. The population was heterogeneous comprising of both male and females cutting across the six departments in the faculty. A sample of 377 was drawn through simple random technique using table of random numbers. Two instruments were used for data collection. Kazembe sorting test and Eysenck personality test were all adopted. The instruments were reported to have construct validity, though the researchers revalidate them for culture fairness and language simplicity, the two instrument were administered to a sample of 50 students and scores obtained were correlated which shows

evidence of divergent validity. Similarly reliability of internal consistency was established of which Kazembe sorting test was found to have a reliability index of r = 0.87 and eysenck personality trait has a reliability index of r = 0.83. Students' academic record was assessed using CGPA for the academic session of 2019/2020 as a measure of academic performance. Data collected for the study was statistically analyzed using descriptive statistics of simple percentage and frequency count to answer research questions 1 & 2 while inferential statistics of ppmc was employed to test all formulated hypotheses at 0.05 level of significance, analysis was conducted with the help of *spss* version 20.

Results and Discussion

Research question one

Which is the most prevalent cognitive style among undergraduate students of Bayero university kano?

Table 1 Descriptive statistics of simple percentage and frequency count

Field Independent	Field Dependent	N
36 (10%)	341 (90%)	377

To answer research question one, a descriptive statistic using simple percentage was used to determine the proportion of cognitive style students (field dependent/field independent) among BUK undergraduate students. Compile questionnaire indicated that 36 respondent were Field independent's representing 10% of the study sample. Field dependent students are the dominants as revealed from the obtained result consisting of 341 students under the field dependent cognitive style representing 90% of the sample size. Thus, based on the obtained result, the findings reveal that there are more field dependent cognitive style learners among undergraduate students in BUK than the field independent learners.

Research Question 2

Which personality trait is most prevalent among B.U.K undergraduate students?

Table 2 descriptive statistics of frequency count and simple percentage

Extroversion	Introversion	N
123 (33%)	254 (67%)	377

To answer research question two, a descriptive statistic using simple percentage was used to determine the proportion of personality traits type (introversion/ extroversion) among BUK undergraduate students. The above table gives the proportion of personality trait type among BUK undergraduate students. Compile questionnaire indicated that 123 respondents were Extroversion personality trait type representing 33% of the study sample. Introverts students are dominants as revealed from the obtained result consisting of 254 students representing 67% of the sample size. Based on these figures, the findings reveal that there are more Introversion personality traits among BUK undergraduate students than the Extroversion personality traits.

Testing Hypotheses One

HO1- there is no significant relationship between field independent cognitive style and academic performance among B.U.K undergraduates' students.

Table 3. PPMC Correlation between Field independent cognitive style and academic performance

Variables	M	SD	r	P	N
Field Independent	5.91	1.93			
			.748	000	36
Academic Performance	2.87	0.66			

* P < .05. ** P < .01

The above table shows the correlation between field independent and academic achievement. Academic achievement is defined as students CGPA. The correlation value of 0.748 indicated that a strong positive correlation exists between field independent and academic achievement. This is because the correlation value 0.748 is fairly close to 1. The closer the value is to 1, the stronger the relationship. Similarly, the two variables are statistically significant at p = 0.000, p < 0.05 .this indicate a positive high correlation between the two variables

Based on this result, a strong and direct relationship exists between field independent and academic achievement (CGPA). Hence, the null hypothesis there is no significant relationship between field independent and academic performance among BUK undergraduate's students is rejected. The finding revealed that a strong correlation exists between field independent and academic performance. The finding is in line with the work of Dwyer & Moore (1995) who posits that field independent learners to be superior to field dependent learners on tests measuring different educational objectives. It

is also in line with the findings of Lieu (2000) who explored the relationship between students' cognitive styles and task in English sentences among Junior high school students in Taiwan, he concluded that a significant relationship exists between Field independent and academic performance in identifying English clauses task.

Table 4. PPMC Correlation between Field dependent cognitive style and academic performance

Variables	M	SD	r	P	N
Field Dependent	13.83	2.22			
			.166	002	341
Academic Performance	3.06	0.67			

* P < .05. ** P < .01

The above table 4 shows the correlation between field dependent and academic performance. The correlation value of 0.166 indicated that a weak positive correlation exists between field dependent and academic performance. However, the magnitude of the correlation value 0.166 is negligible. This is because the value is far close to 1. The closer the value is to 1, the stronger will be the relationship. Additionally, the relationship is statistically significant p = 0.002, p < 0.05. but the magnitude of the relationship is weak.

Based on the obtained result, a direct relationship exists between field dependent and academic performance (CGPA). Hence, the null hypothesis there is no significant relationship between field dependent and

Testing Hypothesis two

HO2 There is no significant relationship between field dependent cognitive style and academic performance among B.U.K undergraduates' students.

academic performance among BUK undergraduate's students is rejected. The finding revealed the presence of relationship between field dependent and academic performance. This is in line with the work of Chamorro, Premuzic & Furnham (2003) who opined that Field dependents perform better than their counterparts even in workshops. The finding is equally in line with the work of Ramlah & Masran, (2007), Poh & Melissa (2006) that positive and significant relationship exists between students' cognitive style and academic achievement.

Testing Hypothesis three

HO3 There is no significant relationship between extraversion personality trait and academic performance among B.U.K undergraduates' students.

Table 5. PPMC correlation between Extraversion personality trait and academic performance

Variables	M	SD	r	P	N
Extraversion	4.27	1.12	.298	001	123
Academic Performance	3.04	0.73			

 * P < .05. ** P < .01

The table 5 above shows the correlation between extraversion and academic performance. The correlation value of 0.298 indicated that a direct relationship exist between extraversion and academic performance. However, the correlation value 0.298 is low. This is because the value is far closer to 1. The closer value is to 1 the stronger will be the relationship. However, in spite of the low correlation value, the two variables are statistically significant at p = 0.001, p < 0.05. Based on this result, direct relationship exists between extraversion and academic performance (CGPA). Hence, the null hypothesis there is no significant relationship between extraversion and academic performance among BUK undergraduate's students is rejected. The finding revealed that a direct correlation exists between extraversion and academic performance. This finding is in line with findings of Dunsmore (2005) who concluded that introverted learners were more successful than their extrovert counterparts. One might argue introvert students' higher academic performance emanates from their more effective study habits and their more concentration ability inside the classroom. As discussed before, extroversion is linked to lower academic achievement at higher educational levels, especially at university; this can be due to less emphasis on social relations and more on competition at higher education levels.

Testing Hypothesis four

HO4 There is no significant relationship between introversion personality trait and academic performance among B.U.K undergraduates' students.

Table.6 PPMC Correlation between Introversion personality trait and academic performance.

Variables	M	SD	r	P	N
Introversion	9.09	1.70			
			.021	. 735	254
Academic Performance	3.05	0.72			

 * P < .05. ** P < .01

In order to test the null hypotheses that there is no significant relationship between introversion and academic performance among B.U.K undergraduates' students, correlation analysis was performed. The correlation value of 0.021 indicated that a direct correlation exists between introversion and academic performance. However, the correlation value 0.021 is low. This is because the value is far closer to 1, and the value is to 1 the stronger will be the relationship. Similarly, based on the obtained P value of $p = 0.735$, $p > 0.05$, the two variables are not statistically significant. Based on this, a non-significant and low relationship exists between introversion and academic performance (CGPA). Hence, the null hypothesis there is no significant relationship between introversion and academic performance among BUK undergraduates' students is upheld. The finding revealed no significant relationship between introversion and academic performance. This finding is in contrary with the findings of Garba (2011) who reported that the students who are highly conscientious (introverts) perform better than their counter parts who are low in their traits,

Discussion of the Findings

This study, examine the relationship between cognitive styles, personality traits and academic performance among undergraduate students of Bayero University Kano. The findings of the study revealed that field dependents cognitive styles are more than field independents cognitive styles, and introverts personality traits are more than extroverts among undergraduate students of B.U.K. This finding supports the work Ramlah (2014) who posited that there are more field dependents than the field independent learners and that introvert students are more than extrovert students, out of 150 subjects, 112 were found to be Field dependent cognitive style, while only 38 were Field independents. The findings of the study equally revealed that there is a significant relationship between Field independent (FI) and academic performance being in conformity to the work of Lieu (2000) who concluded that a significant positive relationship exists between (FI) and academic achievement of students in identifying English clauses.

The finding that a direct correlation exists between Extroversion and academic achievement was in line with the findings of Garba (2011) who concluded that negative correlation exists between extroversion and academic achievement, also that introverts learners were more successful than their Extroverts counterparts. Similarly, the study

revealed a relationship between introversion and academic achievement which goes in contrary with the findings of Daminabo (2008) who reported that the students who are highly conscientious (introverts) perform better than their counter parts who are low in their traits, A strong correlation between field independent cognitive style and academic performance of students was also found in the study, this finding was in conformity with the findings of Akhtar & Arif (2007) who explore the relationship between cognitive style with students' academic achievement in the subject of science at the elementary level, the study results further indicated that low achievers were found to be field dependents, while high achievers tended to be field independents. Significant relationship was found between introversion personality trait and academic achievement of students, this is in line with the findings of Hakimi, Hejazi & Gholamali (2011), who explore relationship between personality traits and students' academic achievement, result revealed that personality traits were significantly related to academic achievement.

A positive correlation was equally reported between extroversion and field independent which is in the same direction with the findings of Danniels & moore (2000), who examine the interaction between field dependency and learner control of presentation mode within educational hypermedia environment, and reported no significant interaction between field dependency and media interaction, but indicated that field independents score significantly higher than field dependents in both experiment groups. Lastly, the study reveals that a negative relationship exist between Introversion and Field dependent which is in conformity to the work of Azizi, Yahya, Yusof Boon, Wan Zuraidah & Wan Hamid, (2002), Azmiza (2009).

Based on the discussions so far, some findings of the present study, and those of other studies were in the same vein while, others were in contrary to other findings, Positive correlations, strong correlations were mostly found between variables of the study, only some few studies found negative correlation between variables of the study by different researchers in different places.

Conclusion

Based on the findings that emerged from this study, It has been concluded that there were differences in cognitive style of under-graduate students of Bayero University Kano; the result shows that there are more students with field dependent cognitive styles than those with field independent cognitive

style, this goes in line with personality traits of Extroversion and Introversion, were it was concluded that there are more Extrovert students than Introverts these are clear evidence of the manifestations and existence of individual differences. Introversion (personality trait) and Field independent (cognitive style) correlate positively with academic achievement, these two variables stands to be good predictors of school success and completion.

Recommendations

The following recommendations are proffered base on the findings of the study:

Since individual differences on personality dimensions or traits is a factor that account for much of the variance we observe in our higher institutions of learning, both university counselors and academic staff should put hands together in devising meaningful and efficient procedures that would identify each individual personality status so as to enhance concerted efforts towards addressing academic problems as they may arise. Similarly, findings from this study would greatly facilitate the establishment of lexical hypothesis in support of theoretical model of personality traits and that of cognitive styles in a more coherent approach aimed at explaining the state of art

with respect to cognitive style and personality trait theories.

Parents and society at large should put more emphasis in having close contact with their wards so as to help them utilize the kind personality or cognitive style they have in a positive way of achieving success in their academic endeavors, since in most cases, the personality variables discussed so far in the study have significant correlation with academic achievement, it should be encouraged to remain so and put more emphasis upon supporting their ward in maintaining it. In addition since there is no research work that is exhaustive, and knowledge itself is built up cumulatively through research work leading to the advancement of frontiers of knowledge, it is recommended that similar and further studies in this area should be carried out so as to provide more empirical data in the state and across the country. Furthermore Since the present study focused only upon undergraduate students of Bayero University Kano, similar studies should be carried out using samples from different universities in the state, and also from lower educational levels. This would serve as provider of cumulative picture of cognitive styles and personality traits of our growing number of school children, so that appropriate

remediation and counseling services would be provided for them. Equally important is that most studies involving personality traits and cognitive styles were carried out abroad and in almost all the studies, no study has join together the cognitive variables with the personality variables at a time there is need to conduct similar study in various level of education so as to find out whether same result will be obtained.

REFERENCES

Abisola, A. M & Semiu, A. B. (2014). Institutional Factors as Predictors of Students' Academic Achievement in Colleges of Education in South Western Nigeria. Educational Research and Review. Vol. 6(8), pp. 141-153.

Ahmad zade, L. & Shojae, M. (2011). Investigating the Relationship between Cognitive Style (Filed Dependence/ Independence) and Academic Achieve ment in Male and Female Stu dents of Behbahan Islamic Azad Univer sity. Journal of Life Science and Bio medicine Vol. 3(3), pp. 245-249.

Akhtar, S. & Arif, M. (2007). A Study of Relationship of Cognitive Styles with Students' Academic Ach ievement in the Subject of Science at Elementary Level. University of Arid Agricultural, Rawalpindi.

Altun, A., & Cakan, M. (2006). Undergraduate Students' Academic Achievement, Field Dependent/ Independent Cognitive Styles and Attitude\toward Computers .Educa tional Technology & Society, 9 (1), 289-297.

Bassey, S. W., Umoren, G., & Udida, L. A. (2013). Cognitive Styles, Secondary School Students' Attitude and Aca demic Performance in Chemistry in Akwa Ibom State Nigeria. Medwell Journal Vol.4 (7), pp. 35-49.

Garba, A.M. (2010).Relationship Between Personality traits, Social adjustment and academic achievement among undergraduate students of selected universities in North West Nigeria. Unpublished PhD Thesis: Bayero University Kano.

Hakimi, S., Hejazi, E., Gholamali. L. (2011). The relationship between Personality Trait and Students' Academic Achievement. Procedia- Social and behavioral Sciences 29 (2011) 836-845.

Kamaruddin, M., Abubakar, Z., Surif J., & Li, W. (2004). Relationship between Cognitive Styles, Levels Of Cognitive Thinking and Chemistry Achievement Among Form Four Science Students.

Krejcie, S.J & Morgan, D.W. (1970).Table of determining sample size for research activities. Journal of Educational psychology: Measurement.30, 607-610.

.Mangal, S.K. (2012). Advanced Educa tional Psychology (2nd ed.). New Delhi- 110001: PHI Learning private limited.

Omena, S. O. & Nwamaka, A.E. (2015). Marital Stress and Extraversion Personality as Predicators of Job Satisfaction among Married Women Teachers in Enugu, Nigeria. Journal of Education and Practice www. iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)

Poropat, A. (2009). A Meta-Analysis of the Five-Factor Model of Personality and Academic Performance. Ame rican Psychological Associa-tion 2009, Vol. 135,No. 2, 322–338 0033-2909/ 09/\$12.00DOI: 10.1037/a0014996

Ramlah, J. (2014). Relationship between Students' Cognitive Style (Field Dependent and Field–Indepen dent Cognitive Styles) with their Mathematic Achievement in Primary School. International Journal of Humanities Social Sciences and Education (IJHSSE) Volume 1, Issue 10, October 2014, PP 88-93

Rehman, S. G., Gulap, S. & Ullah, S. (2013). Relationship between Students' Personality Traits and their Academic Achievement in Khyber Pakhtunkhwa, Pakistan. Journal of Educational and Social Research. Vol. 3 (P 2). Pp.76-85.

Yakasai, M.I. (1991). The relationship of cognitive style to child rearing practice and academic achievement among urban and rural Hausa students .Unpublished M.Ed. dissertation: Bayero University Kano.

Assessment of Social-Play and Emotional Regulation as Correlate of Academic Performance of Pre-Primary School Children in Egor Local Government Area of Edo State

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ABSTRACT

The study assessed social play and emotional regulation as correlates of academic performance of pre-primary school children in Egor Local Government Area of Edo State. To guide the study five (4) research questions were raised out of which two (2) were hypothesized. The research design adopted for this study was the survey research design based on a correlational approach. The population of the study was comprised all one thousand five hundred and fifty four (1554) Pre-primary class 1 pupils, and ninety two (92) teachers serving as caregivers in 41 private pre-primary schools in Egor Local Government Area of Edo State. The sample size for this study was one hundred and twenty (120) Pre-primary class 1 pupils and eight (08) teachers serving as caregivers in 4 schools selected using a multi-stage sampling technique. The research instruments for the collection of data for this study are the Social Play, Emotional Regulation Questionnaire (SPERQ) and Academic Profoma to collect academic performance of the pupils. The instrument was validated by three experts and reliability was done using Cronbach alpha statistics, the coefficients of 0.88, and 0.91 were obtained for Social Play and Emotional Regulation respectively. The research instruments were personally given to the teachers to respond to the items on behalf of the pupils, this is because the teachers as the caregivers are familiar with these pupils, having always been with them for at least six (6) active hours per day which make them be in the best position to respond to the item in their stead. Research questions 1-3 were answered using descriptive statistics such as mean and standard deviation. Hypotheses 1 and 2 were tested using Point-bi-serial Statistics. Based on the findings of the study, it was concluded that the level of socio-play, emotional regulation and academic performance are high among pre-primary school children in Egor Local Government area of Edo state. It was also concluded that social play and emotional regulation significantly predict academic performance of pre-primary school children in Egor Local Government area of Edo state. Based on the findings from the study, the researchers recommended that Parents should always send their children to school when they are socially and emotionally stable. School owners should always admit only children that are socially and emotionally stable in their schools.

Keywords: Assessment, Social-Play, Emotional Regulation, Academic Performance

Introduction

Social play in the early stage of life has a substantial role in the independence of children, creating and preserving new relationships and determination of their roles and status in society. Social play also promotes physical activity and moral

reasoning. (Ashari et al, 2013). Social play is likely to be the most important element of the socialization process because when a child develops socially early in life, he would be able to mingle with others in society in the future. Social play begins in preschool and is crucial for developing social skills and establishing friendships. Through social play, children learn how to share, cooperate, take turns, and express emotions.

According to Ashari et al. (2013), when a child actively interacts with the world around them, their knowledge will be built naturally. Young children will not only receive information passively through the learning process but they also build knowledge through interaction with the environment. Therefore, the cognitive and social elements are intertwined in the interactions with the environment. Through the studies of La Paro and Pianta (2000), play can provide children with such opportunities through the process of restructuring, discoveries, enrichment processes, building experiences and knowledge as well as discovering new concepts.

Children's emotional ability has an important impact on their growth and socialization which can even continue into adulthood. Early emotional regulation ability can predict future peer relationships and personality development. Therefore,

the development of emotional regulation may be considered to be an important part of the early emotional development of children. Emotion regulation is the ability of the individual to regulate their emotions according to the situation. It may be considered a group of different interconnected capabilities such as; identification of emotions, clarity of emotions, receiving of emotions, capacity to fulfil the preferred task despite the interference of negative emotions, and the capacity to practice suitable approaches according to the situation to modify the emotions.

The capability to control emotions is essential for emotional intelligence, therefore, a child that could regulate his or her emotions is likely to perform well in his or her education. Emotion supports memory and working ability when the performance of students is analyzed in the classroom. Past researches point out that negative emotions are negatively related to the grade point average of students, and a high level of negative emotion becomes the cause of the low-level academic performance of students (Arsenio & Loria, 2014).

The effects of emotions in education are becoming central in the present situation. Hence, it has been examined that emotions are directly associated with the learning abilities of students (Pekrun & Perry,

2014). Negative emotions such as anxiety, fear, anger, frustration, guilt, and hopelessness could interfere with the educational performance of students. The current development in psychology and neurosciences exhibit that emotions play an important role in the rise of motivation, interactive resources, remembrance, and knowledge among students. Students who display aggressive attitudes may face extra challenges in increasing and conserving interactions in school. On the other hand, students who experience positive emotions are likely to display better performance in education.

Academic performance represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school. The importance of academic achievement can be viewed from different perspectives; the individual and societal perspectives. On an individual level, academic achievement is the most important predictor of vocational careers and, therefore, individual socioeconomic prosperity (Spinath, 2012). This is true because school grades and scholastic achievement tests are used as selection criteria for jobs and higher education.

The strength of the association between academic achievement and indicators of life success is moderate. On a societal level, the same is true on an individual level, academic achievement is the most important prerequisite for societal prosperity. The more educated a society is, the higher the chances for positive socioeconomic development are likely to be. It is on this postulate, that the study intends to investigate if social play and emotional regulation predict academic performance of Pre-primary children in the Egor Local. Children's development at early stage is very crucial because this can determine their future. The purpose of Pre-primary education is on helping children to build psycho social foundations required for them to undertake abstract learning later in primary school. Children are born with some inherent attribute such as sucking of mothers'breast, grasp and smile and so on. Having been born with these attributes, there is a need for a child to further develop these qualities and other ones needed to survive in the world of life, that is one of the reasons parents send their children to school, starting from creche, through Pre-primary, primary, secondary and tertiary institutions.

Statement of the Problem

Children's development at early stage is very crucial because this can determine their future. Social play is likely to be the most important element of the socialization process because when a child develops socially early in life, he would be able to

mingle with others in society in the future. Social play begins in preschool and is crucial for developing social skills and establishing friendships. Through social play, children learn how to share, cooperate, take turns, and express emotions. Children's emotional ability has an important impact on their growth and socialization which can even continue into adulthood. Early emotional regulation ability can predict future peer relationships and personality development.

Therefore, the development of emotional regulation may be considered to be an important part of the early emotional development of children. The capability to control emotions is essential for emotional intelligence, therefore, a child that could regulate his or her emotions is likely to perform well in his or her education. Emotion supports memory and working ability when the performance of students is analyzed in the classroom. It is on this premise, that this study assessed social-play and emotional regulation as correlates of academic performance of pre-primary school children in Egor Local Government area of Edo State.

Research Questions

The following research questions were raised to guide the study:

1. What is the level of social play among Pre-primary school children in Egor Local Government area of Edo State?

2. What is the level of emotional regulation among Pre-primary school children in Egor Local Government Area of Edo State?

3. Will social play correlate with academic performance among Pre-primary school children in Egor Local Government Area of Edo State?

4. Will emotional regulation correlate with academic performance among Pre-primary school children in the Egor Local Government Area of Edo State?

Hypotheses

Research questions 3 and 4 were hypothesized as follows: the hypotheses were formulated and were tested at 0.05 level of significance.

1. Social play will not significantly correlate with academic perfor mance among Pre-primary school children in the Egor Local Government Area of Edo State

2. Emotional regulation will not significantly correlate with academic performance among Pre-primary school children in the Egor Local Government Area of Edo State

Literature Review

Social Play and Academic Performance

Social Play can e seen as the cooperative actions of peers during play. The actions are the outcome of prolific engagement

through the joint of knowledge, and they provide privileges to occupy in role taking and friendly orientation taking. This activeness leads to modify in inter-individual practice.

Rauf and Bakar (2019) asserted that play and play-based learning is important for children's social development. Children who play are better at being able to control themselves, be more cooperative, considerate, friendly and are with higher social competence. Willis et, al, (2015) contend that children need to play in the real world with actual objects and materials that are tactile and tangible with minimum intervention by the teacher. The study also revealed that children's play was directed along six gifts‖ for children. These colourful gifts were simple soft balls and sets of blocks with which children could play and make interesting designs. Children were given access to these gifts at different ages to allow them to explore the objects and their potential uses. The study also noted that infants were given soft, coloured balls to play with and explore their colours, textures and properties. Popoola et al., (2009) stressed the importance of a structured or prepared environment in which children are provided with materials and experiences that foster their intellectual, sensory and motor development. By using the materials within the prepared environment, children learn to

explore their world through all their senses. For example, in learning the letters of the alphabet and the basic skills of writing, pre-schoolers may begin by tracing complex geometric figures to train the muscles needed for writing. According to a survey, children used letters cut from sandpaper that they could feel with their hands. They then used cut-out letters for spelling the names of familiar pictured animals. Materials availability was limited and their use was strictly structured following the notion of the prepared environment. Children are bound to the prescribed materials in the sensory exercises they were free to explore the prepared environment in an orderly fashion.

Emotional Regulation and Academic Performance

Emotion regulation is the ability of the individual to regulate their emotions according to the situation. It may be considered a group of different interconnected capabilities such as; identification of emotions, clarity of emotions, receiving of emotions, capacity to fulfil the preferred task despite the interference of negative emotions, and the capacity to practice suitable approaches according to the situation to modify the emotions. Emotional regulation is a three-phrase procedure that concern teaching children to determine emotions, helping

them denote what prompt those emotions, and teaching them to control those emotions by themselves.

Graziano, et, al, (2010) investigated the role of children's emotion regulation skills and academic success in kindergarten, using a sample of 325 five-year-old children. A mediational analysis addressed the potential mechanisms through which emotion regulation relates to children's early academic success. Results indicated that emotion regulation was positively associated with teacher reports of children's academic success and produc-tivity in the classroom and standar-dized early literacy and math achievement scores. Contrary to predictions, child behaviour problems and the quality of the student-teacher relationship did not mediate these relations. However, emotion regulation and the quality of the student-teacher relationship uniquely predicted academic outcomes even after accounting for IQ. Findings are discussed in terms of how emotion regulation skills facilitate children's development of a positive student-teacher relationship and cognitive processing and independent learning behaviour, both of which are important for academic motivation and success.

Shala (2013) examined the impact of preschool social-emotional development on the academic performance of elementary school students. Social and emotional development is considered an important factor in child development, especially considering its importance in child school readiness. Social and emotional development consists of the relationships an individual has with others, the level of self-control, and the motivation and perseverance a person has during an activity. This study examined the relationship between children's preschool social and emotional development and their academic success in Pre-primary school. There were 96 children from Pristine participating in the study, 28 of them in the first grade, 32 in the second grade, 15 in the third grade and 21 in the fourth grade. To determine the relationship between children's social and emotional development, during their preschool years, the ELDS assessment form was used, while for their academic achievements in each grade, the ELDS assessment form was used for their grades in two subjects. Several hierarchical regressions were used to determine the relationship between children's social and emotional development, during their preschool years and their academic success. The results of this study revealed that social and emotional development showed significant predictive value for the first, second and third-grade criterion variables. While for the fourth grade, there was no significant predictive value. Supervía1 et, al, (2021)

285

investigated Emotional regulation and academic performance in the academic context: the mediating role of self-efficacy in secondary education students. In the school stage, adolescents experience different emotional and motivational states involved in the learning process that plays a fundamental role in their personal and academic development. In this way, the study focuses on analyzing the relationships between emotional regulation, self-efficacy and academic performance, as well as the possible mediating role of self-efficacy. The study included 2204 students, both male (N = 1193; 54.12%) and female (N = 1011; 45.87%) with ages ranging from 12 to 18 years (M = 14.69; DT = 1.76). The measures used for the investigation were the Emotion Regulation Questionnaire (ERQ), the Academic Self-Efficacy Scale (ASES) and average marks were used to measure students' academic performance. Results: The results of the study revealed a self-determined behavioural pattern characterized by high scores in emotional regulation, self-efficacy and academic performance. Likewise, the mediating role of self-efficacy between emotional regulation and student academic performance was significant. It was concluded that the influence of the academic self-efficacy variable as a mediator between the studied constructs is

denoted, as well as the importance of promoting adaptive behaviours in the classroom that can lead to the adequate personal development of students together with optimal academic performance.

