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## Editorial

The Journal of Theoretical and Empirical Studies in Education (JTESE), belongs to the Department of Educational Foundations Nnamdi Azikiwe University, Awka. It publishes well-researched theoretical and empirical studies in all aspects of Education, hence it is an important source of academic information. We assure all readers of this journal of highly investigated work in education.

The seventh edition of the journal contains sixteen articles that have been rigorously peer-reviewed. We believe that our readers will find this edition very interesting and educative. The Editorial Board acknowledges with thanks all the efforts of the team of editors, the reviewers, the contributors, and others who contributed towards making this edition a success.

## Dr. Oby Ikwuka

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## **ABOUT THIS JOURNAL**

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The Journal of Theoretical and Empirical Studies in Education is a peer reviewed, open access publication of the Department of Educational Foundations, Nnamdi Azikiwe University, Awka, Nigeria. The journal, from 2021, is published annually in two volumes. It is aimed at publishing quality papers that have the capacity to inform policy both nationally and internationally. The editorial board welcomes well researched theoretical and empirical papers, which are of good quality in all aspects of education.

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## ASSESSMENT OF STUDENTS ENTRY RATE AND INTERNAL EFFICIENCY IN PUBLIC SECONDARY SCHOOLS IN DELTA STATE, NIGERIA

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## Abstract

This study determined the entry rate of students into Junior Secondary School (JSS1) and the internal efficiency of public secondary schools in Delta State. Entry rate examines the percentage of enrolee in JSS1 to the population of 12 years who ought to be in school. However, internal efficiency evaluates the effective and productive output produced from the school system through the utilization of scarce resources introduced as input. The study employed the retrospective review on the trend of enrolment in public secondary schools in Delta State from 2005 to 2014 to ascertain the enrolment growth rate (EGR) for the period. To assess the factors that influence internal efficiency in public secondary schools, the simple random sampling technique was employed to select 44 schools (10%) from a population of 440 across the state. Retrieved completed questionnaires were analysed using statistical equations, to compute entry rate. Results obtained revealed that EGR has an undulating trend with an average Enrolment Growth Rate (AEGR) of 7.4% while the entry rate progressively increased annually with an Average Entry Rate (AER) of 96%. Reliability test result of Cronbach Alpha and Guttman Split-Half coefficients were 0.98 and 0.98 respectively. The grand mean of 3.97 from the analysis of the questionnaire corroborated the problems associated with pedagogical activities such as; poor school attendance by learners, poor socio-economic background of learners and lack of recommended textbooks by learners. Consequently, the study recommends construction of more classroom blocks to accommodate the ever-growing population as indicated by the entry rate, provision of recommended textbooks by government, and periodic employment to improve ward's parent economic standing. These would in no small measure improve the teaching and learning process in all public secondary schools in Delta State.

Keywords: Entry Rate, Input, Internal Efficiency, Output, Enrolment growth rate.

## Introduction

According to Akpotu (2014), Entry rate is the measure of flow and movement of students into the educational system. It has crucial importance in the educational system in the following ways; It is a measure of the access to education and quantity of students inflow into the system, the number of entrants helps to determine, influence the enrolment in all subsequent grades and class in the future years as well as it serves as a guide in policy decision on the provision of other educational input,

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such as funding, school plants, teachers, classroom, furniture besides others. However, entry rate is the determinant of the number of the population of twelve years old who successfully enter the secondary level of education from primary six. It has the propensity to measure the level of access to education and the level of influx of students into secondary schools. The concept cannot be underestimated due to the relevance of its input in determining the quality of graduates` produced by the system. Moreover, Akpotu (2014), reiterate that the advent of Universal Basic Education (UBE) led to the increase in mass literacy through free tuition fee, introduced in all levels of education with respect to the social demand approach to educational planning. To achieve the Nigerian philosophy of education as stated in National Policy on Education (2014) that education is the most important instruments of any fundamental change in the intellectual and social outlook of any society preceded must be by an educational revolution. Students introduced into the school system as input, are transformed into either educational wastage (repeaters and dropout) or viable output (graduates) via the processing mechanism. The systematic evolution of input (students) introduced into secondary level of education into JSS 1 progresses through promotion or retard through repetition or dropout in due course to get to SSS 3.

There are other inputs into the school system (educational input) such as, income, classrooms, administration, buildings, textbooks, support staff, equipment and infrastructural facilities. These affect the effectiveness of students' promotion within the secondary level of education either positively or negatively. The positive impact of these variables results in progression on the echelon through JSS1 to SSS3. The physical, psychological, mental, socio-economic disposition and characteristics of the learner admitted besides, other determinants such as teachers, parents, education administrators, the society and the government contribute in no small measure to completion rate of the system. Entry rate expressed as Net Enrolment Rates (NER) represents the number of students in the official school age group expressed as a percentage of the total population in that school age. Entry rates aids in the prediction of new entrants in subsequent academic years for proper allocation of the available scarce resource for future development of the institution of learning. Educational Input into the school system (teachers, materials, buildings, finance) are used to transform one set of output into another set of input (Olubor, 2004). Assessment of entry rate measures the quantity of students' influx, which helps in the prediction of future admission in subsequent years for policy and decision-making such as budgets for teachers and employed labour salaries. The internal efficiency of an educational system as perceived by Galabawa (2003) is the maximizing of the relationship between input and output, which produces significant outcome in the school system in terms of graduates or successful completers out weighing the proportion of enrolled entrant learners. Moreover, repeaters are students who have remained in the same grade over one year and have used additional resources for the grade in the form of school material, equipment, library, and teachers' salary. Students leaving school before completion of a given stage of education are dropout which is an integral part

Assessment of Students Entry Rate and Internal Efficency ... .....

of an educational wastage. This research is therefore centred on the problems envisage with possible increase in students enrolment, without a corresponding increase in economic, physical and human resources capable of turning the input(students) into viable output through the process mechanism. Based on this backdrop, the work was conducted.

According to Ayara (2002), attributed the stunted economic growth to minimal input of education on her human capital. One of the factors influencing the output of the school system is the processing unit. Students' socio-cultural and economic background has much influence on quality of output in the school system. Chowdhury et al (2002) stated that parents with low level of education are more likely to have children who do not attend school. More so, Dar et al (2002) observed that activities such as childcare for younger members in the household are labour intensive, time consuming, and many distractions from children's ability to understand school work. The quality of input introduced into the secondary level of education is a vital factor that determines the internal efficiency of the educational system. Admitting unqualified students with poor mental ability will result in quantitative education with poor output in quality. However, education as a major source of growth and development in any country as it improves the productive capacity as well as promotes economic investments; the school systems must therefore admit only qualified candidates with great intellectual quotient and capacity. Promotion rate is grossly dependent on the knowledge and retentive level of admitted enrolees in the system. The school classroom and environment must be conducive for pedagogical activities if a measureable output capable of increasing the cognitive stock of economic productivity must be attain.

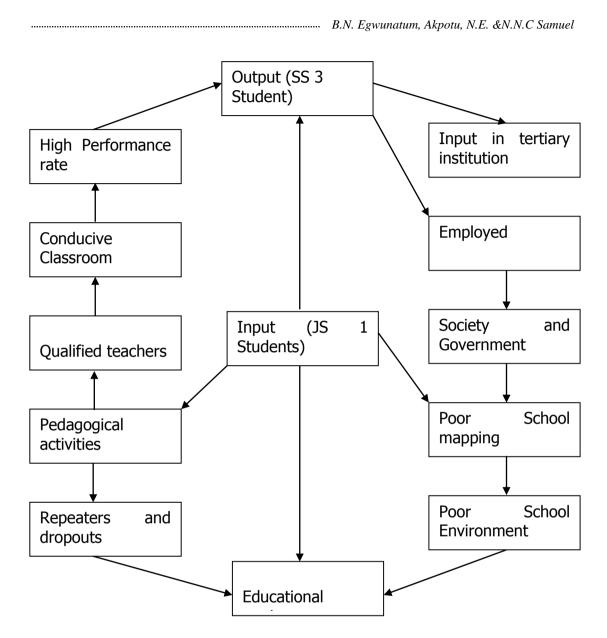
## Purpose of the study

The purpose of the study is to:

- 1. Determine the enrolment growth rate in public secondary school in Delta state (2005/06-2014/15 academic year).
- 2. Evaluate the trend in entry rate in public secondary schools in Delta State.
- 3. Examine measures that could improve internal efficiency of public secondary school.

## **Research Questions**

- 1. What is the enrolment growth rate of public secondary schools` in Delta State?
- 2. What is the trend of entry rate in public secondary schools in Delta State?
- 3. What factors could improve the internal efficiency public secondary schools` in Delta State?



## Figure 1: Conceptual framework for public secondary schools.

The relationship between entry rate and internal efficiency illustrated using a conceptual framework of the school system shows that students admitted into JSS1 in due course of teaching and learning by qualified and dedicated teachers, classroom and school environment conducive, graduate turns out as viable output. The graduates are absorbed as input in tertiary institution and are employed either by the society or as non-teaching staff in government secondary schools. Alternatively, inefficiency may be recorded in the system due to inappropriate utilization of input introduced into the system, poor school mapping and environment resulting to increased repetition and dropout (educational wastage) rates respectively.

## Method

Survey research design adopted in this study, which enabled the researchers to retrospectively study past students enrolment from 2005-2014 retrieved from Delta State ministry of education, Asaba, (2015). The population of study consists of four hundred and forty (440) public secondary schools in Delta State (source: Delta State post primary education board, Asaba, November 2015). Forty-four schools from the total population were sampled using a simple random sampling technique, resulting to a sample size of 10% with due consideration of number of schools in each senatorial district and local government area respectively. A checklist was administered to principals in each sampled school on number of entrants from primary six to JSS1 and enrolment in JSS1 respectively. A self-designed questionnaire on measures that could improve entry rate and internal efficiency in public secondary schools was also administered to ten teachers in each sampled school. The Split- Half reliability test conducted on the instrument gave the following results: Guttman Split-Half (0.98) and Cronbach's Alpha coefficient (0.98) respectively. The data were analysed using statistical equations for Enrolment Growth Rate (EGR), Entry Rate, bar charts, arithmetic mean, standard deviation and the modified Likert scale technique. The cutoff point of the mean was determined, while mean score below 2.5 implies rejection of the item, a mean above 2.5 is accepted of research item.

## Results

**Research Question 1**: What is the enrolment growth rate of public secondary schools` in Delta State?

Year	Enrolment	Enrolment Growth Rate (EGR in %)
2005	216, 226	-
2006	207, 714	-3.9
2007	173, 971	-16.2
2008	207, 913	19.5
2009	232, 820	12.0
2010	101, 688	-56.3
2011	116, 850	14.9
2012	221, 049	89.2
2013	230, 346	4.2
2014	238,040	3.3
Total		67
Average Enrolment Growth		7.4
Rate		
(AEGR)		

 Table 1: Public Secondary Schools Enrolment Growth Rate in Delta State

 (2005-2014)

Source: Delta State Ministry of Education, Asaba (2015).

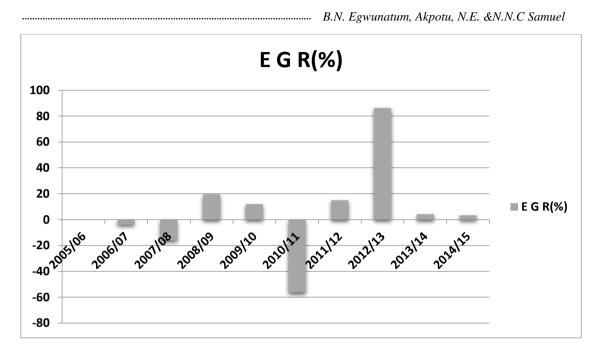


Figure 2: Bar Chart on enrolment growth rate (2005-2015)

Table 1 and figure 2 respectively, is a retrospective study of public secondary schools' enrolment for ten consecutive years (2005 to 2014) in Delta State. The data revealed that the fluctuation in enrolment indicated by the negative EGR is an indication of increase in repetition and dropout rates. The EGR in 2012(89.2%) represent the highest number of entrants into the secondary level of education while in 2010 with EGR of -56.3%, shows the least intake of students into JSS1.

**Research Question 2**: What is the trend of entry rate in public secondary schools in Delta State?

Year	Population of legal entrance from primary six (6)	New Entrant into JSS 1
2009/10	3678	3440
2010/11	3822	3652
2011/12	4672	4502
2012/13	5062	4904
2013/14	5828	5598
2014/15	6282	5918
2015/16	6704	6658
Total	36048	34672

 Table 2: Legal Entrants and Enrolment into Sampled Public Secondary Schools in

 Delta State (2009-2016)

Source: Computed from fieldwork via the checklist

Legal entrant from primary six represent the population of twelve years that ought to be in JSS 1 in a given academic session, while new entrants into JSS1 is the number of new in-take that enrolled in JSS 1.

Year	Population of Legal Entrance From Primary Six	New Entrant Into JSS1	Entry Rate (%)
2009/2010	3678	3440	93.5
2010/2011	3822	3652	95.6
2011/2012	4672	4502	96.4
2012/2013	5062	4904	96.9
2013/2014	5828	5598	96.1
2014/2015	6282	5918	94.2
2015/2016	6704	6658	99.3
Total	36048	34672	
Average			96

 Table 3: Computed Entry Rates for JSS 1 from Table 2

Entry rate (2009/2010) = new entrant in JSS1 (2009/10)/population of legal entrant

from primary six =  $3440/3678 \times 100$ 

The entry rate fluctuated through the years with average rate of 96%. It indicates that out of the 36048 population of legal entrant from primary six in sampled public secondary schools from 2009-2016, only 34672 students turned out as new entrants into JSS1. The average entry rate of 96% signify that 96% out of 100% of students that ought to be in school resumed, indicates that students' influx into the secondary educational level is very high and quantitative.

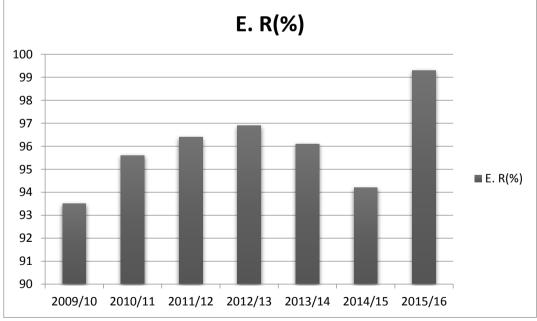


Figure 3: Bar chart of entry rates

From Table 3, the calculated entry rates were derived as the proportion of new entrants into JSS 1 to the population of legal entrants from primary six through the period of 2009 to 2016. It revealed a consistent progression in entry rate from 2009 to 2013 session, then a sudden decline in rate which could be attributed to the in process mechanism in the school system. The peak rate represented in 2015/2016 was an indication of increase in the influx of students into the school system.

**Research Question 3:** What factors could improve the internal efficiency public secondary schools` in Delta State?

Sch	0015					
S/N	VARIABLES	Α	D	Mean	SD	Decision
1	Enforcing students' attendance to	320	89	4.03	0.92	Accepted
	school will increase entry rate					
2	Provision of textbooks increase	332	77	4.05	0.87	Accepted
	Internal efficiency					
3	Provision of basic laboratory	343	66	4.13	0.84	Accepteds
	facilities increases internal					
	efficiency					
4	Discipline in school improve	331	76	4.02	0.88	Accepted
	school efficiency					
5	Employing professional teachers to	351	58	4.34	0.92	Accepted
	teach respective subjects increases					
	Efficiency.					
6	Improved socio-economic	312	97	3.89	0.99	Accepted
	condition for learners improve					
	efficiency					
7	Improved financial allocation to	295	114	3.79	1.02	Accepted
	schools improves pedagogy					
8	Periodic renovation of school	242	167	3.46	1.07	Accepted
	building improve efficiency					_
	Grand Mean 3.97					

 Table 4: Measures that Could Improve Internal Efficiency in Public Secondary

 Schools

Source: Computed from fieldwork

Table 4 above shows that all the eight items are accepted as measures that could improve the internal efficiency in public secondary schools. They are; enforcing school attendance (4.03), provision of textbooks (4.06), and provision of basic laboratory facilities (4.13), Discipline in school (4.02). Employing professional teachers to teach respective subjects (4.34), improved socio-economic condition of learners (3.89), improve financial allocation to schools (3.79), and periodic renovation of school buildings (3.46).

#### Discussion

The Delta State enrolment growth rate of public secondary schools between 2005 and 2014 reveals an undulating fluctuation over the years. Moreover, the gross enrolment rate in 2007 and 2008 was -16.2% and 19.5% respectively. In 2011 and 2012, there was a remarkable increase on enrolment growth rate of 14.9% and 89.2% respectively. The positive changes indicate an increase in entry and promotion rates. The data unfolds the likely challenges of utilizing educational input in the system such as; work force, structural and infrastructural facilities to produce high output and. In Delta State, secondary school teachers were officially employed into the unified teaching profession in October 2009 (Vanguard Newspaper Monday, October 19, 2009), then in 2019 less than two thousand teachers were employed. Undoubtedly, there would have been staff attrition in terms of death, retirement, sickbay and accident victims, which could have officially reduced the staff strength of the work force without a corresponding increase via official replacement of staff. However, these and many more problems tend to threaten the efficiency of the school system.

Table 2, revealed that the some input (students) form the population of legal entrant from primary six, did not enrol as new entrant for JSS1. This led to the discrepancies in the entry rate from 2009-2016 academic sessions. The variation was reflected in figure 3, through the rising trend in rate, from 2009 to 2012 but down ward drop from 2012 to 2015. In 2016 the highest entry rate was recorded as 99.3% with the average entry rate of 96% was an indication of high influx of input (students) into the educational system annually. The free tuition fee in operation in Delta State must have contributed to the increase in the entry rate as stated in Federal Republic of Nigeria (2014), "the junior secondary school shall be both pre-vocation al and academic, it shall be tuition free, universal and compulsory". Besides, Anyim (2012) stated that the future of any nation could be perfectly predicted by the quality, of the product of their educational institution. Entry rate, measures the flow of students, into each level of education from successful arrival as well as the quality of students' inflow into the school system. However, classroom and environment in public secondary schools must be conducive for pedagogic activities for a measurable output capable of increasing the level of cognitive stock of economic productivity. More so, Ayara (2002) attributed the stunted economic growth to minimal input of education on her human capital. Internal efficiency is the relationship between educational input and output, so, output (graduates, repeaters, and dropout) is dependent on the quality and quantity of input introduced into the system, besides the functioning of the processing mechanism process. Kathmadu (2001), stated that among many students,' statistics shows that factors affecting internal efficiency includes Variation in sex and age group; Difference in socio-cultural background in such as backwardness community, difference in economic condition; Parental attitude towards education in general and girls in particular; Parents' educational awareness and literary level: Opportunities cost of child labour and household work: Difference in children living location (in

remote and rural areas). This study reveals that most principals in the remote villages lament the lack of laboratory equipment for the practical in science subjects, bad roads to the school, inability of students living in hamlets and camps frequent absenteeism to school during the rainy season. These reasons had bedevilled the educational system, thereby negatively influencing, internal efficiency of the public secondary schools in Delta State.

Table 4 modified Likert scale agreed 2528 (77.27%) respondent against 744 (22.73%) disagreed, besides all the items addressed in the Table, led to the acceptance of the research question. This therefore indicates that the measures considered, could improve the internal efficiency. This conclusion is in agreement with Anyim (2012) that stated that the future of any nation could be perfectly predicted by the quality of the products of their educational institutions. However, Ezinwa (2004) maintained that the key words in educational system in the future are production, knowledge, pedagogic and structural innovation. Increase in entry rate in the school system is an index of exploring the potential of new Information and Communication Technology for education and training has become necessary in the past few years. Internal efficiency is a function of the effectiveness and productivity of the school system. It also determines the level of retention among learners, goals and objectives of the curriculum is achieved. The structural and functional school facilities are great tools for successful and fruitful learning outcome in public secondary schools. However, government provision of, furniture for all students, textbooks, laboratory equipment will increase the internal efficiency. Hadley (2010) suggested that, micro-level family income is directly linked to the affordability of education and as such has direct impact on whether children attend school. It was in support of this that Anderson (2001) reported that the inability to pay the direct cost of schooling was found to be one of the most frequent, citing a lack of money to pay for school expenses as an important reason for dropping out. In public secondary schools, most students have no recommended textbooks, which is a function of students' poor socio-economic background. Improved socio-economic condition of learners will reduce repetition and dropout rates.

Hence, Ajaja (2011) stated that a reasonable percentage of females who dropped out of school engage in prostitution not for the sake of sexual satisfaction but because of financial difficulties since they are not employable. As regards learner's socioeconomic status, Neelima and Sheetal (2007) reported that it seems that when either of the parents is literate or especially when women are literate, they are more willing to send their children, especially girls to school. Enforcing discipline in schools reduces improve the quality of output turn out from the school, as well as employing professional teachers to teach respective subject in accordance to area of specialization. The United States Bureau of the census (2006) reported that many dropouts do not have specialized skills and are at the level position, consequently they Assessment of Students Entry Rate and Internal Efficency ...

are also more vulnerable to more frequently and longer instance of unemployment. Improved financial allocation to schools for renovations of school buildings uplift the aesthetic, creative magnificent status of learning euphoria in teachers and students, resulting to viable output.

## Conclusion

From the study, the following conclusions could be made about the assessment of students' entry rate and internal efficiency in public secondary schools in Delta State;

- 1. The retrospective study enrolment growth rate (EGR) revealed an unsteady increase in rate from 2005 to 2014 academic session. The least EGR was 56.3%, highest rate of 89.2% and AEGR of 7.4% respectively.
- 2. Computed entry rate shows that there was steady progression in rate throughout the period of evaluation except for year 2014/2015 with rate of 94.2%. This could be attributed to the decrease in the enrolment of new entrants in JSS. An average entry rate (AER) of 96%, represent an influx of students in the secondary level of education.
- 3. The factors such as enforcing student's attendance to school, provision of textbooks by the government and provision of basic laboratory facilities among others are factors which could increase internal efficiency in the secondary school.

Conclusively, issues related to increase in entry rate and internal efficiency of public secondary schools cannot be resolved by a single stakeholder in education but through the collaborative effort of the; households, teachers, educational planners, educational administrators, NGOs, and the government.

## Recommendations

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

- 1. School attendance and entry rate could be improved by government through the construction of well-furnished class room blocks, and conducive learning environment.
- 2. Cognitive skills should be emphasized via well-equipped Information and
- 3. Communication Technology (ICT) centres, modern science laboratories and libraries by the government and NGOs to boost the internal efficiency in the school system.
- 4. The State Government should provide recommended textbooks in public secondary schools. This will drastically improve entry rate and internal efficiency.
- 5. The analysis of the entry rate revealed that more students enrolled in JSS 1 and rate increases annually. Hence, there is need for expansion in terms of material and human resources. Teachers should be employed annually due to reduction

of staff strength via administrative, teaching and support staffs attrition in form of retirement, death sickbay accident victims and change of job.

6. The recommended class size of 1:40 should be adhered strictly, maintained and enforced in public secondary schools, with new structures, to accommodate the overflow from the old practice before and during the analysis.

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## BEHAVIOURAL DISORDERS AS PREDICTORS OF RISKY SEXUAL BEHAVIOUR AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN NIGERIA'S SOUTHEAST

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#### Abstract

The study investigated the relationship between behavioural disorders and risky sexual behaviour among undergraduate university students in South East, Nigeria. The study was guided by seven null hypotheses, which were tested at 0.05 level of significance. The research design utilized in the study was correlation design. The population of the study comprised 169,000 regular students in the 10 public universities in South East Nigeria. The study sample comprised 1,200 regular undergraduates obtained through simple random sampling from six public universities in three out of the five states that constitute the South East. Three selfreport instruments: the Attention Deficit/Hyperactivity Disorder Identification Questionnaire (ADHDIQ), Obsessive-Compulsive Disorder Identification Questionnaire (OCDIQ), and the Undergraduates' Risky Sexual Behaviour Ouestionnaire (URSBO) were used in collecting data. These instruments were validated by three experts. Cronbach Alpha statistics was used in determining the reliability index of the ADHDIQ (0.88) and OCDIQ (0.75), both of which sought non-categorical data, while Kuder-Richardson 20 statistic was used in determining the reliability index of the URSBQ (0.81), which sought categorical data. The research questions were answered using Point Biserial Correlation, while six null hypotheses were tested using multiple linear regression Point Biserial Correlation at 0.05 level of significance. The seventh null hypothesis was tested using multiple linear regression analysis at 0.05 level of significance. Findings indicated that Attention Deficit Hyperactivity Disorder (ADHD) had non-significant low positive relationship with early sexual debut, and had a non-significant low negative relationship with random sexual activity and disregard for protection during sex (subscales of risky sexual behaviour). Obsessive-Compulsive Disorder (OCD) was found to have significant low negative relationship with the three subscales of Risky Sexual Behaviour (RSB). Both behavioural disorders contributed 6.70 percent of the variations in the responses on risky sexual behaviour, therefore were unable to predict RSB among university students in South East, Nigeria. The multiple linear regression analysis indicated (R = .067;  $R^2 = .004$ ; F = 1.515) that the predictor variable (behavioural disorders) contributed only 0.4 percent in explaining the variances in response. Therefore, the study concluded that behavioural disorders do not significantly predict risky behaviour among university students in South East, Nigeria. The study recommended among others, that government should populate counseling units of public universities with persons that possess behaviour management skills, and that sex education should start as early as possible in order to inculcate sexual values on time. Suggestions were made for further research.