Methodology

The research design adopted for this study is the survey research design based on a correlational approach. The population of the study was comprised all one thousand five hundred and fifty four (1554) Pre-primary class 1 pupils, and ninety two (92) teachers serving as caregivers in 41 private pre-primary schools in Egor Local Government Area of Edo State. The sample size for this study was one hundred and twenty (120) Pre-primary class 1 pupils and eight (08) teachers serving as caregivers in 4 schools selected using a multi-stage sampling technique. In stage one, simple random sampling technique was used to select the four (04) schools which constitute 10% of the total number of Primary schools in the Egor Local Government Area. In stage two, systematic random sampling technique was also used to select one class from each of the four schools selected. In stage three, disproportionate sampling technique was also used to select thirty (30) pupils and two teachers each from the four classes selected. The research instruments for the collection of data for this study are the Social Play, Emotional Regulation Questionnaire (SPERQ) and Academic

Profoma to collect academic performance of the pupils. The questionnaire was made up of two sections, A contained questions on the bio-data such as the name of the school, class of the pupil, Age and B consisted of items for Social Play and Emotional Regulation. It had 1-4 graded response options from 4 (Always Almost), 3 (Often), 2 (Sometimes) and 1 (Almost Never). The instrument was validated by three experts and reliability was done using Cronbach alpha statistics, the coefficients of 0.88, and 0.91 were obtained for Social Play and emotional Regulation

respectively. The research instruments were personally given to the teachers to respond to the items on behalf of the pupils. Research questions 1-3 were answered using descriptive statistics such as mean and standard deviation. Hypotheses 1 and 2 were tested using Point-bi-serial Statistics. All hypotheses were tested at 0.05 level of significance.

Presentation of the Results

Research Question One

What is the level of social play among Pre-primary school children in Egor Local Government area of Edo State?

Table 1: Descriptive Statistics of Social-Play among School Children

ITEMS	Mean	SD	Remarks
SOCIAL PLAY. The child;			
Maintains proximity to peer within 1 foot	2.45	1.01	Sometimes
Observes peers in play vicinity within 3 feet	2.59	0.92	Often
Physically imitates peer	2.87	0.90	Often
Verbally imitates peer	2.75	0.95	Often
Shares toys and talks about the activity with peers, even if play agenda is different	2.90	0.92	Often
Physically and verbally responds to interactions from peers (accept toy, questions)	3.19	0.88	Often
Returns and initiates greetings with peers	3.14	0.90	Often
Knows appropriate ways of joining in an activity with peers	3.08	0.94	Often
Invites others to play	3.10	0.94	Often
Requests toys, food, and materials from peers	2.66	1.07	Often
Plays cooperatively with peers during imaginative play	3.12	0.84	Often
Makes comments about what he/she is playing to peers	2.95	1.08	Often
Organizes play (suggests ideas to peers on how to play)	2.82	1.04	Often
Follows peer play plans	2.68	0.98	Often
Offer toys, food, and materials to peers	2.53	0.96	Often
Cluster	**42.84**	**6.17**	**Often**

Table 1 shows that the pupils often: Observes peers in play vicinity within 3 feet, Physically imitates peer, Verbally imitates peer, Shares toys and talks about the activity with peers, even if play agenda is different, Physically and verbally responds to interactions from peers, Returns and initiates greetings with peers, Knows appropriate ways of joining in an activity with peers, Invites others to play, Requests toys, food, and materials from peers, Plays cooperatively with peers during imagina-tive play, Makes comments about what he/she is playing to peers, Makes comments about what he/she is playing to peers, Organizes play, Follows

peer play plans, and Offer toy, food, and materials to peers. However, the pupils sometimes Maintains proximity to peer within 1 foot. The table also shows cluster mean of 42.84 and standard deviation of 6.17. Since the cluster mean is greater than the normative mean of 37.5, this indicates that the level of social-play among Pre-primary school children in Egor Local Government Area of Edo State was high.

Research Question Two

What is the level of emotional regulation among Pre-primary school children in Egor Local Government Area of Edo State

Table 2: Descriptive Statistics of Emotional Regulation Among School Children

ITEMS	Mean	SD	Remarks
EMOTIONAL REGULATION, The child;			
Identify likes and dislikes	3.10	0.90	Often
Identifies emotions in others	2.76	0.91	Often
Demonstrates affection and empathy towards peers	2.80	1.03	Often
Refrains from aggressive behaviors towards peers	2.66	1.04	Often
Refrains from aggressive behaviors towards self	2.75	1.02	Often
Does not exhibit intense fears or phobias	2.56	0.96	Often
Uses different tones of voice to convey messages	2.66	1.06	Often
Allows others to comfort him/her if upset or agitated	3.03	1.07	Often
Self regulates when tense or upset	2.80	1.05	Often
Self regulates when energy level is high	2.85	1.08	Often
Accepts losing at a game without becoming upset/angry	2.65	1.10	Often
Say 'no' in acceptable ways to things he/she does not want to do	3.13	1.00	Often
Accepts being told "no" without becoming upset/angry	2.81	0.91	Often
Accepts making mistakes without becoming upset/angry	2.91	1.03	Often
Understands the impact his/her behavior has on peers	2.45	1.09	Sometimes
Cluster	**41.98**	**8.53**	**Often**

Table 2 shows that the pupils often: identify likes and dislikes, identifies emotions in others, demonstrates affection and empathy towards peers, refrains from aggressive behaviors towards peers, refrains from aggressive behaviors towards self, does not exhibit intense fears or phobias, uses different tones of voice to convey messages, allows others to comfort him/her if upset or agitated, self regulates when tense or upset, self regulates when energy level is high, accepts losing at a game without becoming upset/angry, Say 'no' in acceptable ways to things he/she does not want to do, accepts being told "no" without becoming upset/angry, and accepts making mistakes without becoming upset/angry. the pupils however, sometimes understands the impact his/her behavior has on peers. The table also shows cluster mean of 41.98 and standard deviation of 8.53. Since the cluster mean is greater than the normative mean of 37.5, this indicates that the level of emotional regulation among Pre-primary school children in the Egor Local Government Area of Edo State was high.

Hypothesis One

Social-play will not significantly correlate with academic Performance among Pre-primary school children in the Egor Local Government Area of Edo State

Table 3: Point-Biserial Statistics of Social-play and Academic Performance Among School Children

	N	r^{pb}	Sig (2-tailed)	Remark
Social Play				
	120	.219	.016	Significant
Academic Performance				

$\alpha = 0.05$

Table 3 shows a r^{pb} value of .219 and a p-value of 0.016. Testing at alpha level of 0.05, since the p value is less than the alpha level, the null hypothesis which states that the social-play will not significantly correlate with academic performance is rejected. Consequently, social-play significantly correlate with academic performance.

Hypothesis Two

Emotional regulation will not significantly correlate with academic performance of Pre-primary school children in the Egor Local Government Area of Edo State.

Table 4 :Point-Biserial Statistics of Emotional Regulation and Academic Performance Among School Children

	N	r^{pb}	Sig (2-tailed	Remark
Emotional Regulation Academic Performance	120	.598	.000	Significant

α = 0.05

Table 4 shows a r^{bp} of .598 and a p-value of 0.000. Testing at alpha level of 0.05, since the p value is less than the alpha level, the hypothesis which states that there is no significant relationship between emotional regulation and academic performance is rejected. Consequently, emotional regulation significantly correlate with academic performance.

The finding of research question one revealed that the level of social- play among pre-primary school children in the Egor local Government Area of Edo State is high. The finding confirms the finding of Ashari et al (2013) who affirmed that when children actively interact with the world around them, their knowledge are built naturally. They affirmed that children will not only receive information passively through the learning process but they also build knowledge through interaction with the environment. Therefore, the cognitive and social elements are intertwined in the interactions with the environment.

The finding of research question two revealed that the level of emotional regulation among pre-primary school children in the Egor local Government area of Edo State is high. The finding is in agreement with Iqbal et al (2019) who found that emotion regulation strategies are becoming prominent in the field of study because it helps individuals to control their emotions by applying the strategies.

The finding of hypothesis one showed social-play significantly correlate with academic performance of pre-primary school children in Egor Local Government area of Edo state. This may be because when children play in the real world with actual objects and materials they are tactile and tangible with minimum intervention by their caregivers. The finding is in agreement with Onukaogu et al (2016) who found out that play can help children to learn Mathematics in learning about equal lengths, open and closed spaces, topography, and solid geometric shapes as they play with blocks of different colours and shapes. The finding also confirm the study of Mahindu (2011) who noted that the teachers provided play materials as means of stimulating their understanding of objectives reality creatively. It was found

that young children are strongly influenced by toys that are marketed on television. Some of these toys were related to cartoon shows, current children's movies or children's television programmes that feature violence and action figures. These toys were found to have little play value and were related to aggressive play. The study similarly asserted that toys which stimulate the imagination, dramatic play or creativity contribute to a decline in the imaginative activities of young children. The more appropriate choices are unstructured toys, that have diverse play ability and simple design. Parents, teachers and caregivers need to consider play in development domains in their choices of toys and materials for preschool children. Activities provided should allow the children to explore for themselves and use materials provided in their way. This result may be due to the facts that children learn best when they are part of a secure and stimulating environment full of materials for manipulation. The finding of hypothesis two revealed that emotional regulation significantly correlate with academic performance of pre-primary school children in Egor Local Government area of Edo state. The finding is in agreement with Graziano et, al (2010) who investigated the role of children's emotion regulation skills and academic success in kindergarten, using a sample of 325 five-year-old

children. Results indicated that emotion regulation was positively associated with teacher reports of children's academic success and productivity in the classroom and standardized early literacy and math achievement scores. Contrary to predictions, child behaviour problems and the quality of the student-teacher relationship did not mediate these relations. However, emotion regulation and the quality of the student-teacher relationship uniquely predicted academic outcomes even after accounting for IQ. The findings also confirm the findings of Supervial et al (2021) who investigated Emotional regulation and academic performance in the academic context: the mediating role of self-efficacy in secondary education students. In the school stage, adolescents experience different emotional and motivational states involved in the learning process that plays a fundamental role in their personal and academic development. The results of the study revealed a self-determined behavioural pattern characterized by high scores in emotional regulation, self-efficacy and academic performance. Likewise, the mediating role of self-efficacy between emotional regulation and student academic performance was significant.

Conclusion

Based on the findings of the study, it was concluded that the level of socio-play,

emotional regulation and academic performance are high among pre-primary school children in Egor Local Government area of Edo state. It was also concluded that social play and emotional regulation significantly correlates with academic performance among pre-primary school children in Egor Local Government area of Edo state.

Recommendations

Based on the findings from the study, the researchers recommended that Parents should always send their children to school when they are socially and emotionally stable. School owners should always admit only children that are socially and emotionally stable in their schools.

REFERENCES

Arsenio, W. F, & Loria. S. (2014). Coping with negative emotions: Connection with adolescents' academic performance and stress. The Journal of Genetics Psychology, 175(1), 76-90.

Ashari, Z. M., Kosnin, A. M., & Yeo, K. J. (2013). Play-ased pedagogy in pre-school: A meta analysis research. Man in India Journal, 97(12): 237-243

Graziano, P., Reavis, D. R., Keane, S. P.& Calkins, S.D. (2010). The Role of Emotion Regulation and Children's Early Academic Success. Journal of School Psychology. 45(1) doi: 10.1016/j.jsp.2006.09.002

La Paro, K. M., and Pianta, R. C. (2000). Predicting children's competence in the early school years: a meta-analytic review. Rev. Educ. Res. 70, 443–484. doi: 10.3102/ 00346543070004443

Pekrun, R., & Perry, R.P. (2014). Control-value theory of achievement emotions. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), International handbook of emotions in education 120-141. Routledge/Taylor & Francis Group

Popoola, A. Ayodele, J. & Ajayi, I. (2009). Child work, child schooling and educational achievement: An empirical evidence for Nigeria. Academic Leadership: The online journal. 7, Iss.3, Artcicle 5. https://scholars.fnsu.edu/aij/vo7/iss.3/5

Rauf, A. & Bakar, K. (2019), Effect of play on the social development of preschool children. Creative Education, 10, 2640-2648, doi10.4236/ce2019.1012191

Shala, M. (2013). The Impact of Preschool Social-Emotional Development on Academic Success of Elementary School Students. Psychology Department, FAMA College, Pristine, Kosovo. DOI: 10.4236/ psych.2013.411112

Spinath, B. (2012). AcademicAchievement . Encyclopedia of Human Behavior, 1–8. doi:10.1016/b978-0-12-375000-6.00001-x

Supervía, P. U. & Robres, A. Q. (2021). Emotional Regulation and Academic Performance in the Academic Context: The Mediating Role of Self-Efficacy in Secondary Education Students. doi: 10.3390/ijerph18115715

Willis, J.E., & Hymon-Parker, S. (2015). Expanding multicultural activities across the curriculum for preschool‖. http://www.kon.org/ urc/v5/willis.html.

Analyses of Strategies for Increasing Female Enrollment in Apprenticeship and Vocational Training Programmes for Poverty Alleviation in Ondo State, Nigeria

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ABSTRACT

This study analysed the strategies for increasing female enrollment in apprenticeship training in vocational occupation in Ondo State, Nigeria. The objectives of the study were to find out the roles of female in apprenticeship training in vocational occupation, find out the challenges of female enrolment in apprenticeship training in vocational occupation; examine the causes of female failure in apprenticeship training in vocational occupation and find out the strategies to enhance enrolment of females in apprenticeship training in vocational occupation for poverty reduction in Ondo State. Descriptive survey research design was employed in carrying out the study. The population of this study consisted of all female apprentices in Ondo state who were 1,115. Simple random sampling technique was used to select the 180 apprentices as respondents. Researcher – designed questionnaire on a 4-point rating scale was used to collect data from the respondents. The questionnaire was validated by three experts in Vocational and Technical Education and test – retest reliability coefficient of 0.76 was obtained. Descriptive statistics of frequency count, mean and standard deviation was used to analyse the data. The result revealed that female's enrolment challenges in apprenticeship training ranges from financial problem to lack of trust in female skills, nature interest and lack of choice, denial of support from family and lack of access to services and providing supporting fund. Based on the findings, the study recommended that, Government should establish practical and individualized training apprenticeship centres for female and equip them with necessary equipment to make the work easier for female.

Keywords: *strategies,* enrollment, apprenticeship, training, poverty, alleviation.

Introduction

The contribution of apprenticeship to jobs and skills has long been appreciated by countries eager to promote growth and ease the transition from full-time education to work for young people. Currently, however, places offered by employers are not sufficient to meet the huge demand from young people or to have much impact on female unemployment in these countries the unemployment rate is currently around 20 per cent for 15-24 year old youths in Nigeria and higher still in European countries without apprenticeship provision (Steedman, 2011). Apprenticeship training is taken to denote training programmes that combine vocational education with work-based learning for an intermediate occupational skill and that are subject to

externally imposed training standards, particularly for their workplace component (Steedman, 2011).Apprenticeship in the informal economy is a widespread phenomenon practiced in Nigeria, including G20 countries. In order to pass on skills from one generation to the next, poor societies have developed informal apprenticeship systems that are purely workplace-based. A young apprentice learns by way of observation and imitation from an experienced master craftsperson, acquires the skills of the trade and is inducted into the culture and networks of the business (Streeck, 2017). Apprenticeship agreements are mostly oral, yet they are embedded in the society's customs, norms and traditions. There have been a lot of doubts in the performance of several artisans in Nigeria. Despite the system's strength of providing skills relevant to Artisans, informal apprenticeship has a number of weaknesses which include, long working hours, unsafe working conditions, low or no allowances or wages, little or no social protection in case of illness or accident, and strong gender imbalances are among the decent work deficits often found in an apprenticeship which is believed to have significant effect on the performance of the artisans.

Apprentices work closely with an expert to learn a specific skill so as to become skilled master trainers at the end of apprenticeship period. Apprenticeship is one of the methods of vocational training in Nigeria today. Through apprenticeship training, skills in technical occupations such as Motor Vehicle Mechanic Works, Welding and Smiting, Carpentry and Joinery, Block/Brick-Laying and Concreting, Electrical Installation, Electronics servicing and repairs, Refrigeration and Air-conditioning servicing and repairs, Electric motor rewinding and Auto wiring among others can be acquired. (Sanni, 2016).

Reviewed literature shows that a developing country like Nigeria operates unorganized and unregulated apprentice ship system while the developed countries operate organized and regulated apprenticeship system with defined vocational profile and framework. Over the years, Nigeria has practiced an unorganized and unregulated apprenticeship system. To become an apprentice of any trade, a father chooses a profession for his son and consequently takes him to a known master of that profession to train. There is always a tutelage agreement entered into in which the conditions and terms will be spelt out.

The technological advancement and development of any country rests on both males and females, but there is a concentration on male's participation in technology advancement than females. The

reason for this might be as a result of occupational stereotype which promotes some occupations exclusively for males and some for females.

However, the lady mechanic initiative which is a non-governmental and non-profit organization was founded by the first female Mechanic in Nigeria in 1986 to promote sustainable positive changes in the socio-economic status of females through acquisition of skills in vocational occupations. The scheme is committed to imparting vocational and entrepreneurial skills on females so to enhance their wellbeing and also reduces poverty. Also to stimulate female interest in technical skill acquisition in formal education, the National Policy on Education, NPE (2004) provides for both boys and girls to be exposed early to various aspects of Science and Technology and also call for enrollment in apprenticeship training of Vocational occupations in Ondo State.

Ukachukwu (2015) also stated that this development has posed inherent danger to technology education, national development and has increased poverty greatly. In line with this view, Uzougwu (2014) reported that the total female enrolment figure into apprenticeship training programmein Nigeria as at 2014 was less than five percent. He noted that this figure, in comparison with countries seeking to have rapid socio-economic development is negligible as the countries target about fifty percent enrolment annually.

According to Ogwuman, (2019) Poverty alleviation refers to all the methods, ways or techniques adopted by government, non-governmental organizations or wealthy individuals to reduce or eradicate poverty. Nigeria poverty and poverty alleviation scenario is a very pathetic case. Poverty is not confined to a section of the Nigerian society. From the North to South, East and West, many people are in shackles and are ravaged by hunger, unemployment, destructive epileptic electricity supply, infected drinking water in the midst of abundance. Therefore, this study examines the strategies that can enhance female participation in apprenticeship training to reduce poverty among the people in Ondo state Nigeria.

Statement of the problem

Occupational stereotype is the age-long belief that certain occupations are especially reserved for a particular sex and this has been in place for a long time in Nigeria. For instance, most physically and mentally challenging occupations like Block laying and Masonry, Carpentry and Joinery, Auto Mechanic works, Welding and Fabrication, Steel fixing, Electrical installation among others are believed to be exclusively for males while occupations

like fashion designing, hair dressing, hotel and catering services, manicure and pedicure are specially reserved for females. Stereotype has been one of the major reasons why enrollment of female in apprenticeship training in vocational occupation has reduced over the years which tends to increase the level of poverty among female in the society. However, efforts have been made to remove barriers to females' entrance as apprentices into vocational occupations.

In spite the efforts by the government and non-governmental organizations to stimulate and increase female enrollment in vocational occupations, the trend has not shown any remarkable improvement. Therefore, the study is to determine the strategies that can be employed to increase female enrollment in apprenticeship training in vocational occupations for poverty alleviation in Ondo State.

Purpose of the study

The main purpose of the study is to examine the strategies for increasing female enrollment in apprenticeship training in vocational occupation for poverty alleviation in Ondo State. Specifically, the study seek to:

1. Find out the challenges of females' enrollment in apprenticeship training in vocational occupation in Ondo State, Nigeria.

2. Find out the roles of females in apprenticeship training in vocational occupation for poverty reduction in Ondo State, Nigeria.

3. Examine the causes of females' failure in establishment of apprenticeship training in vocational occupation in Ondo State, Nigeria.

4. Enumerate the strategies to enhance enrolment of females in apprenticeship training in vocational occupation for poverty reduction in Ondo State, Nigeria.

1. **Research Questions**

The following research questions guides the study:

7. What are the challenges of females' enrollment in apprenticeship training in vocational occupation in Ondo State?

8. What are the roles of females in reduction of poverty through apprenticeship training in vocational occupation for poverty reduction in Ondo State?

9. What are the causes of females' failure in establishment of apprenticeship training in vocational occupation in Ondo State?

10. What are the strategies to enhance enrolment of females in apprenticeship training in vocational occupation for poverty reduction in Ondo State?

Methodology

The study used descriptive survey research design. The population of this study consisted of all apprentices in Ondo state

who were 1,115 apprentices (BTVE Akure, 2022).

The study used multistage cluster sampling technique in selecting the respondents so that the population will have chance of being represented in the sample. Six Local Government Areas were used for the study in Ondo North Senatorial District which comprised of Owo, Ose, Akoko North East, Akoko North West, Akoko South East, Akoko South West. Stratified sampling technique was used to select the population in terms of gender and local government. 30 students were randomly selected from each Local Government with a total sample of one hundred and eight respondents. This consisted of 18 females and 12 males from each Local Government in Ondo North Senatorial Districts. The total sample for this study is 180 respondents, on the whole, multistage sampling was used.

The instruments used for this study was a researcher-designed questionnaire titled: strategies for increasing female enrolment in apprenticeship training in vocational occupation for poverty reduction in Ondo State. It consisted of two sections A and B. Section A is on the demographic data of the respondents while section B consisted items to answer research questions.

The research instrument was validated by three experts in the Department of Vocational and Technical Education

Adekunle Ajasin University, Akungba Akoko. Test–retest reliability of the instrument was ensured; the questionnaire was administered to the sampled respondents twice i.e. in an interval of two weeks and reliability co-efficient of 0.76 was obtained. The questionnaire was distributed in person by the researcher with the help of five research assistants. The researcher ensured that all the instruments were properly filled and that no errors occurred and retrieved immediately after its completion by the respondents.

The data collected was analyzed using tables, frequency count, simple percentages, mean and standard deviation to answer the research questions, mean response greater than or equal to 2.50 is taken as agree, while any mean rating below 2.50 is taken as disagree.

Results and Discussion

Research Question one: What are the challenges of female's enrollment in apprenticeship training in vocational occupation in Ondo State?

Table 1: shows the mean responses of the respondents on the challenges of female's enrollment in apprenticeship training in vocational occupation in Ondo State

Table one above indicates the respondents responses on the challenges of female's enrollment in apprenticeship training in vocational occupation. Items 1 have the

highest mean of 3.95 with the standard deviation of 0.512 respectively followed by items 4 with the mean of 3.72 and standard deviation of 0.451 and items 2 has the mean of 3.62 with the standard deviation of 0.351 and followed by item 3 with mean of 3.19 and standard deviation of 1.187 and finally items 5 with the lowest mean of 3.01 and standard deviation of 1.43. It is clear from the result that challenges of female's enrollment in apprenticeship training ranges from financial problem and lack of capital to management lack of trust in female skills, nature interest and lack of choice, denial of support from family and lack of access to service.

Research Question two: What are the roles of female in reduction of poverty through apprenticeship training in vocational occupation for poverty alleviation in Ondo State?

S/N	Questions	SA	A	D	SD	Mean $\bar{x}$	STD	Remark
1	Providing supporting fund raising for vocational occupation apprenticeship training development programme	73 36.5%	61 30.5%	23 16.5%	23 16.5%	3.55	0.770	Agree
2	Active participation in activities that correct the poor image of vocational apprenticeship training programme to the public	112 65.5%	52 26%	9 4.5%	7 4%	2.96	1.310	Agree
3	Creating of awareness within and outside the school environment regarding the importance of vocational apprenticeship training in National development	100 50%	51 25.5%	12 6%	17 18.5%	2.53	0.972	Agree
4	Assisting the school management to advertise vocational apprenticeship training to the public	58 29%	57 28.5%	43 31.5%	22 11%	2.66	1.212	Agree
5	Engaging in sensitization of the public about the activities of vocational apprenticeship training programme	58 32.0%	95 54.5%	20 10%	7 3.5%	2.51	1.121	Agree

Table 2: shows the mean responses of the respondents on the roles and contribution of female in reduction of poverty through apprenticeship training in vocational occupation for poverty alleviation in Ondo State.

Table two above indicates the respondents response on the roles and contribution of female in reduction of poverty through apprenticeship training in vocational occupation for poverty alleviation, the result was based on the mean of the research question 2. Item 1 has the highest mean of 3.55 with the standard deviation of 0.770 followed by items 2 with the mean of 2.96 and standard deviation of 1.310 and items 4 has the mean of 2.66 with the standard deviation of 1.212 and item 3 has mean of 2.53 and standard deviation of 0.972, finally items 5 has the lowest means

of 2.51 and standard deviation of 1.121 which research items was accepted by the respondents. Result shows that providing supporting fund raising, Active participation in activities that correct the poor image, creating of awareness within and outside the school environment regarding the importance, Assisting the school management to advertise vocational apprenticeship training to the public and engaging in sensitization of the public about the activities of vocational apprenticeship training programme. These shows that all the respondents agreed on the roles and contribution of female in poverty alleviation through apprenticeship training.

Research Question three: What are the reasons for female enrollment in apprenticeship training in vocational occupation in Ondo State

Table 3: shows the mean responses of the respondents on the reasons for female enrollment in apprenticeship training in vocational occupation in Ondo State

S/N	Questions	SA	A	D	SD	MEAN $\bar{x}$	STD	REMARK
1	Most females engage in apprenticeship training in vocational occupation for personal employment	85 42.5%	39 29.5%	32 16.0%	24 12.0%	3.27	1.062	Agree
2	It provide employable skills for females apprentice	106 63.0%	41 20.5%	25 12.5%	8 4.0%	3.18	1.218	Agree
3	It help to promote entrepreneurial skills to enable female independent	49 34.5%	101 50.5%	23 11.5%	7 3.0%	3.82	0.386	Agree
4	Reduction of crime among female and poor educational background	74 47%	64 32%	30 15%	12 6%	3.89	0.314	Agree

S/N	Questions	SA	A	SD	D	MEAN $\bar{x}$	STD	REMARK
1	Inadequate infrastructural provision which include poor electricity supply can cause failure in enrollment	77 / 38.5%	67 / 33.5%	34 / 17%	22 / 11%	3.65	1.032	Agree
5	Means of increasing the support for the family can cause failure in enrollment	65 / 37%	57 / 28.5%	38 / 23.5%	20 / 11%	2.66	1.212	Agree
2	People Perception towards the attitude apprenticeship training	35 / 17.5%	103 / 51.5%	44 / 22%	18 / 9.0%	2.34	0.651	Agree
3	Poor finance and record keeping	102 / 51.0%	51 / 25.5%	26 / 13.0%	21 / 10.5%	3.01	1.345	Agree
4	Unstable economy in establishment of apprenticeship training	43 / 21.5%	101 / 50.5%	48 / 24.0%	8 / 4.0%	3.45	0.782	Agree
5	Business depression and fraud in apprenticeship training centre	73 / 36.5%	61 / 30.5%	23 / 16.5%	23 / 16.5%	3.55	0.770	Agree

The results from table three above revealed that Item 14 has the highest mean of 3.89 with the standard deviation of 0.314 followed by item 13 with the mean of 3.82 and standard deviation of 0.386 and item 11 has the mean of 3.27 with the standard deviation of 1.062 followed by item 12 that has the mean of 3.18 with the standard deviation of 1.218 and finally item 15 with a mean of 2.66 and standard deviation of 1.212. The result revealed that the reasons for female enrollment in apprenticeship training includes personal employment, to provide employable skills, promote entrepreneurial skills, Reduction of crime among female and poor educational background and increasing the support for their family.

Research Question four: What are the causes of females' failure in establishment after the completion of apprenticeship training in vocational occupation in Ondo State?

Table 4: shows the mean responses of the respondents on the causes of female failure in establishment after the completion of apprenticeship training in vocational occupation in Ondo State

Table 4 above indicates the respondent's response on the causes of female failure in establishment after the completion of apprenticeship training in vocational occupation. The result was based on the mean of the research question. Item 16 has

the highest mean of 3.65 with the standard deviation of 1.032 followed by items 19 with the mean of 3.45 and standard deviation of 0.782 and items 18 has the mean of 3.01 with the standard deviation of 1.345 and finally item 17 has the mean of 2.34 and standard deviation of 0.651 and items 20 has the mean of 3.55 and standard deviation of 0.770. it is clear from the result that the possible causes of female failure is

Table 5: shows the mean responses of the respondents on the possible strategies that can be used to enroll female in apprenticeship training in vocational occupation for poverty alleviation in Ondo State.