**Keywords:** behavioural Disorders, risky sexual behaviour, attention deficit/hyperactivity disorder, obsessive-compulsive disorder

### Introduction

The sexuality discourse in contemporary South East Nigeria is still largely tabooridden. This is because effort is made for one to appear sanctimonious in the society that is largely Christian (Catholic, Anglican and Pentecostal). A fraction of the population engages in traditional religious beliefs and practices. According to Ilesanmi, Ige and Alele (2014), both religious routes eschew sex before marriage in their canons/tenets. Alarmingly, there is scanty evidence of religious organizations holding seminars and workshops for the sexually viable populations of their denominations to warn them of the dangers of misapplying their sexualities as well as in engaging in risky sexual behaviours (RSB).

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Sexual behaviours are adjudged risky when the performers of such behaviours engage in it in a manner that is threatening to their sexual health (Kalina, 2012). That is, the engagers seldom consider what health risks accrue to their sexual behaviour, which can also be detrimental to other people's welfare. In simple terms, risky sexual behaviour (RSB) consists of sexually significant behaviours that put the individual in the way of harm. Kalina listed such behaviours to include impulsive sex, partnering sexually without discretion, having sex without protection, early involvement in sex, sex with random persons, among others.

It must be noted that in specifying what constitutes RSB, contextual factors such as the sociocultural and religious must be considered. For instance, while researches such as those of Eluwa et al (2019) and Morhasan-Bello et al (2019) seemed to view anal sex and same sex relationships as potentially RSB (especially when unprotected), anal sex is not mentioned as RSB in some other sources. In Western cultures, these two forms of sex appear to be gradually becoming mainstreamed in the sexual lives of the people as depicted on social and electronic media, apparently eliminating the taboos surrounding them. This does not preclude the existence of RSBs stemming from subnormative sexual activities using the purely reproductive organs: the penis and the vagina.

It appears safe therefore, to delimit risky sexual behaviour in this study to include early sexual debut, random sexual activity and disregard for protection during sex. Durowade et al (2017) defined early sexual debut as engagement in sexual intercourse at or before the age of 14 years. Early sexual debut remains a recurring decimal in developing countries and appears to be a common feature in Nigeria, whether due to early marriage, peer influence or the proclivity of the individuals involved. Isiugo-Abanihe, Joseph, Erinosho, Ushie and Gbenga (2012) put the median age of first sex among males and females who were never-married at 17 years and 18 years respectively. Durowale et al have it that early sexual debut has led to such consequences as increased incidence of multiple sexual partners, unprotected sex, unwanted pregnancy and risk for sexually transmitted infections (STIs). Dube et al (2017) defined random sexual activity as sexual contact occurring outside of a romantic or dating relationship. Implicit in this is the fact that it involves persons who are relatively unknown to each other and who might not be emotionally attached to each other. Noting that random sexual activity can predispose one to STIs and have psychological consequences, Hoque (2011) observed that it is quite common among sexually active university students.

In the ever recurring discourse on RSB, disregard for protection during sex seems to be one of the recurring decimals. Hosain et al (2012) found out in their study that 82 percent of their study sample had engaged in sex without the use of condoms. Okafor and Obi (2005) in their study discovered that in Enugu, Nigeria, undergraduate students often engaged in unprotected sex with persons whose health statuses were unknown. Apart from STIs, this could lead to unplanned pregnancies with its concomitant issues. It is thus frightening to imagine that RSB could be a recurring decimal in South East, Nigerian universities, despite the sacrosanct pedestal on which sex is placed by religion and culture.

In South East, Nigeria, it is observable that individuals are often blamed directly for their sexual proclivities, especially some females who are dubbed promiscuous when consequences of their sexual engagements become inimical to their wellbeing. A philandering male is often termed randy, without trying to discover the underlying causes of the ascribed randy nature. The prevalence of sexual activities in tertiary institutions was blamed by Ugoji (2014) on the watering down of social and cultural ethos in the era of moral wanton that the internet age has become. It is thus sufficient to deduce on the premise of paucity of studies that much of the prevailing literature on RSB in South East Nigeria has utilized socio-cultural, socio-demographic, economic and contextual factors as independent variables and not on behavioural issues. In global research, behavioural disorders have been investigated for their role/association with RSB.

Ozoji, Unachukwu and Kolo (2017) defined students with behavioural disorder as those students whose behavioural and emotional displays consistently deviate from the norm, so much as to be able to threaten the norm itself. Some of the behavioural disorders that highlight themselves in behavioural inconsistencies include attention deficit hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), conduct disorder (CD), oppositional defiant disorder (ODD), and a host of others based on the Diagnostic and Statistical Manual of mental disorders, version four (DSM-IV-TR). Of core interest to this study are ADHD and OCD. Among Nigerian in-school adolescents, some of whom are in universities, behavioural disorders have been found to exist across demographic and socioeconomic factors (Ayodele et al, 2015; Umar et al, 2015).

Outside the Nigerian context, Hosain et al (2012) undertook a study on ADHD symptoms and risky sexual behaviour among young adult American women to establish if there is an association between both the predictor and criterion variables.

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It must be noted that the study by Hosain et al explored more subscales of RSB than others. It was discovered that 79.40 percent of study participants had had in sexual intercourse by the age of 15 years (early sexual debut) and 55.40 percent had in their lifetimes had a partner with an undetermined health status (random sexual activity). In addition, 81.50 percent of them had engaged in sex without using condoms consistently in the preceding 12 months before the study under review. ADHD symptom score was also found to be associated with increased likelihood of multiple sexual partners and risky sexual partners, and women who indicated more ADHD symptoms agreed to engage in more RSB of all types, with adjusted odds ratios.

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In a case study of a 50 year old woman in psychotherapy, Gordon (2002), the subject of the study was found to having long-standing sexual obsessions, including preoccupying, sexually obsessive and intrusive thoughts. She also had a family history of OCD. It was found out that the woman was unable to solve her intrusive obsessions due to her irregular attendance to psychotherapy sessions, leading to the conclusion that frequency of attendance to the sessions mediated the effectiveness of remediation of her OCD as well as its influence on her sexual behaviour.

Despite the fact that some studies have been carried out globally on the variables of interest, it was discovered during the review that most of these studies were carried out in countries different in sociocultural context from South East Nigeria. The ones carried out in Nigeria were mostly outside the South East and did not attempt to predict RSB using behavioural disorders. Rather, they usually studied the RSB construct on its own in attempts to establish its prevalence or correlate it to various sociodemographic variables. This study was therefore embarked upon in order to determine if behavioural disorders will predict risky sexual behaviour.

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## **Conceptual Framework**

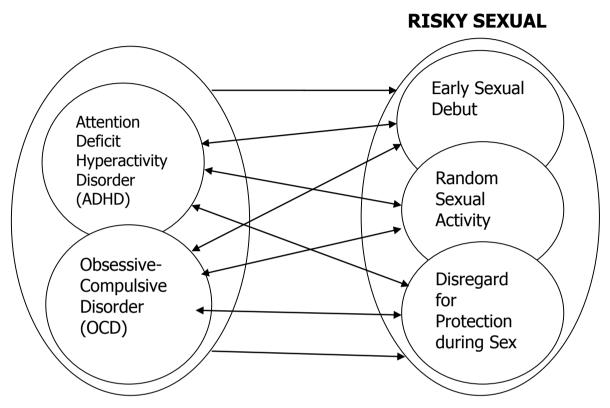


Figure 1: Relationship between behavioural disorders and risky sexual

## Hypotheses

The following research null hypotheses tested at 95% confidence interval guided the study:

- 1. There is no significant relationship between attention deficit hyperactivity disorder (ADHD) and early sexual debut among students in universities in South East, Nigeria;
- 2. There is no significant relationship between attention deficit hyperactivity disorder (ADHD) and random sexual activity among students in universities in South East, Nigeria;
- 3. There is no significant relationship between Attention deficiency hyperactivity disorder (ADHD) and irregular use of protection during sex among students in universities in South East, Nigeria;
- 4. There is no significant relationship between Obsessive-compulsive disorder (OCD) and early sexual debut among students in universities in South East, Nigeria;

5. There is no significant relationship between Obsessive-compulsive disorder (OCD) and random sexual activity among students in universities in South East, Nigeria;

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- 6. There is no significant relationship between Obsessive-compulsive disorder (OCD) and irregular use of protection during sex among students in universities in South East, Nigeria
- 7. ADHD and OCD do not significantly predict risky sexual behaviour among students in universities in South East, Nigeria.

## Method

The correlation research design was used for the study, which was guided by seven research questions and seven null hypotheses tested at 95% confidence interval. The population of the study comprised 169000 unmarried undergraduate students in the 10 public universities across the five states in South East, Nigeria. At various stages, simple random sampling was used to obtain 1200 students as the study sample from three states and six public universities. The instruments for data collection were the Attention Deficit Hyperactivity Disorder Identification Questionnaire (ADHDIQ), Obsessive-Compulsive Disorder Identification Questionnaire (OCDIQ) and the Undergraduates Risky Sexual Behaviour Questionnaire (URSBQ), all expert validated. The ADHDIQ and OCDIQ which measured for the predictor variables yielded Cronbach Alpha indices of 0.88 and 0.75 for their internal consistencies, while for the criterion variable, Kuder-Richardson 20 statistic was used to determine the reliability coefficient of the URSBQ at 0.81 because it sought categorical data. Point Biserial correlation was used in answering six research questions, while the seventh was answered using percentage coefficient from the regression. The same statistic was used in testing hypotheses one to six at 0.05 alpha level. The seventh null hypothesis was tested using multiple linear regression analysis at 0.05 level of significance. The SPSS version 23 software handled missing data by excluding respondents that did not complete the instruments satisfactorily from analysis. The decision rule for the hypotheses was such that when the probability level was higher than the level of significance, it shows that the relationship between the variables is not significant and the null hypothesis is not rejected, and vice versa.

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## Findings

Hypothesis One

There is no significant relationship between attention deficit hyperactivity disorder (ADHD) and early sexual debut among students in universities in South East, Nigeria

# Table 1: Significance of the Relationship between ADHD and Early Sexual DebutVariablesNrSigRemark

ADHD 803 0.011 0.7	766 Non significant low positive relationship
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Table 1 indicates that ADHD has a non-significant low positive relationship with early sexual debut, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore not rejected.

## Hypothesis 2

There is no significant relationship between attention deficit hyperactivity disorder (ADHD) and random sexual activity among students in universities in South East, Nigeria

 Table 2: Significance of the Relationship between ADHD and Random Sexual

 Activity

Variables	Ν	r	Sig	Remark
ADHD	803	-0.030	0.398	Non-significant low negative relationship

Table 2 indicates that ADHD has a non-significant low negative relationship with random sexual activity, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore not rejected.

## **Hypothesis 3**

There is no significant relationship between attention deficit hyperactivity disorder (ADHD) and disregard for protection during sex among students in universities in South East, Nigeria

Table 3: Significance of the Relationship between ADHD and Disregard forProtection

Variables	Ν	r	Sig	Remark
ADHD	803	-0.057	0.112	Non-significant low negative relationship

Table 3 indicates that ADHD has a non-significant low negative relationship with disregard for protection during sex, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore not rejected.

## Hypothesis 4

There is no significant relationship between obsessive-compulsive disorder (OCD) and early sexual debut among students in universities in South East, Nigeria.

Table 4: Significance of the Relationship between OCD and Early Sexual Debut						
Variables	Ν	R	Sig	Remark	_	
OCD	873	-0.069	0.043	Significant low negativ relationship	'e	

Table 4 indicates that OCD has a significant low negative relationship (significant at a two-tailed test) with early sexual debut, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore rejected.

## **Hypothesis 5**

There is no significant relationship between obsessive-compulsive disorder (OCD) and random sexual activity among students in universities in South East, Nigeria.

Table 5: Significance of the Relationship between OCD and Random SexualActivity

Variables	Ν	R	Sig	Remark
OCD	873	-0.077	0.025	Significant low negative relationship

Table 5 indicates that OCD has a significant low negative relationship (significant at a two-tailed test) with early sexual debut, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore rejected.

## Hypothesis 6

There is no significant relationship between obsessive-compulsive disorder (OCD) and early disregard for protection during sex among students in universities in South East, Nigeria

Table 6: Significance of the Relationship between OCD and Disregard forProtection

Variables	Ν	R	Sig	Remark	
OCD	873	-0.089	0.010	Significant negative relation	low onship

Table 6 indicates that OCD has a significant low negative relationship (significant at a two-tailed test) with disregard for protection during sex, a subscale of risky sexual behaviour. The null hypothesis in this regard is therefore rejected.

#### Hypothesis 7

Behavioural disorders do not significantly predict risky sexual behaviour among students in universities in South East, Nigeria

 Table 7: Multiple Linear Regression Analysis for the Predictor Variables and the

 Criterion Variable

Model	Unstandardized Coefficients		Stand. Coeff	t	Sig
	В	Std Error Est	Beta		
1. (Constant)	27.269	0.922	29.58	0.000	
ADHD	-0.002	0.015	- 0.005	-0.125	0.900
OCD	-0.019	0.011	-0.066	-1.702	0.089
R	0.067				
$\mathbb{R}^2$	0.004				
<u>F</u>	1.515		0.221		

Results on Table 7 indicate that the multiple regression coefficient obtained was .067, while  $R^2$  was .004. This means that behavioural disorders (ADHD and OCD) contributed 0.4 percent to explain the variances in response. The F-value of 1.515 is however, not statistically significant based on the p-value of 0.221, which was greater than 0.05 the stipulated level of significance. The standardized Beta coefficients for ADHD and OCD were respectively -.005 and -.066. ADHD and OCD are thus not statistically significant.

## Discussion

Of the three dimensions of risky sexual behaviour investigated, ADHD was found to have a non-significant low positive relationship with only early sexual debut, and a non-significant low negative relationship with the other two dimensions of RSB. The corresponding null hypotheses in this regard were not rejected. The findings in terms of ADHD and early sexual debut negate that of Hosain, Berenson, Tennen, Bauer and Wu (2012) who found that 79.40 percent of American youth who exhibited DSM-IV consistent symptoms of ADHD had engaged in sex by the age of 15 years. In terms of ADHD and random sexual activity, Hosain, Berenson, Tennen, Bauer and Wu (2012) found ADHD symptom scores to be closely associated with increased likelihood of youth engaging in sex with random partners without discretion unlike this study found out. For the relationship between ADHD and disregard for protection, while this study found a non-significant low negative relationship between both variables, Hosain, Berenson, Tennen, Bauer and Wu (2012) who found out that as much as 81.50 percent of undergraduates with ADHD had partaken in sex without consistent condom use in the 12 months preceding their study.

Obsessive-Compulsive Disorder (OCD) was found in this study to have significant low negative relationships with the three subscales of risky sexual behaviour (RSB). The corresponding null hypotheses were thus rejected. In the case of early sexual debut, the study's findings seem to agree with that of Gordon (2002) who found an association between OCD and early sexual debut in a case study. For the relationship between OCD and random sexual activity, the findings of Kumar, Jhanjee, Bhatia, Jindal and Sharma's (2010) negate the findings of this study in this regard. The findings of Kumar et al. in negation to this study's findings on the OCD – disregard for protection relationship, showed a strong association between both variables with positive indices as well.

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Behavioural disorders (ADHD and OCD) did not to jointly predict RSB among undergraduate university students in Nigeria's South East region. The multiple linear regression analysis indicates that the predictor variable (behavioural disorders) contributed only 0.4 percent in explaining the variances in response (R =.067; R<sup>2</sup> = .004; F = 1.515). Behavioural disorders (ADHD and OCD) are thus not statistically significant predictors of risky sexual behaviour among university students in South East, Nigeria. This is in dissonance with the findings of Ramrakha, Caspi, Dickson and Paul (2000), and Sarver, McCart, Sheidow and Letourneau (2014) who all found relationships/associations between several behavioural disorders and risky sexual behaviour.

The nature of the relationship between behavioural disorders and risky sexual behaviour as found in this study can be explained by sociocultural and economic realities (Ajayi, Nwokocha, Akpan, Adeniyi and Goon, 2017; Amu, 2014; Tobin-West and Akani). Religious factors could also be protective because inasmuch as both constructs had etiological significance in the studied region, an extraneous variable could be causing changes in both constructs rather than they having any directional symmetry.

## Conclusion

The study came to the conclusion that as far as South East, Nigerian universities are concerned; behavioural disorders do not have a predictive capacity over risky sexual behaviour among undergraduates. Finally, the study also concluded that on independent bases, both behavioural disorders and RSB as discovered among participants could have related factors separate from either variable.

## Recommendations

Based on the findings made in this study, the following recommendations were made:

- 1. Government should employ people with student behaviour management skills (educational psychologists, counselors and other trained personnel) in counseling units of public universities These professionals should be able to identify behavioural disorders and recommend appropriate remediation for them.
- 2. Sex education should be made a priority every semester in public universities. This is because sexuality is becoming more dynamic by the day and if not followed closely, university students might easily lose what they had previously learned about safe sex.

3. Sex education should start from the earliest age at which children become selfaware and should begin in the family setting. This will cause some deep-rooted inculcation of values in the minds of young individuals, as well as forming a solid foundation against possible sexual proclivities in the future.

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## EFFECT OF SELF-DIRECTED LEARNING AS TEACHING METHOD ON SELF- CONFIDENCE OF SENIOR SECONDARY SCHOOL GOVERNMENT STUDENTS IN FEDERAL CAPITAL TERRITORY, ABUJA, NIGERIA

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### Abstract

The study was conducted to determine the effect of self-directed learning as a teaching method on self-confidence among senior secondary school students in the Federal Capital Territory (FCT), Nigeria. A true experimental research design was adopted for the study. The population of the study comprised all senior secondary school government students in FCT Abuja. While the sample size of the study comprised 90 senior secondary school government (SSS 2) students were drawn from three Area Councils in FCT using multistage sampling techniques. Data was collected for the study using a Students Self-confidence Rating Scale (SSCRS) developed by the researchers. Two research questions and three hypotheses guided the study. Mean and standard deviation were used to answer the two research questions while a t-test was used to test hypotheses at 0.05 level of significance. Findings of the study revealed among others that the mean self-confidence rating scores of senior secondary school government (SSS 2) students taught using self-directed learning as a teaching method were higher than those taught using the conventional (lecture) method and was statistically significant in favour of self-directed learning. Though the group taught using the conventional method gained, slightly higher mean self-confidence score than the control group but was not significant at 0.05 significance level. It was therefore concluded that the teaching method has an effect on theself-confidence of the learner. Based on the findings of the study it was recommended among others that proactive action such as organizing symposium for teachers and campaign on how to boost learners' self-confidence and effect of teaching methods of teaching on the self-confidence of the learner should be initiated by the Ministry of Education and other stakeholders in education.

Keywords: self-directed learning, conventional method and self-confidence

### Introduction

Methods of teaching and learning adopted by a teacher towards achieving the instructional and educational objectives and goal of a given level of education may not only affect the learners' academic achievement but also the personality of the learner. Methods of teaching seem to play a role in the personality make-up of learners. Evidence abounds that literature is dominated by studies on the effect of teaching methods on academic achievement with little or no attention on the effect of teacher's choice of method of teaching on the personality development of the learners.

such as assertiveness, creativity, boldness, and self-confidence among others (Okudiba, 2018) & Oden, 2021). Nzeribe (2004) observed that there are many methods of teaching which the teacher adopts to ensure that the learner learns. However, opined that though the choice of teaching method is the prerogative of the teacher, but must be guided by certain factors which include the age of the learner, size of the class, and duration of the lesson among others. In line with the opinion of the above-mentioned author, Robinson and Persky (2020) added that the objectives of the learner should be factors to be considered in the choice of teaching method.

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Teaching method is the approach or the way the teacher chooses to ensure that the objective of a lesson is achieved within a stipulated time. It comprises the role teachers and the learners are meant to play towards achieving the stipulated instructional objectives. Methods of teaching are normally selected at the planning stage of the lesson, hence it is an integral part of the lesson plan. Literature in the field of education poses a consensus that the method of teaching is classified into two major groups: conventional methods and innovative methods (Nzeribe, 2004). Conventional methods are those traditional methods of teaching characterized by teacher-centeredness in the teaching and learning while the learner remains the passive receiver of the knowledge from the teacher who is regarded as the reservoir of knowledge. In contrast, the innovative method of teaching includes blending of the traditional and innovative method of teaching or absolute innovative teaching method sinclude discovery teaching method and self –directed learning teaching method among others.

Self-directed learning is a term, which is mostly used to explain a learner dominated method of teaching and learning where the role of the teacher is very minimal. According to Merriam (2001), self-directed learning is advisable for adolescents and adults. Many authors have viewed self-directed learning (SDL) from various perspectives. Among the authors include Garrison (1997). The referred to SDL as a process where students are able to merge external management (contextual control), internal monitoring (cognitive responsibility), and motivational (entering and task) factors associated with learning in an educational context. In line with the view of the authors above, SDL is operationally defined as any enhancement in knowledge, skills, accomplishments, or personal development that a person chooses and achieves by his/her attempts through different approaches in their lives. So, when students control both the learning aims and the means of learning, self-directed learning takes place. Its core concept is based on providing the learner with the necessary, conducive and learnable environment that will help the learner to learn what the learner is meant to learn without teaching the learner. In this method of teaching, the major role of a teacher is the selection of learning material, organization of the learning environment to be challenging enough to induce learners to learn.

This process focuses on the significance of letting students follow their interests, which leads to more meaningful learning. While the challenges inherent in this method exist to enhance learners go beyond the easy and the familiar ways (Bharathi, 2014). Self-directed learning can be utilized as an effective strategy to assist students to improve their skills more and learn new concepts rather than confounding what is already known (Rafiee, Pazhakh, & Gorjian, 2014). Besides, during self-directed learning, according to Robinson and Persky (2020), the learner sets goals, determines how progress will be assessed, defines the structure and sequence of activities and a timeline, identifies resources, and seeks out feedback. One of the inherent advantages of a self-directed learning method of teaching is that it tends to boost self-confidence.

Self-confidence is a measure of one's belief in one's abilities and is considered a psychological trait that is related to, but distinct from, both personality and ability traits. Norman & Hyland (2003) states that confidence is a factor in learning which can have its effects on students' participation and progress. Self-confidence is very necessary for a student to take risks and engage in learning activities and those who have self-confidence are assured of their abilities and are setting goals for themselves and work hard to achieve their goals without worrying about the outcomes (Fatima, 2015). Yavuzer (1998) and Mutluer (2006) (as cited in Sar, Avcu & Isiklar 2010) assert that human is born with self-confidence but it is changeable as the child grows. According to Benabou and Tirole (2002), self-confidence is very effective in motivating humans and can lead to changing human behavior. According to Perkins (2018) self-confidence is related to success, achievements in education, conciliation, and a persons' well-being, among other things and self-efficacy, self-esteem, and selfcompassion are the three factors that can affect the level of self-confidence of any individual. Thus, in the context of this study self-confidence is referred to the positive perception of one's ability to achieve success. It is the extent to which a student feels assured of successfully performing different activities in and outside the class for learning purposes. Rubio (2007) identified that students' self-confidence can be lowered due to methods of teaching, students' anxiety, self-insecurity, fear and feeling of being apart from society. However, evidence from literature has shown that the effect of teaching methods on students' self- confidence is yet to be empirically investigated, rather the literature is dominated by the impact of self-confidence on academic achievement of the learner). It is often argued that self-confidence of learners has a positive relationship with an understanding of subject matter and in their overall academic achievement. There seems to be a consensus among scholars on the positive relationship that exists between learner's self-confidence and academic achievement. Academic achievement refers to the extent the learner has learned what they ought to learn at a given field of study in a given period. Such fields of study include government.

Government as a field of study is one of the subjects or courses introduced into Nigeria curriculum to intimate the citizens with the knowledge of their rights and duties to the society. By implication, it has the capacity of installing among recipients self-confidence that will help them to hold onto their right in society. However, the focus of the study is not on the effect of self-confidence on academic achievement, rather on the effect of method on self- confidence.

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Observation from real-life experience has shown that irrespective of the exposure and teaching of government as a subject, many secondary school grandaunts have shown grossly, lack of self-confidence in their day-to-day dealing. Perkins (2018) reported that self-confidence is positively related to success, and achievements in education. Thus, boosting the self -confidence of students and how it should be done demands adequate attention. Speculation has it that that method of teaching adopted by teachers may have an effect on self-confidence of the learner. Though to date, there is no empirical verification of this speculation. Besides, review of available related literature revealed that no adequate attention has been given to the effect of methods of teaching on the self-confidence of the learners. Thus, this study deemed it wise to carry out an empirical investigation to determine the effect of self-directed learning as a method of teaching on self-confidence learners among secondary school government students in FCT, Abuja.

## **Purpose of study**

The purpose of the study was to determine the effect of self-directed learning as a method of teaching on self-confidence and academic achievement of the learner among secondary school government students in FCT, Abuja.

Specifically, the study seeks to determine:

- i. the mean self-confidence rating scores of secondary school government students taught using the self-directed learning (SDLE) method of teaching, the conventional teaching (CME) method group, and the control group (CG) respectively.
- ii. if there is statistically significant difference between the mean self-confidence rating scores of secondary school government students taught using self-directed learning method of teaching and those that were not taught as measured by Student Self-confidence Rating Scale (SSCRS).
- iii. if there is statistically significant difference between the mean self-confidence rating scores of secondary school government students that were taught using conventional method and those that were not taught as measured by Student Self-confidence Rating Scale (SSCRS).
- iv. if there is statistically significant difference between the mean self-confidence rating scores of secondary school government students taught using self-directed learning method and conventional method of teaching as measured by Student Self-confidence Rating Scale (SSCRS).

#### **Research Questions**

The following research questions were posed to guide the study:

1. What are the mean self-confidence rating scores of secondary school government students taught using the self-directed learning (SDLE) method of teaching, the conventional teaching (CME) method group, and the control group (CG) respectively?

#### Hypotheses

- **Ho1**: There is no statistically significant (p<0.05) difference between the mean selfconfidence rating scores of secondary school government students taught using self-directed learning method of teaching and those that were not taught as measured by Student Self-confidence Rating Scale (SSCRS).
- **Ho2**: There is no statistically significant (p<0.05) difference between the mean selfconfidence rating scores of secondary school government students that were taught using conventional method and those that were not taught as measured by Student Self-confidence Rating Scale (SSCRS).
- **Ho3**: There is no statistically significant (p<0.05) difference between the mean selfconfidence rating scores of secondary school government students taught using self-directed learning method and conventional method of teaching as measured by Student Self-confidence Rating Scale (SSCRS).

#### Method

A true experimental research design was adopted for the study. Nworgu (2015) referred to true experimental research design as a type of experimental research design, where the researcher observes randomization in the assigning of the research subjects into treatment and control group. The treatment or the experimental group are exposed to the treatment while the control group is not given treatment rather used to monitor the effect of the treatment given to the experimental group. The population of the study comprised all senior secondary school government students in FCT Abuja. While the sample size of the study comprised 90 senior secondary school government (SSS 2) students drawn from three Area Councils (one secondary school from each of the three sampled area councils) in FCT using multistage random sampling techniques. Thirty students were randomly selected from each of the sampled secondary schools and were randomly assigned into three groups of 10 government students per school. The groups were two experimental groups (selfdirected learning method group & conventional method group) and one control group, used as control for the two experimental groups. The self-directed learning teaching method was labeled SDLE, conventional teaching method group was labeled CME and control group CG respectively. Data was collected using a Student Selfconfidence Rating Scale (SSCRS) developed by the researcher. SSCRS consisted of 25 items structured into four points Likert scale. SSCRS was face validated by four experts, two psychologists, one measurement and evaluation expert and one political

science expert all from the Faculty of Education University of Nigeria Nsukka. The corrections and suggestions of the validators guided the final copy of the instrument. The reliability of the instrument was established using Crobach alpha hence the instrument was polytomously scored with a reliability index of 0.78.

Before the treatment, the researchers with the permission of the principals of the school trained the various government teachers of the three sampled schools for two days on how to use the self-directed learning method of teaching. The teachers were trained on how to organise the instructional materials to trigger learning. These include how to creatively select instructional resources, how to use attitude and words to encourage self-interest, self-target and reduction to minimal psychological and physical punishment. The treatment given to the experimental groups in the study were taught using self-directed learning, the second experimental group (CME) were taught using conventional methods, while students in the control group were not taught. The treatment was given to the students after school hours, to avoid the experiment lasted for two months. Thus, the SSCRS was administered to both experimental and control groups under the same conditions.

Mean and standard deviation were used to answer the two research questions while ttest was used to test the two hypotheses at 0.05 level of significance. In testing the null hypotheses, the following decision rules were used: (i) When the associated probability value obtained is less than 0.05 (that is, p < 0.05) the null hypothesis was rejected and (ii) When the associated probability value obtained is greater than 0.05 (that is, p > 0.05) the null hypothesis was not rejected.

#### Results

**Table 1:** Summary of Government Students' Mean Scores on SSCRS on Basis of Groups

Ν	Mean	Std. Deviation
30	28.70	4.52
30	14.70	4.15
30	14.30	3.95
90	19.23	4.87
	30 30	30       28.70         30       14.70         30       14.30

Key: N=Number of respondent, Mean score, S.D= Standard Deviation of scores

The result of the study as presented in Table 1 above, show that mean self-confidence rating scores of students in the self-directed learning experiment group is 28.70 (S.D= 4.52); the mean self-confidence rating score of students in the conventional method experimental group is 20.00 (S.D = 4.15); while that of students in the control group (no treatment group) is 14.15 (S.D = 3.95) respectively, with the ground mean 19.23 (S.D = 4.87). The table reveals that the mean self-confidence rating score of students taught using self-directed learning method of teaching is greater than that of students'

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taught using conventional method of teaching, while the mean self-confidence rating score of the control group is the list. These implied that self-directed learning has more effect self-confidence of students than the conventional method of teaching.

 Table 2: t-test Analysis of the Significant Difference on the Mean Self-Confidence Scores

 of Government Students Taught Using Self-Directed Learning Teaching Method(SDL) and

 those that Were not Taught (Control Group) as Measured Student Self-confidence Rating

 Scale (SSCRS)

Groups		Ν	Mean	SD	Df	t- cal	Sign	Dec	
Self-directed	learning	30	28.70	4.52	28	4.405	0.000*	Significant	(reject
(SDLE)	_							H <sub>o</sub> )	-
Control group(I C	C)	30	14.30	3.95					

*Key*: N=Number of test respondent, = Mean score, sign= Significant value \* Significant at 0.05.

From Table 2 above, given that (28= 4.405, p<0.05), it implies that there exists a statistical significant difference in mean self-confidence rating score of students on the group taught using self-directed learning and those that were not taught (control group) group as measured by SSCRS. Therefore, the null hypothesis is rejected.

Table 3: t-test Analysis of the Significant Difference on the Mean Self-ConfidenceRatingScores of Government Students Taught Using Conventional TeachingMethod and those that Were not Taught (Control Group) as Measured by StudentSelf-confidence Rating Scale (SSCRS)

Groups		Ν	Mean	SD	Df	t- cal	Sign	Dec	
Conventional tea	ching	30	14.70	4.52	28	3.980	0.667	Not	Significant
method (CME)								(accept I	H <sub>o</sub> )
Control group(I C)		30	14.30	3.95					

# *Key*: N=Number of respondent, = Mean score, sign= Significant value \* Significant at 0.05.

From Table 3 above, given that (28= 3.980, p<0.05), it implies that there is no statistical significant difference in the mean self-confidence rating score between groups of students taught using the conventional method of teaching and those that were not taught (control) group as measured by SSCRS. Hence, the null hypothesis is accepted.

Table 4: t-test Analysis of the Significant Difference on the Mean Self-ConfidenceRating Scores of Government Students Taught Using Self-Directed Learning TeachingMethod (SDL) and those Taught Using Conventional Teaching Method as Measured byStudent Self-confidence Rating Scale (SSCRS)

Groups		Ν	Mean	SD	Df	t- cal	Sign	Dec
Self-directed	learning	30	28.70	4.52	28	4.330	0.000*	Significant
(SDLE)	_							(reject H <sub>o</sub> )
Conventional	teaching	30	14.70	4.15				
method (CME)	e							

Key: N=Number of respondent, = Mean score, sign= Significant value

#### \* Significant at 0.05.

From Table 4 above, given that (28 = 4.330, p<0.05), this implies that there is statistically significant difference mean self-confidence rating scores between government students taught using self-directed learning teaching method (SDL) and those taught using conventional teaching method as measured by Student Self-confidence Rating Scale (SSCRS). Hence, the null hypothesis is rejected.

# Discussion

The findings of the study have shown that students in the self-directed learning teaching method (SDL) group have higher self-confidence rating scores than that of the students in the control group. The study found that the students who were exposed to SDL gained more self-confidence rating scores than those students in the control group who were not exposed to any treatment and those taught using conventional methods of teaching. This finding is in agreement with the study carried out by Rubio (2007) identified that students' self-confidence can be lowered due to method of teaching; students' anxiety, self-insecurity, fear and feeling of being apart from society.

The study concludes that there was a statistically significant difference in the mean self-confidence rating scores of self-directed learning method of teaching group. Also there was statistical significant deference in the mean self-confidence rating scores of self-directed learning method of teaching group in favor of group taught using self-directed learning method of teaching. Furthermore, the findings of the study also showed that the group taught using conventional method gained slightly higher self-confidence mean rating score than those in the control group that did not receive any treatment. However, there was no statistically significant difference in the mean self-confidence rating score of the group taught using conventional (lecturing) method and the (control) group who were not taught. These findings imply that teaching method indeed can boost or lower self-confidence of learners as identified by Rubio (2007).

# Conclusion

The study concluded that method of teaching adopted by a teacher affects and influences the self-confidence of the learner to a large extent. Besides, self-directed learning as a method of teaching boosts self-confidence among secondary school students than the conventional methods of teaching.

#### Recommendations

Proactive action such as organizing symposium for teachers and campaign on how to boost learners' self-confidence and effect of teaching methods of teaching on selfconfidence of the learner should be initiated by the ministry of education and other stakeholders in education. This will help teachers understand the injurious effects of certain teaching methods and attitudes of teachers while teaching on the selfconfidence of the learner.

Those methods of teaching that have the dual qualities of boosting both the selfconfidence of the learner and academic achievement of the learner should be encouraged to be used against methods that only boost academic achievement with total neglect to self-confidence of the learner.

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# FEMALE LDL CHOLESTEROL RESPONSE TO BRISK WALKING EXERCISE AND JOGGING EXERCISE

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#### Abstract

The purpose of this study was to establish the response to brisk walking and jogging of volunteered female university staff Low density lipoprotein (LDL-c). The area of this study was Michael Okpara University of Agriculture, Umudike, and Abia State, Nigeria. The age range of the regular non academic staff was 35–60 years. As a result of the request for free lipid profile test, the population of the study was 67 volunteers. Questionnaire that contained both Inclusion and exclusion criteria were given to the volunteered staff and their response collated. Thereafter, 54 Non-academic staff (15 male and 39 female) met the inclusion criteria. The 39 female subjects for the study were randomly sampled into unequal three groups- Brisk walking group 13 females, Jogging group 8 females, and Control group 18 females. Data were collected using Lipid and Risk Identification Questionnaire (LRIQ) and Infrared vein viewer, Needles and Syringes, tourniquet for pre and post exercise measurement of LDL-c. The hypothesis was tested using ANOVA. Findings of this study showed that after the treatment the female Non-academic staff in the Brisk Walking group had more mean loss than females in Jogging group with a significant difference. Exercise of about 50-60 minutes per day could lead to significant depletion in LDL-c levels.

Keywords: Brisk walking, jogging, lipid profile, LDL-cholesterol

#### Introduction

The more regular the moderate exercises, the less likely cholesterol are to build up in the human arteries. Regular exercise reduces risk factors associated with cardiovascular disease (CVD). Elevated low-density lipoprotein (LDL) cholesterol contributes to atherosclerosis formation, which is associated with an increased risk of CVD (Mortensen & Nordestgaard, 2020). Notwithstanding the gender differences that may be observed in the assessment of blood LDL-c, all humans including male and female are prone to CVDs.

To Baigent, Keech, Kearney, Blackwell, Buck, Pollicino, Kirby, Sourjina, Peto, Collins, and Simes (2005), though adult female have often been under-represented in

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many treatment trials in the past, there is currently no doubt that in secondary prevention LDL reduction in women leads to an equally lower CVD mortality as in men. Maas, and Appelman, (2010) report that cardiovascular disease develops 7 to 10 years later in adult female than in male and is still the major cause of death in women. The risk of heart disease in women is often underestimated due to the misperception that females are 'protected' against cardiovascular disease (Maas, et al, 2010). With the increasing incidence of elevated blood LDL-c and obesity in female there is a parallel increase in the prevalence of CVD and type-2 diabetes (Huxley, Barzi, & Woodward, 2006). By implication, elevated blood LDL-c and obesity are among the major risk factors for CVD and type-2 diabetes.

Huxley, et al submits that those adults female with diabetes are at greater risk for cardiovascular complications than their male counterparts. Wakabayashi, (20017): De Smedt, De Bacquer, De Sutter, Dallongeville, Gevaert, De Backer, Bruthans, Kotseva, Reiner, Tokgözoğlu, and Clays, (2016) observed that regarding LDL cholesterol, adiposity and physical activity as targets, the proportion of subjects who achieved each target was lower in female patients than in male patients, and interactions by age.

The LDL cholesterol is called the 'bad cholesterol' because it is the main source of cholesterol build-up and blockage in the arteries (Heart Foundation, 2018). LDL-c (the cholesterol in low-density lipoprotein) is commonly known as the bad cholesterol, which is produced by the liver and transported to different areas of the human body like muscles, tissues, organs and heart (Costet, 2010). High levels of LDL indicate much more cholesterol in the blood stream than necessary and hence, increase the risk of heart disease (Costet, 2010; Centers for Disease Control and Prevention, 2015). Hence, the need for prevention and therapies for elevated blood LDL-c

Raju (2016); Bemelmans, Blommaert, Wassink, Coll, Spiering, Graaf, and Visseren, (2012); Moraleda, Morencos, Peinado, Bermejo, Candela, and Benito, (2013); Taifour, AL-Shishani, Khasawneh, AL-Nawaiseh, and Bakeer (2015) observed that exercise training protocols could induce significant decrements in the blood LDL-c of the individuals. Moderate exercise is a therapy and has no side effect. Brisk walking exercise (at least 3 mph) is a moderate intensity physical activity and evidence-based intervention for promoting physical activity (Brannan, Varney, Timpson, Foster, & Murphy, 2017). Brannan et al submits that Individuals with an existing health condition would likely achieve greater health benefits due to improvements in management of their condition and reduced risk of developing elevated LDL-cholesterol. This implies that physical exercise could induce a decrease human blood LDL.

Physical inactivity and job stress are linked to a wide range of negative health outcomes and impaired well-being (Ganster & Rosen 2013). Consequently, health

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interventions at workplace (e.g. brisk walking and jogging) to control some health risk like blood lipid profile abnormalities are crucial to maintaining occupational health, even among the university staff. For the University staff constrained by a busy schedule and lifestyle, an exercise prescription such as brisk walking and jogging that delivers benefits with the minimum investment of time is attractive and with positive health outcomes.

Both male and female University staff are in dire need of improved health and fitness as both are affected by the lipid-related health problems such as cardiovascular diseases Kolovou, Anagnostopoulou, Damaskos, Bilianou, Mihas, Milionis, Peggy, Kostakou, and Cokkinos, (2008) reported that lipid profile disorders are evident in both male and female population. Though drug therapy remains superior in handling lipid profile disorders and its associated comorbidities, but the inadequate exercise programmes design and implementation to prevents the numerous health problems in tertiary institutions have led to the little improvement in the physical fitness and health status of her Staff.

Studies known to the researcher have focused on prevalence of cardiovascular disease and obesity, while only a few have described the effect of physical activity on lipid profile disorders in Nigeria. There is paucity of data on intervention with Brisk Walking Exercise and Jogging Exercise and university staff with lipid profile disorders.

To assess the Female University Staff LDL Cholesterol Level Response to Brisk Walking Exercise and Jogging Exercise requires controlled but consistent exercise routine. The major thrust of this study was to establish the response to two-mode of exercise training (brisk walking and jogging) of female university staff with elevated LDL Cholesterol Level.

### **Research Question**

1. What are the mean difference of the LDL cholesterol level of the female university staff who exercised in brisk walking, jogging and those in control group?

# **Hypothesis**

1. There are no significant differences in the LDL cholesterol level of the female non-teaching staff who exercised in brisk walking, jogging and those in control group

# **Materials and Method**

The researchers through the Medical Center of Michael Okpara University of Agriculture, Umudike Abia State, Nigeria called for staff free lipid profile tests. The call was placed on the Notice board of different colleges and staff school of the University. Volunteered Non-academic staff with mildly elevated Low density lipoprotein (LDL) cholesterol aged 35-60 years from Michael Okpara University of Agriculture; Umudike Abia State, Nigeria presented themselves for the study. The

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population of the study was 67. Questionnaire that contained both Inclusion and exclusion criteria were given to the volunteered staff and their response collated. Hereafter, 54 Non-academic staff (15 male and 39 female) met the inclusion criteria. Hence, base on gender the 39 female staff were qualified and sampled for the study. The 39 female subjects for the study were randomly sampled into unequal three groups- Brisk walking group 13 females, Jogging group 8 females, and Control group 18 females.

Ethical Issues were considered with the Ethical Approval obtained from the Health Research Ethic Committee (HREC) of the Federal Medical Center (FMC), Umuahia, Abia State. All the participants signed consent of participation form after attaining personal understanding of the rationale of the study. FMC Umuahia was chosen because it was the only nearest Tertiary healthcare facility to the Area of this study.

The instruments for data collection in this study were Infrared vein viewer (IVV), Needles and Syringes, and lipidPlus device. Other laboratory equipment used includes gloves, white plain tube, Cotton wool and Methylated spirit, tourniquet. The data were collected by collecting venous blood samples from the participants. About 5ml of venous blood samples were collected from the participants into plain tubes and allowed to clot retract and separated and the serum collected for the determination of lipid profile of the participants by two certified Chemical Pathologists and Medical laboratory scientists, respectively, during pretest and posttest.

Lipid and Risk Identification Questionnaire (LRIQ) was also administered to the subjects to elicit information on demographic data. Section A comprised the items on demographic data: age range, employer, nature of employment (teaching or non teaching staff), and gender. The items for inclusion and exclusion criteria formed the section B part of LRQ. Inclusion criteria are: age, whether the subject is on sedentary (exercise less than 2 times per week for the past 3 months), not under any lipid-lowering drug therapy, LDL-cholesterol Level of 150mg/dl and above, regular staff of MOUAU.

The followings are the exclusion criteria- having an elevated blood LDL-cholesterol level associated co morbidities, taken any steroid therapy in past 3 months, any liver, kidney or cardiac failure, patients who were on any type of anti-lipidemic therapy.

In this interventional study TRRIDE was used. TRRIDE is Targeted Risk Reduction Intervention through Defined Exercise. The two mode of exercises- brisk walking and jogging were the interventions administered on the subjects with an elevated blood LDL-cholesterol level. Hence, this study employed a randomized parallel design to examine the effects of different exercise regimes on elevated blood LDL-cholesterol level. Blood LDL-cholesterol test (screening) was taken by two certified Chemical pathologist and Medical laboratory scientists, during pretest and post-test. Each of the subjects was screened by the same examiners to minimize measurement error. Under all strict aseptic precautions, blood sample were collected from each subject after overnight fasting of about 12 hours. The serum was separated immediately after obtaining the blood sample by using centrifugation for 10 minutes. Blood lipid concentration and Lipid Profile- Blood LDL-cholesterol was measured and calculated using Blood Analyzer. The appropriate chemical testing kits were used. The intervention groups are: Group 1) Brisk walking and Group 2) Jogging group.

The intervention group- Brisk walking group and Jogging group trained with one Research assistant (fitness trainer) each. In the exercise prescription for the intervention groups, all the subjects in both brisk walking and Jogging group were guided to perform at the frequency of three times per week. The duration of each training session was 50 minutes- 5 minutes warm up, 40 minutes no break brisk walking exercise and jogging exercise and 5 minutes cool down.

The mode of exercise- Brisk walking exercise and Jogging exercise were aerobic exercises. The Brisk Walking Exercise comprises –self paced walk or move on the feet with slow pace. The Jogging exercise comprises- self- paced jog and trot. The training programme for the two intervention groups lasted for 12 weeks (3 months). There were three sessions per week (Mondays, Wednesdays, and Fridays). Every training session were made to be in the evening time, 5pm to 6pm, and were made up of three segments; the general warm-up, conditioning bout and cool down.

Talk test were used to help monitor the intensity of the exercises in this study. Though the participants reported of a slight rise in their heart rate and breathing, they were able to sang while walking and jogging at a moderate pace.

The brisk walking exercise and jogging exercise programme took place at the Michael Okpara University of Agriculture (MOUAU), Demonstration Secondary School Football field. The subjects in the control group were instructed to live their normal lifestyle.

Changes in Blood LDL-cholesterol were compared between the 3 groups- Brisk walking group, Jogging group and control group using data analysis. Appropriate data analysis demands that, in order not to commit type one error, statistical assumptions of test are ascertained before the actual analysis. In line with this best practice, preliminary analysis was conducted with focus on the assumptions of ANCOVA given the research design. This included the test of normality and outliers, homogeneity of variance and homogeneity of regression. ANCOVA is not robust enough to counter the error that could occur if this is neglected and this could lead to type one error. The examination of the homogeneity of variance on the posttests of the variables to determine if ANOVA could be used showed that distributions were

#### Female LDL Cholesterol Response to Brisk ...

homogeneous in postLDLc. Therefore, the pretests were dropped and ANOVA was used in the analysis. Test for Mean Differences in the Blood LDL-cholesterol level of females in the three groups were carried out.

#### Results

 Table 1: Mean for Female Pre-test and Post-test Low Density Lipoprotein (LDL) 

 Cholesterol Response to Two Mode of Exercise

Variabe	Walking Group (N=13)				Jogging Group (N=8)					Control(N=18)					
	Pretest		Postte	st	(x̄)	Prete	st	Postt	est	(x̄)	Prete	st	Postt	est	(x̄)
	(x̄)	SD	(x̄)	SD	loss	(x̄)	SD	(x̄)	SD	Lo s	(x̄)	SD	(x̄)	SD	loss
LDL-c	152.39	19. 63	130. 69	13. 97	21. 7	133. 13	12.5 6	122 .63	11.92	10. 5	143. 44	11.7 6	144 .44	11.51	-1

Table 1 showed the mean scores of Low Density Lipoprotein-cholesterol (LDL-c) of female non-academic staff in the Brisk Walking Group, Jogging Group and the control groups. The pretest mean scores indicated that the females in the Brisk Walking group had the highest mean score followed by the females in the Control group while the Jogging group had the least mean score.

After the treatment, the female in the Control group had the highest mean score with a mean loss of -1, followed by the Brisk Walking group with a mean loss of 21.7 while the Jogging group had a 10.5 mean loss. It shows that female Non-academic staff in Control group had the highest post mean score, followed by the Brisk Walking group. The Control group had the least mean loss in LDL-cholesterol level. The female Non-academic staff in the Brisk Walking group had a highest mean loss in Low Density Lipoprotein-cholesterol after the treatment followed by the females in the Jogging group.

**Table 2:** Test for Mean Differences in the LDL-c Level of Female Non-academicStaff in the Three Groups.

		Sum of Squares	Df	Mean Square	F	Sig.
	Between Groups	3066.142	2	1533.071	9.878	.000
postLDL-c	Groups Within Groups	5587.089	36	155.197		
	Total	8653.231	38			

Table 2 indicated that ANOVA revealed a significant main effect on the postLDLcholesterol of the female university workers in the three groups F(2,38) = 9.878, p<.05. Hence, the hypothesis that there is no significant difference in the postLDLcholesterol of female university workers was rejected.

Groups Mean Std Error Sig Lower Upper Difference Bound Bound 5.59802 -5.9895 22.1242 walking jogging exercise 8.06731 .475 .013 exercise Control -13.75214\* 4.53434 -25.1381 -2.3662 -22.1242 5.9895 jogging walking exercise 5.59802 .475 -8.06731 exercise Control -21.81944\* 5.29355 .001 -35.1118 -8.5271 walking exercise 13.75214\* 4.53434 2.3662 25.1381 .013 Control jogging exercise 21.81944\* .001 8.5271 35.1118 5.29355

**Table 3:** Bonferroni Test of Multiple Comparisons in the Mean Differences ofFemale LDL-Cholesterol among the Three Groups

\*. The mean difference is significant at the 0.05 level

Further analysis using Bonferroni post hoc test indicated that differences in the female workers' LDL-cholesterol differed in walking and control groups; and jogging and control groups but not in walking and jogging groups.

# Discussion

In female participants LDL-cholesterol, BWE induced higher depletion than JE with a significant difference. JE had as well induced significant decrease in LDLcholesterol in female participants when compared with Control group.

The finding revealed that female participants in BWE group lost more blood LDLcholesterol than the females in the JE group. The females that received BWE treatment had significant decrease in their blood LDL-cholesterol level than females in JE. Females treated with JE had significant mean loss in the blood LDL-cholesterol when compared with Control group.

Meanwhile, data indicates that JE had as well caused significant decrease in LDLcholesterol in female participants when compared with Control group. These have provided answers to research question. These findings imply that BWE could causes remarkable decrease in female blood LDL- an improvement in female blood LDLcholesterol than JE. However, JE is an effective intervention for controlling LDLcholesterol disorder in females.

The results of this work are consistence with other studies that moderate leisure BWE was highly beneficial to female participants as it effectively induces remarkable decrease in blood LDL (Raju, 2016; Elsayyad, Allam, Alzahrani, Gharib, Shami, Khalifa, & Ismail, 2020). This work study and Raju, (2016) used walk and Jogging exercises as interventions. Both studies used adult female as the subjects. The results of both study indicate that at the 50% intensity start subjects in the experimental groups experienced significant decrease in their LDL-C when compared to all the other three intensity start groups.

This study and Elsayyad, Allam, Alzahrani, Gharib, Shami, Khalifa, and Ismail, (2020) used adult female as the subjects in both study, subjects received a programme of moderate exercise training three sessions/ week. In their results, there was a significant decrease (p<0.05) in serum level of LDL-C in both studies. Aerobic exercise decreases LDL-c, thereafter, improves the blood LDL-c level. Omar, Husain, Jamil, Nor, Ambak, Fazliana, Zamri and Aris, (2018) and this study was set to determined the effect of physical activity on blood lipid profile among adult females.