Inadequate infrastructural provision, poor electricity supply, people perception, poor finance and record keeping, unstable economy and business depression and fraud.

Research Question five: What are the possible strategies that can be used to enroll female in apprenticeship training in vocational occupation for poverty alleviation in Ondo state?

S/N	Questions	SA	A	D	SD	Mean $\bar{x}$	STD	Remark
1	Less difficult tasks should be given to female apprentices at the beginning of the training	80 40.0%	76 23.0%	51 25.5%	23 11.5%	3.27	1.062	Agree
2	Practical training to be followed with theoretical explanations, notes and demonstrations	69 34.5%	63 31.5%	34 17.0%	34 17.0%	3.30	1.218	Agree
3	Individualized training to be given to female apprentices in technical occupations.	133 66.5%	46 23.0%	13 6.5%	8 4.0%	3.32	0.386	Agree
4	Female apprentices should be separated from their male counterparts during training	73 36.5%	61 30.5%	23 16.5%	23 16.5%	3.55	0.770	Agree
5	Female apprentices in technical occupations should be provided with basic tools for private practices.	66 33%	76 48%	12 6%	26 13%	3.19	1.187	Agree
6	Rewarding outstanding female apprentices in achievement through awards	49 34.5%	101 50.5%	23 11.5%	7 3.0%	3.82	0.386	Agree
7	Rendering financial support to students to carry out projects for exhibition	100 63.0%	47 20.5%	23 12.5%	10 4.0%	2.58	1.218	Agree
8	Integrating public relations activities in the apprenticeship curriculum	55 34.5%	95 50.5%	23 11.5%	7 3.0%	2.82	0.386	Agree
9	Provision of standard facilities and materials for effective teaching of practical skill	70 36.5%	64 30.5%	23 16.5%	23 16.5%	3.09	0.770	Agree
30	Motivating students to show interest in public relations activities	110 65.5%	54 26%	9 4.5%	7 4%	3.00	1.310	Agree

Table 5 revealed the results on the possible strategies that can be used to enroll female in apprenticeship training in vocational occupation for poverty alleviation, the result was based on the mean of the research question. Item 26 has the highest mean of 3.82 with the standard deviation of 0.386 followed by item 22 with the mean of 3.30 and standard deviation of 1.218 and item 24 has the mean of 3.55 with the standard deviation of 1.062. Items 27, 28, 29 and 30 has mean of 2.58, 2.82, 3.09 and 3.00 and standard deviation of 1.218, 0.386, 0.770 and 1.310 respectively. It was

concluded from the result that the possible strategies that can be used to enroll female in apprenticeship training are less difficult tasks been given to female apprentices, practical training, individualized training, separation from males, provided with basic tools for private practices and rewarding outstanding female apprentices, Rendering financial support to students to carry out projects for exhibition, Integrating public relations activities in the apprenticeship curriculum, Provision of standard facilities and materials for effective teaching of practical skill and Motivating students to show interest in public relations activities are the strategies that should be adopted.

Discussion of findings

From the result of research question one, It is clear from the result that challenges of female's enrollment in apprenticeship training ranges from financial problem and lack of capital, management lack of trust in female skills, natural interest and lack of choice, denial of support from family and lack of access to service. This is in

Result from research question two shows that providing supporting fund raising, Active participation in activities that corrects the poor image, creating of awareness within and outside the school environment regarding the importance, assisting the school management to

agreement with the finding of Tlaiss, (2014) who stated that many challenges confront entrepreneurs regardless of their gender, but other challenges are very peculiar to women. Women entrepreneurs are vital sources of growth that can empower the economy, yet they face tremendous challenges. The lives and responsibilities of women in several developing countries have long been bound by domestic boundaries that view them as mothers, wives, and caregivers. It also collaborate the findings of Yusuf, (2013) who opined that women are unable to carry out their entrepreneurial intentions due to a culturally enforced reliance on their husbands, partners, or relatives for financial support (Ekpe et al., 2014). The issue of gender in urban areas is usually less hampering severe factor to prospective female apprenticeship than it is in rural areas, their self-esteem and managerial skills being higher when compared to rural women and access to external financial resources being more accessible than in rural areas.

advertise, vocational apprenticeship training to the public and engaging in sensitization of the public about the activities of vocational apprenticeship training programme. It is in line with Adim, &Tamunomiebi, (2018) in Ondo, female play important roles in small enterprise development. They are mostly involved in

crafts, weaving of sweaters for school children, mat making; farming both production of food crops, fish farming and poultry, mortar and pestle making, retail and whole scale trade. Most businesses like skin scare and beauty businesses, cosmetics, restaurants, café, wholesale and retail shops are owned and run by women in Owo. Female-owned apprenticeships are making good contributions in the following areas in the economy: Job creation both for the women and others can be a panacea for the increasing unemployment/under employment rate in the country. Women are afforded opportunities to create their own businesses and make adequate use of their acquired skills and training. Women are contributing immensely to both their families and the communities. Most of the women-owned enterprises are serving not only the communities but also larger business organizations.

The result from research question three revealed that the reasons for female enrollment in apprenticeship training includes personal employment, to provide employable skills, promote entrepreneurial skills, Reduction of crime among female and poor educational background and increasing the support for their family. This result is similar to the study of Adama & Audu, (2017) a study carried out in Nigeria found out that after family funding, these female entrepreneurs rely on bank loans, donations, governmental schemes, and charity by churches. In traditional Muslim society and communities, male-female segregation is the norm and presents its issues. Female entrepreneurs guard their privacy and prefer a working environment where they don't have to interact with males.

it is clear from the result of research question four that the possible causes of female failure is Inadequate infrastructural provision, poor electricity supply, people perception, poor finance and record keeping, unstable economy and business depression and fraud. The result is related to the finding of Ayogu & Agu, (2015) implied that The causes are inadequate access to capital, bad management, national disaster (for example flood around New Kutunku layout and areas around Abattoir), business depression, fraud, competition, deceit, demolition exercise, inflation, poor location, high cost of capital, neglect, unstable economy, poor patronage of product, poor finance and record keeping, poor management ability and the "big one" ignorance, inadequate access to information. Some of the women do not have time to read papers or listen to news. The excuse is that after a hard days job they will have to take care of household chores. Power fluctuation has not helped matter as some cannot afford the use of standby generator.

It was concluded from the result that the possible strategies that can be used to enroll female in apprenticeship training are less difficult tasks been given to female apprentices, practical training, individualized training, separation from males, provided with basic tools for private practices and rewarding outstanding female apprentices, Rendering financial support to students to carry out projects for exhibition, Integrating public relations activities in the apprenticeship curriculum, Provision of standard facilities and materials for effective teaching of practical skill and Motivating students to show interest in public relations activities are the strategies that should be adopted. The result is in agreement with Universal Declaration of Human Rights, according to Cesaroni, & Paoloni, (2016), states the following: " Everyone is entitled to all the rights and freedoms outlined in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinions, national or social origin, property, birth or another status" (United Nations 2018). This means that no woman should be deprived of the opportunity to be an entrepreneur. Women apprenticeship need appropriate education, entrepreneurial knowledge, business training such as skill development, time management, et al., for their business to grow (Broto, 2014).

It is beneficial to have formal education to boost entrepreneurship and business performance. Economies, where women have a higher number of years of education, are characterized by relatively high numbers of new female entrepreneurs at the level of both limited liability companies and sole proprietorships. Comparisons of gender-neutral and gender-specific indicators of entrepreneurship highlight the importance of collecting data on female business owners. Also the result collaborate the systematic and consistent collection of such data is crucial for developing meaningful, evidence based recommend dations, and public policies related to women's economic empowerment and their contribution to international development. The lack of sex-disaggregated data in many economies limits the understanding of the issues surrounding female entrepreneur ship. Women entrepreneurs, who view their business success more than just making money, empower and act as a role model using their potential to create a better world and also scaling up the business and profit are success triggers to economic empowerment and their status in the society (Steege & Stanum, 2014).

Conclusion

The researchers concluded that, the involvement of female students in apprenticeship programme in other to reach

out to the public is a welcome strategy that should be considered. The researchers strongly believe that the application of strategies determined by the study is a potential force in improving female students' enrolment in apprenticeship programme.

Recommendations

Based on the findings the following recommendations are made: -

1. Government should establish practical and individualized training apprentice ship centre for female
2. Apprenticeship training centre should be well in equipped with necessary equipment to make the work easier for female
3. Federal and State Governments should review, standardize and expand the Curricula of all apprenticeship training Centres in Nigeria.

REFERENCES

Adama, M. and Audu, M. (2017). 'Competition and Entrepreneurship', Chicago and London: University of Chicago Press.

Adim, C. V. &Tamunomiebi, M. D. (2018).Entrepreneurial orientation and women entrepreneurs' contribution to household livelihood and sustenance in Rivers State.*World Journal of Entrepreneurial Development Studies, 2, 24-35. Retrieved from www.iiardpub.org.*

Ayogu, D. U. &Agu, E. O. (2015).Assessment of the Contribution of Women Entrepreneurs towards entrepreneurship development in Nigeria.*International journal of current research and Academic Review, 3(10).Retrieved from www.ijcrar.com*.

Broto, R. B. (2014). Impact of education and training on performance of women entrepreneurs: A study in emerging market context. *Journal of Entrepreneurship in Emerging Economics, 6(1), 38-52.doi:10. 1108.JEEE-05-2013-0014*

Cesaroni, J. and Paoloni, I. (2016). Repositioning Nigerian youths for economic empower-ment through entrepreneurship education. *European Journal of Educational Studies, 2, 113-118.*

Ekpe, D. E., Alabo, E., &Egbe, I. J. (2014). Women, gender equality in Nigeria: A critical analysis of socioeconomic and political gender issues. *Journal Research in Peace Gender and Development, 4(1), 15–20. doi:10.143003/jrpgd.2014.009*

National Policy on Education (NPE) (2004). "Student perception of entrepreneurs: a cultural perspective" M EDINEB Conference, Salzburg, June *European Scientific Journal October 2013 edition vol.9, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 132*

Steedman, A. (2011). Managing relationship·conflict and the effectiveness of organizational team.*Journal of Organizational Behaviour, 22,309- 328.*

Steedman, O. and Ryan, R. (2018)."Concept of Entrepreneurship". A Paper Presented at the Workshop On Entrepreneurship and Innovation Level students in University Of Ibadan , Jan. 18.

Steege, V. M., &Stamm, V. B. (2014). Women Entrepreneurs: Success triggers, dilemmas, and 'readiness for the future. Innovation for Sustainable Economy & Society, Dublin, Ireland forthcoming conference on 8-11 June 2014. Publication forthcoming.

Tlaiss, M. (2014)."Understanding the social role of entrepreneurship". *Journal of Management Studies 53(4), 610-629. doi:10.1111/joms. 121.*

Ukachukwu, R.H. (2015), A*Taxonomy of Critical Thinking Dispositions and Attitudes*. In Teaching Thinking Skills: Theory and Practice, edited by J.B. Baron and R.J. Sternberg, pp 1-20 New York, Freeman.

Uzougwu, A. (2014). Evidence from Kingdom of Bahrain, United Arab Emirates, and Saudi Arabia. A thesis submitted for the degree of doctor of philosophy. Brunel University, London

Yusuff, O. S. (2013). Gender differentials in factors effecting performance of small-scale enterprises in Lagos State-Nigeria. Innovative Issues and Approaches in Social Sciences, 6(2), 21–39. Retrieved from www.iiass.com.

Effect of Principals' Administrative Practices on Students' Academic Performance in Public Secondary Schools in Kaduna State, Nigeria

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ABSTRACT

The study examined effect of principals' administrative practices on students' academic performance in public secondary schools in Kaduna State, Nigeria. Specific objectives were to assess the effect of principals' supervisory practices and motivational practices each on students' academic performance. Correlational research design was used. The population of the study was 1,290 teachers in 43 public senior secondary schools of three Education Zones. The sample size was 212 teachers in 38 public senior secondary schools of the three Education Zones. Two research instruments were used; a questionnaire for survey data and a checklist for historical data on students' academic performance. The survey data had a reliability test of 0.89, using Spearman-Brown's split half method. Descriptive and inferential statistics of mean, standard deviation, linear regression analysis, t-test and F-ratio were employed to analyze the data collected. The findings revealed that principals' administrative practices have insignificant effect on students' academic performance. Relatively, principals' supervisory practices have positive effect while principals' motivational practices have negative effect. The trend of students' academic performance within ten year period has been poorly fluctuating in the first five years and fairly fluctuating in the last five years. The recommendations hold that principals of public schools should step up more of supervisory functions. They should also enroll fresher and refresher courses in educational management while post graduate qualification in educational management should be made a prerequisite for consideration into school leadership appointment subsequently.

Keywords: Principals' Administrative Practices, Supervisory Practices, Motivational Practices & Students' Academic Performance

Introduction

Principals' administrative practices have been understood to be owing responsibilities to academic activities in the school and stakeholders such as teaching staff, non-teaching staff and students, among others, in the day-to-day operations. In their functions, activities such as students' promotions and transfers, classroom periods and vetting of examination questions are expected to be effectively delegated and supervised with a view to promoting academic performance.

Nevertheless, principals of public senior secondary schools in Kaduna State have been recorded less effective and weak in their supervisory and assessment functions (Kaduna Education Strategic Plan [KDESP], 2013:13 - 15). Adebola (2015) establishes stakeholders' perception of school principals' laissez faire leadership through their inactiveness in school activities in Zaria and Giwa Education Zones. Duruh (2018) posits significant difference in responses to

quality and effectiveness of instructional leadership in girls' day secondary schools in Kaduna State. The KDESP (2019) reiterates acceptance of low students' academic performance in the 2017 Senior School Certificate Examinations (SSCE), despite the State Government efforts in ensuring improvement on teaching and learning through better school administration and clear career paths education professionals' engagement, among others:

> *...success rates of 26% and 30% were recorded in the 2017 West African Examinations Council (WAEC) and National Examinations Council (NECO) Senior School Certificate Examinations (SSCE) respectively... better school administration, good buildings and facilities, ... clear paths for education professionals will all contribute to ensuring better opportunities for children, i.e., to ensure students become literate, numerate and equipped with the skills to fully participate in Nigerian society and contribute to the economy. P.18*

On motivational role of leadership, teachers' opinion responses reject that principals welcome ideas during staff meetings and they do not adequately allow free flow of information from top to the bottom, but they do recommend in-service training through conferences, workshops, seminars and symposia for staff development (Uhaa, 2017). Democratic style of principal leadership is not affirmed to be significantly motivating teachers and students on facilities maintenance for effective teaching and learning (Modibbo, 2017).

Many candidates and students on transfer are being admitted and graduated in public senior secondary schools with low quality content.

Less attention is paid to fitness from placement tests, if conducted, but proceeds from registration of enrolled students in large number. Enrolment size and large class size in public secondary schools have thus been a daunting task for principals and their teachers to manage in terms of quality teaching, thorough assessment of learning contents and discipline on students' characters (Gwamna et. al, 2021). Consequently, low learning contents in the students plunge them into woeful failure in the Senior School Certificate Examinations (SSCE) set by external examining bodies (Igunnu, 2023; Alafiatayo et.al, 2016).

Omoniwa and Kabir (2023) examined "assessment of principals' supervisory roles towards enhancing teaching and learning in public secondary schools in Sabon-Gari Local Government Area, Kaduna State". The objectives of the study were to ascertain direct involvement of principals in supervisory roles and the methods used to carry out the supervisory roles. The research design adopted was descriptive survey design. The population of the study was 550 teachers from 30 public secondary schools in the study area. The sample size of the study was 221, using Kregcie and Morgan sample table. The descriptive statistics adopted were mean sores and standard deviation. The findings revealed cumulative mean of principals' direct supervision and methods of supervision to be respectively accepted as 3.03 and 3.14 in public secondary schools in Sabon-Gari LGA of Kaduna State.

Jideofor (2022) assessed principal's administrative strategies for effective teachers' job performance in secondary schools in Awka South Local Government Area of Anambra State. The research objectives were to determine principal's supervisory strategies and personnel management strategies for effective teacher job performance in secondary schools in Awka South of Anambra State. The research

design was descriptive survey design. The population of the study was 1150 teachers from 18 public secondary schools in the study area, out of which 200 teachers were randomly sampled from 10 of the schools. The descriptive statistics used were mean and standard deviation. The findings revealed that principal's supervisory strategies and principal's personnel management strategies were each effective (2.76 and 2.95 respectively) for teacher job performance in public secondary schools in Awka South.

Uwaleke et.al (2021) examined principals' instructional supervisory roles and teachers' job performance in public secondary schools in Ekiti State, Nigeria. The research design was correlational research design. The population and the sample sizes were 6,936 and 693 respectively. The research instrument was designed on a 4-point Likert scale. The findings hold that principals' classroom observation and principals' evaluation of teachers each have positive and significant relationship with teachers' job performance at 0.05 significant level, using Pearson Product Moment Correlation (PPMC). Aja-Okorie and Ogbonnia (2021) studied principal's supervisory functions for quality assurance in secondary schools in Abakiliki Education Zone of Ebonyi State, Nigeria. The specific objectives examined

how principal carry out instructional supervision and staff development in public secondary schools in Abakililki Education Zone, Nigeria. The research design employed was descriptive survey design. The population of the study was 1985 respondents from 70 public secondary schools from the study area, including both teachers and principals and out of which 405 was sampled. The descriptive statistics used were mean and standard deviation while the inferential statistics used was t-test at 0.05 level of significance. The findings revealed supervisory and staff development functions of principals to be each correlating quality assurance in public secondary schools in Abakiliki Education Zone of Ebonyi State. Furthermore, the findings revealed no significant difference in responses between school principals and teachers on supervisory functions and staff development functions in public secondary in Abakiliki Education Zone.

Olufunmilola (2020) assessed principals' administrative challenges and funding for teachers' effectiveness in secondary schools in Ekiti State. Descriptive survey designed was employed. 330 responses were sampled from 30 public senior secondary schools with two sets of questionnaire. The major findings show that level of principal's administrative challenges and funding and level of teachers' effectiveness have positive and significant relationship at 0.05 significant level, using PPMC. Ezema and Ogunshola (2020) studied the impact of principals' motivational techniques on students' academic performance in Federal Capital Territory Junior Secondary Schools, Abuja, Nigeria. The research design was descriptive survey and the sample size was 300. The findings show that principals' motivational techniques have positive and significant relationship with students' academic performance. The students' academic performance is also found to have fluctuation between the periods 2012 -2017.

Aja-Okorie and Usulor (2016) assessed analysis of principals' motivational practices for teachers' effectiveness in public and private secondary schools Ebonyi State, Nigeria. The specific objectives were to determine the extent to which effective communication of school principals, staff meetings with teachers and ensuring teachers' welfare promote teachers effectiveness in public and private secondary schools in Ebonyi State. The research design adopted was descriptive survey design. The population of the study was made up of 226 public and 129 private school principals. All these 355 principals were used as sample

size. The descriptive statistics employed were mean and standard deviation while inferential statistics was t-test at 0.05 level of significance. The major findings revealed that effective communication of principals, their regular meetings with staff and teachers' welfare assurance each motivate teachers' effectiveness in public and private secondary schools in Ebonyi State, Nigeria. The findings also established absence of significant difference in responses between public and private school principals on motivational practices for teachers' effectiveness in Ebonyi State.

Uthman and Kassim (2016) carried out a study on leadership styles of school principals and teachers, school environment and school achievement in Kaduna State, Nigeria. Survey research design was used to obtain 860 responses on a 5-point Likert scale questionnaire. The findings reveal that leadership styles of principals have positive and significant relationship with each of school environment and school achievement at 0.01 significant level, using correlation matrix table. But the leadership styles have negative and significant relationship with students' academic performance in secondary schools in Kaduna State. Iliya (2016) assessed stakeholders' perceptions of principals' use of transformational and transactional leadership styles in secondary schools in Kafanchan Education Zone, Kaduna State. The research design used was descriptive survey with a 5-point Likert scale questionnaire. 351 responses were obtained from 4000 stakeholders. The findings reveal that both transformational and transactional leadership styles are prevalent in Kafachan Education Zone, only that transformational leadership style is significant using ANOVA at 0.05 level of significance.

Dangara (2015) assessed the impact of instructional supervision on academic performance of secondary school students in Nassarawa State, Nigeria. The research design was descriptive survey design. 92 respondents were sampled from 525 teachers, with the use of questionnaire. The findings reveal that regular instructional supervision and class visitations by principal each have positive and significant relationship with students' academic performance. Supervisor's comment is also found to have positive and significant relationship with teacher's job performance in public secondary schools in the State.

From the foregoing, the study aims at raising questions on how the principals of public senior secondary schools have been carrying out supervision on academic activities and

how they have been motivating their teachers for improvement in students' learning and academic performance.

Objective of the Study

The study aims at assessing the effect of principal's administrative practices on students' academic performance in public senior secondary schools in Kaduna State. Specifically, the objectives are to examine:

i. The trend of students' academic performance in public senior secondary schools between 2013 and 2022 in Kaduna State;

ii. The effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State; and

iii. The effect of principals' motivational practices on students' academic performance in public senior secondary schools in Kaduna State.

Research Question

i. What is the trend of students' academic performance in public senior secondary schools in Kaduna State, from 2013 to 2022?

ii. What is the effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State?

iii. What is the effect of principals' motivational practices on students' academic performance in public senior secondary schools in Kaduna State?

iv. What is the effect of principals' administrative practices on students' academic performance in public senior secondary schools in Kaduna State?

Hypothesis

H_{01}: There is no significant effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State.

H_{02}: There is no significant effect of principals' motivational practices on students' academic performance in public senior secondary schools in Kaduna State.

H_{03}: There is no significant effect of principals' administrative practices on students' academic performance in public senior secondary schools in Kaduna State.

Methodology

The research design adopted was correlation research design with the population of 1,290 teachers and 43 schools from three education zones of Kaduna State by 2018 school census conducted. These education zones of the study were Kaduna Zone, Rigachikum Zone and Sabon- Tasha Zone. The sample size was

212 teachers across 38 schools, using Kregcie and Morgan Table. The research instruments used were a questionnaire and a checklist each designed on four-point Liker scale. The validity of the research instruments was ascertained by two experts in the Department of Educational Management, University of Abuja, Abuja. The reliability of the data was established as 0.89, through Spearman-Brown Split – Half reliability method. The descriptive statistics employed were mean scores and standard deviation while the inferential statistics used were regression analysis and t-test, all were run on SPSS 20.0. Students' Academic Performance was coded SAP, Supervisory Practices (SPP) and Motivational Practices (MTP).

Result

Research Question One: What is the trend of students' academic performance between 2013 and 2022 in public senior secondary schools in Kaduna State?

Table 1: *Students' Academic Performance in WASSCE, Kaduna State, Nigeria, between 2013 and 2022*

Year	5Cs & Above (Including Eng & Maths)	5Cs with Eng. or Maths	5Cs without Eng. and Maths	Less than 5Cs	N	Mean (X)	Std. Dev.	Remark
2013	3,274	2,167	1,392	26,781	33,614	1.46	0.35	-----------
2014	3,156	6,798	3,213	8,148	21,315	2.23	0.34	Increase
2015	4,873	6,488	2,970	9,346	25,789	2.10	0.15	Decrease
2016	8,298	8,609	3,467	7,282	27,656	2.64	0.02	Increase
2017	8,231	10,744	7,612	3,581	29,718	1.92	0.65	Decrease
2018	16,186	8.974	5,983	2,992	34,135	2.43	0.44	Increase
2019	21,981	9,621	6,414	3,207	41,222	2.60	0.01	Increase
2020	22,440	2,449	1,633	817	27,339	3.46	0.28	Increase
2021	24,812	2,180	3,469	1,735	32,196	3.50	0.29	Increase
2022	20,769	1,873	5,340	2,670	30,652	3.33	0.24	Decrease

Source: *Education Resource Department of the Kaduna State Quality Assurance Authority, 2023 – Researcher's Computational Analysis*

From the Table 1, the trend of students' academic performance in public senior secondary schools in Kaduna State has been poorly within the first three years to 2015 while it recorded commendable improvement in 2016 with 2.64 out of 4.00 point scale. The undulating poor performance persisted for the next two years to 2018 and steady improvement picked up from 2019- 2022. The trend of students' academic performance in the 10-year period with overall mean 2.57 can thus be described as fair and moved in a fluctuation manner, even though the last four years depict sustainability of better performance.

Research Question Two: What is the effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State?

Table 2: *Mean Responses on Principals' Supervisory Practices in Public Senior Secondary Schools in Kaduna State*

	SUPERVISORY PRACTICES	SA	A	D	SD	N	X	Std. Dev	Remarks
	In the school where I teach,								
1	There is strict stipulation to students' admission on merit	30	90	55	29	204	2.59	0.57	Accepted
2	There is strict promotion of students on merit	19	56	85	44	204	2.24	0.85	Rejected
3	There is serious supervision of subject periods	83	101	15	05	204	3.29	0.64	Accepted
4	Entrance examinations into SSI is being conducted on candidates with the required BECE / JSCE results.	84	91	22	07	204	3.25	0.61	Accepted
5	Students transferring in are required to write examinations.	32	68	76	28	204	2.52	0.63	Accepted
	there is thorough vetting of examination questions set internally.	44	112	39	09	204	2.93	0.17	Accepted
6	Principal gives instruction on how school activities should move on.	103	92	08	01	204	3.45	0.77	Accepted
7	**Grand Mean**						**2.90**	**0.61**	**accepted**

From Table 2, data collected on principals' supervisory practices were presented. Stipulating to students' admission on merit was accepted to be monitored in principal's duties, with mean score 2.59, but promotion of students to next class was rejected to be observed by school leadership. It was accepted with a strong mean 3.29 that the school head monitors progression of subject periods across all the classes in the school. It was also accepted strongly that new students being admitted into SSI are ensured to write entrance examinations before admission is offered. Principals are strongly accepted to be at the helm of affairs in the school environment in terms of giving instructions and observing compliance.

Table 3: *Coefficient of Determination and Least Square Regression Analysis for Principals' Supervisory Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State*

Variable	R-Square Adjusted	Alpha	Beta Coefficient	Standard Error
SPP	**0.197**	**0.678**	**0.525**	**0.977**

Source: SPSS 20.0 Output

From the Table 3, the effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State is 19.7% by R-Square adjusted. The regression equation to this effect can be expressed as: $SAP = 0.678 + 0.525(SPP) + 0.977$, where 0.678 is constant, 0.525 means increase rate of supervisory practices at 52.5% and 0.977 as standard error.

Research Question Three: What is the effect of principals' motivational practices on students' academic performance in public senior secondary schools in Kaduna State?

Table 4: *Mean Responses on Principals' Motivational Practices in Public Senior Secondary Schools in Kaduna State*

	Motivational Practices	SA	A	D	SD	N	X	Std. Dev	Remarks
	In the school where I teach,								
8	Teachers are provided with staffrooms in good condition.	42	78	54	30	204	2.65	0.57	Accepted
9	There is regular communication with the teaching staff through media such as staff meetings and circulars.	79	93	24	08	204	3.20	0.25	Accepted
10	There is recognition and reward for better performance of teachers from time to time.	24	65	77	38	204	2.37	0.80	Rejected
11	There is delegation of responsibilities to better performing staff.	56	105	30	13	204	2.99	0.17	Accepted
12	Principal exhibits leadership by example.	94	96	07	07	204	3.35	0.64	Accepted
13	Principal possesses spirit of teamwork	86	95	14	09	204	3.20	0.50	Accepted
	Grand Mean						**2.96**	**0.49**	**accepted**

Source: Research Field Work, 2022

From the Table 4, principals' motivational practices are strongly accepted to involve regular communication with staff, leadership by example and promotion of teamwork spirit with mean scores 3.20, 3.34 and 3.20 respectively. Delegation of responsibilities to staff and providing them staffrooms in good condition are also accepted as parts of motivational practices of principals in public senior secondary schools in Kaduna State. But the principals are not accepted to have recognition and reward for better performance of teachers in their motivational practices.