This study and Lakhdar, Diaf, and Khaled, (2020) study evaluated the effect of brisk walking exercise on blood parameters and cardiovascular risk. Both studies observed a gradual decrease in the blood lipid ratios. Both studies conclude that practice of three brisk walking sessions per week at a rate of 30 minutes each has beneficial impact on control and on the reduction of cardiovascular risk

## Conclusion

Brisk Walking Exercise induces higher depletion in female blood LDL-Cholesterol level than Jogging Exercise. Brisk Walking Exercise and Jogging Exercise induce significant depletion in the female blood LDL-cholesterol. Brisk Walking Exercise and Jogging Exercise were effective therapy for improving the female blood low Density Lipoprotein (LDL)-Cholesterol level. Brisk walking exercise (BWE) and jogging exercises (JE) can be recommended for persons with increased blood LDL level without any adverse effects. For reducing the risk of elevated LDL level and lipid profile disorder, BWE and JE of moderate intensity is more effective than depending on diet and being physically inactive. To achieve improved blood LDL higher dose of BWE and JE of about 50-60 minutes per day could lead to significant depletion in LDL levels. Prolonged physical inactivity induces increase in the blood LDL level. BWE would be an ideal exercise for individuals' healthy lipid profile and healthy heart to the larger populations seeking to control their lipid profile level. Depletion in blood LDL through BWE and JE suggests impaired development of Comorbidity conditions associated with the disorders in this lipid profile parameter in the participants.

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# JEAN-JACQUES ROUSSEAU'S SOCIAL CONTRACT THEORY: RELEVANCE AND APPLICATION IN THE CONTEXT OF PEACE-BUILDING IN NIGERIA

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## Abstract

This paper is an exposition on the relevance and application of Rousseau's social contract theory in the context of peace-building in Nigeria. The aim of the paper was to contribute to the ongoing efforts at enthroning lasting peace in Nigeria, in the light of Rousseau's social contact theory. Content and conceptual analysis was adopted as a method, while secondary sources were used for data collection. The study was a qualitative one. The paper discussed the concept of peace education, peace-building, Rousseau's social contract theory, and relevance of the theory in the context of peace-building in Nigeria. These were critically articulated. Sundry evidence from literature shows that peace education and peace-building are indispensable for sustainable development in Nigeria. The paper postulated that Rousseau's ideas such as mutuality, communal justice and collective security have positively contributed to the shaping of sustainable peace through peace-building. Observations are that in Nigerian context, lack of teamwork in the spirit of mutuality, lack of social justice, flagrant neglect of collective security, selfishness among the leaders, foreign interventions, ethnic and religious bigotry among others, are some of the factors that affect peace-building adversely. It was, therefore, concluded that Rousseau's social contract theory, which emphasizes teamwork, social justice, mutual agreement and collective interest, is relevant to the Nigerian peace-building process, and so its application will boost the effort. Based on the conclusion, the paper recommended, among others, that Rousseau's social contract theory be adopted and applied to the process of peace-building in Nigeria, and that the spirit of mutuality should be entrenched in peace-building by peace builders, and that social justice should be practiced for an effective and sustainable peace-building to thrive. Keywords: Peace Education, Peace-building, Rousseau's Social Contract Theory, Nigeria

# Introduction

The ubiquitous nature of the trouble in Nigeria is not just remarkable, but phenomenal. It can only be matched with Achebe's view as captured in Madu and Onyebuchi (2019), that the trouble with Nigeria is simply and squarely a leadership problem. One question that begs for a soothing answer, when such narrative as this comes up is: How long shall these problems that have apparently become endemic in Nigeria continue to be grappled with, without practical and desired results in sight? The issue of dearth of peace in Nigeria that has become so irritating a predicament that yearns for an urgent and suitable resolution cannot be glossed over at this time. There has to be a way out. In this regard, peace education and peace-building be considered

feasible approaches and magic wands to solve the enigma. Peace education can be seen as the process of acquiring values, knowledge, sense and sensibilities that help in developing the attitudes and skills which are needed by individuals to live in harmony with their selves, others, and with the ontological environment they live in, (Ikechuckwu, 2014). In other words, peace education is a deliberate attempt to teach both young and old the skills of peace-building. In this sense, peace-building is that activity, with its attendant processes, which aims to resolve injustice in nonviolent ways, and to transform the cultural and structural conditions that generate deadly and destructive conflicts (Kroc Institute for International Peace Studies, 2018). Peacebuilding revolves around developing constructive personal, group, and political relationships across ethnic, religious, national, racial and class boundaries. This kind of networking and synergizing brings about lasting peace in the society. To say that this is what Nigeria needs at the moment, to ensure that enduring peace is entrenched in the land, is to state the obvious.

In recent time, Nigeria has been besieged by multi-pronged problems, ranging from personal, tribal religious and ethnic sentiments, resentment, to political upheavals, social quagmire and economic downturn. As a result, feelings of flagrant neglect, marginalization, and high-handedness, abuse of power with impunity, inequity in the distribution of resources, allotment of portfolios and infrastructural development, have become high among the ethnic nationalities in Nigeria. This heart-rending situation has triggered hatred, rancor and mistrust, which in turn have led to avoidable killings, lynching, bloodbath, kidnapping, cybercrime, political and civil unrest as well as threat of secession from different groups in different quarters in Nigeria. The incremental rise of non-state actor groups in the form of bandits, kidnapers, terror groups has not only become nightmarish for Nigerians, but seems to have overwhelmed the security apparatus. This is worrisome, as it has constrained the different geo-political zones to resort to floating their own security structures, as a mechanism for self-defense, since the idea of quis custodiet ipsoscustodias (who keeps guard over the guards) seems to have prevailed in our contemporary Nigerian society. According to Ekeh (2016), government worked towards peace-building, as can be seen in the establishment of Unity Secondary Schools across the states of the Federation, the setting up of the National Youth Service Corps, the Institute of Peace and Conflict Resolution; Peace Corps of Nigeria, and incorporation of Peace Education in the curriculum of social studies, civic education, religious education among others.

In spite of the above observation by Ekeh, the situation on ground is a pointer that perhaps those efforts are not yielding the desired results. One may then ask: Can such efforts alone suffice to see Nigeria wriggle out of the current situation? It is really doubtful. There is need for additional efforts. The thrust of this paper, therefore, is to consider the relevance and application of Jean-Jacques Rousseau's social contract theory in the context of peace-building in Nigeria. It is hoped that this will go a long way in bringing lasting peace to Nigeria. In this regard, the paper will consider the concepts of peace education, peace-building and Rousseau's social contract theory in the context of peace-building in Nigeria. Content and conceptual analysis was used as a method for this study. This is because the context of the content and concept of the work was analytically elucidated for intelligibility and easy comprehension to ensue.

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#### **Peace-building**

The concept of peace-building does not easily lend itself to a straight-jacket definition. It evokes the idea of quot homines tot sententiae (there are as many opinions as there are people). In other words, when so many people are volunteering a statement, there will be so many views. Hence, there are varieties of definitions of peace-building by various scholars. Some of these definitions specify what activities fall within the scope of peace-building or delimit peace-building to post-conflict interventions. Peace-building, according to Redmond (2009), strives to manage, reduce, resolve and transform underpinning aspects of conflicts by using such avenues as official diplomacy, civil society, peace processes, informal dialogue, negotiation and mediation. This definition favours gentle, steady, gradual and collaborative approach to issues of conflict. Peace-building has also been defined as a process intended to resolve current conflicts and prevent their future occurrence by addressing the root causes of the problem and providing a comprehensive strategy to encourage enduring peace (Moulton, 2018). In view of this, Neal (2013) states that conflict resolution focuses on the likelihood to examine the roots of the conflict so as to find viable solutions that the parties involved may have missed in their attempt to establish peace.

Although peace-building has been a concept that is largely without a definite shape and rule of thumb, Jennifer (2007) asserts that there is one thing common and central to all the definitions: The task of improving human security; and improving human security is not the work of one person or institution. The implication here is that peace-building requires a wide range of efforts by different individuals, groups, government and civil society at the community levels, as well as national, and international levels to resolve the primary causes of violence and ensure that citizens have freedom from all forms of fear. They will not only have freedom from fear, but also freedom from want and humiliation, prior to violent conflict, during and after peace-building.

In the light of the above views, it can be seen that peace-building entails addressing violent conflicts, be it social, political or otherwise to ensure that reconciliation is achieved. In line with the above, Kroc Institute for International Peace Studies (2018) maintains that successful peace-building activities create an environment supportive of self-sustaining and durable peace, reconcile opponents, prevent conflict from starting, integrate civil society, create rule of law mechanisms, and address underlying structural and societal issues. In other words, peace-building is a multidisciplinary,

cross-sectors process which becomes remarkable when it works over the long run and at all levels of society to establish and sustain relationships among people locally and globally, thus engendering sustainable peace. More so, peace-building activities address the root causes or potential causes of violence, create a societal expectation for peaceful conflict resolution, and stabilize society politically and socioeconomically.

Although other activities that are geared towards ensuring peace and resolving conflicts among people such as peacemaking, peacekeeping and conflict resolution may have some of their aims intersecting with peace-building, they are not the same. They are quite distinct. To this effect, Coning (2013) opines that these concepts differ from one another. Comparing the concepts, they argue that peacemaking involves stopping an ongoing conflict. By implication, peacemaking seeks to put an end to a conflict that is currently taking place, which may have caused some harm to the people. It is analogous to putting off an inferno that may have consumed lots of things, probably, burning people's property or even human beings. Thus, peacemaking takes place in the cause of conflict, whereas peace-building happens before a conflict starts or immediately it stops. Peacekeeping, on the other hand, prevents the resumption of fighting following a conflict. Peacekeeping does not address the basic cause of violence or work to create societal change, like peace-building does. This is just like one who had a burn on his laps, and has first-aid applied to it to soothe the pain and to avoid the escalation of the wound. Peacekeeping only stays the cause of conflict, when the conflict has already ended. Therefore, it also differs from peace-building in that it only occurs after conflict ends, not before it begins. Similarly, conflict resolution does not include some components of peace-building, such as state building and socioeconomic development, since it only emphasizes the moment at which a conflict ends and making the outcome of such action clear.

Peace-building is rather broad and all-encompassing in itself. It also addresses economic, social and political root causes of violence and cultivates reconciliation to stall the comeback of the fundamental and direct violence. Peace-building efforts aim to alter beliefs, attitudes and behaviors of people, thereby transmogrifying any short and long term ruffle between individuals and groups, to foster more stable and peaceful coexistence. Hence, peace-building is an approach to an entire set of interrelated and coherent efforts that supports peace. Confirming the above, The United Nations (2010) states that Peace-building involves variety of measures targeted at reducing the risk of going back and forth of conflict by strengthening national capacities at all levels for conflict management, and also lay the foundations for sustainable peace as well as sustainable development.

The above assertion implies that Peace-building strategies shall be coherent and patterned to specific needs of the concerned country. This process must be based on such country's ownership of the idea of peace-building, and should comprise a carefully prioritized, sequenced, and relatively narrow set of activities designed at achieving the objectives of peace-building. These activities of peace-building shall not be without the awareness and agreement of the people and parties involved in the conflict. This is to avoid overdependence of the people in conflict on foreign assistance and its domineering influence on such country. At this juncture, it tickles one's imagination to comprehend whether peace-building can be achieved (particularly in Nigeria) without Rousseau's Social Contract Theory, the aim of which is to elicit the agreement of all for the benefit of all?

#### **Rousseau's Social Contract Theory**

There are sundry and diverse rights and duties in different nations of the world, including Nigeria. Social contract is remarkable to these rights and duties because of the role of bringing members of the society together in agreement with rights and duties obtainable in the society. Concurring with the above, Redmond (2009) states that social contract is an agreement among individuals in a society or between the people and their government that outlines such rights and duties to the people. Such agreement is a voluntary one. It is found among the people who determine their relationship among one another and with government, thereby forming a unique organized society. Social contract, according to Redmond (2009), is a brainchild of the French philosopher, Jean-Jacques Rousseau (1712-1778).

Jean-Jacques Rousseau is many things at the same time. Redmond (2009) reports that Rousseau hails from Switzerland of French origin. He was a philosopher, as well as a social and political theorist, a well-known musician, botanist and one of the writers whose eloquence was phenomenal in the days of enlightenment. Rousseau was born on 28 of June, 1712 in Geneva and was raised by an aunt, due to the death of his mother that occurred few days after his birth. Rousseau served as an apprentice to an engraver at the age of thirteen. He ran away after three years and became a scribe and acquaintance to a wealthy and charitable woman known as Madame Louis de Warrens. Redmond further states that Madame de Warrens made a very deep influence on Rousseau's life and writings. Consequently, Rousseau became a close friend to Denis Dederot (1713-1784), a French man who doubled as an encyclopedist and a philosopher. Reporting further, Redmond (2009) states that Denis commissioned Rousseau to write articles on music for French Encyclopedie. Afterwards, Rousseau's atypical views were opposed to French and Swiss authorities, and disassociated him from many of his friends. Confirming the above assertion, Kramnick (2009) reports that as a result of this, Rousseau in 1762 ran to Prussia and later to England. In England, he became a friend to David Hume (1711-1776), a Scottish historian and philosopher. They however later separated and damned themselves in public letters. Rousseau's life was synonymous with ups and downs, conflicts and resolutions. This had an enormous effect on his philosophical writings. As a prolific writer, Rousseau had lots of work to his credit. To wit, Discourse of ICT Skills and Utilization of Mobile Learning Technology ...

Political Economy, Discourse on the Origin of Inequality; Emile, Education, Confession as well as Social Contract.

The Social Contract theory propounded by Rousseau is an avenue through which he vented his position on the life of man in the society. Rousseau started with pondering on the ontological existence of man prior to the emergence of society. He went further to evaluate the society and its implications for man. Rousseau was engrossed with finding out the legal ground for the administration of men in the society. In the process he found that man had natural freedom on the things that concerns nature. He equally opined that self-preservation is a natural instinct found in every man. Nevertheless, as men continued in the exercise of their freedom in the ontological state, they were impeded in the course of their attempt for self-preservation. Such impediments stretch from conflict of interest to man's inability to provide enough resources to satisfy his needs. How to organize men in the society is another problem Rousseau found. They thought that they could come and work together. The coming and working together of men is what Rousseau alternatively terms the social contact, social compact, body politic, or sovereignty.

In view of the above, Rousseau sees as invalid contract in which one gives away oneself into slavery. For him, such a contract is a typical of self-enslavement. By implication, when a person sells himself into slavery, the tendency is that such a person has deprived himself of the opportunity to exercise his freewill. It has as well deprived him the power of application of his moral character. Evidently, the establishment of relationship among the people, which will provide each individual with adequate protection that is supported by the society, even as everyone's freewill and liberty is preserved, became imperative. This suggests that each person's right to complete freedom in the society is not denied. Rousseau (in Cassirer, 1954) contends that the contract of self-enslavement is bereft of mutuality. In other words, the slave loses all. Such contract relegates the rights and interests of the self-enslaved person background, thereby pushing him to a totally disadvantaged to the position. Unarguably, immediately such contract entered into by the slave is enforced, the slave loses his status as a moral agent, meaning that the slave's master is in full control of everything that is owned by the slave, notwithstanding the slave's effort to nudge his master to act to his advantage. Such a situation calls for social justice (of course with social contract) so that everybody, the master as well as the slave, will not feel cheated.

Correspondingly, Rousseau (1976) sues for social justice as the basis through which all men, the elites and the recruits, would agree to better the social institutions for the benefit of all. Rousseau insists that justice should be the bedrock of social institutions. This is true because social institutions devoid of justice cannot move forward. For Rousseau, social institutions can only be bettered when the elites and recruits cogitate on the outcome of their actions and allow it to hinge on the principles of social justice,

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which he feels will ensure fair play and build collective security. Rousseau further states that man naturally is egocentric and self-centered. Man would always want to be socially, economically and politically secure. Such an attitude is seen by Rousseau as a cauldron for conflict and schism. To avoid such a scenario, where conflict and self-destruction will thrive, Rousseau advocates for collective security which everybody will be aware of, and mutually agrees upon. Collective security, for Rousseau, refers to a situation where everybody's personality, effort, comfort and benefits should be ensured and protected from suppression and repression, and where playing on people's intelligence will not be found in the society, but rather where social contract will reign supreme.

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Similarly, in Social Contract, Rousseau identifies two wills that are running contrary to each other: The particular will and general will. The two wills are identified by the author as constituting a logjam to effective application of the social contract theory. Here, the particular will represents individual selfish interest and impulse that brews the urge for self-satisfaction and "I first" attitude, while the general will represents the interest of the generality of the people and the civic impulses of the people that seek the greatest happiness for the greatest number of people all over the society. The particular will runs contrary to the general will with little or no interest in the welfare of the society to which the individual belongs. What is more, the individual in the particular will only seek his personal good, instead of the general good. For Rousseau, the individual will of rulers or the will of the elites should not decide what holds in the society, rather the general will should prevail. Hence, the law enacted with the consent of the generality of the people of a given nation will not only always be accepted by citizens of the nation but will entrench peace education that will help build a lasting peace in such a nation.

**Rousseau's Social Contract Theory in the Context of Peace-building in Nigeria** Nigeria, as a nation, has been making efforts at peace-building. It has also been receiving some interventions from foreign peace agencies, especially from America and some European countries. However, it can be easily perceived that sometimes external support for peace-building can lead to over-dependency on the part of the supported nation. It often undermines the domestic politics of the said nation, thus infringing on its autonomy and capacity for self-governance. Nigeria is a stark example of such a nation. That is why the government is usually weak and dependent on foreign assistance. This over-dependence can be attributed to poor management of resources by the Nigerian leadership. In this regard, Barkindo (2014) argues that if Nigeria's vast resources have been well managed, there would not be need for any foreign intervention, and perhaps such high level conflicts would not have emerged in the first place.

Any third party attempt at peace-building without genuine domestic agreement and leading participation can result to hollow institutions. This makes the foreign peace builders' everyday practices, habits, and narratives negatively influence peacebuilding effectiveness. The above observation implies that international peacebuilders do not always fully understand the conflicts they are trying to resolve because they are not familiar with the peculiar characteristics of the people, the cultural norms and values as well as their diverse socio-economic and political backgrounds. Even at that, they seldom include local leaders in decision makings, and do not stay posted long enough to oversee positive changes. Such a situation leaves local decision makers regarding the conflict out of touch with the foreign agents who act as key players in the peace-building process. When Rousseau's social contract theory is applied to peace-building, such a lacuna could be filled. This theory, as Rousseau contends, is absolutely necessary to peace-building since its thrust is the coming and working together in mutual agreement, with justice as bedrock for the parties in conflict and the agents of conflict resolution. This will lend a helping hand to peace-building, which could engender an enduring peace.

As a matter of fact, that peace-building evolves to bring about sustainable peace is not in doubt. However, it falls short of some nuggets that are necessary in building peace and actually bringing about the much desired sustainable peace and development. One of these nuggets is the organization of people in the society so that they could come and work together as a team. Nigeria, with its diverse ethnic nationalities, cultural differences, religious plurality, needs such a coming together of its citizens. This coming together of people is of great interest in Rousseau's social contract theory, as it forms its crux. This implies that in the process of peace-building, there is need for everybody involved in and affected by the conflict: The conflicting parties, the stakeholders, the government, peace institutions, as well as the foreign agents and other interest groups. Those interested in building peace must not work in isolation. Hence, all must come together to work with team spirit and without neglecting or isolating anybody (whether significant or otherwise) involved in the conflict. It is in this way that sustainable peace that will usher in sustainable development in the society can be attained, because everybody is involved and carried along.

Furthermore, Rousseau's social contract theory establishes relationship among the people, which will provide each individual with adequate protection that is supported by the community, as everyone's freewill and liberty is guaranteed. With this spirit of team work and all-inclusiveness, every player in the conflict will be allowed the freedom to air their view without undue interference and inhibition. The implication of this is that no stone will be left unturned in the peace-building process because people's views and opinions are sampled without restriction. Being result-oriented will be the hallmark of such a peace-building process. Without gainsaying it, the objective of peace-building will always be revered because all the parties concerned are part of the process. Since they are contributors to the peace-building, they will put in their best to see that the process is sustained.

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Social justice is another important nugget to peace-building. Rousseau maintains that justice is the basis through which all the people - the elites and the recruits, would agree to better the social institutions for the benefit of all. Social institution here connotes all the parties involved in the conflict. Since justice is not only the bedrock of social institutions, but also indispensable for peace to reign, justice (towards people) is necessary in peace-building. Justice towards people urges one to respect the rights of others and to establish harmony in human relationships. This would promote equity, for the good of the individual persons and the common good of all, especially in a nation characterized with conflicts. Conflict is part of human predicament. As human predicament, moral probity is required among the parties in order to bring lasting solution to it. One of the ways morality can thrive is through the expansion and practice of sympathy. The reason is that an expanded sympathy can hardly be put to a bad use.

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In the context of this discussion, expanded sympathy is apparently a sine qua non for peace-building in the sense that the foreign agents involved in peace-building may not want to be encumbered by limited sympathies, that is, being self-centered, only wanting and projecting their own benefits, rather than the benefits of the generality of the people in a given nation. This is applicable to Nigeria where many of these agents are interested in peace-building and sustenance. The above assertion suggests that the nation in conflict can only be better when the elites (including foreign agents) and recruits (ordinary citizens) imbibe reflective thinking and endeavor to see that their actions are anchored on the principle of social justice and fairness. With this, peace-building will not only thrive but will be sustained even when the foreign agents might have gone.

#### Conclusion

Peace-building, is a comprehensive concept that encompasses, generates and sustains a full array of processes, approaches, and stages needed to transform conflicts into sustainable, peaceful relationships among the members of the society. It includes activities designed to prevent conflict through addressing remote and proximate causes of violence, promoting sustainable peace and delegitimizing violence as a dispute resolution strategy. Peace-building is a powerful factor for conflict resolution, social transformation, restorative justice, trauma healing, reconciliation, development, and peaceful coexistence. However, as has been noted, it cannot unilaterally guarantee sustainable peace, which is a veritable and indispensable catalyst for sustainable development. With Rousseau's social contract theory such a feat as envisaged above by peace-building could be a dream come true. Rousseau sees peace-building process as teamwork where all hands must be on deck to be able to build peace that will indeed be sustainable and lasting even in the absence of peace builders. In sum, Rousseau's social contract theory advocates for team work in mutual agreement, the spirit of collaboration, justice and fairness. Thus, with Rousseau's idea, the hope of building lasting peace in Nigeria can be realized. ICT Skills and Utilization of Mobile Learning Technology ...

Corollarily, peace-building without the application of Rousseau's social contract theory will only amount to a stone that has been lying in the water, yet in the inside it is perfectly dry. So, Rousseau's social contract theory is relevant to peace-building in Nigeria, and it is hoped that its application therein will be a boost to Nigeria's peace efforts.

### Recommendations

After a careful exposition of this work, the following recommendations were advanced;

- 1. Parties involved in a conflict should be carried along in a peace-building process, in other to pragmatically build the desired peace.
- 2. Various stakeholders in the conflict should be given freedom to air their views.
- 3. Justice should be allowed to take its course for sustainability of the built peace, to avoid repeat of conflict.
- 4. Jean-Jacques Rousseau's social contract theory should be adopted and applied to school curriculum to facilitate peace-building process in Nigeria.

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# ICT SKILLS AND UTILIZATION OF MOBILE LEARNING TECHNOLOGIES FOR INSTRUCTIONAL DELIVERY AMONG PRE-SERVICE TEACHERS IN TWO HIGHER INSTITUTIONS IN SOUTH-EASTERN NIGERIA

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## Abstract

This study examined ICT skills and utilization of mobile learning technologies for instructional delivery among pre-service teachers in two higher institutions in South-Eastern Nigeria. Three research questions guided the study. The study adopted a descriptive survey design. Population of this study comprised 142 degree students from Alvan Ikoku Federal College of Education and Imo State University, Owerri. Therefore the 62 students at the 3<sup>rd</sup> year degree level from School of Education, Alvan Ikoku Federal College of Education and 80 students at the 3<sup>rd</sup> year degree level from Faculty of Education, Imo State University, Owerri served as sample for the study. A twenty-one item rating scale developed by the researchers titled "ICT Skills and Mobile Learning Technologies for Instructional Delivery (ICTMLTID)" and validated by specialist was used for data collection. The reliability of the instrument was obtained as 0.76 using Cronbach Alpha Statistics. Data were analyzed using mean statistical tool. The level of ICT skills of pre-service teachers in the area investigated is high. Following the findings of the study, it was recommended among others that school authorities should ensure pre-service teachers are being encouraged to maintain high standard in mobile learning through continuous training and retraining.

Key words: ICT, mobile learning, teacher & pre-service teachers.

## Introduction

In this 21<sup>st</sup> century instructional delivery, teaching and learning can no longer be effective without the acquisition and utilization of basic information and communication technologies (ICT) skills and competencies. ICTs have been considered as the combination of technologies for collecting, storing, processing, communicating and delivering information (Ajuzie, 2015). ICT is also defined as a diverse set of electronic technologies and technological tools and resources used to communicate, create, disseminate, store, and manage information (Adomi & Kpangban, 2010). These technologies may include computers, the Internet, broadcasting technologies and telephony. ICT is a critical tool in preparing and educating students with the required skills for the global workplace. It educates students so that they can continually adapt to a work world of continuous technological innovations.