Table 5: *Coefficient of Determination and Least Square Regression Analysis for Principals' Motivational Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State*

Variable	R-Square Adjusted	Alpha	Beta Coefficient	Standard Error
MTP	**-0.117**	**1.071**	**0.358**	**1.542**

Source: SPSS 20.0 Outputs

From the Table 5, the effect of principals' motivational practices on students' academic performance is -11.7% by R-Square adjusted (coefficient of determination). This negative result implies shortage of principals' motivational practices on their staff's commitment to students' academic performance. The regression equation to this effect is SAP = 1.071 + 0.358(MTP) + 1.542,

where 1.071 is alpha (constant), 0.358 is beta and 1.542 is the standard error. The beta suggests increase rate of principals' motivational practices at 35.8%.

Research Question Four: What is the effect of principals' administrative practices on students' academic performance in public senior secondary schools in Kaduna State?

Table 6: *Coefficient of Determination and Least Square Regression Analysis for Principals' Administrative Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State*

Variable	R-Square Adjusted	Alpha	Beta Coefficient	Standard Error
	0.422	-2.810		2.101
			0.851	
SPP			0.863	
MTP				

Source: SPSS 20.0 Outputs

From the Table 6, the effect of principals' administrative practices on students' academic performance is 42.2%, the remaining 57.8% of the effect is due to other variables outside the current study. The regression equation is obtained as SAP = -2.810 + 0.851(SPP) + 0.863(MTP) + 2.101.

Testing of Hypothesis

H_{01}: There is no significant effect of principals' supervisory practices on students' academic performance in public senior secondary schools in Kaduna State.

Table 7: *T-test Result for Principals' Supervisory Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State.*

Variable	N	Mean	SD	df	t-cal	P-value (0.05)	Decision
SPP	07	2.90	0.46				
				16	1.572	0.177	Accepted
SAP	10	2.57	0.69				

Source**: SPSS 20.0 Outputs**

From the Table 7, the null hypothesis one is accepted that principals' supervisory practices do not have significant effect on students' academic performance in public senior secondary schools in Kaduna State, even though the effect is positive. The justification for insignificant effect hinges on

calculated as 0.177, which is greater than 0.05 level of significance.

H$_{02}$: There is no significant effect of principals' motivational practices on students' academic performance in public senior secondary schools in Kaduna State.

Table 8: *T-test Result for Principals' Motivational Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State.*

Variable	N	Mean	SD	df	t-cal	P-value (0.05)	Decision
MTP	06	2.90	0.38				
				15	0.691	0.527	Accepted
SAP	10	2.57	0.69				

Source**: SPSS 20.0 Outputs**

From the Table 8, the null hypothesis two is accepted that principals' motivational practices do not have significant effect on students' academic performance in public senior secondary schools in Kaduna State, even though the effect is negative. The reason for its insignificant effect bases on p-value

calculated (0.527) which is greater than 0.05 level of significance.

H$_{03}$: There is no significant effect of principals' administrative practices on students' academic performance in public senior secondary schools in Kaduna State.

Table 9: F-Ratio Result for Principals' Administrative Practices and Students' Academic Performance in Public Senior Secondary Schools in Kaduna State.

Model	Sum of Squares	Degree of Freedom	Mean Square	F-ratio	P-value (0.05)	Decision
Regression	0.558	2	0.279			
Residual	0.296	3	0.099			
Total	0.854	5		2.828	0.204	Accepted

Source: SPSS 20.0 Outputs

From the Table 9, the p-value calculated is 0.204, which is greater than 0.05 level of significance. This hints that principals' administrative practices do not have significant effect on students' academic performance in public senior secondary schools in Kaduna State.

Discussion

Students' academic performance in the period has been discovered to be poorly influencing, especially in the first five years to 2018, while it picked up in 2017 to be richly fluctuating. This finding is similar to Ezema and Ogunshola (2020) that students' academic performance in their domain was fluctuating. Principals' supervisory practices were accepted to be prevalent in public senior secondary schools in Kaduna State, with positive and insignificant effect on students' academic performance. These findings have partial agreement with Omoniwa and Kabir

(2023), Jideorfor (2022), Awka and Uwaleke (2021), Aja-Okorie and Ogbonnia (2021) and Dangara (2015) where instructional supervision of school principals is established to have positive and significant effect on students' academic performance, teachers' job performance and quality assurance in public secondary schools in Nigeria. The reasons for the current study's partial disagreement could be traced to difference in domains, ages of study and statistical tools employed, amongst others. Principals' motivational practices were accepted in public senior secondary schools in Kaduna State but with negative and insignificant effect on students' academic performance. The findings are at variance with Olufunmilola (2020) and Ezema and Ogunshola (2020) who posit that motivational practices of school principals have positive and significant effect on students' academic performance and

teachers' job performance in public secondary schools. Principal administrative practices, as a whole, are found to have positive and insignificant effect on students' academic performance in public senior secondary schools in Kaduna. The findings have partial agreement with Iliya (2016) who establishes significant effect of transformation leadership style on teachers' job effectiveness and students' academic performance. Conversely, the findings have total disagreement with Uthman and Kassim (2016) whose findings uphold negative and significant effect on students' academic performance.

Conclusion and Recommendations

The study establishes that principals' administrative practices have positive and insignificant effect on students' academic performance in public senior secondary schools in Kaduna State. Specifically, supervisory practices have positive effect and motivational practices have negative effect, both of which are insignificant on students' academic performance. The trend of students' academic performance has poor fluctuations in the first five years while the second five years recorded fair fluctuations. From the findings, the following suggestions are proffered.

i. Principals of public secondary schools in Kaduna State are urged to step up more of their efforts in supervisory functions in order to sustain improvement on students' academic performance. These extra efforts are hoped to subsequently assure positive and significant effect on students' academic performance.

ii. Principals of schools are enjoined to enrol fresher and refresher courses in educational management, particularly for those heads who are coming from science, technical and art backgrounds. Education courses such as personnel management, managerial psychology and organizational theories, amongst others, will have a long way in shaping their understanding in motivation theories and education leadership in school organization.

iii. Post graduate qualifications in educational management should be included and emphasized as one of the requirements for candidates wishing to be appointed as principals of secondary schools in the State.

REFERENCES

Adebola, A. A. (2015). Perceptions of stakeholders on prevailing leadership styles of principals in secondary schools in Zaria and Giwa educational zones in Kaduna state, Nigeria. Unpublished Thesis for the Award of Master of Education in Educational Administration and Planning, Ahmadu Bello University, Zaria.

Aja-Okorie, U. & Ogbonnia, O. N. (2021). Principal's supervisory functions in the management of secondary schools for quality assurance in Abakiliki education zone of Ebonyi state, Nigeria. *IDOSR Journal of Arts and Management,* 6(1): 70 -79

Aja-Okorie, U. & Usulor, V. I. (2016). Analysis of principals' motivational practices for teachers' effectiveness in public and private secondary schools in Ebonyi state, Nigeria. *Journal of Public Policy and Admini-stration Research,* 6(2): 74 – 83

Alafiatayo, B. M., Anyanwu, R. & Salau, O. A. (2016). Effect of selected teachers' abilities on students' attitudes and academic performance in Biology among secondary schools in sabon–gari local government area, Kaduna state, Nigeria. *International Journal of Research and Method in Education*, 6(2), 24 –29

Dangara, U. Y. (2015). The impact of instructional supervision on academic performance of secondary school students in Nassarawa state, Nigeria. *Journal of Education and Practice,* 6(10): 160 – 167

Duruh, B. C. (2018). Planning, supervision and quality of instructional leadership of girls' day secondary schools in Kaduna state. *Journal of Education and Entrepreneurship*, 5(1), 10 – 19

Ezema, O. & Ogunshola, R. F. (2020). Impact of principals' motivational techniques on students' academic performance in federal capital territory junior secondary schools, Abuja, Nigeria. *BSUJEM,* 2(1): 116 – 126

Gwamna, S. K., Jatau, A. & Ugwu, L. (2021). Effects of class size on performance and attitude in ecology among senior secondary students in sabon-tasha, kaduna state, Nigeria. *International Journal of Research in Education, Humanities and Commerce,* 2(2), 13 -22.

Igunnu, A. A. (2023). Enhancing teachers' motivation strategies and performance effectiveness in selected secondary schools in kaduna state, Nigeria. *International Research Journal of Education and Technology,*5(6), 322 -332

Iliya, Y. (2016). Stakeholders' perception of principals' use of transformational and transactional leadership styles in secondary schools in Kafanchan education zone in Kaduna state. *International Journal of Educational Benchmark,* 4 (3): 95 - 108

Jideofor, E.N. (2022). Principal's admini-strative strategies for effective teachers' job performance in secon-dary schools in Awka south local government area. *International Jour-nal of Innovative Social and Science Education Research,* 10(1): 48 – 61

Kaduna Education Strategic Plan, (ESP, 2013). Reviewed Kaduna State Education Strategic Plan,2006–2015.

Kaduna State Education Sector Strategic Plan, (2019). Kaduna State Government Education Sector Strategic Plan, 2019 – 2029.

Modibbo, A. T. (2017). Influence of principals' leadership on the maintenance of facilities in secondary schools in Kaduna state Nigeria. Unpublished Thesis for the Award of Master of Education in Educational Administration and Planning, Ahmadu Bello University, Zaria.

Olufunmilola, O. E., (2020). Principal administrative challenges and funding for teachers' effectiveness in secondary schools in Ekiti State. *European Scientific Journal,* 16(10): 171 – 180

Omoniwa, F. A. & Kabir, Z. A. (2023). Assessment of principals' supervisory roles towards enhancing teaching and learning in public secondary schools in Sabon Gari local government area, Kaduna state. *Journal of Contemporary Issues in Education,* 7(1): 103 113

Uhaa, C. D. (2017). Assessment of principals' role performances in the management of secondary schools in Kaduna metropolis, Kaduna state, Nigeria. Unpublished Thesis for the Award of Master of Education in Educational Administration and Planning, Ahmadu Bello University, Zaria.

Uthman, K. Y. & Kassim, A., (2016). The impact of leadership styles of principals and teachers of secondary schools in Kaduna State, Nigeria: using school environment as a tool for school achievement. *International Journal of Advances in Management and Economics,* 5(2): 61 - 72

Uwaleke, G. C., Emeka, I. F. & Sani, Y., (2021). Principals' instructional supervisory roles and teachers' job performance in public secondary schools in Ekiti state, Nigeria. *African Scholars Journal of Contemporary Education Research*, 21(8): 1 - 15

An Assessment of Qualitative Education Delivery in Nigeria: A Case of Sustainable Development Goal Paradigm

By

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ABSTRACT

The study assessed the extent of qualitative education delivery in Nigeria and its impact in achieving the Sustainable Development Goals (SDG). The study's objectives assessed government attitudes towards quality educational delivery, determine the level of government investment in education and evaluate how government policies have fared towards the development of education. Descriptive survey research design was used. Academic staff from three tertiary institutions in Southwest, East, and South formed the population of the study. Simple random sampling technique was employed to select forty academic staff each from the three Universities hence 120 Academic Staff members were selected for this study. A self-structured 4-Likert Scale Questionnaire titled, "Assessment of Qualitative Education Delivery in Nigeria: A Case of Sustainable Development Goal Paradigm Questionnaire" (AQEDNCSDGPQ) was used to generate data. Content and construct validity of the questionnaire was established by relevant experts while the use of Split-half reliability method, (r) value of 0.889 was obtained. Analysis of Covariance, ANCOVA is used to analyse the data and tested at 0.05 significant level. The study revealed that the government's attitude towards education, its investment level in the sector, and policy formulation contribute immensely towards the provision of quality education. It then concluded that for Quality Delivery of Education to be assured, the government must show positive behavior towards education, improvement in resource allocation by way of investment, and formulation of functional policies among others. It then recommended that only skilled personnel and professionals with sound educational backgrounds should be recruited to manage the education sector.

Keywords: Quality Education, Delivery, SGDs, Assessment, Skilled

Introduction

Education is widely recognized as a major instrument for socio-economic develop-ment both for an individual and the nation. It is also recognized as a fundamental right of an individual and a means of raising political and social consciousness. Similarly, it equips an individual with the necessary skills, knowledge, and competencies to function effectively in society and to enable them to contribute

their respective roles to the overall progress of their community and the nation thereby reducing poverty and inequality and thus empowering marginalised groups through access to quality education. In addition, it helps to increase the number of skilled workers needed to the level of manpower, and its curricula are designed to instill a sense of national unity, and civic duty and to spread common social mores, ideologies, and language (Federal Government of Nigeria, 2013). This made Akinyemi (2013) assert that education is at the threshold of a country's development as it influences and moderates the level and dimensions of development in a nation. Literature has shown that education is the key driver in human capital formation, it helps in the quality of life, labour, and quality work life of the country (Akinyemi, 2013; Kaul, 2010), enhances the acquisition of skills and knowledge for economic productivity of a nation (Ekundayo & Ajayi, 2009)

On the other hand, quality education improves critical thinking, creativity, and problem-solving abilities, which are crucial for innovation, entrepreneurship, and sustainable development. The concept of quality is therefore paramount and essential to the sustenance and attainment of the goals of education which includes harnessing human/material resources by utilizing hi-tech gadgets/devices, and materials for the production and distribution of goods. The quality of education is seen as the balanced maintenance of education (its outcomes, processes, and environment) with identified needs, goals, requirements, norms, and standards.

Literature Review

Qualitative Education

The provision of qualitative education provides avenues for learners with the required capabilities to become economically productive and enhance their individual well-being so that they can contribute meaningfully to the development of their society. To achieve this, there must be proper funding of education and putting in place a quality assurance mechanism to ensure that the goals of education are being met. Similarly, the school environment must be devoid of insecurity and fear and have adequate teaching and learning equipment that will enhance students' outcomes through motivated staff and students. According to Obasi (2010), some of the indicators of quality and functional education include the effective and efficient performance of employability of graduates both locally and internationally based on the skills attained. Similarly, there is the admissibility of graduates to postgraduate studies with remedial conditions and the high rating of the institution both nationally and globally, etc.

Olujuwon (2006), Njoku (2007), and Obanya (2015) identified a positive attitude toward education claiming that if all stakeholders have a positive mindset toward education, there would be an increasing value for education as qualitative education is only directed and channel towards the sustenance of development. Education remains the only wheel of change that has the tendency to transform underdeveloped economies into developed economies. It corrects the problem of balance of payment deficiency usually experienced by countries, increases the quality of human capital development, and increase investment, modifies students'/ learners' behaviour and attitude towards effective change in learned concept among others.

National Policy on Education and Qualitative Education

The Federal Government of Nigeria's National Policy on Education, (2013) emphasized the importance of quality management in education by stating that successful education depends on good planning, effective administration, and enough funding—all of which are management-related factors. It anticipates that these management services for education will accomplish several objectives, including providing effective managerial and administrative oversight for system upkeep and development. In addition, it ensures quality control of instruction and other educational services through routine and ongoing supervision (Ibiam, 2014). To further emphasize the value of education, Okebukola (2013) lists the following as contributing factors to educational sustainability for a nation's economy such as fostering creativity; encouraging research for ground-breaking discoveries; reducing poverty; advancing gender equality; and enhancing health.

Thus, it could be deduced that education is the cornerstone upon which the economic, social, and political growth of a country is anchored and the bedrock of the sustainable development of any country. Thus, the management of high-quality education is crucial for attaining sustainable development in Nigeria, a nation with a growing population and many obstacles and these have far-reaching implications for sustainable development.

Since education is concerned with the nurturing of human potential for the integral continuous development of tasks to harness potentials for the development of society to ensure sustainable human progress, sustainable development is defined as the development that promotes the integration of individuals' activities without compromising the integral development of an individual's future (United Nations World Commission on

Environment and Development (WCED, 1987)

Sustainable Development Goals

The sustainable development goals (SDGs) are an international agenda that several nations adopted in 2015 with the aim of eradicating poverty, preserving the environment, and ensuring that everyone lives in peace and prosperity. The 169 targets of the Sustainable Development Goals, also known as Vision 2030, are aimed at eradicating poverty in all its manifestations, including severe poverty, and addressing the world's most pressing problems. The objectives and benchmarks are global; that is, both developed and developing nations can use them. To achieve these goals, action must be taken in every area of the country, including government, the economy, civil society, the education sector, and the citizens in general. By adopting the agenda, all participating nations agreed to take the bold and transformative steps that are urgently needed to move the world toward a sustainable path. The SDGs are regarded as the road map for building a better, more sustainable future for all. The 17 interconnected goals, which address all facets of the world's concerns, are all expected to be accomplished by 2030.

This aligns with Nigeria's road to SDG Country Transition Strategy (2015) that the aim of SDG is to build on and finish the unfinished business of the MDGs. Also, to realize universal human rights, achieve gender equality in all spheres of life, and, most importantly, strike a balance between the economic, social, and environmental dimensions of development. Aguene (2021) informs that SDG is about people, their well-being, and equality in their interpersonal connections are at the heart of sustainable development in a setting where imbalances between nature and civilization might eventually lead to economic and social stability. According to the UN DESA's Statistics Division 2019, some of the important measures of sustainable development goals include technological advancement for innovation, reduce, reuse, and recycle appraisal, promoting environmental education and awareness, Resource utilization as per caring capacity, and improving quality of life including social, cultural, and economic dimensions.

Perspective on Sustainable Development

Sustainable development, or SDG, is defined by Aguene (2021) is meeting present needs without compromising the ability of future generations to meet their own. The concept of needs involves involvement, connections, and ideals in addition to basic bodily necessities. Ending hunger and poverty, providing a healthy life, ensuring everyone has access to

necessities like clean water and sanitary facilities, utilizing renewable energy sources, and encouraging inclusive education and good work are all ways to achieve this. The expenses and benefits of development must be shared by all members of a community. Everyone in the community must participate in the development, in other words. According to Dukun (2008), in Osaat and Uche (2018) sustainable development is a new way of life and approach to social and economic activities for all societies, rich and poor, that is compatible with the preservation of the environment. Thus, higher education has a significant role to play in achieving these goals, including in the areas of economics, development, research, and social systems. Therefore, actions must be taken in every sector of the nation, including the government, the economy, civil society, the educational system, and the general population, to accomplish these aims. All attending countries decided to take the drastic measures that are urgently required to steer the globe onto a sustainable course by approving the agenda. The SDGs are seen as the blueprint for constructing a better, more sustainable future for all. All 17 connected objectives, which cover every aspect of the world's problems, are anticipated to be completed by 2030. According to Olujuwon (2006), embarking on the path of sustainable development will

require a profound transformation in how we think and act. To create a more sustainable world and to engage with sustainability-related issues as described in the SDGs, individuals must become sustainability change-makers. They require the knowledge, skills, values, and attitudes that empower them to contribute to sustainable development. Education, therefore, is crucial for the achievement of sustainable development. However, not all kinds of education support sustainable development. Education that promotes economic growth alone may well also lead to an increase in unsustainable consumption patterns. The now well-established approach of Education for Sustainable Development (ESD) empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability, and just society for present and future generations.

Barriers to Implementing the Sustainable Development Goals

Literature has shown barriers against the effective management of qualitative education in Nigeria which will affect achieving the MDG Goals. Nwaokugha and Ezeugwu (2017) and Etesike (2011) highlighted some of the problems including the absence of quality input, inadequate funding, inadequate infrastructural facilities, inadequate qualified teachers, the

problem of poor policy implementation incessant strikes, poor supervision, and examination malpractice. Similarly, Iwundu and Thom-Otuya (2014) observed that some of the challenges are incessant strike action, inadequate funding, politicization and abuse of the education sector, bribery and corruption, unemployment, and lack of emphasis on entrepreneurship education. In the context of the African States, Achuonye (2013) indicated that efforts to achieve quantity and quality education have been constantly dashed because of several issues related to poverty, underdevelopment, and the prevailing political situation which manifests in the form of a debt burden, population rate, general instability, low skilled manpower, and not keeping pace with global trends. Iwundu and Inko-Tariah (2015) added intellectual dishonesty among teachers, pull-it-down syndrome, and justice ability in the right to education as factors militating against quality education in Nigeria. The study of Olujuwon et al (2023), Chukwudi and Amah (2019) reveal underfunding, poor infrastructure, inadequate classrooms, and teaching aids (projectors, computers, libraries, laboratories, etc), paucity of quality teachers and dedication of teachers to their work, poor or polluted learning environment, social vices like examination malpractices, cultism, corruption, and

infant hooliganism as well as poor governance and management and poor implementation of policies. In the same vein, Lawrence, Ihebuzor, and Lawrence (2020) identify political preferences regarding competing development needs and poor planning, poor expenditure control, inadequate funding, the little relationship between planned and actual expenditure, inadequate reporting, poor checks, and balances, and too much input-based budgeting at the expense of results-based budgeting. The UN Report of 2019 reveals gender disparity and a big urban-rural divide between the North and the South due to the Almajiri culture and insecurity, kidnapping, and pervasive refugee situation all contributing to low school enrolment and the out-of-school children coupled with the neglect of learning environment and facilities. In addition, Nwankwo and Nweke (2016) noted that the education sector is riddled with corruption and corrupt practices such as misappropriation of budget allocation, cronyism, and an abundance of ghost workers which make it difficult to achieve developmental educational goals.

The above is not only peculiar to Nigeria as Kanayo, Kizito, and Patrick (2013) posited that there are prominent challenges that hamper the achievement of sustainable development goals in Africa including extreme poverty, rapid population growth

rate, rapid urbanization, deforestation, the environmental impact of extractive industries, rate of economic growth, rural development, climatic variability, and natural environmental hazard. The study of Adegbami and Adesanmi (2018) concludes that education is a requirement for the all-around transformation of people and societies, its neglect through poor funding, outdated curriculum, and poor policy portends a danger to the sustainable development of a rapidly population-growing Nigeria. This is corroborated by Osunwusi (2020) in his conclusion that Nigeria still has a long way to achieving the SDGs.

Statement of the Problem

Nigeria is the most populous black nation in the world and has an estimated population of about 200 million people. The country is endowed with abundant human and material resources and one of the major oil producing countries in the world. The country is a signatory to the United Nations Sustainable Development Goals (SDGs) and has committed to ensure inclusive and equitable quality education for all by 2030. However, despite her quest for development and in recognition of education as an instrument for attaining national and sustainable development, and substantial investment in education access and management of qualitative education

remains a big challenge. This is due to the persistent challenges and inadequacies in qualitative education delivery within the framework of the SDGs, and this problem is multi-faceted and complex coupled withinconsistencies, non-implementation of educational policies and agreement with various unions, corruption and corrupt practices perpetrated by the stakeholders. There is disparity in access to education between regions due socio-economic indices and there is no equity in distribution of resources. In rural areas of the country, many children still lack access to quality education and this disparity threatens the achievement of SDG. UNESCO (2021) asserted that Nigeria has the highest number of out-of-school children in the world, with over 10 million children out of school. Similarly, the quality of education offered in the country is poor with low levels of literacy and numeracy among students due to the shortage of qualified teachers in most core courses. The curriculum content is outdated and irrelevant to the needs and aspirations of the society in this 21st century knowledge economy may not align effectively with the goals and targets set out in the SDGs due to inadequate innovative pedagogical approaches. In addition, there is no strong commitment to educational issues by successive government due to inadequate funding which has led to dilapidated and

obsolete facilities creating an environment that stifled students' potentials and negligence on investment in-service training for teaching personnel among others form a catalyst for reform in the educational sector if sustainable development goals' is to be achieved any time soon in the country. There is the need to access disparities and cultural attitudes towards education and see whether the education system adequately prepares students to contribute to the country's sustainable development. As poorly educated and not thoroughly grounded workforce may struggle to compete in the global market, potentially hindering Nigeria's economic development. Thus, the effectiveness of policies and governance structures in driving educational quality and aligning education with SDGs is a critical concern. Ensuring that policies are effectively implemented and monitored is crucial. the establishment of the Sustainable Development Trust Fund (SDF) saddled with the responsibility of enforcing economic, social, and environmental sustainability is necessary with the strengthening of relevant constitutional framework on education and integrating the philosophies of sustainable development in education and training at all levels. Kanayo. Kizito & Patrick, 2013; Osunwunsi, 2020).

Research Objectives

The crux objective of this study is to assess the extent of Qualitative Education Delivery in Nigeria: A Case of Sustainable Development Goal Paradigm. However, its specific objectives were to:

1. Assess government attitude towards Quality Educational Delivery
2. Determine level of Government investment in Education
3. Evaluate how government policies have fared towards Development of Education

Hypotheses

$H0_1$: Government attitude does not significantly contribute to Quality Educational Delivery in Nigeria

$H0_2$: Level of Government investment does not significantly contribute to Quality Education Delivery in Nigeria

$H0_3$: Dynamics in Government policies does not significantly contribute to Quality Education Delivery in Nigeria

Research Methodology

A descriptive survey type of non-experimental design was used in this study since it is a design type that gives the opportunity to study a large sample of entities by selecting and studying samples chosen from the population so as to discover the relative incidence, distribution, and interrelations of sociological and psychological conditions; Academic staff from tertiary institutions in Nigeria formed the population while the accessible

population Comprised of academic staff from Lagos State University of Education, Lagos, University of Uyo, Uyo, and Imo State University, Owerri respectively. A purposive sampling technique was first adopted to select the aforementioned Universities (Cutting across SW/SS/SE). Thereafter, a simple random sampling technique was further employed to select forty academic staff each from the three listed Universities hence 120 members of academic staff selected for this study. A self-structured was used to generate data. This Questionnaire instrument was divided into two sections: Section A generated items on respondents' biodata while Section B generated statement 20 closed-ended items on 4-Likert scale type of SA, A, D, and SD. The instrument was validated by 3 Academics from the College of Management Science Education, Epe annex of the same institution. They claimed the instrument meet content and construct

validity after addition, modification, and removal of poor items.The reliability of the self-designed Questionnaire and Examination Questions was determined on 20 academics at Lagos State University, Ojo. The use of the Split-half reliability method, (r) value of 0.889 was obtained meaning a positively high correlation that the instrument is reliable and relevant to this study. A copy of the instrument was developed on goggle form and sent to colleagues on their platforms in their respective institutions through the help of fellow colleagues in those institutions. Analysis of Covariance, ANCOVA is used to analyse the data and tested at 0.05 significant level.