ICT makes it easier for students to access knowledge. ICT is regarded as an engine for growth and tool for empowerment, with profound implications for education, change and socioeconomic development. The impact of ICT on learning is the vision that it enables learning 'anywhere, anytime and anyhow' (Ibe- Bassey, 2011). With ICT, knowledge is not constrained by geographic proximity; it also offers more possibilities for sharing, archiving, and retrieving knowledge. Information and Communication Technology (ICT) in education has been continuously linked to higher productivity and higher educational outcomes. It has the potential to accelerate, enrich, deepen skills, motivate and engage students in learning; helps to relate school experiences to work practices, help to create economic viability for tomorrow's workers; contributes to radical changes in school, strengthens teaching and provides opportunities for connection between the school and the world (Davis &Tearle; Lemke & Coughlin, cited in Ogbonna, 2017). In the educational sector, there exist preprimary, primary, secondary and tertiary levels (NPE, 2008 & 2013). A functional educational programme however centers on a well-trained and retrained teacher (Iwu, Ajuzie, Nwoke, Lemchi & Ike, 2018).

The teacher is one who facilitates and directs to a large extent the instructional process. Anyanwu (2010) sees a teacher as that individual who is able to make the learner want to learn and helps same to learn more. Onye (2012) identifies a teacher as the pivot of teaching and learning. Flowing from the above, it is therefore necessary for a quality teacher in the 21st century to possess the relevant 21st skills and technological competencies to enable him/her be effective and efficient in the educational system (Obilo, Ibebuike, & Ajuzie, 2016; Ajuzie & Amah, 2019). There are two types of teacher education in Nigeria namely pre-service and in-service teachers (Amosun, Falade & Falade, 2015). Pre-service programmes are preparatory training meant to initiate beginning teachers while in-service programmes are designed to sharpen and refresh the skills and competencies of already serving teachers. No matter the teacher education programme one finds himself, there is urgent need to cue in the modern trend of teaching and learning which emphasizes on technology utilization in instructional delivery (Ajuzie, 2013). Contributing to the above discourse, Garba (2014) opines that teachers' competence toward the integration of ICT in their educational practices is dependent on teacher education and training on one hand; and, teacher educators on the other hand. This further hinges on the availability and adequacy of the ICT resources and infrastructure in the teacher training institution. The arrival of information and communication technology (ICT) in Nigeria has made it possible for pre-service teachers and students to become computer literate as it truly will enhance exchange of information between teachers and students through the utilization of mobile learning technologies distance notwithstanding (Ajuzie & Ukegbu, 2015). Considering the fact that teachers play vital roles in teaching and learning, it means that they should have the knowledge, skills and competencies in ICT utilization for instructional delivery (Ajuzie & Amah, 2017; Yutri& Godwin, 2013). But inadequate knowledge, lack of infrastructure, poor

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electricity power supply among others are major constraints in a developing nation like Nigeria (Ajuzie, 2009). Also, Yurti and Godwin (2013) observed that despite various ICT literacy skill development programmes being initiated and conducted on teachers' professional development, the ICT skills level in Indonesia is still quite low as shown by the National Examination of Teachers' Competency, which was conducted online in 2011 and 2012. However, Wilson, Tete-Mensah and Boateng (2014) maintain that although ICT offers new opportunities and flexibilities for classroom use, it also challenges the confidence of the user. The importance of ICT integration in the 21st century classroom has necessitated its use in the teacher preparation institutions to enable future teacher be skilled and confident users. It is an irrefutable fact that ICT has the potentials to transform teaching and learning processes which necessitates its inclusion as a compulsory part of teacher education programmes (Toit ,2015).

ICTs provide opportunities for almost everything in instructional delivery, in the past teachers and learners have to deal with in the complexity of teaching and learning but with new trend in technologies it is a forgotten issue. There are series of new instructional packages that cover content needs, learning goals, culture, and even principles of student-centered learning, collaboration, active learning; differentiation with visible learning, all these explain the required pleasure that should be found in any educational system (Zambrano &Ternent de Samper, 2014).

Mobile learning technologies devices are not quite new in the global community they have been quite around and common over a decade and they are still very much around. Since the invention of computer system, series of microcomputers had flooded the global market. These have also metamorphosed into invention of phones which made it convenient for people to communicate, interact and relate anywhere and at any moment (Ukommi, &Okeagu, 2015). Mobile devices are portable handheld communication devices connected to wireless network that allows users to make calls, send text messages and run applications (Sharma 2008 and Baran, 2014).

They are series of gadgets that are movable, portable and easy to carry about, and as such allow on the go accomplishments with little or no stress. Simply put, mobile learning is a type of learning where teachers and students interact electronically despite distance, time or location using mobile devices. According to Michael, Jonathan, Nathan, Ammol, Rich and Sandy, (2016), it is obvious that m-learning technologies can potentially provide important opportunities for learning and collaborative interaction. Mobile learning resources includes mobile phones, personal digital assistant (PDA), personal computer (PC), tablets, iPads etc (Ajuzie, Onyema & Akukwe, 2018; Assan & Thomas, 2012).

Many scholars have focused on mobile technologies for instruction. Muhammed, Umaru, and Amed, (2016) affirmed that mobile phones have become an almost essential part of daily life since their rapid growth and popularity in the late 1990's.

A related study by Adedoja and Abimbade (2016) examined the influence of the Mobile learning training on Technology/Mobile Phone Self-efficacies and the results indicated that the pre-service social studies teachers have high Technology/Mobile Phone Self-efficacies after exposure to the training. However, in Nigeria, Nwokeocha and Ezeahurukwe, (2012) and Ajuzie & Ipem (2017) affirmed that application of ICT in Nigeria institution particularly in teacher education is a dream due to absence of computers, projectors interactive white boards and other e-learning facilities.

# **Statement of the Problem**

Instructional delivery in recent times has been carried out effectively and efficiently by teachers in advanced countries with the help of ICT. Truly, Information and Communication Technology has played a great role in enhancing teaching and learning of subject areas in institutions of higher learning. It follows that pre-service teachers should be part of this new trend. However, observation shows that most of the pre-service teachers find it difficult to engage their learners on ICT skills acquisition and mobile learning. The questions before us all are could it be that these pre-service teachers are afraid to accept the ICT and mobile learning facilities or the government is finding it difficult to provide necessary facilities to help these preservice teachers join the rest of the world in technology advancement in the field of education? Hence, the researchers decided to investigate ICT skills and utilization of mobile learning technologies for instructional delivery among pre-service teachers in AlvanIkoku Federal College of Education and Imo State University, Owerri Imo State in South-Eastern Nigeria.

## **Purpose of the Study**

The main purpose of the study was ICT skills and utilization of mobile learning technologies for instructional delivery among pre-service teachers in two higher institutions in South-Eastern Nigeria. Specifically, the study sought to:

- 1. Ascertain the level of ICT skills of pre-service teachers in AlvanIkoku Federal College of Education and Imo State University, Owerri.
- 2. Determine the level of utilization of mobile learning among pre-service teachers in AlvanIkoku Federal College of Education and Imo State University, Owerri.
- 3. Identify the possible constraints to pre-service teachers' lack of utilization of mobile learning in instructional delivery Alvan Ikoku Federal College of Education and Imo State University, Owerri.

# **Research Questions**

The following research questions guided the study:

- 1. What is the level of ICT skills of pre-service teachers in Alvan Ikoku Federal College of Education and Imo State University, Owerri?
- 2. What is the level of utilization of mobile learning among pre-service teachers in Alvan Ikoku Federal College of Education and Imo State University, Owerri?

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3. What are the possible constraints to pre-service teachers' lack of utilization of mobile learning in instructional delivery AlvanIkoku Federal College of Education and Imo State University, Owerri?

# Methods

The study adopted descriptive survey design. The population of the study consisted of 142 degree students from both institutions. That is 62 students at the 3<sup>rd</sup> year degree level from school of education, Alvan Ikoku Federal College of Education and 80 students at the 3<sup>rd</sup> year degree level from faculty of education, Imo State University, Owerri respectively. From the researchers point of view, this is a manageable population which is a census count in which the total population becomes the sample. Therefore, the 142 students in the two institutions in Imo State served as the sample for the study. The instrument used for the study was a rating scale titled "ICT skills and mobile learning technologies for instructional delivery (ICTMLTID)" developed by the researchers. The instrument consisted of two sections A and B. Section A was used to elicit information on personal data and level of the respondents, while section B was on ICT skills, mobile learning and constraints to pre-service teachers' lack of utilization of mobile learning. Section B comprised twenty- one (21) items of fourpoint rating scale of Strongly Agree (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD), where the respondents ticked the correct answer that appeal to him/her in the space provided. The options were assigned points namely, 4, 3, 2 and 1 respectively. The instrument was validated by an educational technology specialist in the Department of Curriculum/Instruction and two specialists each in ICT and Measurement and Evaluation in Imo State University, Owerri respectively. The specialists authenticated the instrument. The reliability of the instrument was obtained as 0.76 using Cronbach Alpha Statistics. The one hundred and forty two (142) copies of the rating scale were administered to the respondents by the researchers and all were returned for data analysis. For the purposes of this study, the study considered any rating scale item with mean rating of 0 - 2.49 as indication for low possession and not utilization of M-learning skills while 2.5 - 4 as indication for high possession and utilization of M-learning skills. Mean statistical tool was used to answer the research questions.

# Result

S/N ICT Skills		SA	А	D	SD Me	ean (x)	Decision
1. I learn on my own via the N	let 320	90	40	12	3.25	А	
2. I type with my smart phone	easily	480	60	04	-	3.83	SA
3. I create/edit my text on my	440	45	20	07	3.61	SA	
4. I upload information from t	. I upload information from the Net			24	04	3.54	SA
5. I save document on phone	nemory	420	81	20	-	3.67	SA
6. I attach a document to an e-	-mail	456	75	20	03	3.88	SA
7. <u>I can make video calls</u>	476	60	06	-	3.54	SA	
Cluster mean					3.62		SA

 Table 1: Pre-Service Teachers' Response on their Level of ICT Skills

Analysis from table 1 upheld that level of ICT skills of pre-service teachers in the area investigated is high. With a cluster mean of 3.62 which is higher than the acceptable mean of 2.5.

S/N Use of Mobile learning	SA	А	D	SD	Mean	(x)
Decision						
1. I use M-learning because it's good						
for learning	504	48	-	-	3.89	SA
2. I use M-learning because it makes						
easy access to information	472	42	20	-	3.76	SA
3. I use M-learning because it makes						
education easier	396	60	28	09	3.47	А
4. I use M-learning because it makes						
learning a fun	488	30	20	-	3.79	SA
5. I use M-learning because it's						
more convenient	432	60	20	04	3.63	SA
6. I use M-learning because it reduces						
stress on person as you can learn at your own pace	480	30	24	02	3.77	SA
7. I use M-Learning because learning speed is faster than face-to-face appr	420 8 oach	31 20	-	3.67	SA	
Cluster mean					3.67	SA

 Table 1: Pre-Service Teachers' Response on Their Utilization of Mobile Learning

The analysis shows that the utilization of mobile learning by respondents is high. This is supported by the cluster mean score of 3.67 higher than acceptable mean of 2.50.

 Table 3: Pre-Teachers Response on Constraints to Utilization of Mobile Learning

S/N	Items	SA	Α	D	SD M	ean(x)	Decision		
1. Lacl	k of smart phone	440	45	20	07	3.61	SA		
2. Lacl	k of regular electricity power su	oply 504	48	-	- 3.89	SA			
3. Poo	r Network services	420	81	10	05	3.63	SA		
4. High	h cost of ICT materials	484	30	22	-	3.77	SA		
5. Lacl	k of laptop computers & ipads	424	66	28	-	3.65	SA		
6. Lac	k of teacher competencies	488	45	20	05	3.65	SA		
7.Lack	of effective computing skills	456	48	08	-	3.61	SA		
Cluste	Cluster mean 3.61 SA								

Analysis from table 3revealed that pre-service teachers' agreed that there are constraints to utilization of mobile learning. With a cluster mean of 3.61 which is higher than the acceptable mean of 2.5.

#### Discussion

The analysis shows that level of utilization of mobile learning by respondents is high. This finding is in line with the view of Obilo, Ibebuike, &Ajuzie, (2016) and Ajuzie& Amah, (2019) who in their different submissions affirmed that it is necessary for a quality teacher in the 21st century to possess the relevant 21st teaching skills and technological competencies to enable him/her be effective and efficient in the educational system.

The analysis shows that level of utilization of mobile learning by respondents is high. This finding may have informed the observation of Ajuzie (2013) that there is urgent need for pre-service teachers to cue in the modern trend of teaching and learning which emphasizes on technology utilization in instructional delivery (Ajuzie, 2013). Analysis from table 3revealed that pre-service teachers' agreed that there are constraints to utilization of mobile learning. This finding corroborates the opinion of Ajuzie (2009) and Wilson, Tete-Mensah &Boateng (2014) that such factors as inadequate knowledge, lack of infrastructure, poor electricity power supply among others are major constraints to ICT and mobile learning in a developing nation like Nigeria.

# Conclusion

This study has confirmed that the importance of mobile learning cannot be over emphasized. This means that mobile technologies could assist teachers in many ways, especially to making learning attractive to teachers/learners. With mobile learning devices, the concept of instructional plan could be repackaged with relevant knowhow. Also, with the utilization of mobile technologies, school system would be more focused to offer a lot to the society especially when one realizes that teaching has to be fun and not tedious. Automatically students will love schooling and would always look forward to being in school environment rather than whiling away their time in crime and crime related issues. Therefore, to make teaching and learning attractive to learners, mobile learning is paramount and sure way to achieving technological advancement in educational sector.

#### Recommendations

Based on the findings of the study, the following recommendations were drawn.

- i. School authorities should ensure pre-service teachers are encouraged to maintain high standard in mobile learning through continuous training and retraining.
- ii. Pre-service teachers should be giving incentives by school authorities to encouraging them to continue in utilization of mobile learning devices in instructional delivery.
- iii. Administrators and governments that are involved in the provision of quality teacher education should go beyond policy statements to sincerely provide needed resources for mobile learning in tertiary institutions.

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# PHYSICAL EDUCATORS' EFFORTS TO INCLUDE CHILDREN WITH DISABILITIES USING DATA ON ASSESSMENT SCORES IN IN GENERAL PHYSICAL EDUCATION CLASS IN ANAMBRA STATE: IMPACT OF GENDER AND EDUCATION QUALIFICATION

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# Abstract

The study investigated the physical educators' efforts to include children with disabilities using data on assessment scores in in general physical education class in Anambra State and the impact their gender and education qualification would have on these efforts. One research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The descriptive survey research design was adopted for the study. The population of the study comprised all the 91 teachers teaching Physical Education at the J.S.S 3 in the 261 public secondary schools in Anambra State. All the 91 teachers were used for the study due to the relatively manageable size of the population. The researchers adapted a research instrument titled "Liberman Inclusion Rating Scale for Physical Education (LIRSPE)". This was used for data collection. The instrument was validated by three experts. The reliability of the instrument was ascertained using Cronbach Alpha which yielded an overall coefficient of 0.83. The researchers together with 6 research assistants collected data for the study and a 78% return rate was recorded. Mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses. The major findings of the study revealed that physical educators made efforts to include children with disabilities using assessment scores in general physical education class. It was also reported that the professional and non-professional physical educators differ significantly in their efforts to include children with disabilities using assessment scores in general physical education class. Based on the findings, it was recommended among others that the Ministry of Education should organize annual in-service training for physical education teachers' especially nonprofessional ones to upgrade their skills and knowledge on current trends of including children with disabilities using assessment scores in their class.

**Keywords:** physical educators, efforts, children, disabilities, assessment scores, physical education,

#### Introduction

Physical education is a subject offered in junior secondary schools in Nigeria. It is concerned with exercises, physical drills and building hygiene practices of students. Ojo (2015) asserted that physical education is a systematic instruction in sports, training, practice, gymnastics, exercises, and hygiene as part of a school or college program. Continuing, Ojo (2015) asserted that it is an instructional program built

around basic motor activities, which helps achieve the goal of physical, emotional and mental wellbeing for every pupil, student and student-teachers. Physical education is concerned with developing sports and good health practices to promote the physical fitness of learners in the school system. According to Akindutire and Olanipekun (2014), physical education is concerned with the development and adjustment of the individual through carefully selected and well conducted programme of physical activities and related experiences.

There are several benefits of physical education as integral subject of the school system. Anam and Ahueansebhor (2017) noted that physical education activities enhance the psychometric affective and cognitive abilities of the child, thereby making him/her functional and effective contributor to national development afterword; because no nation can grow and develop when her citizens are weaklings. The physical education is needed by all students irrespectively of their disabilities. Johnson cited in Fedewa, Erwin, Young and Alumbaugh (2015) averred that the physical education is beneficial to children with disabilities through the development of their aerobic capacity and improving their gross motor function.

Disability is a physical and psychological impairment that restricts a person's capability to perform particular activities. Mahama and Mintah (2018) defined disability as physical or mental impairment which has substantial and long-term adverse effect one's ability to carry out normal day-to-day activities. Disabilities include learning, visual, hearing, learning and other physical impairments. Morey, Ennis and Katsiyannis (2018) asserted one of the ways to promote a healthy and active lifestyle of children with disabilities is to engage them in inclusive physical education. The inclusive physical education is practices in many secondary schools in Nigeria. Inclusive physical education entails bringing together children with disabilities and the non-disabled to learn in regular classroom through modifying the environmental physical structures, equipment and teaching methods to suit their diverse leaning needs and conditions. The inclusion of children with abilities in physical education requires teachers who possess requisite skills and sound knowledge for successful implementation of the programme. Given the importance and undeniable role of inclusive education in fulfilling educational equity in the society, one of the ways to reach this aim is to determine students' assessment scores for identifying the gaps between existing and desired needs of children with disabilities (Kamal, Saeid, Hadi & Gita, 2014).

Assessment is the act of evaluate students for the purpose of making valid judgment about learners' performance based on specific predetermined standards or criteria. According to Abdallah (2016), assessment is a part of the educational process where instructors appraise students' achievement by collecting, measuring, analyzing, synthesizing and interpreting relevant information about a particular object of interest in their performance under controlled conditions in relation to curricula objectives set

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for their levels, and according to the procedures that are systematic and substantively grounded. The assessment scores help teachers to monitor the learning progress of learners' with disabilities in general physical education class. It forms the basis for modifying the inclusive physical education classroom practices to suit the diverse needs of all learners in the classroom. Rasha and Sawilowsky (2016) stressed out that assessment practices enable teachers to identify students' current level of skills, their strengths and weaknesses and evaluate the extent to which the learners have met instructional goals. Some physical educators seem to use students' scores to only determine the status of their academic performance.

There are several factors that are likely to affect assessment practices of physical educators. These factors could include qualification and gender. The professional and non-professional may differ in their efforts of using assessment scores in the classes due to special training received by the professional ones. Similarly, the ways that male and female physical educators utilize assessment scores may vary probably due to societal factors. Greguol, Malagodi, and Carraro (2018) reported that there is no significant difference between the mean scores of male and female physical educators on efforts toward the inclusion of students with disabilities at the start of physical education classes. On the contrary, Rovena (2016) reported that female teachers have more positive attitudes than male teachers when it came to the inclusion of students with disabilities in regular school programmes. As a result of these mixed findings, the need arise for further studies to take gender and education qualification into consideration in an attempt to provide more evidence on physical educators' efforts to include children with disabilities in their classes using assessment scores in Anambra State. Ojo (2015) pointed out students with abilities self-motivation during PE class is declining, leading to heightened rate of obesity. The declining motivation of children with disabilities in physical education class is probably the fact that their assessment scores are rarely used to diagnose their strengths and weaknesses for planning and their improving instruction. Thus, it becomes imperative to determine the physical educators' efforts to include children with disabilities using data on assessment scores, gender and education qualification in general physical education class.

## **Purpose of the Study**

The purpose of this study is to determine the physical educators' efforts to include children with disabilities using data on assessment scores in in general physical education class in Anambra State and the impact of gender and educational qualification could have on these efforts. Specifically, the study aimed at determining:

1. Physical educators' efforts to include children with disabilities using assessment scores in general physical education class

- 2. Whether there is a significant difference in the efforts of male and female physical educators to include children with disabilities using assessment scores in general physical education class.
- 3. Whether there is a significant difference in the efforts of professional and non-professional physical educators to include children with disabilities using assessment scores in general physical education class.

#### **Research Question**

One question guided the study:

1. What are the efforts of physical educators to include children with disabilities using assessment scores in general physical education class?

#### Hypotheses

The following hypotheses were tested at 0.05 level of significance

- 1. There is no significant difference in the efforts of male and female physical educators to include children with disabilities using assessment scores in general physical education class.
- 2. There is no significant difference in the efforts of professional and nonprofessional physical educators to include children with disabilities using assessment scores in general physical education class.

#### Method

Descriptive survey research design was adopted for the study. This design was deemed appropriate, since the researchers collected the data from the population to describe phenomena as they exist or in a systematic manner regards to physical educators' efforts to include children with disabilities using data on assessment scores in general physical education class in Anambra State. The population of the study comprised all the 91 (ninety-one) JSS physical Education teachers teaching Physical Education at the J.S.S 3 in all the 261 Public Secondary Schools in the six Education Zones in Anambra State.

The entire population was studied without sampling due to the relatively small size. The researcher adapted the instrument developed by Liberman-Brian titled "Inclusion Rating Scale for Physical Education" (LIRSPE). The instrument was modified by the researchers and titled Physical Educators' Efforts to Include Children with Disabilities in General Physical Education Class Questionnaire (PEETICDGPECQ). The instrument has two sections; A and B. Section A has four items on the demographic data of the respondents and Section B has four items on using of assessment scores. The instrument was face-validated by three experts comprising one lecturer from the Department of Human Kinetics and Health Education and a lecturer from Department of Adult and Continuing Education from the Faculty of Education, Nnamdi Azikiwe University, Awka, in addition to an expert from Department of Human Kinetics and Sports Studies, Alvan Ikoku Federal College of Education Owerri. Their suggestions which included inclusion of omitted items and removal of items that do not fit the

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instrument were used to get the final draft of the instrument. Cronbach alpha was used to determine the internal consistency of the instrument which yielded coefficient of 0.85.

A total of ninety-one (91) copies of the questionnaire were administered directly to the respondents by the researchers together with six research assistants who were physical education secondary school teachers. They were briefed by the researcher on the procedures for the administration of the questionnaire. A total of 91 copies of the questionnaire were distributed and 71 copies were properly filled and successfully retrieved, indicating 78% percent return. At the end of the exercise, copies of the questionnaire retrieved were used for data analysis. The data was analyzed using mean and standard deviation for answering the research questions. In answering the research questions in this study, mean scores that fell between real number limits: Strongly Agree (SA) 3.50-4.49, Agree (A) 2.50-3.49, Disagree (D) 1.50-2.49, and Strongly Disagree (SD) 0.50-.49 were used for interpretation. For decision on the null hypotheses, if the p-value is equal to or greater than the significant value of 0.05, the null hypothesis was rejected and the difference was taken to be statistically significant, but if otherwise, the null hypotheses was not rejected and the difference was not taken to be statistically not significant.

## Results

#### **Research Question 1**

What are the Physical Educators' efforts to include children with disabilities using assessment scores in general physical education class?

#### Table 1

Mean Ratings of Physical Educators' on their Efforts to Include Children v	vith
Disabilities Using Assessment in General Physical Education Class (N=71)	

S/N	Efforts Using Assessment	Mean	SD	Remark
1.	Assessing children with disabilities			Agree
	alongside their non-disabled peers and	3.23	.58	
	make modifications as needed.			
2.	Identifying their abilities during playtime,	3.07	.93	Agree
	break and lunch times.	5.07	.95	
3.	Record the performance of the disabled			Agree
	children at the same time with their peers	3.24	.57	
	to ensure inclusion.			
4.	Making sure that their performance and	3.17	.60	Agree
	scores matter.	3.17	.00	

The result presented in Table 1 shows the mean ratings of efforts by physical educators to include children with disabilities using assessment in general physical education class. The mean ratings on the four items ranged between 3.07 and 3.24, indicating that physical educators' assessment practices are inclusive of children with disabilities. The inclusive efforts using assessment were; assessing them alongside

their non-disabled peers, identifying their abilities during playtime, break and lunch times, recording their performance at the same time as those of their non-disabled classmates and making sure their performance and scores matter.

# Hypothesis 1

Male and female physical educators do not differ significantly in their efforts to include children with disabilities using assessment scores in general physical education class.

## Table 2

t-test Comparison of Mean Ratings on Efforts towards Inclusion of Children with Disabilities Using Assessment in General Physical Education by Male and Female Physical Educators

Source of variation	Ν	Mean SD		df	t-cal	<i>P</i> -value	Decision
Male	25	3.15	.57				
				69	33	.74	NS
Female	46	3.19	.45				

Table 2 shows that the mean rating by male physical educators (M=3.15) on their efforts to include children with disabilities using assessment in general physical education class was not significantly less than the mean rating by the female physical educators (M=3.19); t (69) = -.33, p=.74. This implies male and female physical educators do not differ significantly in their efforts to include children with disabilities using assessment in the general physical education class. Therefore, the null hypothesis was not rejected.

# Hypothesis 2

There is no significant difference in the mean ratings of Professional and Non-Professional physical educators in their efforts to include children with disabilities using assessment scores in general physical education class.

## Table 3

t-test Comparison of Mean Ratings on Efforts towards Inclusion of Children with Disabilities Using Assessment Scores in General Physical Education by Professional and Non-professional Physical Educators

Source of variation	Ν	Mean SD		df	t-cal	<i>P</i> -value	Decision
Professional	41	3.33	.40	69	3.31	.00	Significant
Non- professional	30	2.96	.53				C

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Table 3 shows that the mean rating by professional physical educators (M=3.33) on their efforts to include children with disabilities using assessment in general physical education class was significantly greater than the mean rating by the non-professional physical educators (M=2.96); t (69) = 3.31, p=.00. This implies that professional and non-professional physical educators differ significantly in their efforts to include children with disabilities using assessment in general physical education class. Therefore, the null hypothesis was rejected.

#### Discussion

The finding of the study shows that efforts were made by physical educators to include children with disabilities using assessment scores in their classes. The efforts by physical educators to include children with disabilities using assessment in their class included: assessing them alongside their non-disabled peers, identifying their abilities during playtime, break and lunch times, recording their performance at the same time as those of their non-disabled classmates and making sure their performance and scores matter. This finding refuted that of McGrath, Crawford and O'Sullivan (2019) which shows that post primary physical education teachers' did not make effort in the inclusive practice of disabilities in their classes. The difference in geographical location may bring about varying educational programme and school environment characteristics which could influence physical educators' efforts to include children with disabilities using assessment scores in their class. Perhaps, the assessment scores help physical educators to determine the students' understanding of contents of inclusive physical education. It also forms the basis for decision on placement, advancement and instrument needs of children with disabilities.

It was also reported that the male and female physical educators do not differ significantly in their efforts to include children with disabilities using assessment in the general physical education class. This is in disagreement with the earlier finding of Greguol, Malagodi and Carraro (2018) asserted that the physical education teachers' gender has significant influence in their inclusion of children with disabilities in their classes. The difference in societal and environment factors of geographical location where the two studies were conducted could account for the disagreement in the findings. There is no significant difference in the mean ratings of male and female physical educators could point to the fact that they apply similar curriculum in delivering instruction to children with disabilities. Further result shows that the professional and non-professional physical educators differ significantly in their efforts to include children with disabilities using assessment in general physical education class.

#### Conclusion

Based on the findings of this study, it was concluded that physical educators made efforts to include children with disabilities in general physical education class in Anambra State. All students especially those with disabilities learn at different pace and it appears from the findings that physical educators have made several efforts to meet their individual learning needs using assessment scores. The male and female physical educators addressed the instructional needs of all children by their efforts of reducing and managing learning barriers. The professional physical educators made significant efforts to include children with disabilities in general physical education class than non- professional physical probably due to the fact the professional ones have specialized skills and knowledge to handle children with abilities in their classes.

## Recommendations

Based on the findings, it was recommended among others that

- 1. The Ministry of Education should organize annual in-service training for physical education teachers especially non-professional ones to upgrade their skills and knowledge on current trends of including children with disabilities using assessment scores in their classes.
- 2. The Post Primary School Service Commission should recruit and post qualified physical educators to secondary schools to enable them use their varied instructional knowledge to promote inclusive physical education

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# UNDERGRADUATE STUDENTS' PERCEPTION OF ONLINE LEARNING AMIDST COVID-19 PANDEMIC IN NNAMDI AZIKIWE UNIVERSITY, AWKA

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#### Abstract

Despite the increasing rate of online learning the world over, it seems that Nnamdi Azikiwe University, Awka is yet to fully integrate online learning in adherence to the Covid-19 pandemic protocols. Since students are regarded as the pivot around which teaching-learning context revolves, it is expedient to elicit their views about this form of education. It is in view of the foregoing that the researchers sought to examine undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka. A survey research design was adopted for the study. The population of study comprised all 24,958 (14,304 Regular and 10,654 CEP) undergraduate students in Nnamdi Azikiwe University, Awka according to Academic Planning Unit of the University (2021). The sample for the study comprised 360 (194 Regular and 166 CEP) undergraduate students in Nnamdi Azikiwe University, Awka obtained using simple random sampling, purposive sampling and disproportionate sampling techniques. The instrument that was used for data collection was the "Students' Perception of Online Learning Amidst Covid-19 Pandemic Questionnaire" (SPOLACPQ)". The instrument was validated by three experts. The reliability of the instrument was tested using Cronbach Alpha which gave a reliability co-efficient of 0.76. The indication of the findings of the study is that majority of regular undergraduate students perceive that data package for online learning is unaffordable and that their academic progress is difficult to monitor with online learning among others. It was further revealed that the majority of CEP perceive that online learning prevents them from physically interacting with their classmates on academic tasks and reduces their access to their lecturers' input in their classwork among others. Based on the findings of the study, it was recommended that curriculum planners should consider the review of the curriculum contents to capture online learning during and after Covid-19 pandemic.

Keywords: Online learning, COVID-19, Pandemic, Undergraduate, Programme

#### Introduction

The current Covid-19 pandemic elicited rapid shift from in-class to online learning in universities. This shift created an educational environment that threw undergraduate students in public universities into confusion as they have hitherto become accustomed to the traditional face-to-face lecture approach. Universities, in a bid to

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adhere to the tripartite protocols of lockdown, social distancing and isolation had to adopt online learning; Nnamdi Azikiwe University, Awka inclusive.

Within Nigeria context, the use of online learning is advantageous amidst Covid-19 as it facilitates the enforcement of the dual protocols of isolation and social distancing. With the advent of online education in Nigeria universities, the spread of the covid-19 virus is reduced to the barest minimum as students with the symptoms are isolated; more so, social distancing ensures that the virus is not indiscriminately spread. Li and Lalani (2020) observed that students normally memorize 25-60% of the assigned material when learning online, whereas they memorize only 8-10% of this material in the traditional classroom. This indicates that the students may be able to learn faster online.

Online learning has ensured that the Nigerian university is in tune with global trend of online learning especially given that modern day students are digital natives. The implication is that this model of learning is more focused on the students and offers flexibility in choosing the proper time for their studies. Going further, Gasevic (2020) stated that there are five merits of online learning even after the COVID-19 crisis comes to an end viz: encouragement of teachers to adopt on-campus activities that stimulate active learning; preparation of students for life in general and for work in the digital age in particular; enablement of institutions to respond to the emerging social needs of people; increment in students' individualized and resilient education options and accommodation of students who are unable to afford to full-time education. Mukhatar, Javed, Arooj and Sethi (2020) opined that although online learning is estimated as a supplement to traditional learning and a complementary way of increasing students' satisfaction and cost-effectiveness, despite the merits of online learning amidst covid-19 era, it has come with its attendant demerits in university education.

In Nnamdi Azikiwe University, Awka, students and lecturers are confronted with many challenges trailing the use of online learning. Some of these challenges are related to internet access and the use of technology. That is, students often struggle to take part in online learning because of the unreliable internet or technology access. There appears to be a gap in this regard among students within and across countries. Students, certainly have their perception on online learning during this global health crisis. The relative novelty of online learning especially among public universities in Nigeria is at the core of varied perceptions of students of its use amidst Covid-19 pandemic.

Perception refers to one's view of something or an individual's formation of opinion based on experience. It is the organization, identification, and interpretation of sensory information in order to represent and understand the environment (Schacter, 2011). Undergraduate students' perception of online learning is supported by the fact that

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many universities in Anambra State appear not to have integrated online education as a model of teaching and learning amidst Covid-19 era. Students' perception of online learning could provide the school authorities with feedback which will aid them in improving teaching, course content and structure. It is interesting to know that undergraduate students' perception of online learning could differ according to programme of studies. In Nnamdi Azikiwe University, Awka, there are different undergraduate programmes which are Regular, Continuing Education Programme (CEP) and Sandwich programme.

Regular education programmes are run on weekdays especially for students who are not in the working class category. In other words, their lectures take place on a daily basis with the exception of weekends. The expectation is that every regular student is expected to graduate at the expiration of four, five or six years depending on their discipline. The implication is that exceeding the expected years of graduation amounts to over-stay. On the other hand, both Sandwich and CEP programmes are part-time programmes.

Continuing Education Programme (CEP) is usually run on weekends especially for working class students who may not be disposed to attend lectures on weekdays. CEP students are however exposed to the same lecturers and curricular contents as in the case of regular undergraduate students. The distinction in the two programmes basically lies in the duration of the programme and the fact that their lectures are not done on a daily basis. Given the disparity in academic schedules of regular and parttime undergraduate students, it is expected that their perceptions of online learning will vary.

Sandwich programme, as a programme of study, is conducted outside the regular system of study by institutions of higher learning. Students of sandwich programme are often times workers who seek to improve their professional status, position or income and educational levels. Nigeria's educational policy, which outlines that the minimum teaching qualification is National Certificate in Education (NCE), has forced many teachers, in particular, to enroll for sandwich programme so as to obtain Degree Certificate. In Nigeria, Sandwich students are not full time students of their respective universities because majority of the participants are teachers. They are expected to spend at least three months during long vacation to receive lectures and be examined. The candidates are expected to be physically present, attend all lectures and write examinations during the contact period.

The current study was therefore, focused on CEP and regular students as they come to school on weekly basis unlike the sandwich students that come on holidays. Olayemi, Adamu, and Olayemi (2021) investigated the perception and readiness of 148 students towards online learning in Nigeria during the Covid-19 pandemic using survey research design. Structured questionnaire was the instrument used for the data collection. On the positive side, the study revealed that majority of the respondents

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claimed to be conversant with online learning with a high level of readiness. Furthermore, the findings revealed that majority of the respondents indicated high level of ICTs skills and competencies needed for online learning. Ansar, et al. (2020) looked at 600 undergraduate students' perception and satisfaction regarding online learning system amidst COVID-19 Pandemic in Pakistan using cross-sectional descriptive study. The findings of the study revealed that 78% of students were dissatisfied from online learning. Students also raised concerns over assessment methods, student-instructor communication, fairness of examination and difficulty in understanding concepts. Majority of students preferred classroom teaching and 81% of respondents didn't want to continue with e-learning. Obeidat (2020) examined 131 undergraduate students' perspective about online learning and the extent to which it influenced them positively or negatively in respect to psychological state, learning and skill acquisition, level of interaction, and financial state in Jordan using mixed method of research design. It used questionnaire and questionnaire interview in order for the qualitative results to support the quantitative ones. The findings of the study indicated that the psychological state of students was ranked first and their level of interaction was ranked last regarding the influence online learning had on them.

In addition, the study showed no significant differences in students' responses to the four categories or aspects due to gender, residential area, and the type of school they graduated from. However, they revealed significant differences between Arts and Information Technology students' responses. Yadav, Arora, Kumari and Nandal (2020) examined perception of 411 students regarding online learning during lockdown period in three different communities of India (rural, urban and metropolitan) using survey research design. The findings of the study revealed that majority of students have smart phones in urban and metropolitan but neutral to learning while rural students prefer the conventional leaning.

Despite the wide-based adoption of online learning the world over, it seems that Nnamdi Azikiwe University, Awka is yet to fully integrate online learning in adherence to the Covid-19 pandemic protocols. Since students are regarded as the pivot around which teaching-learning context revolves, it is expedient to elicit their views about this form of education. It is in view of the foregoing that the researcher sought to examine undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka. It is in view of the foregoing that the following research questions were raised:

- 1. What are regular undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka?
- 2. What are CEP undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka?

#### Method

The survey design was adopted in this study. The design is considered appropriate for the study because, according to Nworgu (2015), it seeks to collect and analyze data from only a few people or items considered to be representative of the entire group. The population of study comprised all 24,958 (14,304 Regular and 10,654 CEP) undergraduate students in Nnamdi Azikiwe University, Awka according to Academic Planning Unit of the University (2021). The sample for the study comprised 360 (194 Regular and 166 CEP) undergraduate students in Nnamdi Azikiwe University, Awka drawn using multistage sampling comprising simple random, purposive sampling and disproportionate sampling techniques. The instrument that was used for data collection was "Students' Perception of Online Learning Amidst Covid-19 Pandemic Questionnaire" (SPOLACPQ)". The validity of SPOLACPQ was determined by giving, along with the purpose of the study and research questions, to three experts. The reliability of SPOLACPO was ascertained using test-retest method in a pilot test by administering the SPOLACPQ to a similar group of 40 students in University of Nigeria, Nsukka, which was outside the study area. The second test was administered two weeks after the first on the same sample. The two sets of scores were used to compute a correlation co-efficient using Pearson Product Moment Correlation coefficient formular. The correlation co-efficient value of 0.76 was obtained for SPOLACPQ. Mean and standard deviation were used to analyze the data collected. The cut-off point for accepting mean score was put at 2.50, with the decision rule that any weighted mean score from 2.50 and above was interpreted as Agree while weighted mean scores below 2.50 were interpreted as Disagree.

#### Results

#### Table 1

Mean Scores of Regular Undergraduate Students on their Perception of Online Learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka

SN	I perceive that:	Mear	n SD	Remark
1.	Online learning reduces my physical access to learned			
	materials	3.54	0.68	Agree
2.	Online learning reduces my access to my lecturers in put			
	in my classwork	1.86	0.20	Disagree
3.	Online learning diminishes my physical interaction with			
	my lecturer on lecture contents	3.77	0.76	Agree
4.	Online learning prevents me from physically interacting			-
	with my classmates on academic tasks	3.80	0.78	Agree
5.	Online learning limits my participation on extra-curricular			
	activities	2.00	0.26	Disagree
6.	Online learning reduces my writing speed on course conten	ts 1.96	0.16	Disagree
7.	I face problem in online education during lock down perio	d		
	as it is not user friendly	3.18	0.58	Agree
8.	I do not have the device to participate in online learning	2.00	0.12	Disagree

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SN	I perceive that:	Mean	SD	Remark
9.	Data packaging for online learning is unaffordable	3.9	8 0.8	4 Agree
10.	Epileptic power supply hinders online learning	3.5	0 0.6	i8 Agree
11.	Online learning takes more time to understand than the			_
	traditional face-to-face learning	3.0	8 0.52	2 Agree
12.	It is difficult to monitor my academic progress via online			-
	learning	3.8	6 0.8	32 Agree
13.	Assessment of my academic progress is more accurate in			-
	online courses	3.6	3 0.7	4 Agree
14.	I am more likely to ask questions in an online course	3.6	60 0	.72 Agree
15.	My technical skills (email/internet apps) have increased			C
	since attending online classes	3.7	4 0.7	4 Agree
16.	Online courses are very structured with set due dates simil	lar		Ū.
	to face-to-face courses	1.6	0.1	5 Disagree
	Mean of Means	3.0	07 0.	55 Agree

Data in Table 1 show that item 9 has the highest mean score of 3.98 which indicates that the record number of the respondents perceive that data package for online learning is unaffordable. This is followed by item 12 with a mean score of 3.86 which depicts that a good number of the respondents perceive that academic progress is difficult to monitor with online learning. Item 16 has the lowest mean score of 1.67 which indicates that the least number of the respondents perceive that online courses are very structured with set due dates similar to face-to-face courses. The mean of means of 3.07 shows that regular undergraduate students have positive perceptions on online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka.

# Table 2

Mean Scores of CEP Undergraduate Students on their Perception of Online Learning amidst Covid-19 Pandemic in Nnamdi Azikiwe University, Awka.

I perceive that:	Mean	SD	Rem	ark
Online learning reduces my physical access to lea	arned			
materials		3.04	0.70	Agree
Online learning reduces my access to my lecturer	s in put	-		
in my classwork	_	3.90	0.90	Agree
Online learning diminishes my physical interaction	on with			-
my lecturer on lecture contents		3.22	0.60	Agree
Online learning prevents me from physically inter	racting			
with my classmates on academic tasks		4.08	1.06	Agree
Online learning limits my participation on extra-c	curricul	ar		
activities		1.92	0.12	Disagree
Online learning reduces my writing speed on cou	rse con	tents 3	3.44 (	0.64 Agree
I face problem in online education during lock do	wn per	iod		
as it is not user friendly	_	3	3.14 (	0.56 Agree
	<ul> <li>Online learning reduces my physical access to learnaterials</li> <li>Online learning reduces my access to my lecturer in my classwork</li> <li>Online learning diminishes my physical interaction my lecturer on lecture contents</li> <li>Online learning prevents me from physically interaction with my classmates on academic tasks</li> <li>Online learning limits my participation on extra-oractivities</li> <li>Online learning reduces my writing speed on could face problem in online education during lock does</li> </ul>	<ul> <li>Online learning reduces my physical access to learned materials</li> <li>Online learning reduces my access to my lecturers in put in my classwork</li> <li>Online learning diminishes my physical interaction with my lecturer on lecture contents</li> <li>Online learning prevents me from physically interacting with my classmates on academic tasks</li> <li>Online learning limits my participation on extra-curricul activities</li> <li>Online learning reduces my writing speed on course con I face problem in online education during lock down per</li> </ul>	Online learning reduces my physical access to learned materials3.04Online learning reduces my access to my lecturers in put in my classwork3.90Online learning diminishes my physical interaction with my lecturer on lecture contents3.22Online learning prevents me from physically interacting with my classmates on academic tasks4.08Online learning limits my participation on extra-curricular activities1.92Online learning reduces my writing speed on course contents 31.92I face problem in online education during lock down period3.22	Online learning reduces my physical access to learned materials3.040.70Online learning reduces my access to my lecturers in put in my classwork3.900.90Online learning diminishes my physical interaction with my lecturer on lecture contents3.220.60Online learning prevents me from physically interacting with my classmates on academic tasks4.081.06Online learning limits my participation on extra-curricular activities1.920.12Online learning reduces my writing speed on course contents 3.440.12I face problem in online education during lock down period0.12

SN	I perceive that:	Mean	SD	Remark
24.	I do not have the device to participate in online learning	2.02	0.10	Disagree
25.	Data packaging for online learning is unaffordable	3.64	0.77	Agree
26.	Epileptic power supply hinders online learning	3.40	0.55	Agree
27.	Online learning takes more time to understand than the			-
	traditional face-to-face learning	3.68	0.68	Agree
28.	It is difficult to monitor my academic progress via online	;		-
	learning	3.80	0.76	Agree
29.	Assessment of my academic progress is more accurate in	l		-
	online courses	1.80	0.18	Disagree
30.	I am more likely to ask questions in an online course	3.16	0.58	Agree
31.	My technical skills (email/internet apps) have increased			-
	since attending online classes	2.06	0.28	Disagree
32.	Online courses are very structured with set due dates sim	ilar		C
	to face-to-face courses	3.26	0.6	6 Agree
	Mean of Means	3.10	0.57	Agree

Data in Table 2 show that item 20 has the highest mean score of 4.08 which indicates that the record number of the respondents perceive that online learning prevents them from physically interacting with their classmates on academic tasks. This is followed by item 18 with a mean score of 3.90 which depicts that a good number of the respondents perceive that online education reduces their access to their lecturers' input in their classwork. Item 29 has the lowest mean score of 1.80 which indicate that the least number of the respondents perceive that assessment of their academic progress is more accurate in online courses. The mean of means of 3.10 shows that CEP undergraduate students have positive perceptions on online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka.

## Discussion

# Regular undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka

The indication of the findings of the study is that majority of regular undergraduate students perceived that data package for online learning is unaffordable and that their academic progress is difficult to monitor with online learning among others. This understanding is not unconnected to the fact that a good number of regular undergraduate students are not in the working class category and may find it difficult to afford the data package. More so, regular undergraduate students may not find it easy monitoring their academic progress online as they come to school on weekdays and have become used to monitoring their academic progress via the analogue means on a daily basis. Generally, regular students have positive perceptions towards the use of online learning amidst Covid-19. The findings of the study agree with the

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position of Muthuprasad, Aiswarya, Aditya and Jha (2021) that majority of the students preferred to use smart phone for online learning and that they prefer recorded classes with quiz at the end of each class to improve the effectiveness of learning. Muthuprasad, Aiswarya, Aditya and Jha added that students opined that flexibility and convenience of online classes makes it attractive option, whereas broadband connectivity issues in rural areas makes it a challenge for students to make use of online learning initiatives. The findings of the study further agree with the assertion of Olayemi, Adamu, and Olayemi (2021) that majority of the respondents claimed to be conversant with online learning with a high level of readiness. However, the high cost of data, poor internet services, erratic power supply, inaccessibility to online library resources and limited access to computer were the major perceived challenges to effective online learning.

# CEP undergraduate students' perception of online learning amidst Covid-19 pandemic in Nnamdi Azikiwe University, Awka.

The revelation of the findings of the study is that majority of CEP students perceived that online learning prevents them from physically interacting with their classmates on academic tasks and reduces their access to their lecturers' input in their classwork among others. It further revealed that CEP students have positive perceptions towards the use of online learning amidst Covid-19. This is understandably so given that online learning favours CEP students to the extent that it allows them to learn from the comfort of their workplace. More so, as a result of the fact that some of them are employed, they can afford the data package for online learning. The findings of the study are in collaboration with the assertions of Obeidat (2020) that the psychological state of students was ranked first and their level of interaction was ranked last regarding the influence online learning had on them. Moreover, online learning is advantageous to them as it saves them time, effort; eases communication, enhances lecture follow-up and feedback. Obeidat (2020) added that the students considered online learning as hindering interaction and motivation.

## Conclusion

In view of the findings of the study, it was concluded that regular students have favourable perceptions towards the use of online learning amidst Covid-19. It was further concluded that CEP students have positive perceptions towards the use of online learning amidst Covid-19.

## Limitations of the study

- 1. The limitation of this study is that both regular and CEP undergraduate students used in the study were not use to online learning before the emergent of COVID-19 pandemic and this posed great challenge for the teachers.
- 2. In the study, only regular and CEP undergraduate students were sampled and used which therefore limits the scope of generalization.

3. The samples used for the study were restricted to only regular and CEP undergraduate students who attend lecturers on weekly basis. The other category of students, sandwich undergraduate students were not involved because they attend lecturers only on holidays. Their inclusion may affect the findings of this study.

#### Recommendations

In line with the findings of the study, certain recommendations were made. These include that:

- 1. University authorities should provide means through which knowledge delivery and general learning activities can be achieved seamlessly and at the lowest cost to the students even amidst Covid-19 pandemic.
- 2. University authorities should ensure the technological savviness of lecturers through the organization of workshops and seminars amidst Covid-19. So that, online learning should be enhanced.
- 3. Curriculum planners should consider the review of the curriculum contents to capture online learning during and after Covid-19 pandemic.
- 4. Lecturers should work towards the sustenance of online learning amidst Covid-19 by continuing using online platforms for their lectures.

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# EFFECT OF SOCIAL SKILLS TRAINING AND GENDER ON CONDUCT DISORDER AMONG PUPILS WITH MILD INTELLECTUAL DISABILITIES IN IBADAN, OYO STATE, NIGERIA

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#### Abstract

Challenging behaviours are the norm among most children at various points during their development. Researchers and practitioners from across the fields of education, mental health and criminology have, however, identified a pattern or clustering of behavioural difficulties that is dissimilar to age-appropriate norms. Therefore, this study determined the outcome of social skills training on the management of conduct disorder in pupils with mild intellectual disability in Ibadan. The study adopted a descriptive survey research design of correlational. Purposive random sampling technique was used to select three special schools in Ibadan. The participants were screened and randomly assigned to treatment and control groups. Participants in the two treatment groups were exposed to four weeks of social skills training. Two instruments used were: Slosson Intelligence Test (SIT) ( $\alpha = 0.90$ ), Conduct Disorder Rating Scale ( $\alpha$ = 0.86). Three hypotheses were tested at 0.05 level of significance. The result reveals that there was significant impact of Social skills training on the management of conduct disorder of pupils with mild intellectual disability (F(16/29) = 3.213, p < .05), also, there was significant impact of age on the management of conduct disorder of pupils with mild intellectual disability (F value (2/27) = 6.419, Pro=0.006 < 0.05). And, there was a significant difference in the impact of gender on the management of conduct disorder of pupils with mild intellectual disability (t-cal= 10.130 > t-crit = 1.960), (P<0.05). Social skills training was found to be effective to manage conduct disorder in pupils with mild intellectual disability. It is, therefore, recommended that professionals involved in the education of pupils with intellectual disability should employ social skill training so that the pupils can fit in well into society.

Keywords: Social skills training, Conduct disorder, Pupils with mild intellectual disability

#### Introduction

Society is dealing with a trend of conduct disorder and destructive behaviour in children with intellectual disability. In the United States, one of the highest priorities for public health and crime prevention is the prevention of aggressive and delinquent behaviour during childhood and adolescence. Children with social, emotional, and conduct problems including aggression, noncompliance and oppositional behaviour in elementary school are at high risk for academic failure, rejection of peers, conduct disorder, school dropout delinquency, and drug and alcohol problems later on. (Webster Stratton, Reid, & Stoolmiller 2008).

There are many different definitions of intellectual disability but the one presented by the American Association of Intellectual and Developmental disabilities (AAIDD, 2012) defines intellectual disability specifically as a disability originating before the age of 18 and characterized by significant limitations both in intellectual functioning and adaptive behaviour. The criteria used by most of the experts to classify children with intellectual disability are severity of their problems (Luckasson, Reeve, 2001). Most people who are recognized as intellectually disabled are classified as mild intellectual disability. These children faced many mental and behavioural problems including inability in learning, personality problems, and deficiency in adaptive behaviour. They may not be able to control their behaviour (Shea, 2006). Intellectual disability can be caused by a problem that starts any time before the child turns 18 years old, even before birth. It can be caused by injury, disease or a problem in the brain. For some children, the cause of the intellectual disability is unknown which in turn have serious implication on their education and entire lifestyle throughout life.