Data Presentation and Result Interpretation

$H0_1$: Government attitude, level of government investment and dynamics in policies does not significantly contribute to Quality Education Delivery in Nigeria

Table 1: Estimate of the relative Contributions of Government attitude, level of government investment and dynamics in policies and Quality Education Delivery

Dependent Variable: Quality Education Delivery

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	5.622[a]	5	1.725	2.851	.017
Intercept	25.399	1	25.399	55.201	.000
Government attitude	2.124	1	2.124	5.162	.024
Level of Investment	3.867	1	3.867	8.047	.005
Dynamics in Policies	0.438	1	0.438	.716	.039
Investment*Attitude	0.282	1	0.282	.459	.040
Policies* Attitude	0.005	1	0.005	.692	.009
Attitude*Investment	0.679	2	0.054	.525	.002
Error	104.370	104	1.002		
Total	1309.004	120			
Corrected Total	214.001	119			

R Squared= 0.674 (Adjusted R Squared = 0.431)

Table1 above shows that Government attitude, its level of investment and dynamic policies do significantly contribute to the Quality of Education Delivery. (Government attitude: $F_{(1,120)}$= 5.162, p=0.024, partial eta=0.090; Level of government investment $F_{(1,120)}$= 8.047, p=0.005, partial eta=0.122; and dynamics in government policies $F_{(1,120)}$= 0.716, p=0.039, partial eta=0.160; This implies that Government attitude, investment in education and dynamics in government policies account for 9%, 12.2%, 16% respectively which amounted to 37.2% for the variance in this work while 62.8% can be accounted for by variables outside this study. By implication, it can be upheld that government attitude, level of investment in education and dynamics in policies are good contributors to Quality Education Delivery in any clime.

Discussion of Findings

It can be recalled that Sustainable Developmental Goals, SDGs is an upshot from Millennium Developmental Goals, MDGs. From SDGs, it would be right to state in specifics that all the goals can only come to reality if Education is viable. Education is the root and vehicle through which all programmes and policies are sustained. The nature of Education provided in a country will determine the kind of development to be experienced.

From this study it was revealed that for Quality Education Delivery to be assured in Nigeria, the government must develop a positive attitude towards education; there must be deliberate action to bring about improved and quality investment in education; Also, the dynamics in government policies should be such that is aimed at ensuring that contents in the Curriculum are reviewed to ensure that they are relevant and addresses the needs of the larger society.

The outcome of this study is in connection with that of Olujuwon (2006), Njoku (2007) and Obanya (2015) who stated that the government should develop a positive attitude towards its education. They went further to stress that developing a positive attitude towards education would go a long way to enlighten them that the successes of those developmental projects are tied to Quality education. No doubt Sustainable Development Goals were designed to facilitate rapid development among economies as it allows them to set long term plans and work towards achieving them; It was also established that level of Government investment do significantly contribute to Quality Education Delivery in Nigeria. This corroborates the findings of Obanya (2015) who noted that quality investment in Education by way liberally increasing the budgetary allocation accrued to education sector, funding programmes

designed to improve on teachers, learner (students and pupils), refurbishment of schools across the nation, upward review of teachers salary in line with the current economic situation, employ only competent and trained personnel, provision of good housing and transportation schemes for teachers, hitch free retirement plan, well-structured leave plan among others. A government that provides this to improve on the quality of education in her country will end up bringing about Quality service delivery in Education because such a sector will look attractive and innovative thereby attract the best brains, by so doing SDGs can thrive. Moreso, it was established that formulation of Government policies does significantly contribute to Quality Education Delivery in Nigeria. This outcome was in consonance with that of Nwaokugha, Ezeugwu (2017) and Etesike (2011) noted that Nigeria is very good at formulating policies but often confronted with issues surrounding implementation. Most times these numerous policies summersaults may lead to systemic corruption, inadequate disbursement of resources to emergent segments/areas, incessant strike actions, poor supervision, increase in the involvement of students, teachers and school managers in vices practice, production of half-baked graduates among others.

Conclusion

The study examined the extent of qualitative education delivery as a catalyst for achieving the SDG in Nigeria. The study reveals that SDG was planned to facilitate rapid development among economies of the world as it allows them to set long terms plans and work towards achieving them. Therefore, the management of qualitative education is the key indicator in achieving SDG through accessible, functional, and result-oriented education. The study further reveals that a change in Government attitude towards education will go a long way to improve quality delivery in Nigeria and will enhance the achievement of SDG Goals. Similarly, the level of continuous investment by government will also cascade the delivery of quality education. Above all, the dynamics in Government policies be it positive or negative goes a long way to determine the delivery of quality education in Nigeria. However, the literature reviewed in the study reveals the bane of achieving SDGs includes non-implementation of policies, inadequate funding, facilities, and teachers and these must be confronted in achieving SDGs in the country. Similarly, socio-economic, political, and religious factors that inhibit positive and result-oriented development must be removed as they stifle growth and development. The study concludes that the

government must show positive behavior towards education, improvement in resource allocation by way of investment, and formulation of functional policies among others. Similarly, there is a wide gulf in gender discrimination which is associated with religious, societal, and cultural biases and this violates the fundamental rights of Nigerian as enshrined in the 1999 constitution. Also, the educational sector suffers from the inability of the government to effectively implement its policies to promote quality education.

It could be deduced from the study that a key driver of sustainable development in Nigeria is the administration of high-quality education. Despite its difficulties, the nation has the capacity to improve its educational system and benefit from a well-educated citizenry. Nigeria can unleash the transformative power of education and open the door to a more prosperous and inclusive future by investing in infrastructure, creating public-private partnerships, improving teacher development, and pushing curriculum reform. Policymakers, educators, members of civic society, and other stakeholders must collaborate to achieve the aims of education.

Recommendations

The study recommends among others that:

- There should be a conscious change in government behavior towards education as it is seen as the only sector that does not contribute significantly to nation building by way of no resource generation hence why previous and present governments have always allocated little or nothing significant to the sector.
- Only competent personnel should be saddled with formulation or review of policies in Education so that experts in the field of education can successfully design and postulate policies that are out to address students, Teachers and educational managers related challenges in the school environment.

REFERENCES

Adegbami, A.,& Adesanmi, O.(2018). Nigeria's educational system and sustainable development goals' attainment: A wild goose chase https://www.researchgate.net/publication/329140179

Achuonye, K. (2013). *Comparative education in Africa and beyond*. Port Harcourt: Pearl Publishers.

Aguene, I. N. (2021). An appraisal of the iimplementation of Sustainable Development Goals2030 in Nigeria. *Journal of Social Sciences*, 6(2), 1-23.

Akinyemi, G. (2013). Quality administration and management in higher education in Nigeria:

Implications for human resource development. *International Education Studies*, 6(4),225-235.

Chukwudi, D.E., & Amah, E. (2019). The decline quality of education in Nigeria as it affects the enterprise manager. *International Academic Journal of Management and Marketing*, 6(4), 1-6.

Dokun, O. O. P. (2008), *Sustainable Development: Issues and Challenges for Nigeria.* Ibadan: Graphic Nig. Ltd.

Etesike, C. (2011). Education as an instrument for security and national development: Challenges ahead. In: A. O. Abobale., C. M. Ogbodo and B. U. Maduewesi, (Eds), *Contemporary issues in Nigerian education*. Onisha: West and Solomon publishing company

Ekundayo, H. T., & Ajayi, I. A. (2009). Towards effective management of the university education in Nigeria. *International NGO Journal, 4*(8), 342-347.

Federal Ministry of Information. (2015). Nigeria's Road to SDGs, Country Transition Strategy. Abuja: Unpublished Manuscript.

Federal Government of Nigeria. (2013). *National Policy on Education*. Lagos: NERDC Press.

Hauwah, K.K. A.,Sodiq, O.J., & Olatunji, M.S. (2022). Socioeconomic development and sustainable development in Nigeria: The roles of poverty reduction and social inclusion. *Journal of Business and Socio-economic Development*. doi:10.1108/JBSED-10-2021-0137

Ibiam, N. (2014). Quality management of universities education in Nigeria: An appraisal. *African Research Review*,8(3),201-203.DOI: http://dx.doi.org/10.4314/afrrev.v8i3.17

Iwundu, C. O., and Inko-Tariah, D. C. (2015). *Evaluation of crises in the Nigeria's education sector: Implications for the Nigeria State. Educational Research International*, 4(4).

Iwundu C. O., and Thom-Otuya B. Z. N. (2014). Nigeria education sector and security challenges: The journey so far (unpublished work).

Kanayo, O., Kizito, E.U., & Patrick, U.(2013). The challenges and implications of sustainable development in Africa: Policy option for Nigeria. *Journal of Economic Cooperation and Development*, 34 (4), 77-112.

Kaul, J. N. (2010). *Higher education, social change and national development.* http://14.139.58.196:8080/xmlui/handle/123456789/169

Lawrence, A. W., Ihebuzor, N., & Lawrence, D. O. (2020). Some Challenges Militating against Developing Countries Achieving SDG 4 on Targets: Nigeria as Case Study. *Modern Economy,* 11, 1307-1328. https://doi.org/10.4236/me.2020.117093

Njoku, Z. C. (2007). Improving Female Access to Education in Northern States of Nigeria. The perceptions

of teachers, parents and community leaders. *Journal of the Nigeria Academy of Education* (JONAD),3 (1), 44-60

Nwankwo, B.C. & Nweke, P.O. (2016). Effect of Corruption on the Educational System: A Focus on Private Secondary Schools in Nsukka Zone, *Nigeria. Global Journal of Human— Social Science*, 16, 59-67.

Nwaokugha, D. O., & Ezeugwu, M. C. (2017). Corruption in the Education Industry in Nigeria: Implications for National Development. *European Journal of training and Development Studies*, 4, 1-17.

Obanya P. (2015): Sustainable Human Development is all about Education at the second Inter-Disciplinary conference Global Initiatives for Integrated Development, Chukwuemeka Odimegwu Ojukwu University.

Obasi, O. (2010). Qualitative and functional education as a social imperative for authentic national development: The Nigerian situation. *School of Business and Management Technology Conference Journal*, 1(1): 5-14.

Ogbodo, C. M.. Nwaoku, N.A.,& Ekere, S.C.O.(2007). Quality Assurance in Higher Education, *Towards Quality in African Higher Education*.pp 247-254.

Okebukola, P. (2013). Open Education and the March to 2020: Can Nigeria Make It? *Text of 2nd Pre- Convocation Lecture*, National Open University of Nigeria, 18 January, 2013.

Olujuwon, O.T. (2006). Transforming the Nigerian Educational System, a paper presented at the 3rd Vittachi conference on rethinking educational charge at Al-Akwayne University, Ifrane, Morrocco.

Olujuwon, O., Omiyale, O.P., & Olujuwon, M.T. (2022). Management of school facilities on academic achievement of students in public secondary schools in Badagry Local Government Area of Lagos State. *International Journal of Educational Research and Policy Making,* *5*(1),988-1001. doi**:** 10.13140/ijerpm.05.01.920. (Local)

Osaat, S. D. & Uche, C. M. (2018) *Globalization of Higher Education and the Advancement of Sustainable Development Goals.* Port Harcourt: University of Port Harcourt Press Lt Osunwusi, A.O.(2020). The Nigerian education milieu in the SDG era: The roles, values, challenges and prospects of ODL and lifelong learning. *International Journal of Learning and Development,* 10(1), 140-158.

United Nations Publication (2020). *Progress the Sustainable Development Goals*. United Nations Publication.

The Sustainable Development Report (2019) UN DESA's Statistics Division 2019 United Nations Publication. United Nations Publication.

United Nations (2015) Millennium Development Goals Report (New York) UN Publication.

United Nations (2019). *Sustainable Development Goal Report*, New York: UN Publication

World Commission on Environment and Development (1987) our common future. New

York: Oxford University Press for the Bruntland Commission

Assessment of the Utilization of Microsoft Project Management Software by Construction Companies in Kano State, Nigeria

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ABSTRACT

This study was conducted to assess the utilization of Microsoft project management software by construction companies in the state. Three research questions guided the study and a descriptive survey research design was employed for the study. A Total of 34 construction companies were selected for the study using purposive sampling technique. The instrument used for data collection was 22 items questionnaire which was titled "questionnaire for project managers". It was validated by three experts, one from the department of Science and Technology Education, Bayero University, Kano, and the other two from the department of Industrial and Technology Education, Federal University of Technology Minna. The reliability coefficient of the instrument was 0.87 using cronbach Alpha statistics. A Total of 34 questionnaires were distributed among construction managers. In analyzing the data, mean and standard deviation were used. Findings of the study revealed that, construction companies were not utilizing the software for project management. The benefits of using the software includes the ability of the software to help users in monitoring the progress of work, forecasting feature resources, managing budget and staying focused and organized. Expensive nature of the software, difficulty to open in other system that does not have the software and lack of customization features were some of its obstacle. Based on the findings, it was recommended that construction companies should train their construction managers on how to utilize the software for the management of resources in order to complete the projects on time, within budget and with high quality.

Keywords: Assessment, Microsoft, Management, Software, Construction Companies

Introduction

Project management in construction is the process of planning, organizing and directing each part of the project life cycle from initial stage to the completion. It is the application

of knowledge, skills, tools and techniques to project activities to meet project requirements through the integration and application of project management processes which includes initiation, planning, implementation, controlling, monitoring and termination of a project (PMI, 2004). According to Hexagon (2023), project management is a holistic practice with the goal of delivering projects on time and within budget but is also complex discipline that requires addressing many important concerns, including cost control, scheduling. Procurement, and risk assessment that requires project managers to make proper planning and scheduling of resources to each and every construction activity. To make the scheduling of resources easy and more efficient, a construction manager can opt for making use of any of the project management software for the scheduling of construction resources.

Project management software are packages commonly used for resource scheduling. According to Robert et al (2013), Project management software generally facilitates the integration of project data, the interaction with enterprise systems and the interoperability with new information Technology (IT). Besides optimizing the productivity of the teams, the system allows

to make better decisions, maintain a competitive advantage and to implement an effective project management. Joydeep et al (2015) stated that, the modern project management practice is complicated to an extent that it cannot operate without the assistance of project management software such as Micro Soft Project (MS Project).

The MS Project software was developed and sold by Microsoft to support project managers in growing a plan, assigning assets to responsibilities, tracking development, handling the finances, and studying workloads (Subramani and Karthick, 2018). Gantt Chart and Critical Path Method (CPM) are the most common features of MS project software. The Gantt chart which is a planning tool and one of the most important features of MS project is used to get an overview of the entire project on visual timeline which shows the work that is schedule to be done on specific days. It helps the project managers and team members view the start dates, end dates and milestones of a project schedule in simple stacked bar chart. Novakova and Novy (2021) stated that detailed and realistic planning is required for project management and monitoring and the Gantt Chart enables to monitor the continuity of individual project parts as well as the degree of

fulfillment of the given tasks and the overall time required.

According to Matthew, Bruce, & Colleen (2001), the utilization of project management (PM) software such as MS project as a tool for managing and organizing work has grown and continues to grow at a rapid pace in all industries. The software can be used to perform many task such as identifying critical activities using critical path method (CPM). Svozilova (2016) stated that one of the most important network diagram which is used to plan the individual project activity sequences is compiled by the Critical Path Method (CPM) which serves as a project management tool developed based on the search of project critical path - the longest sequence of project tasks that do not contain any time reserves.

The software can also be utilized in the management of project through Scheduling of resources. The scheduling of resources is one of the vital functions in construction project to determine the sequence of activities necessary to complete a project. Scheduling of resources with MS project software requires the efficient and appropriate allocation of all the resources to various construction activities involved in the project to be executed. The execution of the

scheduled task work based on the resource availability as defined in the resource calendars. Novakova and Novy (2021) stated that the scheduling of the project forms an integral part of the project plan and contains all the information on the dates and time sequences in which the project work takes place and to be completed by the construction companies

Construction companies are responsible for executing construction project through proper planning and coordination of construction activities, in order to complete the project within the stipulated time, budget and quality. To achieve this, the contractors must determine the best methods to finish the project as specified in the project documents. One of the best method is to make use of the project management software such as MS project to helps them in fulfilling the various requirements of the project. Hoang, Nhat and Swostik (2014) hinted that the main function of software is to offer help, and enhance the quality of output with less effort than manual ways. A project has disparate requirements and the aim of the adopted software is to fulfill those requirements effectively in terms of time and cost. In addition, the issues of scheduling, tracking and physical element

must be considered while adopting the project management software.

Various literatures have emphasized the important of using project management software for the management of construction activities. Nikhil, Dwivedi and Trivedi (2020) conducted a case study on the effective scheduling using MS project in the construction of two floor residential building in Gwalior. All the construction activities were copied in MS Project software and the scheduling was done. It was found out that many days were saved due to the used of the software as when compared to traditional method. However, Rhuta et. al. (2015) carried out a research study by using MS project 2013 aims at minimizing the duration of the project. After allocating the resources, he concluded that the use of project management software helps in reducing lost of resources.

Despite the numerous benefits of MS Project software, yet, many construction companies do not perceive the benefits of using the software for the purpose of managing their resources. This may be associated to the lack of competent employees, in addition to non readiness of construction companies in changing toward using modern devices (pavel, Anna and Yuriy, 2016). This is what prompted the researcher to embark on this study to assess the utilization of MS project software by the construction companies in Kano state Nigeria.

Statement of the Problem

Contract in construction is an agreement between the contractor executing the construction work and the client who is hired to do the work, spelling out clearly the scope, terms and conditions of the project, which include the type of work to be done, the starting and finishing time, the total cost, as well as the quality of the construction project. several construction companies were experiencing delay problem in construction which lead to construction disputes that may terminate the contract or even claims threatening the contractor's surety bonds if unmitigated, thereby violating most of the contract agreement. Yang, Chen and Huang (2012) stated that construction delays and duration issues are frequently responsible of transforming productive ventures into loosing projects. These delays can be reduced or prevented by an increased pre- project planning and successful project management as they are one of the most critical success factors of the construction project accomplishment. The utilization of project management software such as MS project will help the project managers in planning

and scheduling their resources thereby effectively managing the construction project within budget, time and quality. Meredith and Mantel (2001) stated that Project Management software helps Project driven organizations deliver high quality products and services within a short time with fewer costs. Based on the foregoing, therefore, the study was designed to assess the utilization of MS Project management software by construction companies in Kano state, Nigeria.

Objectives of the Study

The aim of the study is to identify the level of utilization of MS Project management Software by construction companies in Kano state, Nigeria. Specifically, the study seeks to determine

1. The usage of MS project management software by the construction companies in Kano state, Nigeria.
2. The perceive benefits of using MS project management software by construction companies in Kano state, Nigeria.
3. The challenges of using MS Project management software by construction companies in Kano state, Nigeria.

Research Questions

1. What is the MS project management software being used for by the construction companies in Kano state, Nigeria?
2. What are the perceive benefits of using MS Project management software by construction companies in Kano state, Nigeria?
3. What are the challenges of using MS Project management software by construction companies in Kano state, Nigeria?

Methodology

The research design adopted for this study was descriptive survey research design. This is because survey is a data collection instruments for quantitative research which involved the use of a questionnaire to assess the utilization of MS project software by the construction companies in Kano State, Nigeria. According to Julie (2015), survey research can use quantitative research strategies using questionnaires with numerically rated items. This design was considered suitable because the data was collected from the respondents that were working with the identified construction companies in the capacity of construction managers. Purposive sampling technique was employed to select one project manager from each construction company who is directly responsible or play better role in

managing construction activities in that company. This makes a total of 34 respondents from the 34 construction companies that have their offices in the state and also currently undertaking various construction projects in the state. Wasihun and Fikire (2022) stated that a researcher can use purposive sampling technique, without sampling research participants on a random basis; this is because the goal of this sampling is to sample research participants strategically, so that the selected participants are relevant to the research questions that are being asked. The instrument used for data collection was 22 items questionnaire titled "Questionnaire for the utilization of MS Project Management Software (QUMSPMS)".The questionnaire comprises of two sections, section "A" contains the personal data of respondents and section "B" elicits responses on the research questions. The instrument was validated by three experts, one from the department of Science and Technology Education, Bayero University Kano, and the other two from the department of

Industrial and Technology Education, Federal University of Technology Minna, Niger State, Nigeria. Four rating scale was used to rate the responses. Strongly Agree (SA= 4 points), Agree (A= 3 points), Disagree (D= 2 points) and Strongly Disagree (SD= 1 point). Mean and standard deviation were the statistical tools used to answer the research questions and the baseline scores of 2.5 and above were considered agreed and below 2.5 disagreed. According to David (2005), a mean score of 2.5 was used as a criterion to judge mean scores for a modified four- point item format. The mean of 2.5 is calculated from the sum of 4+3+2+1 divided by 4. The reliability coefficient of the instrument was 0.87 using cronbach Alpha statistics. According to Keith (2018), a reliability coefficient of around 0.70 or greater is widely considered desirable.

Results and Discussions

Research Question 1: What the MS project management software is being used for by the construction companies in Kano state, Nigeria?

Table 1: Mean Responses of the respondents on the usage of MS project management software by the construction companies in Kano state, Nigeria

S/NO	Items	Mean	Standard Deviation	Remarks
1.	Microsoft Project software is used for general projects management in our company	1.85	0.82	Disagreed
2.	The software is used for Project planning	2.09	0.75	Disagreed
3.	The software is used for tracking project evolution when it comes to completion, time and cost	2.18	0.71	Disagreed
4.	The software is used for scheduling and time management	2.24	0.74	Disagreed
5.	The software is used for resource allocation	2.46	0.78	Disagreed
6.	The software is used for project budget	2.41	0.79	Disagreed
7.	The software is used for communication and collaboration	2.18	0.90	Disagreed
8.	The software is used for documentations	2.06	0.77	Disagreed

The analysis of data presented in Table 1 above revealed that the respondents disagreed with all the eight items on the level of utilizations of MS project management software in their construction companies with their means ranges from 1.85 – 2.46 and standard deviations from 0.71 – 0.90. This signifies that they were not utilizing the software for general project management, project planning, tracking project evolution, scheduling and time management, resource allocation, communication and collaboration, project budget as well as documentations.

Research Question 2: What are the perceive benefits of using MS Project management software by construction companies in Kano state, Nigeria?

Table 2: Mean Responses of the respondents on the perceive benefits of using MS project management software by construction companies.

S/NO	Items	Mean	Standard Deviation	Remarks
1.	The software help the users stay focused and organized	3.03	0.97	Agreed
2.	The software is user friendly	2.32	0.68	Disagreed
3.	The software gives opportunity to manage budget	2.71	0.87	Agreed
4.	The software helps in forecasting feature resources	3.38	0.69	Agreed
5.	The software is very flexible	2.44	0.86	Disagreed
6.	The software enhances customers satisfaction	2.91	0.66	Agreed
7.	The software helps in monitoring the progress of work	3.59	0.55	Agreed

From Table 2 above, the result revealed that 5 out of 7 items were agreed as some of the benefits derived from using MS project software with their means ranges from 2.71 – 3.59 and standard deviations from 0.55 – 0.97. The benefits derived includes assisting the user to stay focused and organized during the management of construction project, gives opportunity to manage budget, helps in forecasting feature resources, enhances customer satisfaction as well as helps in monitoring the progress of work. On the other side, 2 items were rejected as some of the benefits derived from the software with their means of 2.32 and 2.44 and standard deviation of 0.68 and 0.86. The 2 items rejected were the user friendliness and flexibility of the software.

Research Question 3: What are the challenges of using MS Project management software by construction companies in Kano state, Nigeria?

Table 3: Mean Responses of the respondents on the challenges of using MS project management software by construction companies in Kano state, Nigeria.

S/NO	Items	Mean	Standard Deviation	Remarks
1.	The software is difficult to learn and use	2.56	0.93	Agreed
2.	The software is expensive	3.41	0.78	Agreed
3.	The software has limited integration with non Microsoft products	3.18	0.71	Agreed
4.	The software has difficulty to open in other system that doesn't have the software	3.47	0.79	Agreed
5.	The software has difficulty in visualizing/tracking progress	2.88	0.84	Agreed
6.	The software lack customization features	2.82	0.97	Agreed
7.	The software files are not easy shareable	2.69	0.98	Agreed

The result in Table 3 above revealed that all the items listed were agreed by the respondents as the challenges confronting the utilization of MS project management software by construction companies in Kano state, Nigeria with mean scores ranges from 2.56 – 3.47 and standard deviations from 0.71 – 0.98.

Discussion of the Findings

The findings of the study in Table 1 above revealed that all the 8 items were not agreed with as some of the area of usage of MS Project management software by construction companies in Kano State with their means ranges from 1.85 – 2.46 and standard deviations from 0.71 – 0.90 . This signifies that they were not fully utilizing the software despite its importance in the management of projects as identified by Agim (2015); Peansupap and Walker (2005) who stated that the area of usage of the software as designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, project budget and analyzing workloads as well as helps in reducing the time for data processing and communicating information for effective decision-making and coordination among construction participants to enhance construction productivity. Nevertheless, the finding may be due to the fact that that most

of the construction companies were using the manual method for managing their construction activities and could therefore not identify the usage of the software.

Table 2 findings revealed that 5 out of 7 items were agreed as some of the perceive benefits derived from using MS project software with their means ranges from 2.71 – 3.59 and standard deviations from 0.55 – 0.97. The benefits derived from the software include assisting the user to stay focused and organized during the management of construction project, helps in forecasting feature resources, enhances customer satisfaction, helps in preparing budget as well as monitoring the progress of work. On the other side, 2 items were rejected as some of the benefits derived from the software with their means of 2.32 and 2.44 and standard deviation of 0.68 and 0.86. The 2 items rejected were the user friendliness and flexibility of the software. For the items that were agreed with, the findings was supported by Hoang, Nhat and Swostik (2014) who hinted out that the main function of a project software is to offer help, and enhance the quality of output with less effort than manual ways. A project has disparate requirements and the aim of the adopted software is to fulfill those requirements effectively in terms of time and cost in addition, the issues of

scheduling, tracking and physical element. For the items that were disagreed with, the findings is in line with Celoxis (2018) who stated that scheduling with MS project software is powerful but painfully complicated. There are too many concepts that are practically impossible to master even after rigorous training.

Findings on Table 3 revealed that all the 7 items listed were agreed by the respondents as the challenges confronting the use of MS project management software by construction companies in Kano state, Nigeria, with mean scores ranges from 2.56 – 3.47 and standard deviations from 0.71 – 0.98. The finding is in line with Umar (2013) who stated that factors hindering some firms from using project management software package were due to the lack of knowledge of the software package, the high cost of the software and lack of the technical know-how of project management software usage which is a problem in the construction industry in Nigeria.

Conclusion

The study investigated the level of utilizations of MS project management software by construction companies in Kano state, Nigeria. Based on the findings of this study, it is concluded that construction companies in Kano state were not utilizing fully the potentialities of the software despite their knowledge of some of its benefits. However, the numerous challenges identified were hindering the proper utilization of the software.

Recommendations

1. Construction companies in Kano state should train their construction managers on how to utilize the software for the purpose of project management in order to be completing their various projects on time, within budget and with high quality

2. Exploring the benefits of the software in the project management, there is need for management of construction companies to emphasize on the use of the software as against the manual method in the management of construction projects.

3. Microsoft project management Software Company should make the software more users friendly so that many companies can patronize and computerize their mode of construction management.

REFERENCES

Agim, D. (2015) *The Management of Projects with microsoft project*. Micro Office Project. https://www.idpublications.org.

Aish, M., Aftab, H., & Rosli, M. (2006) Comparative study on resource scheduling with primavera project planner and MS project software. *Proceeding of National Seminar on Civil Engineering Research*, University Technology Malaysia Skudai, Malaysia. https://www.researchgate.net/public ation/261547584_Comparative_Stu dy_of_Resource_Scheduling_with_ Primavera_Project_Planner_and_Mi crosoft_Project

Celoxis (2018) 13 *reasons not to use Microsoft project*. https://www.celoxis.com/article/13- reasons-why-to-stop-using- microsoft-project

Gajewska, E., & Ropel, M. (2011). *Risk management practices in a construction project–a case study.* Swedia, Chalmers University of Technology.

Hexagon (2023). Construction project management: Definition, processes and more. https://www. ecosys.net/knowledge/construction- project-management/

Hoang, Nhat, M.S., & Swostik, (2014). *Project Management Software and Utilities*. [Bachelor's thesis, Lahti University of Applied Sciences]. https://www.coursehero.com/file/77 978851/Hoang-Nhat-Minh- Shrestha-Swostikpdf/

Joydeep, K., Tanmoy, K.B., Manasija, B., & Anupam, C. (2015). Project management software- An overview. *International Journal of Current Innovation Research*, 1(6), 129-135. https://www.researchgate.net/public ation/282121893.

Keith, S.T. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments. *Research in Science Education*, 4(1), 21-24. DOI 10.1007/s11165-016- 9602-2

Matthew, J.L., Bruce, P.J., & Colleen, A.S. (2001). Project management in construction: software use and research directions. *Journal of Construction Engineering and Management,* 127(2), 101-107. DOI:10.1061/(ASCE)0733- 9364(2001)127:2(101)

Meredith, J.R., and Mantel, S.J. (2001). Project management in construction: Software use and research direction. *Journal of Construction Engineering and Management*, 127(2), 101-107.

Nikhil, N., Dwivedi, A.K., & Trivedi M.K. (2020). Effective Scheduling using MS project in M.I.T.S region, Gwalior. *International Journal for Research in Applied Science & Engineering Technology*, 8(10), 17- 21. https://doi.org/ 10.22214/ijraset.2020.31739

Novakova, J., & Novy M. (2021). Use of Construction Project Scheduling Methods in the Czech Republic. *IOP Conference Series Materials Science and Engineering,* 1203(2), 022004 DOI:10.1088/1757- 899X/1203/2/022004

Pavel, K., Anna, N., & Yuriy, V. (2016). The Problems of project management software implement tation in construction corporations. *MATEC Web of Conferences*, Moscow State University of Civil Engineering, Russia 73(23),07016. DOI:10.1051 /matecconf/20167307016.

Peansupap, V., and Walker, D. (2005). Impact of project management software on the project failure rates in Nigerian construction industry. *International Journal of Scientific Engineering and Applied Science*. 2(5) 361.

PMI, A. (2000) *Guide to the project management body of knowledge, PMBOK Guide 2000 edition'* Newton Square, PA: Project Management Institute.

Rivard, K, Hugues, R, Lloyd, M, & Thomas M. (2004) Case studies on the use of information technology in the Canadian construction industry. *Journal of Information Technology in Construction,* 9 (2), 19-34.

Robert, P., Nathalie, P., Xavier, G., & Pierre, M.L. (2013). Project management software utilization and project performance. *International Conference on Project Management / HCIST. Procedia Technology*, 9 (2013), 857 – 866. doi: 10.1016/ j.protcy.2013.12.095.

Subramani, T. & Karthick, T.M. (2018). Study on time and resource management in construction project using MS project. *International Journal in Engineering and Technology.* 7(20.10) 23-26.

Svozilova A. (2016) *Information Technology Project Management and Information System*. Grada Publication.

Umar, M. S. (2013) *An Appraisal of Project Management Software Packages Use in Indigenous Construction Firm*. [Degree Thesis, Department of Building Technology, school of environmental studies, Federal Polytechnic, Nassarawa].

Wasihun, B.B., & Fikire, Y.A. (2022). Research in educational policy and management sample size for interview in qualitative research in social sciences: *A Guide to Novice Researchers*, 4(1), 42-50

Yang, L. R., Chen, J.H., & Huang, C.F. (2012). Requirements definition and management practice to improve project outcomes. *Journal of Civil Engineering and Management*, 18(1), 114-124. DOI:10.384 6/13923730.2012.657340

Structural and Process Quality: The Pathway to Quality Assurance in Early Childhood Care Development Education (ECCDE)

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ABSTRACT

Quality in Early Childhood Care Development Education (ECCDE) does not have universally accepted conceptual definition and components. However, some common elements of quality can be thought of in two dimensions: Structural and process quality. Structural quality comprises the laws, policies, regulations and other influences that originate outside classroom but affect process quality. Process quality relates to the interactions between children and their teachers as well as their peers. Therefore, this paper examined the importance of the two components of quality assurance that influence the outcomes of the Early Childhood Care Development Education system. Moreover, the paper explicitly reviews the major variables – the concept of quality; the concept of process; quality assurance in ECCDE and the association between structure and process quality, as the early childhood education system in Nigeria is facing series of problems in terms of quality assurance. Moreover, the paper concluded by standing on its position for the improvement of quality assurance in the Early Childhood Care Development Education. Finally, the paper recommends that, there should be a committed quality concern on the structural and process quality to enhance quality delivery in ECCDE.

Keywords: *Structure and process quality,* quality assurance and Early Childhood Care Development Education (ECCDE)

Introduction

Quality in early childhood education programmes are seen as a key policy approach for preparing children early education and beyond. Yet few programmes meet quality standards considered necessary for supporting young children. Early Childhood Care Development Education (ECCDE) is the first level of education a child attends before primary school. It is the pioneer step of introducing a child to formal education, apart from home, being the first agent of socialization and of building a child's character. Consequently, it is essential to recognize that high-quality education at the early stage of life gives children a good start

(Ndagi, Bola, Iyabo & Olaitan, 2020). Early Childhood Care Development Education (ECCDE) is a sequential development of a child socially, physically, morally, intellectually, emotionally to help his mind, body and personality to grow. It is of paramount importance to recognize that high-quality education at the early stage of life gives children a solid foundation and good beginning in their entire life. The Federal Government of Nigeria recognizes the importance of ECCDE, as a result, it has given prominence in the National Policy on Education. In spite of the well-articulated goals and objectives, the actualization of these goals does not seem successful due to inadequate instructional materials and poor funding.

In general, Early Childhood Care Development Education in Nigeria is viewed as a multidimensional concept and has been described as consisting of two key elements. The first concerns process quality, which has to do with the actual day-to-day interactions of children and consists of dynamic aspects of the classroom, such as children's relations and interactions with teachers and peers. Structural quality refers to the laws, policies, regulations, children-to -teacher ratio or teacher's educational level, which are considered the basic requirements that affects process quality. As indicated by Ikuenomure and Olamram

(2012), Early Childhood Care Development Education (ECCDE) programme provides opportunities to enhance children's learning and development, especially when a high quality learning experiences and educator child interactions are embedded within them. Giving the multidimensional nature of Early Childhood Care Development Education quality, it remains imperative for these elements being the pathway to sound educational system at the early stage.

Early Childhood Care Development Education has become a growing policy priority in many countries. It has been recognized by Emmanuel (2014), that quality in ECCDE makes a wide range of benefits, including social and economic, better child well-being and learning outcomes as a foundation for lifelong learning. Thus, in Nigeria especially in the public schools sector, less emphasis has been placed on regulating structural quality, such as children-to-teacher ratio. Moreover, aspects of process quality, such as the quality of teacher-child interactions are less targeted in quality monitoring and inspection. However, given the importance of these elements that is structure and process, these elements are directly influencing the quality in ECCDE. Therefore, one can conclude that, the paucity of research in the field of ECCDE

in Nigeria has shown the little inputs on the aspects of structural and process provisions. This calls for a more comprehensive approach which may take into account these dual qualities in scaffolding the high quality experience for children in their ECCDE classrooms.

The Concept of Quality Assurance

The need for the conceptualization of quality assurance in Nigeria can never be taken for granted. According to Larry (2011) the term quality assurance is used to refer to ways of ensuring the quality of a service or product. Quality assurance comprises of administrative and procedural activities implemented in a quality system so that requirements and goals for a product, service or activity can be accomplished. Quality assurance consists of two guiding principles namely: fit for purpose, which means the product should be suitable for intended purpose; and right first time, which has to do with the mistake should be eliminated. This establishes the fact that, quality assurance is a set of activities designed to ensure that a product or service meets the specified requirements and quality standards. Therefore, to facilitate the quality of the system that shall produce efficient and effective outcome. The instrument of quality assurance such as structure and process must be effectively put in place. Thus, quality assurance is any

systematic process of making sure that a service meets the specified requirements.

As seen by (Espinosa, 2002) quality assurance describes and manages the activities of control, evaluation, audits and regulatory aspects of an organization or educational institution. It evaluates the quality process and instructions for managerial improvement and success. According to WHO, quality assurance is a wide-ranging concept covering all matters that individually or collectively influence the quality of a product or service. This means that, quality assurance encompasses all those planned and systematic actions needed to provide adequate confidence that a product, service or result will satisfy given requirements for quality and be fit for use. Quality assurance ensures that educational inputs or services consistently meet or satisfy the students' expectation, which is achieved by setting clear quality goals, defining criteria and implementing control measures. This helps in building strong academic inputs and outputs relationship, trust and loyalty, which leads to increased satisfaction. That is why all educational institutions ensure that their services are of high quality, reliable and efficient.

Quality Assurance in ECCDE

Quality assurance in relation to ECCDE is the process of monitoring early childhood

care development education settings to assess and ensure the quality of children's experiences. Babangida, Mustapha, Aweh & Tolorunleke (2020) describes quality assurance as the systematic review of educational provision to maintain and improve its quality, equity and efficiency. According to the Organization for Economic Corporation and Development (OECD) (2019), quality assurance is the process of monitoring early childhood development education settings to assess and ensure the quality of children's experiences. It encompasses school self-evaluation, external evaluation such as inspection, the evaluation of teachers and school leaders, and student assessments. Abdullahi (2018) states that quality assurance in ECCDE entails the quality of teaching personnel, quality of available of instructional materials, equipment and facilities, school environment and its facilities including quality of education standard delivery. Therefore, quality assurance in ECCDE determines quality inputs and quality outputs of the educational system.

In line with the above, the Federal Ministry of Education (FME, 2012) prioritized the quality assurance in Nigeria as a paradigm shift from the former practice of school supervision and inspection to a monitoring and evaluation process that provides a new operative mode of evaluation or standardization. The evaluation process and practice are now carried out according to set standards that bring about improvement in teaching. Hence, the goals of early childhood care development education is to assist the quality assurance unit to succeed. Oluwadare (2015) described these goals as to effect a smooth transition from the home to school; prepare the child for the primary level of education; and provide care and support to the children. In spite of the above, the Universal Basic Education (UBE, 2013) emphasized that quality assurance is a major challenge in Nigeria's early childhood care development education. Accordingly, most pre-school are laggard behind in terms of essential infrastructure to enable such school to function effectively. Moreover, they are seriously lacking adequate support services from all ramifications, that of public, private and individual philanthropist. Consequently, quality assurance in ECCDE includes the health, nutrition, shelter, care, cognitive, language, emotional, social and moral intents (Ndagi et al, 2020).

The Structural and Process Quality

In general Early Childhood Care Development Education (ECCDE) quality is viewed as an imperative concept and has been described as consisting of two key components (Slot, 2018). The importance

of quality concerning the association between structural and process quality in early childhood care education development, well-being and learning has been recognised as multidimensional, as the two concepts are interrelated and jointly affect children's day-to-day experience and include the dynamic aspects of their educational outcomes (Mulder, 2015). That is to say quality in early childhood care development education is conceptualized in two domains, which is structure and process. In a study conducted on cross-country comparison by the duo of Olga Wyslowska and Pauline Slot in 2020 on the structural and process quality in Early Childhood Care Education provision. The finding illustrates that structural and process quality imposition practice facilitate a high quality assurance in Early Childhood Education.

The Structural Quality Structural quality relates to the framework conditions in Early Childhood Care Development Education (ECCDE) institutions, such as the staff-child ratio, the equipment for children and employees or the qualification of the staff (Workman & Ullrich, 2017). Additionally, structural quality is typically understood to include features such as the learning environment and educator qualifications. Also included within structural quality is professional development activities,

learning frameworks to guide educational programming practice and support that build learning opportunities in the home environment (Torii et al, 2017). Moreover, as indicated by Peterson and Elan (2021) structural quality features include the readily quantifiable and regulable features of settings, like staff qualifications, group size and classroom materials, hypothesized to underlie process quality features.

The Process Quality Process quality has been previously mentioned to reflect what actually happens on a day-to-day and moment-to-moment basis in settings, including activities and interactions between and among teachers and students. Process quality in Early Childhood Care Development Education (ECCDE) refers to the interactions and experiences that children have with their social and spatial-material environment. A high process quality has a positive effect on the well-being of the children. The professionalism of the teachers who set pedagogical impulses and thus comprehensively support the development of children's skills, is decisive for a high process quality (Wetchsler, Melnick, Maier & Bishop, 2016). Process quality encompasses children's experience within the early child care system, with a focus on educator pedagogy and effective teaching strategies, educator-child interaction, programmes,

curriculum and learning interventions and social-emotional support.

The association between structural quality and process quality in ECCDE is that, process features are considered the most proximal determinants of children's learning and have been proposed as a key mechanism linking structural features to children's outcomes. Besides, specifically, structural features are theorized to set the stage for process quality by creating the conditions in which high quality developmentally supportive process can

occur. Therefore, structural quality and process quality include large and diverse set of features at the system of ECCDE levels, all believed to influence what children and their teachers do every day in early childhood care development education settings (Slot, 2018). According to Megalonidou (2020) there exists empirical evidence in support of the association that, structural quality and process quality directly affect child outcomes in a situation where these two variables are utilized in teaching and learning of young children.

STRUCTURAL QUALITY

ECCDE

QA CHILD OUTCOMES
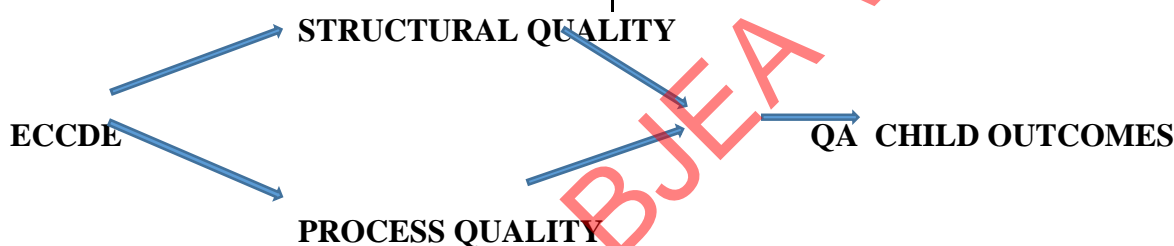
PROCESS QUALITY

Conclusions

In conclusion, the paper attempts to highlight the relevance of structural quality and process quality as the two fundamental components of quality assurance in Early Childhood Care Development Education (ECCDE). Early child education is so important for young children, as most of what they learn prepares them for the next stage of their educational goals. Moreover, ECCDE supposed to encourage and foster creativity, skills and team learning. However, the early childhood education system in Nigeria is facing series of problems in terms of quality assurance.

There is a lopsided value system that affects quality assurance in early childhood education provision, more especially the provision of structural and process quality infrastructure. The overall quality must be improved in Nigerian early childhood education system. Therefore, it is important that government should make all the necessary provisions to make the Nigerian ECCDE a high-quality assured programme. The provisions and services need to be organized systematically with clear targets, structural and process quality orientation to provide right experiences for optimal child development.

357

Recommendations

It is recommended that Nigeria should take note of the duo components of quality assurance in early childhood care development education when reviewing their quality assurance mechanisms for ECCDE. Furthermore, it is recommended that:

1. Actual quality monitoring units should be in place by ministries of education to ensure that both private and public preschool institutions are meeting the minimum standard.

2. In-service training, seminars and workshops should be organized for teachers for capacity building tailored to meeting the challenges of quality assurance with particular reference to structural and process quality.

3. The present quality assurance programmes should be rebranded with holistic approaches, whereby new policies should be implemented putting emphasis on the provision of structural and process quality.

4. Government in the three tiers should fund early childhood care programme through a provision of sufficient logistics to the quality assurance unit to assist them in discharging their duties effectively and efficiently.

5. Educational teaching and learning environment for early childhood care should be made rich, peaceful and secured in order to stimulate learners as well as the environment that will assist the good provision of structural and process atmosphere.

6. Government should provide a reasonable amount to sponsor research findings specifically in the area of Early Childhood Care Development Education (ECCDE).

REFERENCE

Abdullahi, M.M. (2018). Adult and non-formal education access to quality in the multi-disciplinary: Journal of knowledge review: Vol. 37 No 1 published by National association for the advancement of knowledge (NAFAK).

Babangida, A.A., Mustapha, A., Aweh, O.P., and Tolorunleke, C.A. (2020). Quality assurance and control in early childhood education towards achieving philosophy and goals of special needs education in Nigeria: The imperatives of teacher's preparation. African scholars' journal of contemporary education research (JCER-8) 143-152.

Emmanuel, O. (2014). Quality primary education as an instrument for national development. Journal of Childhood and Primary Education 1 (1) 85-90

Espinosa, L.M. (2002). Policy brief high-quality pre-school: Why we need it and what looks like.

Federal Ministry of Education, (2012). Development of Instructional materials from local resources. Basic Education Teacher Handbook. Nigeria Educational Research and Development, Abuja (NERDC).

Ikuenomure, M. G. & Olamram, N. (2012). Ensuing quality assurance in early childhood education. Obafemi Awolawo University Press.

Larry, S. (2011). Quality assurance vs quality control learning

Megalonidou, C. (2020). The quality of early childhood education and care services in Greece. International journal of child care and education policy.

Mulder, H. (2015). Association between structural quality aspects and process quality in Dutch early childhood education and care settings. E.C. Research quarterly, 33, 64-76.

National Centre for Quality Assurance (2017), Indicators of quality for ratings.

Ndagi, Y.M., Bola, A.G., Iyabo, A.C., and Olaitan, S.U. (2020). Quality assuran ce in early childhood care education: veritable tool for national develop ment in Nigeria. Al-hikmah journal of education vol. 7 no. 1 205-209.

OECD, (2019). Starting strong: Key Organisation of Economic Corporation Development OECD indicators on early childhood education and care. OECD publishing.

Oluwadare, E. A. (2015). History and development of early childhood development in Nigeria. Kings print.

Peterson, G. and Elson, E. (2021). Process quality and structural quality. Libre texts social sciences.

Slot, P. (2018). Structural characteristics and process quality in early childhood education and care: A literature review OECD education working papers.

Universal Basic Education, (2013). Training and manual for early childhood care development and education, Abuja Universal Basic Education Commission.

Wetchsler, M., Melnick, H., Maier, A., and Bishop, J. (2016). The building blocks of high-quality early childhood programmes (policy brief). Retrieved fromhttps://learningpolicyinstitute.org

Whyslowska, O. and Slot, P. (2020). Structural and process quality in early child education and care provision in Poland and the Netherlands: A cross-national study use of cluster analysis 31 (6): 1-17.

Workman, S. and Ullrich, R. (2017). Quality 101: Identifying the core components of high-quality early childhood programme. Retrieved from https//:ola.american congress.org/cont.

Management Demands for Online Teaching and Learning in Nigerian Universities

By

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ABSTRACT

Prior to the advent of the coronavirus pandemic in March 2020 in Nigeria, not many people considered online delivery of instruction in conventional universities as a viable option in the country. The face-to-face delivery method was the approach to instructional delivery in conventional universities. With the COVID-19 lockdown, governments and institutions began to consider alternative instructional delivery mediums specifically through the online, blended learning and other forms of e-learning outlets so that unplanned disruption to academic activities can be reduced to the barest minimum in the country. Since uninterrupted learning would be of great benefit to students, parents, administrators and other stakeholders of educational institutions, it was argued that universities must satisfy the management demands for online teaching and learning to be meaningful in the country. The goal of this article is to discuss the place of resources management especially staff up skills through in-service training, the provision of hard and software computer components for teaching staff in order for them to actively participate in e-learning. Being a position paper, it argued that data provision is a sin-qua-non in engagement in e-learning environment. As such, university authorities should make provision for them in order for their teaching staff to function ultimately. It further argued for the provision of an uninterrupted power supply for the benefit of e-learning. The paper opined that online instructional demands are not just an alternative but a complement to the face-to-face teaching in conventional universities which is capable of minimizing disruptions in the nation's educational system. Suggestions were made for engagement in online teaching and learning in the universities to be meaningful, effective and efficient as university authorities keep focus on their primary goal of producing high-level manpower for national development.

Keywords: *E-learning,* COVID-19, lecturers, training, management, demands

Introduction

Prior to the advent of coronavirus pandemic in March 2020 in Nigeria, not many people considered online delivery of education as a viable option in the country. The face-to-face delivery method was the main approach to instructional delivery in conventional universities. With the closure of educational institutions at all levels of education due to the COVID-19 lockdown, governments and institutions began to consider alternative instructional delivery mediums specifically through the online, blended learning and

other forms of e-learning outlets. Public and private providers of educational institutions initiated moves to keep afloat in the midst of the unprecedented lockdown. While public conventional universities were closed down, their private university counterparts, however, forged ahead in continuing instructional activities in the online learning platform during the lockdown period (Okocha 2020).

The issues raised by the education shutdown for about six months (March 2021 to Sept 2021 during the COVID-19 pandemic lockdown) had hardly settled down and the public universities embarked on an indefinite strike. The strike organized by the Academic Staff Union of Universities (ASUU) once again interrupted learning in Nigerian public universities for about eight months. The strike lasted from February 14 to October 14, 2022 (Suleiman, 2022). As if these disruptions were not enough, the Federal authorities directed in their wisdom that universities be closed down on February 22, 2023 for the general elections. (Tyessi 2023). Schools were directed to resume again after four weeks of school closure. From March 2020 to March 2023, Nigerian universities lost not less than fifteen months that would have been utilized for human capacity production to unplanned disruptions to academic activities.

Some youths could be derailed by the unplanned closures of universities by not returning to class at the end of the closures. As pointed out by Ajayi, (2011), any policy aimed at promoting quality education must focus on the learners, the learning environment, the curricula, the teaching-learning processes and the learning outcomes. The learners' interest should be paramount so that knowledge can remain relevant in their scheme of priorities. The manager should be aware that consumers' satisfaction is important (Abdulkareem & Oduwaye 2017). A system that keeps disrupting learning is inimical to the efficient management of time and the satisfaction of consumers. The university seekers planned for a three - or four - years programme in the undergraduate programme as the case may be. Extending the period for another fifteen months for no fault of the students could be frustrating and certainly inefficient in the management of the nation's resources. This work is anchored on the thesis propounded by Creed and Morpheth (2014). They argued that education is not only a right but in situations of emergencies and early reconstruction, it provides physical, psychosocial and cognitive protection which

can be both lifesaving and life-sustaining. Learners benefit more from education than without it during crises (Imakpokpomwan & Alonge 2023). The virtual classroom can effectively sustain students learning despite the physical disruption in the system.

Awe (2011) aptly advocated for changes in pedagogical emphasis from staff teaching to student learning. If lecturers were well equipped with the pedagogy associated with online teaching and learning, the disruptions would not have affected learning in any way or at least not the way they did because teaching and learning would have migrated from the face-to-face classroom to the online learning platform until the situation normalizes. Nwadiani (2011) has encouraged that the productive capacities of a nation's human resources must therefore be adequately developed to enable them to effectively organize, coordinate and explore the capital and natural resources available to actualize the anticipated development. Capacity development up-skills staff for better performance. Even though the primary task of academic staff is to dispense knowledge, they must keep focus not only on getting current and relevant information but also in the exploration of the platform upon which they dispense knowledge. The online platform has evolved as a medium of

communication and could be further explored by lecturers for effective instructional delivery.

Studies have shown that university lecturers are in need of the appropriate skills required for online learning in order to adjust to emerging realities. Umezulike (2018) studied the capacity - building index of lecturers and strategies for effective adult education programmes in the era of technological innovation in South-East Nigeria. Four objectives guided the study which made use of survey research design. The findings revealed that lecturers of Adult Education needed the capacity - building to enable them to operate computers, upload text on the internet, and effectively use interactive white-board for teaching and learning and video-conferencing for effective adult education programmes in the era of technological innovation in South-East, Nigeria. Bakare, Onah and Okereke (2018), specifically studied the needs of lecturers in E-teaching for the delivery of computer and electrical - electronic technology courses in tertiary institutions in South Western, Nigeria. They found a gap between integration of technology and instructional delivery. The study found a need for capacity development of lecturers of computer, electrical-electronic technology courses in

order to be able to teach with technology. This underscores the need to train and re-train all lecturers in Nigerian universities on the online instructional delivery mode. Anho (2012), argued that aging Lecturers can be assisted through training and other staff development programs to remain vibrant, vital, flexible and productive. In fact, all categories of staff/lecturers need capacity building to be able to explore or improve on their engagement in an e-learning environment.

As pointed out by Adeyemi (2011), the success of university education delivery and its resulting developmental impact on society is hinged on adequate planning, effective administration and efficient utilization of resources. Staff development is cardinal to utilization for result-oriented administration. Pre-service training is not enough to keep staff utilization throughout the working life of a staff. That is why human resources managers design the necessary in-service training programmes to fit into the goals of the organisation. In this case, requisite training of lecturers on the manipulation of computer hardware and software with the necessary skills and techniques can provide lecturers and students with an alternative teaching and learning platform.

Uninterrupted learning would be of great benefit to students, parents, administrators and other stake-holders of educational institutions but higher institutions in Nigeria were hardly prepared for the abrupt disruptions in the academic calendar of the universities during the period mentioned earlier. University institutions have to keep their primary goal of producing high-level manpower in focus for national development. Hence, an uninterrupted academic calendar would be most welcome no matter the socio-political imperatives that affect an operational environment of the universities. Thus, exploring management principles and procedures, the available human, financial, physical and material resources in educational organizations are expected to be effectively directed toward the achievement of educational objectives and goals (Abdulkareem & Oduwaye 2017). This piece shall discuss some of the management demands for online learning necessary for the smooth running of the university system in Nigeria and elsewhere.

- **Teaching Staff Capacity Building**: Lecturers are specialist academics whose professional callings in various fields of human endeavors are highly valued. A good number of the lecturers learnt through the face-to-face platform. They too have been

using that method to deliver instructions to their students until the advent of covid-19. The challenges thrown up by online delivery require that most of the lecturers who were trained through the face-to-face mode of delivery have to undergo in-service training to build their capacity and confidence in discharging their responsibilities to their pupils and students. The older generations who are more experienced are used to the face-to-face mode of delivery. They may be more challenged than the younger generations who most often are already conversant with aspects of the internet and the open technology.

Proprietors of colleges and universities must as a matter of policy strategize on how these experts can be trained and re-trained in all aspect of online delivery if the system must continue to rely on the experiences of the sages which in reality are inevitable for a strong educational system. Training and up-skills energises the workforce as an agent of human capacity development to improve its capability in the workplace. According to Anho (2018), capacity building refers to putting in place the needed human and infrastructural facilities that will enable an individual to realize its full potential of existence geared towards the realization of the collective goals of the nation as a society

and attaining specific institutional goals. Akuegwu, Nwi-ue and Etudor-Eyo (2018) found Lecturers' participation in capacity-building programmes to be significantly low with respect to workshops, seminars, conferences, ICT training and mentoring. This could be so in an environment where lecturers use their lean resources to train themselves in seminars and conferences without official sponsorship. Agbonna, Akeju, Yakubu and Fashola (2022) studied the capacity-building of lecturers in state-owned universities in South-West Nigeria. They found that capacity-building opportunities were high hence the job performances of lecturers who received such training were high also. They therefore recommended that Nigerian university lecturers should always avail themselves of training opportunities in order to remain current and relevant to the system. The issue may not be lecturers' willingness to attend but the sponsorship of national and international conferences which could be avenues to empower lecturers for higher productivity. There is no need for workers to lobby for training opportunities. Such could breed corruption. Instead, it should naturally flow from a need assessment to get the workforce empowered for higher productivity. For instance, a staff that has

spent a year in a position should be given an opportunity to attend training via conference, workshop or seminars. Lecturers who have attained the position of Senior Lecturer and above should be qualified for international conferences sponsored by the institution.