Due to the difficulties associated with childhood conduct disorder, there is a need for the development and evaluation of treatments. Given the early onset and stability of the problem, the need for interventions targeting children who exhibit antisocial behaviour prior to the elementary years is particularly critical. Unfortunately, little research exists on treatment for conduct disorder in early childhood (Nangle, Erdley, Carpenter, and Newman, 1990).

The concept of social skills has been variously defined by psychologists. Schneider (1985) defines social skills as an instrument for connecting a person to the environment. They believe that this instrument is used for initiating and continuing a desirable relationship which is an important aspect of mental health. Ilknur and Bulbin (2007) define desirable social skills as the acceptable social pattern of behaviour which helps children gain social reinforcement and acceptance. Social skills also help them avoid annoying situations, set positive feedback from the social environment, and improve interpersonal relationship.

Social skills training for people with intellectual disability have received a great attention over the last several decades (Kuhn, 2001) had shown that social skill deficits are commonly observed among the population of individuals diagnosed with intellectual disability. According to Matson and Boisjoli theory (2008), lack of social skills is a barrier for independent life and it is related to intellectual disability. Social skills trainings may provide some solutions to the problems society is facing with many children. Social skills trainings aim at increasing the performance of key social behaviours important to success in social situations. Several research studies focused on creating social and life skills training programs for children and adolescents with impaired interpersonal abilities (Domitrovich, Cortes, & Greenberg, 2007; Ducharme, Folint, & Derosier, 2008).

# **Statement of the Problem**

Challenging behaviours are the norms among most children at various points during their developmental years. Researchers and practitioners from across the fields of special needs education, mental health and criminology have, however, identified a pattern or clustering of behavioural difficulties that is dissimilar to age-appropriate norms.

These behaviours include hostility to others, aggression and rule infractions, defiance of adult authority and violations of social and cultural norms. Many different terms are used to describe this set of behaviours, including conduct disorder, oppositional defiant disorder, severe behavioural difficulties, emotional and behavioural disorder, and antisocial behaviour.

Many children with intellectual disability are isolated from their peers and are therefore deprived of interaction and play because of their behavioural issues. This isolation limits their opportunities to learn through observation and interaction with other children. Due to a lack of awareness and knowledge, such behavioural problems are mistakenly considered manifestations of mental illness. However, in people with intellectual disability, behavioural problems can lead to serious life-threatening situations if not properly managed. Thus, it is pertinent to manage such behavioural problems through the use of some specialized techniques; hence, this study examined the effectiveness of social skill training on the management of conduct disorder in pupils with mild intellectual disability in selected special schools in Ibadan.

The purpose of this study was to investigate the effectiveness of social skill training in the management of conduct disorder in pupils with mild intellectual disability in selected special schools in Ibadan; to compare the effectiveness of social skills in the management of conduct disorder in pupils with mild intellectual disability, to investigate if age differences has effect on dependent variable, to investigate if gender differences has effect on dependent variable.

## **Literature Review**

Society is dealing with a trend of aggressive and destructive behaviour among children and adolescence. Children with social, emotional, and conduct problems are at high risk for academic failure, peer rejection, conduct disorder, school dropout, delinquency, and drug and alcohol problems (Webster Stratton, Reid, and Stoollmiller, 2008). A high priority for the United States public health and crime prevention is the prevention of conduct disorder and delinquent behaviour during childhood and adolescence (Taylor, Eddy, and Biglan 1999).

Social skills trainings aim to increase the performance of key social behaviours that are important for children to succeed in social situations. Solutions may be provided with social skills trainings for the increasing trend of conduct disorder and destructive

behaviour among children with intellectual disabilities. Various studies of socials kills trainings have shown effectiveness in improving children's levels of social interaction and cognitive problem solving (Erwin, 1994), declining conduct disorder and bullying behaviour, (DeRosier, 2004), and reducing disruptive, off task behaviours in children with intellectual disabilities (DuPaul & Weyandt, 2006).

Normal behavioural development involves a decreasing rate of behavioural problems as children learn skills such as empathy, perspective taking, intention-cue detection, problem solving, cooperation and self-control. It is likely that the acceptance into a peer group aids in the child's learning these skills, (Dodge, 2003). As a child engages in activities that expand their worldview and increases their socialization skills, they gain a sense of balance in the exchange of emotional expressions and social competence. The child begins to view relationships in a reciprocal manner where the give-and-ake of emotions and interactions creates mutual respect (Richburg & Fletcher, 2002).

A meta-analysis of studies of social skills training effectiveness shows that social skills training can improve children's levels of social interaction and cognitive problem solving abilities (Erwin, 1994). Choi and Kim (2003) found success with a cognitive social learning model of social skills training used to teach social skills to pre-kindergarten children with low peer acceptance. Social skills trainings were effective in providing support for pupils with emotional difficulties (Tierney and Dowd, 2000). DeRosier (2004) found that social skills training proved beneficial in the decline of aggression, bullying behaviour and fewer antisocial affiliations in children with conduct disorder. Additionally, social skills training can be a major component in reducing disruptive, off task behaviours in children with conduct disorder (DuPaul and Weyandt, 2006).

Although the opinions about the efficacy of SST are mixed in the literature (Forness, 2005; Gresham, 2004; Maag, 2005; Quinn, Kavale, Mathur, Rutherford, & Forness, 1999; Smith &Travis, 2001), there is general agreement that students with conduct disorder need to learn social skills to be successful in school and life. Students with conduct disorder experience significant difficulties in the development and maintenance of interpersonal relationships, demonstration of prosocial behaviour patterns, and social acceptance by teachers and peers (Kauffman, 2009; Walker, Ramsey, & Gresham, 2004). It has been argued that one of the primary reasons that children are referred for and/or classified as conduct disorder is based on their social deficiencies (Gresham, 2002).

## Age and Conduct Disorder in Pupils with Intellectual Disability

Research indicates a range in prevalence for challenging behaviours, such as aggression, of 10 to 20% of all people with intellectual disability (Emerson et al., 2001; Lowe, 2007). Similar prevalence rates of between 10 and 15% for aggression have been reported (Saloviita, 2000). The range of prevalence rates for aggression

appears to be slightly larger with estimates of between 2 and 20% (Cooper, Smiley, Jackson et al., 2009; Crocker et al., 2006).

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Of all the developmental parameters of antisocial behaviour, perhaps the most extensively studied has been the age at which it begins (LeBlanc and Loeber, 1998). An exhaustive review by Farrington and eight expert colleagues (Farrington, Loeber, Elliott, 1990) precludes the need for us to review this large literature here. It can be summarised by the well documented observation that early onset of antisocial behaviour problems is the single best predictor of serious adult criminal outcomes.

There have been few statistical analyses of age differences in prevalence rates of challenging behaviour. Several methodologically robust studies report an increase in challenging behaviour with age. More specifically, a small number of studies indicate an increase in prevalence until the mid-30s followed by decline (e.g. Kiernan and Kiernan, 1994; Oliver, 1987). Many researchers however, have failed to identify any association between age and challenging behaviour (e.g. Fraser, Leudar, Gray, and Campbell, 1986; Hillery and Mulcahy, 1996) whilst others report age related changes in the prevalence of challenging behaviour but are imprecise with regard to the age at which the prevalence begins to change (Hemmings, Gravestock, Pickard, and Bouras, 2006).

Disparity in general and age - related prevalence might result from the divergent methodologies and samples employed. For example, the prevalence of challenging behaviour is likely to depend on the form of the behaviour and definition, prevalence of challenging behaviour is likely to be higher in a sample of participants recruited from institutions where individuals are referred as a result of challenging behaviour (Emerson et al., 2001).

## Gender and conduct disorder in pupils with intellectual disability

Despite the importance of age of onset for theory and prevention planning, we found no published systematic comparisons of sex differences in this important variable. Unpublished sex comparisons of onset are cited by Elliott (1994) who mentioned that fewer girls than boys initiated self-reported serious offending at every age, and by Weiner and Wolfgang (1989) who mentioned that more girls than boys were first registered by police before age 14. Because these reports are unpublished, and seem to conflict, this study compares the sexes on age of onset.

Individuals of one gender frequently misinterpret the actions of the other. In our schools, cross-gender misunderstanding can impact greatly on the educational process, and may result in boys displaying strong traditional male behavioural patterns being labeled emotionally and/or behaviourally disordered when they are not.

#### **Hypotheses**

- a. There is no significant impact of Social skills training on the management of conduct disorder of pupils with mild intellectual disability
- b. There is no significant impact of age on the management of conduct disorder of pupils with mild intellectual disability.
- c. There is no significant impact of gender on the management of conduct disorder of pupils with mild intellectual disability.

#### Method

A descriptive survey research design of correlational was used for this study. This method is used because the study is about looking into influence of existing variables (Social skills training, sex and age) on the management of conduct disorder of pupils with mild intellectual disability. The population for this study consists of all persons with mild intellectual disability in Oyo state but for geographical location and accessibility, a sample was drawn from the general population. Thirty (30) persons with mild intellectual disability in three different schools were purposively selected for the study; the schools include Hisb Lai Algalib Special School (H.L.A), Gate, Ibadan, Oluyole Chesire home school, Poly road, Ibadan and Home school for the handicapped, Ijokodo, Ibadan. Comprising of males and females were randomly selected from each school respectively. The schools are located in Ibadan, the Oyo state capital. Purposive sampling technique was adopted for the schools and the participants. The researchers make used of frequency count and percentage for analyzing the demographic data while hypotheses were tested using the t-test and Analysis of variance ANOVA

# Result

## Table 1

Summary Table of ANOVA Showing the Impact of Social Skills Training on the Management of Conduct Disorder of Pupils with Mild Intellectual Disability

Source	SS	DF	$MS^2$	F ratio	Р
Between Groups	446.333	16	27.896	3.213	<.05
Within Groups	112.867	13	8.682		
Total	559.200	29			

Results from table 1 reveal that there was significant impact of Social skills training on the management of conduct disorder of pupils with mild intellectual disability (F (16/29) = 3.213, p<.05). The hypothesis stated was rejected.

Table 2Summary of ANOVA of Age Group on the Management of Conduct Disorder ofPupils with Mild Intellectual Disability

Age Group	Ν	Mean	Std Dev	Sum of Square	df.	Mean Square	F	p.(Sig)
9 to 10 yrs	12	69.08	7.051	62.242	2	231.12		
11 to 12 yrs	13	72.23	9.959	2004.424	27	74.23	6.419	0.006
13 yrs and above	9	70.40	8.173	2066.667	29			signific ant
Total	30							

Above table 2 present the ANOVA analysis showed that there was significant impact of age on the management of conduct disorder of pupils with mild intellectual disability. The result revealed three differences means values of age group. The mean scores of age between 11 to 12 years has mean value of 72.23, follow by age between 13 years and above means of 70.40 and age between 9 to 10 years has mean of 69.08. Therefore, it conclude that there was significant impact of age on the management of conduct disorder of pupils with mild intellectual disability (F value (2/27)= 6.419, Pro=0.006 < 0.05). That is, there was significant impact of age on the management of conduct disorder of pupils with mild intellectual disability.

#### Table 3

*t-test of Difference in the Impact of Gender on the Management of Conduct Disorder of Pupils with Mild Intellectual Disability* 

Variable	Gender	Ν	Mean	SD	df.	t-Cal	t-Crit	Р
Management of conduct disorder		18 12 35	85.83 70.41	7.868 9.596	28	10.130	1.960	0.004 (p<0.05) Significant

Table 3 revealed that there was a significant difference in the impact of gender on the management of conduct disorder of pupils with mild intellectual disability. It was observed that the t-Calculated value was greater than t-Critical values (t-Cal= 10.130 > t-Crit =1.960), (P<0.05). There was a significant difference, Hypothesis rejected. Also the mean difference shows that male has high mean value of 85.83 than female mean value of 70.41. Therefore it was concluded that, there was significant difference in the impact of gender on the management of conduct disorder of pupils with mild intellectual disability.

#### **Discussion of Findings**

The result of the findings revealed that there was significant impact of Social skills training on the management of conduct disorder of pupils with mild intellectual disability. The result corroborates various studies of socials skills trainings that have shown effectiveness in improving children's levels of social interaction and cognitive

problem solving (Erwin, 1994), declining conduct disorder and bullying behaviour, (DeRosier, 2004), and reducing disruptive, off task behaviours in children with intellectual disability (DuPaul & Weyandt, 2006).. DeRosier (2004) found that social skills training proved beneficial in the decline of aggression, bullying behaviour and fewer antisocial affiliations in children with conduct disorder. Additionally, social skills training can be a major component in reducing disruptive, off task behaviours in children with conduct disorder (DuPaul & Weyandt, 2006).

The result of the study revealed that there was significant impact of age on the management of conduct disorder of pupils with mild intellectual disability Many researchers however, have failed to identify any association between age and challenging behaviour (e.g. Fraser, Leudar, Gray, &Campbell, 1986; Hillery & Mulcahy, 1996) whilst others report age related changes in the prevalence of challenging behaviour but are imprecise with regard to the age at which the prevalence begins to change (Collacott, Cooper, Branford, & McGrother, 1998; Hemmings, Gravestock, Pickard,& Bouras, 2006; Kiernan & Alborz, 1996; Maisto, Baumeister, &Maisto, 1978).

The result reveals that there was significant difference in the impact of gender on the management of conduct disorder of pupils with mild intellectual disability. The reason for this development could be that male pupils with mild intellectual disability display more conduct disorder baheaviour than the female ones. This implies that in exhibiting conduct disorder, the influence of gender identity appears to be significant. Therefore, when pupils with mild intellectual disability are frustrated they behave in dissimilar manner.

As mentioned to above, gender-based differences may be especially pertinent to programming for youngsters with conduct disorder. Boys are identified to exhibit antisocial behaviour at a rate of three (Campbell &Werry, 1986) or three and a half (Office of Civil Rights, 1988; Gollnick & Chinn, 1990) to seven and a half (United States Department of Education's Office of Special Education Programs, 1993) or eight (Coleman, 1986; Lauritzen, 1990) times that for girls. Of all the categories of disability, "aggressive behaviour" has the highest percentage of boys. Additionally, boys are more likely than girls to receive mental health services (Green, Clopton, & Pope, 1996).

#### Conclusion

Enhancing positive behaviour among pupils with mild intellectual disability, involves equipping children with the appropriate skill concept, including its defining features (e.g., the behavioral components necessary to enact the skills involved). Ideally, this skills concept will function as a template for future social behaviour. In order to do so, however, social skill training needs also to define the functional relevance of the social concept to the children. If children are not provided with this information, the social concept will not be employed appropriately simply because the children do not understand the usefulness of the skill. The specific skills involved in the social concept and its functional relevance can be provided to the children through verbal and for modeled instruction.

The researchers found that social skills training and decrease the antisocial behaviour of pupils with mild intellectual disability such as conduct disorder, tantrums bullying etc. in our society through direct teaching of instruction in the classrooms. The study revealed that there was significant main effect of age in the management of conduct disorder of pupils with mild intellectual disability. Also, the study shows that there was significant main effect of gender in the management of conduct disorder in pupils with mild intellectual disability.

However, there was significant two-way interaction effect if treatment and age, treatment and gender, age and gender in the management of conduct disorder of pupils with mild intellectual disability. And lastly, there were three way interaction effects of treatment, age and gender on the conduct disorder behaviour of pupils with mild intellectual disability.

## Recommendations

Based on this context therefore, the researchers put forward the following recommendations: It is recommended that awareness programmes through different seminars, meet up groups, workshops are to be arranged by the government through the ministry of education to update these workers.

Family/parent oriented programmes should be encouraged and parents should be seen as an integral part of the modification plans. Parents training should be put in place to expose them to how to effectively use the treatment programme; social skills training in managing antisocial behaviour to complement what the teachers have done in the class.

The family, society and significant others should take time to give appropriate support to pupils with mild intellectual disability with conduct disorder behaviour as to help them overcome their challenges and adjust well to teaching and learning situation in school.

Psychological intervention programmes should be put in place to help pupils with mild intellectual disability to self-rediscover their potential and competence to adjust to learning situation in school. Schools for the special needs should endeavour to create interactive environment that would enable pupils with mild intellectual disability cope with their challenges.

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# COMPARISON OF ACADEMIC PERFORMANCE OF REGULAR AND PART-TIME UNDERGRADUATE STUDENTS IN FACULTY OF EDUCATION WIDE COURSES, NNAMDI AZIKIWE UNIVERSITY, AWKA.

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#### Abstract

In Nnamdi Azikiwe University, Awka, the regular students attend lectures on weekdays and have regular contact with their lecturers. The part-time students as a result of their work schedule attend lectures on weekends. Hence, it is expected that variation in the academic performances of regular and part-time students in faculty wide courses will exist. Whether or not this variation exists is what informed the researcher to compare the academic performance of regular and part-time students in Faculty of Education wide courses, Nnamdi Azikiwe University, Awka. A survey research design was adopted for the study. The participants of the study comprised all the 1802 third year regular and fourth year part-time undergraduate students (2018/2019 session) in Faculty of Education, Nnamdi Azikiwe University, Awka. The sample of this study comprised 280 third year regular and 160 fourth year part-time undergraduate students in the faculty obtained through simple random sampling and disproportionate sampling techniques. Data collected were analyzed using mean standard deviation and t-test statistic. The findings revealed that that regular undergraduate students have higher mean academic performance scores than part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. It was further revealed that male and female regular undergraduate students have higher mean academic performance scores than male and female CEP undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. In addition, it was revealed that that while there is was a significant difference between the mean performance scores of male regular and male part-time students in EDU 331, also a significant difference existed between the mean performance scores of female regular and female part-time students in EDU 331. In line with the findings of the study, it was recommended that University administrators should ensure that the best students are admitted into part-time programme so as to avert the dismal failure of part-time students in faculty-wide courses.

Keywords: academic performance, regular programme, parttime programme, continuing education

#### Introduction

Higher education takes place at higher institutions of learning such as polytechnics, colleges of education and universities. Higher institutions in Nigeria have various modes of study – regular or part-time. This categorization is witnessed in many universities; Nnamdi Azikiwe University, Awka; inclusive. Nnamdi Azikiwe

University, Awka is a large federal institution with various types and categories of students. First, the students are classified into regular and part time students. Second, its various categories of students include the Master's degree students and the Doctoral degree students, Pre-degree students (referred to as Preliminary Programme students in this study) which include Pre-Science students, and Diploma Programmes Students; the undergraduate students – part-time (sandwich students and Continuous Education Programme (CEP)) students and regular students. The present study, however, concentrated on regular and CEP students.

Regular undergraduate students refer to the category of students whose programme of studies run on weekdays. Regular undergraduate programmes span for four to five years for different courses with the exception of a course like medicine and surgery that last for six years. Regular undergraduate programmes are complemented by part-time. Regular students as well as the part-time students are admitted through UTME/PUTME. The part-time was established with a view to providing a viable alternative undergraduate programme or run the regular programme as a result of work-schedule. The major distinguishing feature between the regular undergraduate programme and part-time programme is that the former spans for four years while the later spans six years. C.EP is designed to prepare students for courses in education and physical sciences. Hence, it is being run by some faculties; faculty of education inclusive.

Faculty of Education in Nnamdi Azikiwe University has nine departments – Educational Foundations, Guidance and Counselling, Library and Information Science, Early Childhood and Primary Education, Adult Education, Vocational Education, Human Kinetics and Health Education, Educational Management and Policy and Science Education. Faculty of Education is the only faculty in the university that runs three undergraduate programmes – sandwich, regular and CEP. Specifically, the CEP exposes the candidates to many of the courses that are done in the main four-year degree regular programme. Consequently, admission through this means could have an impact on the students' academic performance.

Academic performance is the yardstick for the educational quality of a nation. It is the outcome of students' evaluation in the educational process which indicates the extent to which students have achieved the educational goals as specified in the curriculum (Tumba, 2020). A student's academic performance is usually measured in examinations or continuous assessment tests and could be expressed in various ways depending on what the scores in faculty wide courses will be used for.

There are a couple of faculty wide courses offered in faculty of education. The faculty wide courses include Sociological Foundations of Education (EDU 101), Philosophical Foundations of Education (EDU 102), Historical Foundations of Education (EDU 103), Introduction to Educational Management (EDU 104) and

Introduction to Educational Psychology (EDU 111), Psychology of learning (EDU 212), Special Education (EDU 335), Educational Research and Statistics (EDU 331), Educational Measurement and Evaluation (EDU 333) etc. The two of the faculty wide courses are Educational Research and Statistics (EDU 331) and Measurement and Evaluation (EDU 333) which some students, based on the researcher's observation, perform poorly at, as reflected in their academic performance. For the present study, the faculty wide course that was used is Educational Research and Statistics (EDU 331). More so, the academic performance of 300 level students were used because that is the level that offers statistical courses which some students find difficult. The academic performance of a student could differ based on many variables; gender inclusive.

Gender differences in academic performance is one of the key academic issues under deliberations globally (Abdu-Raheem, 2012). There has been inconsistencies in the findings among researchers regarding gender and academic performance of students. Some researchers (Amogne, 2015; Olasehinde & Olatoye, 2014; Oludipe, 2014) found no significant difference between male and female students' academic performance while others (Hashim, Ababkr, & Eljack, 2015; Lin, 2015; Ezeudu & Obi, 2013) found a statistically significant difference between male and female academic performance in favour of the male students. Academic performance of regular undergraduate students and Part-time students has remained a subject of debate.

#### Modes of Study and Academic Performances in Universities in Nigeria

There are two modes of study in Nigerian universities – regular and part-time. Both are admitted via UTME and PUTME. The PUTME examination is presumed to be a set of standardized aptitude tests that should predict an individual's ability to study in a particular vocation. Prospective students usually pass through rigorous preparations to beat the cut-off mark due to the high level of competition amongst candidates. Those who succeed in meeting these requirements are expected to adapt and perform favourably in their respective courses of study. However, the predictive validity coefficients of the UTME and PUTME are still a point of argument. Research works show that validity of UTME and PUTME varies among universities and even among departments of the same university.

Emaikwu (2012) assessed the impact of students' mode of admission into university and their academic achievement in Nigeria using ex-post facto research design. Academic records of students were used for data collection. The findings of the study indicated that there was no statistical significant difference in the mean academic achievement of students who were admitted into the university through unified tertiary matriculation examination, remedial programme and direct entry admissions. There was statistical significant difference in the mean academic achievement of male and female students and that the academic achievement of male students was higher than their female counterparts based on the three modes of admission. In similar vein,

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Adenegan and Osho (2012) investigated the mode of entry as a predictor of success in Bachelor of Science in Education Mathematics Degree Examinations in Adeyemi College of Education (A.C.E), Ondo State, Nigeria using survey research design. Data on undergraduate Cumulative Grade Point Average (CGPA) from entry level to the final level with respect to their mode of entry into mathematics department were collected directly from the departmental academic records in the school of science of Adeyemi College of Education, Ondo, Ondo State, Nigeria for the 2006/2007 – 2009/2010 academic sessions. The findings revealed that the Direct Entry (DE) mode of entry is the best predictor of success in the College when compared with the University Matriculation Examination (UME) mode students' performance.

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It is heart-rending that despite the rigorous screening exercises that candidates are made to pass through during admission as well as efforts made by both the governments and the university administration to improve the standard of education as measured by academic performance of the graduates in faculty of Education, Nnamdi Azikiwe University, many of regular undergraduate and part-time students still come out with poor grades. In Nnamdi Azikiwe University, Awka, the regular students attend lectures on weekdays and have regular contact with their lecturers. The part-time students as a result of their work schedule attend lectures on weekends. Hence, it is expected that variation in the academic performances of regular and part-time students in faculty wide courses will exist. Whether or not this variation exists is what informed the researcher to compare the academic performance of regular and part-time students in Faculty of Education wide courses, Nnamdi Azikiwe University, Awka. In the light of the foregoing, the current study specifically sought to compare:

- 1. The mean academic performance scores of regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.
- 2. The mean academic performance scores of male regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.
- 3. The mean academic performance scores of female regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.

## **Research Questions**

- 1. What are the mean academic performance scores of regular and part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University?
- 2. What are the mean academic performance scores of male regular and part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University?
- 3. What are the mean academic performance scores of female regular and part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University?

### **Hypotheses**

The following null hypotheses were tested at 0.05 level of significance:

- 1. There is no significant difference in the mean performance scores of regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.
- 2. There is no significant difference in the mean performance scores of male regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.
- 3. There is no significant difference in the mean performance scores of female regular and part-time students in Educational Research and Statistics course in Nnamdi Azikiwe University, Awka.

# Method

This study utilized a survey design. The design is deemed appropriate for the study because, according to Nworgu (2015), it seeks to collect and analyze data from only a few people or items that are deemed to be representative of the entire group. The participants of the study comprised all the 1802 third year regular and fourth year parttime undergraduate students (2018/2019 session) in Faculty of Education, Nnamdi Azikiwe University, Awka. The sample of this study comprised 280 third year regular and 160 fourth year part-time undergraduate students in the faculty obtained through simple random sampling and disproportionate sampling techniques. Four out of the nine departments in the faculty of education was obtained through simple random sampling technique. Furthermore, disproportionate sampling technique was used to obtain 124 male regular and 156 female regular students as well as 70 male and 90 female part-time students. No instrument was needed for data collection .This because already existing data was used. Specifically, arithmetic mean and standard deviation were used to answer the research questions. The decision rule was that any mean score below 50 was taken as low performance while mean scores above 50 was taken as high performance. The decision rule was that that if the calculated value is greater than the critical value, the null hypothesis was rejected but when the calculated value is less than the critical value, the null hypothesis was not rejected.