- **Provision of Hardware**: Computer hardware in the form of internet-ready desktops, laptops, ipad or smartphones are in-dispensable in online education delivery. Roy (2018) agreed that technology has digitized classrooms through digital learning tools like, computers, iPads, smartphones and smart digital whiteboards. He added that it has expanded course offerings, and has increased student's engagement and motivation toward learning. Scholars have decried the absence of computer hardware for use by teachers and lecturers in their official capacities in the nation's educational institutions. A good number of lecturers can work privately with information and communication technology tools such as laptops, desktops and smart phones in their private capacity. They are minimum working tools that must be provided by their employers for the smooth functioning of the system. Therefore, lecturers using their private computer/laptop technology and air time to transact public

duties are not only exploitative but could throw up issues relating to data security, hence, should be discouraged.

- **Learning Management System (LMS):** The advent of COVID-19 and the subsequent closures of educational institutions promoted online learning in the country via open technology platforms such as WhatsApp, Telegram, Facebooks, Zoom, and similar platforms. The insecurity of open technology in the dissemination of institutional confidential records could spell disaster for the educational institutions exploring it if adequate measures are not taken to safeguard against data theft. Openness of the open technology could encourage fraud where dishonest persons could take advantage to create unexpected results in the system. Hacking, phishing and other advanced security violations could steal or disrupt data. In order to minimize the risks associated with open technology, university data could be better protected by adopting the learning management system (LMS) specifically designed for the university. Alenezi (2018) conducted a study in Saudi Arabia and found in the study that the main barriers to the use of LMS were inadequate technical support by the universities, negative attitudes toward technology, and inadequate training on the

LMS platforms. Minor barriers the study found include poor Internet access and networking, limited infrastructure, lack of hardware and software to run the LMS, and challenges of appropriate language usage.

- **Curriculum innovation in teacher education:** The changes in teaching and learning approaches as occasioned by the innovative educational delivery mode call for innovation of the curriculum of teacher education. In-service teachers are trained to fit into the present and future classrooms where technology in general and the internet specifically is expected to assume more roles. At the primary and secondary schools some private schools are not only encouraging online delivery but they are also consolidating on the gains of COVID-19 to prepare for the future classroom where internet technology might increasingly play a prominent role. Some governments in Nigeria are providing technology-based instruction to teachers. For example, the Edo State government has been promoting Edo State Basic Education Sector Transformation (Edo BEST) through innovative use of computers and the internet to the pupils and students. There is a need to innovate the curriculum as is done in some universities. For example, universities outside Nigeria are now floating Department

of Internet Studies which is the hub for teacher education for the future classroom.

- **Accessible internet facilities:** Provision of information technology hardware does not confirm accessibility to the internet. The provision of data energises the mobilization into the global web channels. In West Africa, data is very expensive. Oyetimi (2020) reported that 'The cost of accessing the internet remains very high in West Africa, as high as $8 per kilobyte per second while it costs about $0.52 in North Africa and even less in Europe. In some public institutions in the country, lecturers obtain their data provision from personal savings to transact office duties. Expecting lecturers to procure the data for their use in teaching their students online is tantamount to asking lecturers to fund their classroom accommodation arrangement for teaching their students and may be counterproductive.

- **Constant energy system**: If online learning must be encouraged, the provision of a constant energy system is indispensable. Perennial issues of electricity inefficiency and attendant inefficiencies have been commented on by many scholars. Nwokoye, Dimnwobi, Ekesiobi and Obegolu (2017:7) observed the 'high social, economic and environmental effects of poor public power

supply and its extensive substitution with highly polluting generators'. Ibadin and Imakpokpomwan (2009) decried the challenges of electricity supply which hinders the use of information communication technology for educational planning. The issue is not the willingness of lecturers to adapt to the emerging realities as occasioned by the advent of COVID-19 pandemic but the inability of political actors to tackle the nation's teething problems of which electricity supply is cardinal. The inconsistency and staggered availability of current to power the electronic system is a fundamental hindrance to online learning (UNDESA 2014). A newspaper reported that it was not all about access to internet facilities. Even most students who had access don't have a stable electricity supply to follow lectures at the right time (The Vanguard newspaper 2020). In a survey, Egielewa, Idogho, Iyalomhe and Cirella (2022), found that 75% of higher education students do not want to remain online as was the case during the pandemic because of poor electricity supply, network issues and inability to buy enough data for the online classes. The use of an electricity generator to power the system is too expensive which renders the system epileptic. With the current price of over N600 per liter of petrol,

how many students and lecturers could afford the commodity to power their generators which energises the electronics. It is unimaginable for one to procure a small generator for his private use as well as for office use. No doubt, the perennial problem of electricity instability is a major setback to technological development in the country. The management of technological innovation in higher education cannot achieve the desired goal if a constant electricity supply is not available.

Conclusion

The article has examined the place of technology in enhancing teaching and learning in the university. It specifically discusses the management requirement for the introduction of technology in instructional delivery in the university to succeed. The article examined some demands that must be satisfied such as training of staff, provision of laptops and accessibility to the internet facilities in conducting university business at a cheaper rate would encourage the staff and students to explore the emerging technology in instructional delivery. It added that the energy supply in the country is less than expected and should therefore be improved to provide for uninterrupted supply for efficient delivery for the common good of all. It is therefore germane to add that the

introduction of technology in instructional delivery could save the university from total collapse during strikes, economic recession and other emergencies occasioned by natural or man-made disruption.

Online instructional demands are not just an alternative but a complement to face-to-face teaching in conventional universities. If online resources are well harnessed for teaching and learning in universities, the effects of unplanned disruption on learning may be minimized.

Recommendations

The following suggestions are made to improve the existing realities

(1) Lecturers should be sponsored for national and international conferences in a planned arrangement to support their engagement in the online teaching and learning environment. Institutions can determine what training types fit lecturers at certain level and they are approved without lobbying for training or other capacity development opportunities. Senior Lecturers and above should be sponsored for international conferences in addition to national and sub-national conferences.

(2) Teaching tools such as laptops and internet connectivity should be made available to lecturers for their official duties.

(3) Energies needed to power electronics should be made available to university campuses uninterrupted for teaching and learning online to be effective and efficient.

(4) The cost of data is too high in Nigeria. It should be reduced to the cost of data as obtainable in North Africa if not that of Europe so that the current tempo in online learning could be sustained. More specifically, educational engagement online should be supported with cheaper data.

(5) Curriculum innovation in teacher education should make provision for pedagogy in the online environment.

(6) Public universities in the country should explore or deepen their exploration of the Learning Management System if they have started its usage in the management of the university records.

REFERENCES

Abdulkareem A. Y. and Oduwaye R. (2017). Concepts, principles and functions of educational management. In R. O. Olubor, A.Y. Abdulkareem, A. T. Alabi& F. Adeyanju (ed) Educational Management: New perspectives. Lagos, Amfitop books 1-13.

Adeyemi, K (2011). Transforming the Nigerian university system through corporate governance. In K. Adeyemi and B. Awe (ed) *Rebranding Nigerian Educational System*. Lagos, School of Education, National Open University of Nigeria. p111-121

Agbonna, R., O., Akeju, A., B., Yakubu, A., O., & Fashola, B., O. (2022). Capacity Building as Correlates of Lecturers Job Performance in State Owned Universities in South-West Nigeria. *Rivers State University Journal of Education (RSUJOE)* 25(2):183-193 www.rsujoe.com.ng

Ajayi, I. A. (2011). Enhancing quality education in Nigeria. In K. Adeyemi and B. Awe (ed) *Rebranding Nigerian Educational System*. Lagos, School of Education, National Open University of Nigeria 122-136.

Akuegwu, B., A., Nwi-ue F., D., & Etudor-Eyo, E. (2018). Lecturers' Participation in Capacity Building Programmes in South-South Nigeria: Implications for Sustainable. Makerere Journal of higher education 4(2) (2013) 279 – 292.

Anho, J., F. (2012), Lecturers' Participation in Training and Development by Status as Capacity Building Mechanism for Quality Education: A Study of Nigerian Universities in the South-South Geo-Political Zone. KIU Journal of Social Sciences. Kampala International University 4(4) 149-162

Awe, B (2011). Nigerian universities and challenges of education for sustainable development. In K. Adeyemi and B. Awe (ed) *Rebranding Nigerian Educational System*. Lagos, School of Education, National Open University of Nigeria. 137-152.

Bakare, J., Onah, B., I., & Okereke, G., K., O. (2018), Capacity Building Needs of Lecturers in E-Teaching for Effective Delivery of Computer and Electrical/Electronic Technology Courses in Tertiary Institutions in South Western, Nigeria International Journal of Engineering Research 13(11) 8736 - 8750

Creed, C., & Morpheth, R. L. (2014). Continuity education in emergency and conflict situations: The case for using open, distance and flexible learning. Journal of Learning and Development 1(3). https://j14d.org/index.php/ej14d/article/view/25

Egielewa, P., E., Idogho, P., O., Iyalomhe F., & Cirella G., T (2022). Covid-19 and digitized education: Analysis of online learning in Nigerian higher education. *E-learning and Digital Media* 19(1) 19-35 https://doi.org/10.1177/2042753021 1022808

Ibadin, V. O. & Imakpokpomwan, M. I. (2009) Application of information and communication technology in educational planning in Nigeria: problems and solutions.*The International Journal of Series on Tropical Issues* 10 (3) 215-226. publication of the Department of Political Science and Public Administration, University of Buea, Cameroon.

Imakpokpomwan, M., I. & Alonge, H., O. (in press). Educational management response to covid-19 pandemic in

Edo State: Lessons for school administrators.

Imakpokpomwan, M., I., (2020, July 6). COVID-19 need to re-open schools in Nigeria. The Nigerian Observer, page 10. *www.nigerianobserver. com*

Nwadiani, M. (2011). Educational planning and the challenges of development in Nigeria. In K. Adeyemi and B. Awe (ed) *Rebranding Nigerian Educational System*. School of Education, National Open University of Nigeria.

Nwokoye, E., S., Dimnwobi S. K., Ekesiobi C., S., & Obegolu C., C., (2017). Power infrastructure and electricity in Nigeria: Policy considerations for economic welfare. KIU Journal of Humanities 2(1) 5-17.

Okocha, S. (2020) Private universities take the lead in online learning. https://www.universityworldnews.com

Oyetimi, K. (2020, April 10th). E-learning: How covid-19 is reshaping education in Nigeria. https://wwwtribuneonlineng.com.

Roy, A (2018). Technology in teaching and learning. *Journal of Emerging Technologies and Innovative Research* (JETIR1904J46) www.jetir.org

Suleiman, Q. (2022). ASUU strike: NLC rejects Nigerian governments no work, no pay. Premium Times October 25, 2022.

Tyessi, K. (2023). 23 General Elections: FG orders closure of universities. *ThisDay* Feb 10, https://thisdaylive.com

Umezulike, N., A. (2018). Capacity building index of lecturers and strategies for effective adult education programmes in the era of technological innovation in South-East Nigeria 229-241. Eric

United Nations Department of Economic and Social Affairs UNDESA (2014). Electricity and Education: The benefits, barriers and recommendations for achieving the electrification of primary and secondary schools.

Vanguard (2020). Educationist says unstable power supply threat to effective online teaching. www.vanguardngr.com. May 9.

Assessment of Gender Differences in Knowledge and Practice of Voluntary Blood Donations among Students of Colleges of Education in Kano State

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ABSTRACT

The purpose of this research was to assess gender differences in knowledge and practice of voluntary blood donations among students of colleges of education in Kano State. The study employed a descriptive design of survey type. The population of the study comprised of 66,206 male and female students in colleges of education in Kano State out of which a sample of 382 was used using multi-stage sampling procedure. The instrument used for data collection was researchers' developed questionnaire. It was validated by experts and subjected to pilot study that yielded a reliability index of 0.78. The formulated hypotheses were analyzed using t-test at 0.05 alpha level of significant. The data from 366 respondents that were duly filled and returned were analyzed and reported. The result of the study indicated that students of colleges of education in Kano State do not significantly differ (p=.932>0.05) in their knowledge of voluntary blood donation based on gender. The study also found that male and female students of colleges of education in Kano State do not significantly differ (p=.137>0.05) in their practice of voluntary blood donation. Based on these findings, the study recommended that periodic health talks on voluntary blood donations should be organized in schools for all the male and female students to encourage those that already had knowledge and are practicing voluntary blood donations to continue and others to key-in to voluntary blood donation, considering its numerous merits.

Keywords: Gender differences, Knowledge, Practice, Voluntary Blood Donation, Colleges of Education Students.

Introduction

Human blood is an important component of human life, and there are no alternatives to blood components yet (Melku, et al., 2018). Sharing blood with others is the only option for people who need it to survive. Blood transfusion is a process in which blood that has been taken from a person is put into another person's body, typically after an accident or during an operation and for other medical purposes (Olaiya, Alakija, Ajala & Olatunji 2004). Blood donation is giving or allowing some of the blood in an individual to be withdrawn and provided for medical purposes to help another person. Blood transfusion is the donation of blood or blood products from the donor into the bloodstream of the recipient. It is a life-saving scheme in both routine and emergency situations to

replace blood cells or blood products lost through bleeding with accident injuries, surgical conditions, malignancies, pregnancy complications and other medical conditions (Melku, et al., 2018).

Blood donors fall into one of the three categories: paid, family/replacement, or voluntary. The safest blood donors among the three groups are those who give their blood willingly, entirely out of charity, and are conscious of their ineptitude to do so in situations when there is even the slightest possibility of endangering the health of blood receivers (Udegbe, Odukoya & Ogunnowo, 2015). Therefore, the only option to stockpile blood in a hospital blood bank for emergency use to save lives is through voluntary blood donation and lack of blood supply could result in fatalities (Siddique, Yasmeen, Hina, Alam, 2012). In spite of its tremendous importance to sustaining life, most people especially in developing countries do not donate blood voluntarily.

Globally, about 118.5 million blood units are collected annually, yet the demand exceeds the existing capacity (Mohammed & Osman, 2016) and voluntary blood donation (VBD) is more common in developed nations than in developing nations, including Nigeria (Ingale, Gessesse & Miruts, 2015). This could

be due to misunderstandings, lack of awareness, and a bad attitude toward practicing voluntary blood donation and as a result, the rate of blood donation is inadequate. Additionally, factors that were discovered to be predictive of voluntary blood donation includes environment, location, sex, age, and educational status (Ingale, Gessesse & Miruts, 2015). In order to meet a country's most fundamental blood needs, according to the World Health Organization (WHO) (2012), 1% of its population must donate blood however, less than 1% of people in many nations, particularly developing nations like Nigeria, donate blood. Less than 25% of the blood supplies in many nations come from voluntary unpaid blood donors, which is considered the safest blood source (WHO, 2014). Hence, there is a need to motivate young (male and female) generations to meet 100% voluntary non-remunerated blood donation (Nwankwo, Eseigbe, Asuke & Okeke, 2022).

In a study conducted in a sub-Himalayan State by Singh, et al (2017), when gender based statistical significance was calculated on knowledge parameters, it was found to be significant regarding age for blood donation, minimum weight for blood donation, suitable blood pressure for blood donation, volume of

blood collected during each donation and number of patients benefitted from one unit of blood (p <0.05). When reasons for reluctance to donate, blood were explored, higher proportion of females replied that blood donation led to anemia and fear of needle among the main reasons. On the other hand, higher proportion of males reported that objection from the family for blood donation and decreased immunity after blood donation as among the chief causes for reluctance to donate blood. This difference of opinion among student of either sex was found to be signifi cant statistically (p<0.05) (Singh, et al., 201 7).

Kano State is the most populous state in Nigeria with many institutions. It is a state with a massive population of young people and a document of the National Population Commission (2010) indicates that a total of 7,423,408 people (78.96%) of Kano's population are aged less than 30 years. Also, a total of 2,801,662 people (1,328,391males and 1,473,271 females) representing 29.80% are officially designated as youth, that is, between 18 and 35 years. These statistics indicate that Kano State's population is made up of large number of youths that are expected to be in tertiary institutions. In Nigeria and Kano State in particular, very

little progress has been made in the direction of providing sufficient blood for the teeming population and the level of knowledge associated with voluntary blood donation may affect the disposition of potential donors to donate blood.

Recruiting a sufficient number of voluntary donors still remains a challenge and students' population in the study area would have formed a large pool of donors if sensitized and motivated to have positive attitude and ready to be regular voluntary blood donors. More so, students in tertiary institutions including colleges of education in Kano State by virtue of their age and population should be more informed about the benefits of voluntary blood donation. Hence, are expected to have a good knowledge of blood usage, to be aware of the increasing demand and scarcity of the blood, and are thus expected to have positive attitude towards blood donation as well as encourage practice of voluntary blood donation among the public.

Research Questions

The study was guided by the following research questions:

1. Are there differences in the knowledge of voluntary blood donation among students of Colleges of Education in Kano State based on their gender?

2. Are there differences in the practice of voluntary blood donation among students of Colleges of Education in Kano State based on their gender?

Hypotheses

The following hypotheses were formulated and tested at 0.05 alpha level of significance:

Hypothesis 1: Students of Colleges of Education in Kano State are not significantly different in their knowledge of voluntary blood donation based on gender.

Hypothesis 2: Students of Colleges of Education in Kano State are not significantly different in their practice of voluntary blood donation based on gender.

Methodology

The design employed for this study was descriptive survey. This design according to Patrick (2009) enables the researchers to describe an event, situation or phenomenon as it is at the time of the study. This design is appropriate for this study because it makes it possible to collect data quickly and affordably from a large population and also helps in describing students' voluntary blood donation knowledge and practice as they are currently without any treatment or intervention. The population of this study was made up of all male and female students in the six colleges of education in Kano State totaling sixty-six thousand, two hundred and

six (66,206) (Academic offices, 2021/2022 academic session). The institutions are: Federal College of Education, Kano, Federal College of Education (Technical), Bichi, Sa'adatu Rimi College of Education, Kumbotso, Kano State College of Education and Preliminary Studies, Annur Institute of Islamic Education, Kwajalawa and Ameenudeen College of Education, Kawo. A sample of 382 students was selected from the six colleges of education in Kano State for this study. The Research Advisors (2006) suggests that for any population of between 50,000 and 75,000, a sample size should not be less than three-hundred and eighty-two respondents (382). Multi stage sampling procedure was used in selecting the required sample.

Stage 1: Stratified sampling technique was used to select the institutions. The colleges were divided into 3 strata thus: Federal, state and private.

Stage 2: From each stratum, the two federal colleges of education were purposively selected, two state and two private colleges of education were randomly selected. That is six (2 federal, 2 state and 2 private) colleges of education were selected for the study.

Stage 3: Proportionate sampling technique was also used. Thereafter, simple random

sampling technique was used and arrived at a total of 382 respondents.

The instrument for data collection was researchers' developed questionnaire. The questionnaire was validated by experts and standardized with a reliability index of 0.78 using Cronbach Alpha statistic. The instrument was administered by the researchers with the help of six (6) research assistants. Inferential statistics of t-test was used to analyze the hypotheses at 0.05 level of significance. Statistical Package for Social Science (SPSS) version 25 was used in data analysis and out of 382 copies of the questionnaire distributed and administered, only 366 were correctly filled and returned which were used for data analysis.

Hypotheses Testing:

Hypothesis 1: Students of Colleges of Education in Kano State are not significantly different in their knowledge of voluntary blood donation based on gender.

Table 1: Summary of t-test on knowledge of voluntary blood donation based on gender

Variable	N	Mean	S.D	Std. Error	df	t	p	Decision
Knowledge								
Male	173	22.01	5.723	.435	364	.085	.932	Retained
Female	193	21.95	5.979	.430				
Total	366							

t = .085, df = 364, (p = .932 > 0.05)

Table 1 above shows that, t = .085, df = 364, (p = .932 > 0.05), this indicated that students of colleges of education in Kano State do not significantly differ in their knowledge of voluntary blood donation based on gender. Therefore, the null hypothesis was retained on the account that both male and female students in colleges of education in Kano State do not significantly differ in their knowledge of voluntary blood donation. This implies that both male and female respondents have similar knowledge of voluntary blood donation.

Hypothesis 2: Students of Colleges of Education in Kano State are not significantly different in their practice of voluntary blood donation based on gender

Table 2: Summary of t-test analysis on practice of voluntary blood donation based on gender

Variable	N	Mean	S.D	Std. Error	df	t	p	Decision
Practice								
Male	173	20.25	2.991	.227	364	1.472	.137	Retained
Female	193	19.72	3.777	.272				
Total	366							

t = 1.472, df = 364, (p = .137 > 0.05)

Table 2 above shows that, t = 1.472, df = 364, (p = .137 > 0.05), this indicated that students of colleges of education in Kano State do not significantly differ in their practice of voluntary blood donation based on gender. Therefore, the null hypothesis was retained on the account that both male and female students in colleges of education in Kano State do not significantly differ in their practice of voluntary blood donation. This implies that there is no difference in the practice of voluntary blood donations between male and female respondents.

Discussion

The finding of this study revealed that students in colleges of education of Kano State did not significantly differ in knowledge of voluntary blood donation based on their gender. The current study is in line with the findings of Nigatu & Demissie (2014) whose study showed that about 161 (40.4%) had good knowledge of blood donation of which 85 (21.4%) and 76 (19.0%) were male and female students respectively. This study also gained the support of Sabu et al (2011) that the overall level of knowledge on voluntary blood donation among the respondents was found to be 48.4% in male and 44.7% in female. Also, the study conducted by Bharatwaj et al (2012), revealed that there was no significant

difference between the males and the females with regards to their knowledge on voluntary blood donation.

The finding of hypothesis two on practice of voluntary blood donation based on gender revealed that students in colleges of education in Kano State did not significantly differ in practice of voluntary blood donation based on their gender. The current study is in line with the findings of Hiremath (2012) in his study on "To assess the knowledge of blood donation among voluntary blood donor at blood bank, Krishna Hospital Karad (Maharashtra, India)", where a total of 33 (33%) male and 21 (21%) female had donated blood at least once in the past. This finding is inconsistent with the research conducted by Mrigendra (2013) on "Knowledge, attitude and practice of blood donation among students of different colleges of Kathmandu, Nepal" whose findings revealed that percentage of donors among boys was much more than percentage of donors among girls, being 31.5% and 8.7% respectively. This study is also in disagreement with the findings of Agrawal, et al (2013) who concluded that gender-wise, greater proportion of the blood donors were males (84%) than the female (16%) counterparts. It also contradicted the findings of Nigatu & Demissie (2014) where it was

stated that different studies reveal that blood donation, is completely different by sex and that males were more likely to donate blood more than females. This study also disagreed with the findings of Fauzia, et al (2011) whose findings revealed that regarding blood donation status, 93 males (62.8%) and 43 females (26.5%) had donated blood in the past. In their study, it was concluded that this could not be unconnected with the cultural belief that males are better and strong to take responsibility than female. This study is also inconsistent with the findings of Bantayehu (2015) who found that the proportion of males (64%) who have donated blood in his study is significantly higher than females (36%).

There was no significant difference between the males and females with regards to their knowledge on voluntary blood donation in this study. This insignificant difference in the knowledge and practice of the male and female groups in this study may be due to the fact that the respondents (male and female students) are almost in the same environment and are exposed to relatively the same level of health awareness. It could also be that most of the respondents acquired their information about blood safety and donation and its associated services through television and radio mainly among other sources.

Conclusions

Based on the outcomes of this study, the following conclusions were drawn that:

1. Male and female students of colleges of education in Kano State have similar level of knowledge of voluntary blood donation.

2. Male and female students of colleges of education in Kano State are not significantly different in their practice of voluntary blood donation.

Recommendations

The following recommendations were drawn that:

1. Periodic health talks on voluntary blood donations should be organized in schools for all the male and female students to encourage those that already had knowledge and are practicing voluntary blood donations to continue and others to key-in to voluntary blood donation, considering its numerous merits.

2. Provision of incentives such as free accommodation, scholarship and certificates should be used as means of motivating and involving students of colleges of education in Kano State irrespective of their gender in practicing regular voluntary blood donation.

REFERENCES

Agrawal, A., Tiwari, A.K., Ahuja, A. & Kalra, R. (2013). Knowledge , Attitude and Practices of People towards Voluntary Blood Donation in Uttarakhand. *Asian Journal of Transfus Sci; 7:59-62.*

Bantayehu, D. (2015). Knowledge, Attitude, and Practice of Voluntary Blood Donation and Associated Factors among Health Care Providers in Addis Ababa health Facilities, Ethiopia. Occup Med Health Aff 3: 209. Available at: doi:10.4172/2329-6879.1000209.

Bharatwaj, R.S., Vijaya, K. & Rajaram, P. (2012). A Descriptive Study of Knowledge, Attitude and Practice with regard to Voluntary Blood Donation among Medical Under graduate Students in Pondicherry, India. *Journal of Clinical and Diagnostic Research. 6(4): 602-604.*

Fauzia, H. M., Tabinda, A., Kashmira, N., Qudsia, A. & Mohammad, I. L. (2011). Knowledge and Attitudes towards Voluntary Blood Donation among Students of a Private Medical College, Karachi. *Infectious Diseases Journal of Pakistan. (20) 01,273-276.*

Hiremath, P. (2012). To Assess the Knowledge of Blood Donation among Voluntary Blood Donor at Blood Bank, Krishna Hospital Karad (Maharashtra, India). *Journal Nurs Care 1:124.* Available at: doi:10.4172/2167-1168.1000124

Ingale, L., Gessesse, S. & Miruts, G. (2015). Magnitude and factors associated with voluntary blood donation practice among adult Mekelle population, north Ethiopia: a community-based cross-sectional study. Research and Reviews. *Journal Oncol Hematology; 4(3):5–13.*

Melku, M., Asrie, F., Shiferaw, E., Woldu, B., Yihunew, Y., Asmelash, D. &

Enawgaw, B. (2018). Knowledge, Attitude and Practice Regarding Blood Donation among Graduating Undergraduate Health Science Students at the University of Gondar, northwest Ethiopia. *Ethiopia Journal of Health Science, 28 (5):* 571.

Mohammed, H. & Osman, T. (2016). Voluntary Blood Donation among Medical Students in a Resource-limited Country. *JPHD, 2 (3):* 257-67.

Mrigendra, A. (2013). Study of Knowledge, Attitude and Practice of Blood Donation among Students of Different Colleges of Kathmandu, Nepal. *International Journal of Pharmaceutical & Biological Archives. 4(3): 424 - 428.* Available Online at: www.ijpba.info.

National Population Commission (2010). 2006 Population and Housing Census, Priority Table, Vol. 111, Abuja.

Nigatu, A. & Demissie, D.B. (2014). Knowledge, Attitude and Practice on Voluntary Blood Donation and Associated Factors among Ambo University Regular Students, Ambo Town, Ethiopia. *Journal Community Med Health Educ 4: 315.* doi:10.4172/2161 0711.1000315.

Nwankwo, C. G, Eseigbe, P., Asuke, S. & Okeke, C. N. (2022). Attitude and Knowledge of Voluntary Non-Remunerated Blood Donation among Clinical Medical Students in a Tertiary Institution in North-Central Nigeria. *Haematology International Journal, 6(1)*: 00203.

Olaiya, M.A., Alakija, W., Ajala, A. & Olatunji, R.O. (2004). Knowledge, Attitudes, Beliefs and Motivations Towards Blood Donations among

Blood Donors in Lagos, Nigeria. *Transfus Med. 14 (1):*13 17.

Patrick, D. (2009). Interviews and the Philosophy of Qualitative Research. *The Journal of Higher Education 75(1):* 127-132.

Sabu, K., Remya, A., Binu, V.S. & Raghavan, V. (2011). Knowledge, Attitude and Practice on Blood Donation among Health Science Students in a University Campus, South India.*Online Journal Health A llied Scs. 10 (2):6.* Available at http://www.ojhas.org/issue38/2011-2-6.html.

Siddique, U.F., Yasmeen, A., Hina, N. & Alam, S.N. (2012). Who Donates More; Medical or Non-Medical Students. *Journal of the Dow University of Health Sciences, Karachi 6(1):*17-21.

Singh, P., Gupta, R. K., Shora, T. N., Langer, B., Kumari, R. & Gupta, R. (2017). Gender based knowledge, attitude and practice study about blood donation among medical students in a sub-Himalayan State. *International Journal of Research in Medical Sciences. 5(5):*1882-1887.

The Research Advisors (2006). Sample size table. http//:www.researchadvisors.com/tools/ samplesize.thm.

Udegbe, A., Odukoya, O.O. & Ogunnowo, B.E. (2015). Knowledge, attitude, and practice of voluntary blood donation among residents in a rural local government area in Lagos State: A mixed methods survey. *Nigerian Journal of Health Sciences;15(2):*80-88

WHO (2012). Blood Donor Selection: Guidelines on Assessing Donor Suitability for Blood Donation. Geneva.

WHO (2014). Ethiopia Commences World Blood Donor Day 2014 Celebrations. Geneva, Switzerland.

A Moral Dimension to Punishment as a Corrective Measure to Indiscipline in Contemporary day Schools

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ABSTRACT

The aim of this paper was to explore and discuss the moral dimensions of punishment as a disciplinary measure against anti-social behaviour in secondary schools. The objective of this paper was to conceptualize and justify the need for punishment in our schools and to assess the permissibility of punishment as disciplinary measures in schools. As a philosophical study, the methodology employed included the speculative, analytic and the prescriptive. In addition, logical reasoning and clarification of concepts, propositions and argument aided in gaining deeper understanding and insight into the moral dimensions of punishment in secondary schools. It was revealed that punishment is still perceived as a painful act inflicted on a person especially by a higher authority but at the same time it has remained and indispensable/effective disciplinary mechanism in schools as it tends to restore discipline and order to an erring learner. Finally, an appraisal of the appropriateness of the use of punishment in schools as a disciplinary measure will aid the school authority in being fair, firm and humane in exerting punishment.

Keywords: *Punishment,* measures, moral dimension, indiscipline

Introduction

It is a common place to hear teachers complain that lack of school discipline is the most serious impediment to their work as teachers. Daily, teachers are faced with negative attitudes of students. Such disciplinary problems range from misbehaviour in the classroom to the disruption of effective instruction, to even an atmosphere of extreme hostility and physical violence. Oftentimes too, one hears that students in a disruptive school system lack a degree of commendable docility essential to learning, and some students prove to be destructive, if not actually dangerous.

It will therefore not be alien to students when school authorities attempt to enforce discipline and sometimes, employ the use of punishment as a disciplinary machinery. It is also very important to note that if learning must take place, there is the urgent need to curb excesses by way of undesirable – behaviour of students. Ordinarily, the term school discipline connotes a condition of order and obedience among learners in schools which makes it possible to attain the

objectives of the school and make teaching and learning to happen. Thus, with discipline, there are limitations and the practice of restraint. This is quite imperative in the school setting; especially when the school authorities are looked up to as institutions that will come up with laws and regulations to guide students' standard of behaviour. Through discipline, students are taught to conform to school codes and norms. This is with a goal to help students to be well adjusted, happy and useful to the society. According to Nolte (1980) and Barrel (1978), the doctrines of school discipline is based on the concept of "in loco parentis", which allows school authorities full responsibility for children's upbringing, the right to discipline and control. This makes discipline a most effective management tool used in school.

Often times, when punishment is mentioned, it tends to connote fear, negation and pain. This may not be quite so, especially if we come from the premise that discipline has its implicit morality which is important in the development of children's character. This is to the effect that without discipline in classroom and schools, the success of the teaching and learning is threatened. In this case, wrong doers need to be corrected, and this involves punishment. In essence, violation of school rules calls for the use of punishment as discipline. According to Christopher (2019), no human society, when its laws and laid down principles are infringed, leaves itself powerless to impose sanction. This is more or less a penalty for disobeying a rule. This is where punishment as a sanction becomes imperative. It is in this light that it is the intent in this paper to see punishment as having corrective measure rather than punitive, as perceived in some quarters.

Objective of the Study

1. To conceptualize and justify the need for punishment in our schools
2. To identify the theories of punishment
3. To assess the permissibility of punishment as disciplinary measures in Schools

Methodology

Specifically, in this paper, the main educational issue is looking at punishment as a disciplinary measure from an ethical lens. It is in the practice in philosophical research to employ the three traditional research methods. These are: The Speculation, Analytic and Prescriptive.

The Concept, Nature and Moral Justification for Punishment

In every school system, the need to maintain discipline cannot be compromised. It is

against this background that educational institutions put in place rules and regulations to guide students' actions as well as regulate their improper and unacceptable behaviours. This is to the extent that as far as learning is concerned, any disciplinary action should be aimed at promoting learning and to facilitate responsible citizens and adulthood. In effect, discipline is crucial in school so as to allow it function properly in order to achieve the desired educational goals. It is in this context that Thorndile and Barnhart (1979:262) defined discipline as a "trained condition of order and obedience, order kept among school learners, bring to a condition of order and obedience or bring under control". This simply describes disciplines as a "practice of imposing strict rules of behaviour on other people" and also, as "the ability to behave and work in a controlled manner" (Treffrey, et al, 1997). Basically, discipline is a strive towards appropriate behaviours and actions taken, so as to present or handle behavioural problems in the classroom, as well as the control learners' behaviour in the opinion of Mbithi (1994), discipline is the pillar for the success of a school in academics and extra-curricular activities. He further adds that sometimes, discipline connotes negativity, especially when it has to do with corrections of wrong doers which may also involve

punishment. That notwithstanding, discipline is also regarded as a positive force.

Oftentimes, when school authorities want to maintain discipline, there will always be some recalcitrant students who need some corrective measures, as a result of being indisciplined or haven committed some offence and gone against the school rule and regulations. In such cases, the school authorities will apply further stringent measures by way of punishment. Such procedures of discipline is hoped will instill corrections. According to Mbithi (1974), any violation of school rules calls for the use of discipline and punishment.

It is often thought in some quarters that discipline and punishment are synonymous. In the argument of Kleing (1985) despite the close similarities in meaning, they are yet quite distinct in the sense that punishment is deliberate and presumably an unpleasant imposition. Also, punishment is also associated with some moral failure and its main immediate purpose is to reform or correct. On the other hand, discipline is the practice of training people to obey rules and punishment them if they do not (Simatwa, 2010). Evidently, discipline is hinged on the platform that an individual has exhibited a negative attitude. However, no matter the extent of attitude displayed, punishment

should never appear arbitrary or perceived as abuse of power, as this may lead to hostility on the part of the student. One crucial aspect of discipline is to firstly make clear to the students' rules and regulations put in place and the penalty or consequences for breaking the rules. This serves as a guide. On the other hand, teachers must be equipped with the kind of punishment to give to different misbehaviours. In other words, punishment may be judged as fair or unfair depending on the degree of reciprocation and proportionate to the offence. This is important, to prevent punishment from being given arbitrary. However, whatever the punishment meted, the intent should be hinged on discipline. Egwuyenga (2000) said that discipline is globally aimed at that training which enables the individuals to develop an orderly conduct and self-control as well as self-direction. In essence, with discipline, the student knows his limitations. He knows which he is late for school and the punishment that goes with such offence. So also, the student who engages in a fight knows the implication. This makes discipline a mode of life to conform to, a situation where students are taught to respect school laws and regulation, and maintain established standard of behaviour (Adeshina, 1980). Thus, with the doctrine to school discipline, Barrell (1978)

and Nolte (1980) say it is hinged on the concept of "loco parentis". This give the school authorities full responsibility and the right of discipline and control. Generally, disciplinary problems in schools that warrant suspension are varied. Rosen (1997) identified the following ten types of disciplinary problems which may lead to a learner's suspension (as punishment). These are defiance of school authority; not reporting to after-school detention; class disruption; truancy; fighting; the use of profanity; damaging school property; dress code violations; theft; and leaving school without permission. Some others that could disrupt normal school routine include repeatedly asking to go to the toilet; mission lessons; absconding from classes and school; smoking in the toilets; being rude to teachers and others in authority, fighting in school; wearing bizarre clothing and make-ups; threatening teachers and leaving school before close of time (McManus, 1995).

All of the following can be grouped as common school disciplinary problems. But according to Alidzulwi (2000), there are other serious cases of learners' misconduct. In a survey by Frazier (1999) burning down of classrooms and other school properties, learners attack on teachers and principal, attack of staff vehicles and public vehicles

are some serious offences committed by students. In the same vein, Moodji (1999) identified the kinds of perpetration of school violence as those making themselves guilty of the following:

- Verbal violence
- More serious behaviour, including vandalism, theft and blackmail
- Extortion or use of weapons in the school premises
- Planned violence, which includes physical violence in or outside the school premises
- Sexual harassment of girls

There is no gainsaying that the above misbehaviours need to be addressed and reprimanded accordingly. The aim is to put an end to such occurrences, irrespective of the unpleasant nature of the punishment.

Evidently, the condition of breaking (or breaking) the rules must be satisfied for consequences to be considered punishment. This makes punishment the imposition of an undesirable, unpleasant outcome upon a group or individual meted out by an authority. In other words, it comes as response and deterrent to a particular action or behaviour that is deemed undesirable or unacceptable. As Brooks (2012:2) puts it, "punishment is a response to crime which must involve a loss (including a loss of liberty or money for example) must only be administered only when someone has broken the law; and can only be used by an authority with a legal system". Indeed if punishment is employed in schools, it will help to build students who will not repeat mistakes because of the fear of punishment. This makes punishment an integral aspect of socialization and punishing unwanted behaviour is often part of an educational system or behavioural modifications which also include rewards.

The question as to whether punishment has its implicit morality cannot be underestimated. Ordinarily, the school is looked up to as the moral energy of society. This also means that besides academic activities, the school should endeavour to produce morally right individuals with disciplined character. The kind of character that Lickona (1989:51) sums that:

character consists of … values in action. Character … has three interrelated parts: moral knowing, moral feeling and moral behaviour. Good character consists of knowing the good, desiring the good and doing the good-habits of the mind, habits of the hearts and hearts of action. We want our children… to judge what is right, care deeply about what is right – and then do what they believe to be right even in the face of pressure from without and temptation from within.

If this is one goal to be achieved, then the school should not be seen to condone illicit behaviour that disputes the moral, social and ethical principles of the school and the society at large. In another sense, every misbehaviour has its ultimate effect on the moral value, worth and dignity of that individual as an offender. It is in this regard that the offender should be punished. However, punishment should not be carried to a point of hatred. Instead, it should be recognized as differing in their degree of severity and may include sanctions, such as reprimands, deprivation of privileges or liberty. This also brings to mind, justification for punishment which includes retributive, deterrence, rehabilitation and incapacitation. All of these are a pointer to the fact that the importance of punishment in school is aimed at improving the ethical or moral state or nature of the students.

Still on the nature of punishment and its moral justification, if and when a student misbehaves, he has deviated from school rules and is therefore bound to make some corrective measures or a corresponding coronary. This is the very essence of punishment. On the other hand, the nature of ethics centres on good or bad, right or wrong. This makes punishment a crucial issue in ethics and morality. As Ozumba (2001:64) affirmed, "the task of ethics is not limited to analysis, it extends to the clarification of concepts. This is why the concept of punishment comes within the preview of ethics". In this context, Ozumba (2001:64) said that punishment means:

> *Causing somebody to suffer discomfort for wrong doing. Punishment is an act whereby an offender is deprived certain of his rights for committing an offence. It involves inflicting pains of some sort on the offender. It is the penalty one pays for an offence.*

Theories of Punishment

An analysis of the theories of punishment would expose the need or role of punishment in school discipline. This is against the background that theorists of punishment subscribe to the assertion that schools should enforce discipline as a means of training students to develop orderly conduct, self-control and a positive sense of direction.

Such a state establishes a relationship between learning atmosphere, learning environment and disciplined student environment. This is also in recognition that the learning environment can exhibit disciplined student environment and possibly too, disruptive student environment. When the latter is the case, the school puts mechanism in place to bring disruptive

environment under control. This is where punishment comes in. What one finds with the theories of punishment is that they consist the basic justification the society often invokes to punishment offenders either to avenge a wrong act or deter future wrongdoing. Citing the case of the utilitarian and retributive theories, Aboluwodi (2015: 135) says these theories punishment provides in-road into the nature of punishment.

(i) The utilitarian theories describe different forms of punishment which seek to discourage wrong behaviour or criminal tendencies among individuals in society. The basic utilitarian theory of punishment teaches that punishment is always justified not only by the consequences and punishment is always undesirable in itself. Thus, for utilitarians, a punishment is justified if it has superior utility. For advocates of this theory according to Echekwube (2000:295):

Punishment is detested as long as it inflicts pain on offender or criminal. They claim that punishment should aim at producing good results with the minimum pain possible. That punishment should be acceptable to the Utilitarian means that punishment must bring about a reformation of the criminal's character and which also serves as a deterrent to would-be criminals.

In essence, the utilitarian theory of punishment hold the view that punishment should yield change in behaviour and reformation. This is why the basic utilitarian theories are deterrence and rehabilitation.

(ii) Deterrence theory takes its root from the word deter, which means to prevent or discharge. This theory of punishment is "directed towards discouraging or hindering one form the commission of an act considered bad" (Ozumba, 2001:65). It is therefore noted that the essence of punishment is to instill fear or to deter people from it because of the consequences attached. In other words, punishment (2000;296), this is based on the assumption that if crimes are unpunished, the rate of criminal acts would assume unimaginable proportions and societal order might be very much disorganized. In this regard, the deterrent theory of punishment serves as prevention to the tendency to deviate from a given societal norms. Basically, deterrence theory operates on the principle that steps should be taken to deter wrongdoing by meting out appropriate punishment to an individual who commits an offence. In the summation of Allen (2004), the basic idea

of deterrence is to deter both offenders and others from committing a similar offence.

(iii) On the other hand, the reformative theory of punishment sometimes known as the rehabilitative theory is that "punishment that is meted on the offender in order to change him or her from a morally deprived person to a better human being" (Ozumba 2001:65). This theory of punishment is hinged on the belief that when punishment is meted out, "others may be brought to awareness that crime is wrong through another's punishment and as it were, `reform' before they actually commit a crime" (Allen, 2004). That is why for Allen (2004), a theory of rehabilitation is associated with treatment of the offender. This theory of punishment is quite crucial in schools and in the society as a whole, it enables students with bad and deviant behaviour to give up their bad ways of life and accept a better one. For instance, anyone with undesirable behaviour, can have his future behaviour modified by remedial treatment, instead of just blaming or punishing the offender for his bad deeds. Thus, with proper education, reformativists believe that persons who deviate from societal norms can attain a

better life. Punishment under this theory should not actually be to inflict pain, rather, it should serve as a means to educate the offender through love. Essentially, deterrence and reformative punishment theories are typical utilitarian that tend to address the consequences of an action.

(iv) According to Ozumba (2001:65) "it is simply the desire to punish either in a vindictive spirit or to correct the upset of the moral order". Thus, for Akperipurun (2000:65), it is that theory of punishment that is an end in itself that an offender should suffer from pain in proportion to the criminal act. The retributionist see this as the primary and main purpose for inflicting punishment. Retributive theory seeks to punish wrong doers because they deserve being punished. As Marshall (2005) puts it, "retributive theory involves a paying back for a crime committed in the past". For instance, a student who broke into the class teacher's cupboard and absconded from school should be punished anytime he returns back to school. However, Marshall (2000) is quite worried about this kind of punishment especially as it involves students, as most of them may not be committed intellectually to understand

and even appreciate the reasons behind certain actions they may be held accountable for as breach of school rules. It is in this case that Marshall is worried about the unpleasantness of the sort of thing we wish to inflict on our children in the name of punishment. He is quite particular about children between the age of 11 and 16. In his opinion, if there are children in the African classification, can we "talk about punishment involving the education of the young children, when their capacities to understand reason are derived by reason itself… that is, children are not normally considered to be rational" (Marshall, 2005). Even at this, does the desirability of retributive punishment still hold? In advancing his own reason why he thinks retributive punishment it desirable as a form of punishment, Kant affirms thus:

Whoever has committed murder must die. There is in this case, no judicial substitute or surrogate that can be given or taken for the satisfaction of justice. There is no likeness or proportion between life, however, painful and death: and therefore there is no equality between the crime of murder and the retaliation of it but what is judicially accomplished by the execution of the criminal.

From Kant's argument, retributivism simply states that people who commit crimes deserves to be punished, and this alone is sufficient to justify punishing the offenders.

The intensity with which retributive punishment is meted out in the larger society may not be same in the school setting. However, one thing that needs to be transmitted to students is that retributive treatment is not mere punishment, but an unpleasant treatment. For instance, students who destroy school properties in the event of a riot will be changed proportionately for damages done. In this regard, retributive punishment is employed; and as Rawls (2010) has asserted, the retributionist believes that punishment is justified on the grounds that wrongdoing merits punishment. Even though he holds that retributionists should be able to show that those who are punished indeed deserve the punishment by their actions. Thus, the students who damage school properties should be punished in accordance. However, it is argued in some quarters that since retribution aims so much at retaliation, it may not often time reform or deter other students from committing same offence. In this case, the view is that retributive punishment is quite reprehensible and may not work well in an educational setting, especially when the ages 6-11 are considered.

Still on the assertion that punishment is good and justified. Thomas Aquinas, described punishment as an act of vindication, which belongs to the virtue of justice, and its object as the restoration of order through the infliction of an evil on the offender. From the perspective of Aquinas, it also follows that man has this `natural inclination' to repress evil with punishment. It is therefore an obvious feature of human nature that all men have a sense that evil acts should be punished. It also follow that the worse the offense, the more severe the punishment. Thus, the severity of the punishment given to the student who put on a wrong school shoe, will not be same meted on the male student who rapes his classmates. The emphasis is that punishment given to the offender should reflect the kind of offence. This makes punishment a good act, and an act of justice aimed at the restoration of order.

Generally, the knowledge that punishment will follow crime could deter people from committing crime. Ultimately too, a society free of crime allows one to enjoy his entitled rights, and the unhappiness that comes with insecurity, is reduced. Ultimately, punishment helps to reform the offender. When this is the case, punishment acts as a form of norm reinforcement. Specifically, for retributionists, wrongdoers should be punished because they have violated social norms and the rights of others. Punishment restores and moral order that has been breached by the original wrongful act.

At this juncture, the paper will further examine the theories of punishment and discipline. In so doing, the implicit morality in each theory will be identified and articulated. Also, its suitability as a disciplinary mechanism will be explored.

Permissible Punishment as Disciplinary Measures in Schools

So far, the argument has entered on the moral permissibility of punishment in schools. Questions attempted includes: why may we punish students? To what extent can the student be punished? In effect, why may we punish students and how severely? The debate on the justification for punishment should not stem from a simplified single value or aim and function of punishment (reformative, utilitarian, retributive and deterrent). Instead, it should span across questions that make punishment morally acceptable. In other words, a defense of punishment requires answers to several distinct questions, whose answers may appeal to different moral consideration.

Beginning with the question as why we may punish students, this can be looked at from various perspectives. Firstly, it must be

established that there is an offender and punishment is in response to crime he or she committed, depending too on the gravity of the offense. Again looking at the morality implicit in punishment, we must look at this offender as a moral being. As expressed in Kant's (1996:557) famous formulation, all human beings are rational beings, who possess dignity, and an absolute inner worth that warrants respect (both self-respect and the respect of others). He goes further in his categorical imperative to instruct thus: "act in such a way that you treat humanity whether in your own person or in the person of another, always at the same time as an end, never simply as a means" (Kant, 1994:36). Still in his "Doctrine of Virtue", Kant (1997:173) instruct that, "to be contemptuous of others, that is to deny them the respect owed to human beings in general, is in every case contrary to duty: for they are human beings.

In effect, treating a student who has broken school rules with contempt is unethical in itself. Contempt in this context refers to that feeling that a person is worthless. Treating an erring student with contempt is seeing him as morally worthless. There is no doubt that the student has done something wrong; and there is always this tendency to want to look down on him especially in comparison with other good students. This also comes from the premise that often times, contempt involves a feeling that cannot be rationally controlled at the time at which it emerges. But in a moral rational sense, the teacher can cultivate a disposition not to regard others (students) with contempt. Contempt actually focuses on a person not for what she has done, but for who she is. It should not be mistaken natural that once a student goes out of order, the immediate reaction of the teacher or those in authority is to gets involved in a fight, it is mostly the fight that brings about resentment. When the teacher gets contemptuous, it presents the student as morally inferior, and as a thing rather than a moral person. This disposition `creeps' into whatever punishment that will be served on the student. In essence, the disposition of the teacher already colors the punishment as immoral with not much prospect for moral reforms. According to Hill (2000:60), this makes contempt a deep dismissal, a denial of the prospects of reconciliation and a signal that conversation is over. The indication from Hill's position shows that contempt reflects a sort of disengagement and a giving-up on a person. This shows that even in the first place, the person was not even worthy of a genuine engagement which hardly paves way for any form of reconciliation that could

possibly bring up change in behaviour. Even if he or she were genuinely repentant, desires forgiveness and is ready to apologize and change his behaviour, contempt has already permeated the assessment of that student. It is most likely that the contemptuous disposition of the teacher will prevent him from recognizing evidence of reform. In other words, the concept of contempt itself already rules out the possibility of modifying the future behaviour of the individual. Evidently, contempt does not look for signs of repentance on the part of the offender. Instead, it gives up the search for possible change.

Conclusion

While not countering the foregoing as justification for punishment, the central argument in this paper focuses on permissible punishment. This recognizes the offender as a human being, even in punishment, as well as elicits the moral import in punishment. Drawing from the Kantian formulation, it says that "all human beings are rational beings who possess dignity"…" This being the case, even in punishment, the student who has broken school rules should not be regarded with contempt. When contempt is involved, the prospects of offenders' reform is undermined. This begins with the weakening of his motivation to engage in moral reflections and reforms. Then the whole idea of a reform, where the intended changes in the individual's motives and dispositions are defeated. After all, contempt does not look for signs of repentance, and quite to undermine the prospects of reforms.

Suggestions

There is no gainsaying that discipline is crucial to school's ethos, and in its purest form, punishment is supposed to bring about remorsefulness. But sometimes, there may be punitive intent without punitive effect. This is quite disturbing because one major idea of punishment is to reform the student. But as previously noted, the disposition of the punisher has its ultimate effect on the behavioural change of the student. Significantly, contempt was cited as one issue that could weaken the motivation of the student being punished, and even the will to reform. In its mode or degree, punishment should not undermine the prospects of reforms. From a moral point of view, there is always the hope that punishment should promote the moral reform of offenders.

REFERENCES

Aboluwodi, A. (2005). A critical analysis of retributive punishment as a discipline measure in Nigeria's punishment secondary schools. *Journal of Education and Practice,* 6(10), 134-142.

Adesina, S. (1980). *Introduction to Educational Management.* Ile-Ife: University of Ife Press.

Akpenpuun, D. (2000). Principles of ethics: Ibadan: Agape Publications.

Alidzulwi, T.A. (2000). The role of parents in value education with special reference to the situation in Venda (Northern Province). Unpublished M.Ed. dissertation. Stellenbosch: University of Stellenbosch.

Allen, R. (2004). Divine punishment as a problem in theodicy. http://www.kton.demon.co.uk/punishment.

Barrel, G.R. (1978). *Teachers and the Law.* Great Britain: Methuen and Co. Ltd.

Brooks, T. (2012). Punishment. Oxon: Routledge.

Christopher, T. (2019). An eye for an eye: The morality of punishment. www.jubilee.centreorg/eye-for-an-eye-morality-of-punishment.

Dewey, J. (1954). The moral training given by the school community. In Jo Ann Boydston (Ed). John Dewy: The middle works. Vol. 4, 1899-1924. Carbondale, III Southern Illinois University Press. 269-274.

Donnelly, J. (2000). Two simple rules – discipline problems down. *Pro Principal,* 16(7), 1-3.

Echekwube, A.O. (2005). Contemporary ethics: History in Ekpoma review. *Floreat System,* 3(31).

Egwunyenga, E.J. (2000). *Essentials of school administration.* Benin City: Justice Jeco Publishers.

Flew, A. (1970). The justification of punishment, in W. Sellers and J. Hospers (Eds), reading in ethical theory. New Jersey: Prentice Hall Inc.

Frazier, H.C. (1999). Corporal and capital punishment of Juveniles. *Journal of Medical Law,* 93, 996.

Hill, H.C. (1999). Respect, pluralism and justice: Kantian perspectives. Oxford: University Press.

Hobbes, T. (1972). Punishments and rewards: philosophical perspectives. New York: State University of New York Press.

Kant, I. (1994). Groundwork of the metaphysics of morals. In James W. Ellington, trans. Immanuel Kant, Ethical Philosophy. Indianapolis, Ind: Hackett Punishing Inc.

Kant, I. (1996). The metaphysics of morals. In Mary J. Gregor, trans and ed. The Cambridge edition of the works of Immanuel Kant, practical philosophy. Cambridge, UK: Cambridge University Press.

Kant, I. (1997). Gregory Ludwig Collins' and Johann Vigilantius' notes Kant's ethics lectures. In Peter Health and J.B. Schneewind, eds. The Cambridge edition of the works of Immanuel Kant lectures on ethics. Cambridge, U.K.: Cambridge University Press.

Kleinig, J. (1985). *Philosophical issues in education.* London: Croom Holm.

Likona, T. (1989). Educating for character: How our schools can teach respect and responsibility. New York: Banstam.

Marshall, M. (2005). Discipline without stress, punishment or rewards. *Classroom Management for Middle and Secondary Schools*, 29(1), 51-54.

Mbithi, D. (1974). Foundation of school administration. Nairobi: Oxford University Press.

McManus, M. (1995). Troublesome behaviour in the classroom. London: Routledge.

Mel, T. (2003). Ethics. New York: McGraw – Hall.

Moodj, E.D. (1999). Tuck in that shirt: Race, class, gender and discipline in an urban school. *Sociological Perspectives*, 48(1), 25-48.

Nolte, M. (1980). The impact of the abolition of corporal punishment on teacher morale. 1994-2004. *South African Journal of Education,* 27(2), 283-300.

Osher, D. (2010). How can we improve school discipline? *Educational Researcher*, 39(1), 48.

Ozumba, G. (2001). A course text on ethics. Lagos: O.O.P Ltd.

Rawls, J. (2010). Two concepts of rules. http://ethics.sandiego.edu./ applied/deathpenalty/ rawls.html.

Rosen, L. (1997). School discipline: Best practices for administrators. Thousand Oaks Corwin Press.

Rowne, O.E. (2005). Teacher perception of levels of professional contribution to the school. *College Student Journals,* 43(3), 852-859.

Ryan, K. (2003). The six Es of character education. New York: Centre for the Advancement of Ethics and Character.

Simatwa, E.M.W.; Ouma, M.A. & Serem, T.D.K. (2013). Management of pupil discipline in Kenya: A case study of Kisumu municipally. *Education Research,* 4(5), 374-386.

Thorndile, E. & Barnhart, C.L. (1979). Scott, foreman intermediate dictionary. Oxford: Oxford University Press.