# Results

Table 1

Mean Academic Performance Scores of Regular and Part-Time Undergraduate Students in Educational Research and Statistics course in Nnamdi Azikiwe University

Source of Variation	Ν	Mean	SD
Regular	280	50.41	10.16
Part-time	160	45.43	9.45

Data in table 1 show that the mean performance score of regular undergraduate students in EDU 331 is 50.41 while that of part-time students is 10.05. This means that the regular students performed better than part-time students. The standard

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deviation of 10.16 for students shows a higher homogeneity than that of the part-time students with a standard deviation of 9.45.

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**Table 2:** Mean Academic Performance Scores of Male Regular and Part-TimeUndergraduate Students in Educational Research and Statistics Course in NnamdiAzikiwe University

Source of Variation	Ν	Mean	SD
Regular	124	47.05	9.58
Part-time	70	43.10	9.30

Data in table 2 show that the mean performance score of male regular undergraduate students in Educational Research and Statistics course is 47.05 while that of male part-time students is 43.10. This means that the male regular students performed better than male part-time students. The standard deviation of 9.58 for male students shows a higher homogeneity than that of the male part-time students with a standard deviation of 9.30.

**Table 3:** Mean Academic Performance Scores of Female Regular and Part-Time Undergraduate Students in Educational Research and Statistics Course in Nnamdi Azikiwe University

Source of Variation	Ν	Mean	SD
Regular	156	53.77	10.86
Part-time	90	48.47	10.05

Data in table 3 show that the mean performance score of female regular undergraduate students in Educational Research and Statistics course is 53.77 while that of female part-time students is 48.47. This means that the female regular students performed better than female part-time students. The standard deviation of 10.86 for female students shows a higher homogeneity than that of the female part-time students with a standard deviation of 10.05.

**Table 4:** Test of Significance of Difference between the Mean Performance Scores ofRegular and Part-Time Students in Educational Research and Statistics Course

Variables	Ν	X	SD	Df	t-cal	t-crit	Remark
Regular	280	50.41	10.16				
				438	16.56	1.96	Significant
Part-time	160	45.43	9.45				-

Data in Table 4 indicate that a significant difference exists between the mean performance scores of regular and part-time students in Educational Research and Statistics course. The analysis result revealed that calculated value (16.56) is greater

than the critical value (1.96). Therefore, the null hypothesis is rejected. This result means that there is a significant difference between the mean performance scores of regular and part-time students in Educational Research and Statistics course.

**Table 5:** Test of Significance of Difference between the Mean Performance Scores of Male Regular and Male Part-time Students in Educational Research and Statistics Course.

Variables	Ν	X	SD	Df	t-cal	t-crit	Remark
Regular	124	47.05	9.58				
				191	8.62	1.96	Significant
Part-time	70	45.10	9.30				-

Data in Table 5 indicate that a significant difference exists between the mean performance scores of male regular and male part-time students in Educational Research and Statistics course. The analysis result revealed that calculated value (8.62) is greater than the critical value (1.96). Therefore, the null hypothesis is rejected. This result means that there is a significant difference between the mean performance scores of male regular and male part-time students in Educational Research and Statistics course.

**Table 6:** Test of Significance of Difference between the Mean Performance Scores of Female Regular and Female Part-time Students in Educational Research and Statistics Course

Variables	Ν	X	SD	Df	t-cal	t-crit	Remark
Regular	156	53.77	10.86				
				244	12.44	1.96	Significant
CEP	90	48.47	10.05				-

Data in Table 6 indicate that a significant difference exists between the mean performance scores of female regular and female part-time students in Educational Research and Statistics course. The analysis result revealed that calculated value (12.44) is greater than the critical value (1.96). Therefore, the null hypothesis is rejected. This result means that there is a significant difference between the mean performance scores of female regular and female Part-time students in Educational Research and Statistics course.

#### Discussion

The findings of the study revealed that regular undergraduate students have higher mean academic performance scores than part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. This implies that regular undergraduate students are more exposed to peer tutoring in Educational Research and Statistics course than part-time undergraduate students.

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Though, there are no related studies in literature, studies in literature such as that of Emaikwu (2012) revealed that there was no statistical significant difference in the mean academic achievement of students who were admitted into the university through unified tertiary matriculation examination, remedial programme and direct entry admissions. The afore-mentioned position is further contradicted by Joe and Kpolovie (2014) who argued that certificate programme has produced graduates with the best academic performance, followed respectively by the Basic Studies, School of Science Laboratory Technology and UTME/PUTME programmes. The reason for the higher academic performance of regular students than part-time students in Educational Research and Statistics course could be attributed to the fact that parttime students who come for lectures on weekends and do not have ample time to master the course. On the other hand, regular students come to school on week days and have enough time to interact with other students and lecturers in matters of research and statistics. Furthermore, the findings of the study revealed that a significant difference existed between the performance of regular and part-time Students in Educational Research and Statistics course. This stems from the fact that the regular students have better test-taking strategies and time management skills than their part-time counterparts.

The findings of the study revealed that male regular undergraduate students have higher mean academic performance scores than male part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. This implies that male regular undergraduate students have more study time, interest and self-concept in Educational Research and Statistics course than male part-time undergraduate students. Though, there are no related studies in literature, studies in literature such as that of Emaikwu (2012) showed that there was statistical significant difference in the mean academic performance of male students who were admitted into the university through unified tertiary matriculation examination, remedial programme and direct entry admissions. The high mean performance of male regular students in Educational Research and Statistics course cannot be divorced from the fact that they come to school regularly and interact with their lecturers on a regular basis. Furthermore, the findings of the study showed that a significant difference existed between the performance of male regular and male part-time Students in Educational Research and Statistics course. This could be due to the fact that male regular students are more academically resilient and less-test anxious than their male part-time counterparts.

The findings of the study revealed that female regular undergraduate students have higher mean academic performance scores than female part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. The logical deduction here is that there is a performance gap between female regular undergraduate students and female part-time undergraduate students in Educational Research and Statistics course. Much as there are no related studies in literature, studies in literature such as that of Emaikwu (2012) indicated that there was statistical significant difference in the mean academic achievement of female students who were admitted into the university through unified tertiary matriculation examination, remedial programme and direct entry admissions. The high mean performance of female regular students in Educational Research and Statistics course cannot be separated from the fact some of the female regular students have more time for their studies than their part-time counterparts. However, female part-time students are expected to perform well in Educational Research and Statistics course as some of them are into business that necessitates the practical use of statistics unlike the female regular undergraduate students who use statistics theoretically. Furthermore, the findings of the study indicated that a significant difference existed between the performance of female regular and female part-time Students in Educational Research and Statistics course. This could be attributed to the fact that the female regular students dedicate ample time to study unlike their part-time female counterparts that are distracted by work schedules.

# Conclusion

Based on the findings of the study, it was concluded that regular undergraduate students have higher mean academic performance scores than part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University. It was also concluded that male and female regular undergraduate students have higher mean academic performance scores than male and female part-time undergraduate students in Educational Research and Statistics course in Nnamdi Azikiwe University.

# Recommendations

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

- 1. Efforts should be made by university administrators to ensure that none of the categories of students in faculty of education is discriminated against but treated the same way as others so as to produce good quality graduates.
- 2. Government should pay more attention to part-time students in terms of financing and making provision of teaching facilities so as to shore up their academic performance in faculty wide courses.
- 3. University administrators should ensure that the best students are admitted into part-time programme so as to avert the dismal failure of part-time students in faculty wide courses.
- 4. Parents should see to it that they employ the services of remedial teachers so as to improve the academic performance of their students.
- 5. Lecturers in the Faculty of Education should ensure that they approach part-time programmes with the level of commitment with which they approach regular students.

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# PARENTAL MARITAL STATUS, AUTHORITARIAN, AUTHORITATIVE AND PERMISSIVE PARENTING STYLES AS PREDICTORS OF ADOLESCENTS' PEER REJECTION SENSITIVITY

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# Abstract

Rejection sensitivity is the disposition of a person to expect anxiously, readily perceive, and intensely react to rejection. This is a problematic behaviour for adolescents, and many factors have been said to contribute to it. The study examined how parental marital status, parenting styles can predict adolescents' rejection sensitivity, given that studies are inadequate to draw a meaningful generalization on the impact of these factors on adolescents' rejection sensitivity. The sample size comprised 1000 second year students in two Federal universities in southeast, Nigeria. Data were collected using two research instruments, Parental Authority Questionnaire (PAQ) and Rejection Sensitivity Questionnaire (RSQ). Results showed that both permissive parenting style and authoritative/flexible parenting style have a low negative relationship with in-school adolescents' peer rejection sensitivity (r=-.20, -.09), respectively. Regression analysis revealed that gender, parental marital status and two parenting styles were predictors of adolescents peer rejection sensitivity, jointly contributing 7.3% to explain the variances in the model and the corresponding F (1,150) = 13.109 was statistically significant (p<.05). The discussions were based on relevant literature, and recommendations were made.

Keywords: parenting, permissiveness, authoririan, authoritative, rejection sensistivity

# Introduction

Researchers have argued that family background is important in adolescents' development of certain psychological features, primarily through parents' involvement in child-rearing and maintaining a guardian-ward relationship (Chung & Emery, 2010; Turley & Desmond, 2011). Specifically, Wing and Mathew (2015) asserted that parents' marital status (married, single, widowed, divorced, or separated) could have a decisive influence on adolescent outcomes. Sun (2001) stated that adolescents who had divorced parents developed low self-esteem. More so, Pappa (2013) highlighted several studies that have addressed parental marital status (divorced) and its effect on adolescents. The study by Pappa concluded that kids from divorced families have low scores in adjustment, general well-being, and academic achievement, but with modest differences. Another factor that influences adolescent outcomes is parenting styles (Mellissa, 2015). Styles of parenting form the basis of cognitive representations of attachment and relationships in children. By implication, the experiences of caregiving, especially parental insensitivity and rejection, make it

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likely that other peers would be seen as rejecting (or rejection may occur), and these negative pasts with caregivers and compeers could lead to both peer rejection and heightened sensitivity to rejection (Power, 2013). The current study seeks to understand how parental marital status and styles of parenting predicts adolescents' peer rejection sensitivity.

Literature has indicated relationships between parental marital status like divorce and adolescent problem behaviors, though such studies have come with inconsistent results, one thing that comes to play is that parents' marital status influences many aspects of their children's lives (Pappa, 2013). In a study by Sugiarti et al. (2018), college students from dysfunctional families were found to suffer psychological distress. Also, a longitudinal study investigated the relationship between parental marital status and psychopathology. Findings showed that kids brought up by single parents or families where parents have constant disputes had higher levels of psychopathology (Hayatbakhsh et al., 2013). Attachments to and participation from both parents are essential for lifelong healthy development (Schwartz & Finley, 2009). The stability and strength of parents' marriage are significant factors that affect adolescents' emotional adjustment (Cohen & Finzi-Dottan, 2005). Studies have revealed that kids who grew up in a more stable and happy parental marriage experience better well-being than those from maritally distressed and separated families (Duhig & Phares, 2009; Breivik & Endresen, 2009). Compared to peers growing up in intact families, adolescents who have divorced their parents often experience emotional problems. These adolescents exhibit more problem behaviors, engage in early sex, are less likely to attend or graduate from higher institutions, and experience difficulty relating with others (Frank, 2008; Schindler & Coley, 2012; Schwartz & Finley, 2009).

A working representation of both parents is crucial for developing internal regulation of emotions and satisfactory social interactions. This means that for adolescents to develop stable emotional and social prowess, both parents should have a functioning relationship (Titze, Schenck, Lugoz, Lehmkuhl, & Titze, 2013). Crowell, Treboux, and Brockmeyer (2009) asserted that parental divorce could enhance children's risk of developing insecure attachment styles. Schaan and Vogele (2016) opined that insecure attachment styles are related to rejection sensitivity, a disposition that reflects the tendency "to expect anxiously, readily perceive and intensely react to rejection". Rejection sensitivity is a crucial mediator for many mental disorders such as depression and borderline personality disorder and is used as a proxy for insecure attachment in many studies (Staebler, Helbing, Rosenbach & Renneberg, 2011). According to Higuera (2019), a history of neglect or rejection in early life is a possible explanation for rejection-sensitive dysphoria. This rejection sensitivity could be due to having hypercritical or neglectful/separated parents, thereby influencing how the kids perceive themselves. As a result of such parent-child relationships, adolescents develop low self-esteem and the deep dread of abandonment and rejection in their dealings with others.

Existing research shows that parenting is one of the most influential factors among various influences on child development, determining the child's behavioral development. Specifically, contrasts in childrearing styles breed different outcomes in children (Santrock, 2017; Sahithya, Manohari, & Raman, 2019; Mellissa, 2015). Sahithya, Manohari & Vijaya (2019) defined parenting styles as a collection of behaviours and parental attitudes that are often used by parents, continually in different situations, to handle their children's behaviours. Baumrind suggested that these behaviour patterns be grouped into three major styles: authoritarian, permissive, and authoritative parenting styles (Santrock, 2017). Parents who use authoritarian ("strict ruler") methods have low support and high demands. These parents expect and demand obedience because they are the "person in charge" and will not explain their orders (Cherry, 2019). When parents have high but reasonable and consistent expectations for their children's behavior, communicate well with them, and use reasoning rather than coercion to guide their children's behavior, children tend to develop stronger ability and self-confidence. This type of parenting is described as authoritative (Baumrind, 2013). As Rosenthal (2014) surmised, permissive parents, are more friend-like to their kids. These parents allow their wards to decide for themselves and counsel them as buddies. Laxity characterizes this style of parenting with minor penalties and regulations. She also pointed out that these parents tend to give their wards whatever they want and hope that their tolerant style will be appreciated.

Studies have emphasized parenting styles as an essential variable that influences adolescents' self-esteem, children's psychological and social development, risk-taking, resilience, autonomy, psychological adjustment, affection, communication (Dehue, Bolman, Vollink, & Pouwelse, 2012; van der Watt, 2014; Luk, Patock-Peckham, Medina, Belton, & King, 2016; Rinaldi & Howe, 2012; Gracia, Fuentes, & Garcia, 2012; Gómez-Ortiz, Del Rey, Casas, & Ortega-Ruiz, 2014; Gómez-Ortiz, Del Rey, Romera, & Ortega-Ruiz, 2015; Gómez-Ortiz, Romera, & Ortega-Ruiz, 2016). Parenting styles have also been associated with rejection sensitivity. According to Sarıçam (2010), rejections' harmful effects are experienced in childhood. Furthermore, persons affected by their parents' unhealthy behaviours during childhood may develop expectations of and sensitivity to rejection during adulthood. (Çardak, Sarıçam, & Onur, 2012).

This study utilizes Bowlby's (1969) attachment theory as a theoretical framework. Attachment theory posits that early caregiving experiences influence close relationships throughout the lifespan between parents and child. Disruptions to the parent-child relationship, such as parental divorce, death or separation, adversely affect other relationships in the future (Little & Sockol, 2020). Furthermore, styles of

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parenting form the basis of cognitive representations of attachment and relationships. Bowlby states that when parents respond to their children's needs with rejection, it increases sensitivity to rejection in their wards. In essence, when parental warmth is lacking, kids crave support, build rejection expectations, and seek to avoid such rejection by forming top value (Kokkinos, 2013). The main idea of attachment theory as stated by Groh et al. (2014), is that infants gain feelings of security when guardians are receptive and sympathetic to the child's needs. Therefore, the success of parentchild relationship is determined by their attachment level. This would undoubtedly influence their relationships and friendships with their peers and how they react to rejection (Groh, Fearon, Bakermans-Kranenburg, van Ijzendoorn, Steele, & Roisman, 2014). For adolescents who had little or no attachment with their parents, their parents struggle with an appropriate parenting style to cope with them. Also, these would be sensitive to rejection if faced with any form of it (Gómez-Ortiz, Del Rey, Romera, & Ortega-Ruiz, 2015). Adolescents who have a proper attachment with their parents are likely to be involved in fewer risky behaviours. They always have comfortable shoulders to rely on, thereby reducing unhealthy behaviours that might emanate from rejection (Gallarin, & Alonso-Arbiol, 2012).

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The association between parental marital status, family wellbeing and children's educational attainment is established (Amato, 2010; Bjorklund & Sundstrom, 2006). However, there is paucity of information on parental status and parenting styles as predictors of adolescents' rejection sensitivity. Given this, this study intends to address the following, specifically to:

- 1. Ascertain the relationship between authoritative, authoritarian and permissive parenting styles
- 2. Ascertain if parental marital status, authoritarian parenting style, permissive parenting style and gender, significantly predicts adolescents' rejection sensitivity.

# Method

# Demographic Characteristics

As shown in Table 1, 69.2% of the respondents were female while 30.8% were male. Also as revealed in Table 2, single parents accounted for 14.6% of the respondents, 82.9% reported having complete or married parents and 2.5% reported having guardians.

# Design of the Study

Correlational research design was adopted for this study. The correlational design was used as the researchers aimed at understanding the relationship existing among the variables of study as well as the predictive powers of the independent variables.

# Population, Sampling and Sampling Technique

This study population comprised 200 level students in the Faculties of SOCIAL SCIENCES/HUMANITIES, and EDUCATION in federal universities in southeast Nigeria, totaling 10,866 students. The sample of this study population stood at 1000 students of 200level. In selecting the sample for the study, multi-stage sampling procedure was adopted.

The first stage of the sampling was the systematic stratification of the five federal universities in South-East Nigeria using location. In this case, these federal universities were stratified into the states where they are located. Purposive sampling was used to select three universities, as both MOUAU and FUTO are specialized universities and will not have the faculties needed for this study. The universities selected for the study were Nnamdi Azikiwe University, Awka and University of Nigeria, Nsukka. In the second stage, the researchers selected a faculty from each university using simple random sampling. The number of faculties selected was 2, namely, Faculty of education in Nnamdi Azikiwe University, Faculty of Social sciences in University of Nigeria Nsukka. In the third stage of this study's sampling process, proportionate stratified random sampling technique was employed to select 1000 students from the selected faculties. Given that some faculties had more students than the other, the need to use proportionate stratification was justified.

#### **Instruments**

Two research tools were employed in data collection. They are: a) the Parental Authority Questionnaire (PAQ) developed by Buri John R. (1991) to measure the permissive, authoritarian and authoritative parental authority prototype of Baumrind (1971). It consists of 30 items for each parent and provides allowable, authoritarian, and authoritative scores for mothers and fathers, respectively. It is made up of a 4point scale, going from 1 (strongly disagree) to 4 (strongly agree). Each cluster consisted of 10 items per parenting style. Experts revalidated the instruments in Nigeria, Cronbach Alpha was used to test its reliability which stood at: permissive (P) = 0.71, authoritarian (A) = 0.76, flexible/authoritative (F) = 0.75. b), Rejection Sensitivity Questionnaire (RSQ) developed by Feldman and Downey (1994). The original version was developed for undergraduates. It consists of 18 items, which are mainly suitable for their daily social life (for example, "You invite your boyfriend/girlfriend to go home to see your parents"). The researcher adapted the instrument into 11 items. This was done by removing items that are not peer related, given that the study focus is on peer rejection sensitivity. Test for reliability using Cronbach Alpha test stood at 0.76, which shows the instrument had high reliability.

# Data Analysis

To ascertain the predictive influence of independent variables and test relationships multiple regression and Pearson r was employed. The researchers screened the data in order to ascertain the missing values and tested for essential statistical assumptions before carrying out the main analysis. As revealed by the analysis, throughout the variables the missing values percentage ranged from 0.01-3.0. Given, that the missing values were less than 5%, missing values were treated using list wise deletion. Serial correlation was tested and the value of Durbin-Watson test was 2.11 which is between 1.5 and 2.5, thus the data met the assumption of independent errors. Also, collinearity diagnostic test showed VIF values below 3.0, with the range at 1.06 to 1.31.

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#### Results

Table 1: Frequency Distribution of Adolescents' Gender							
Gender	F	%	Cum%				
male	285	30.8	30.8				
female	641	69.2	100.0				
Total	926	100.0					

As Table I shows, the study participants were 1000 federal university students in southeast Nigeria. Among them, 926 participants filled out the traditional questionnaire, but 74 questionnaires were excluded from the analysis because they were not completely filled out. The gender distribution was 285 (30.8%) male and 641 (69.2%) female.

Х	F	%	Cum%
Single parents	129	14.6	14.6
Complete parents	731	82.9	97.5
guardian	22	2.5	100.0
Total	882	100.0	

 Table 2: Frequency Distribution of Parental Marital Status

Given the stereotypes of some parental marital status (divorced, unmarried) in Nigeria and the reluctance to report it. The researchers subsumed these parental marital status (divorced, unmarried, widowed) into single parents, to make for ease in respondents reporting it. In terms of parents' marital status, 82.9% of the participants were raised by complete parents, 14.6% were raised by single parents (divorced parents, unmarried, widowed) and 2.5% were raised by a guardians. 882 respondents properly filled the items, others not well filled and omitted were excluded from the analysis. Table 3: Relationship between Parenting Styles and In-School Adolescent Peer **Rejection Sensitivity** 

	permissive	authoritarian	authoritative_flexible	rsq_tot
Permissive	—			
authoritarian	063			
authoritative_flexible	.419**	196**	_	
rsq_tot	199**	.056	085**	

\*\*. Correlation significance is at 0.01 level (2-tailed).

Table 3 revealed the correlation coefficients between the variables. Permissive and authoritative/flexible parenting styles both have low negative relationship with inschool adolescents' peer rejection sensitivity, r=-.20, -.09, respectively. While authoritarian parenting style have positive relationship with adolescents' rejection sensitivity, r=.56, ns

Table 4: Multiple Regression Analysis for Predictor Variables and Rejection Sensitivity

			idardized ficients	Standardized Coefficients		
Μ	odel	В	Std. Error	Beta	Т	Sig.
1	(Constant)	18.051	1.880		9.600	0.000
	Gender	-1.283	0.324	-0.137	-3.995	0.000
	Parental Status	-2.028	0.390	-0.182	-5.913	0.000
	Permissive Parenting	-0.182	0.035	-0.192	-5.207	0.000
	Authoritarian Parenting	0.003	0.036	0.003	0.098	0.922
	Authoritative Parenting	0.140	0.043	0.127	3.285	0.001
	R	0.273				
	R <sup>2</sup>	0.074				
	F	13.109				0.000

Table 4 shows that the multiple regression coefficient (R) was .273 while R2 was .074. This is an indication that the predictor variables jointly contributed 7.4% to explain the variances in response and the corresponding F (1,150) = 13.109, p= 0.00 is statistically significant (p<.05). Using standardized (B), Table 4 indicated that gender, parental status, permissive parenting and authoritative parenting styles made significant contributions to the model. While gender, parental status, permissive parenting to the model, authoritative parenting styles had negatively contributed significantly to the model, authoritative parenting style had positive significant contribution, and authoritarian parenting style did not contribute significantly to the model.

# Discussion

Initial findings revealed an unequal gender representation, with the female adolescents making up 69.2% of the sample size, and the males with 30.8%. Although this brings about gender bias in the interpretation of the results, it is not surprising as it yields an expected difference. This is as a result of greater number of female students in the faculties of humanities, social science and education when compared to their male counterparts (Trusz, 2020). In terms of parental marital status 82.9% of adolescents have married biological parents, this finding suggest that greater number of adolescents had a complete family structure which is having grown with married biological parents. Furthermore, results show that 129 adolescents have single parents which accounts for 14.6% of the sample and just 22 in-school adolescents had non-biological parents (Nigeria) family value system, which emphasizes the strong need of

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family togetherness and detest for divorce (Adegoke, 2010). However, Wilcox et al. (2009) asserted that living with two biological parents does not have a consistently beneficial effect on child outcomes. The finding that few in-school adolescents lived with other people that are not their parents, is an acceptable cultural practice in the region and beyond (Omigbodun, 2008).

Findings in this study have shown that parenting styles are associated with in-school adolescents' peer rejection sensitivity. Specifically, permissive parenting style was found to have a significant negative relationship with in-school adolescent peer rejection sensitivity. This means that adolescents who are brought up with the permissive parenting style are less likely to being sensitive to rejection. Hypothesis tested show that the relationship is significant. As at the time of this writing, there were no studies known to the researchers on the relationship between permissive parenting style and rejection sensitivity, which contradicts or conform to the present finding. However, one reason that could account for this finding is that given permissive parents' warmth and responsiveness, this affectionate, responsive parenting fosters secure attachment relationships. According to Garcia and Gracia (2009) teens with permissive parents had higher self-esteem. They were less likely to view the world as a hostile threatening place, and less likely to be emotionally withdrawn.

On the other hand, authoritarian parenting style had a non-significant positive relationship with in-school adolescence peer rejection sensitivity. This means that adolescents who had this type of parenting may be sensitive to rejection. The direction of the relationship is expected because children who are overburdened by rules may feel guilty when peers reject them. This conforms to the finding of Çardak, Sarıçam & Onur (2012) where it confirmed that kids born to authoritarian parents when compared to other children have higher rejection sensitivity. On the contrary, authoritarian parenting style is not always associated with problematic behaviours. A Middle East research on adolescents failed to link authoritarian parenting and behavioural problems like depression (Dwairy 2004; Dwairy and Menshar 2006). Difference in culture and values could have accounted for varied findings.

Authoritative/flexible parenting style had a significant negative relationship with inschool adolescence rejection sensitivity. According to the findings of this study, adolescents whom parents were brought up with authoritative/flexible parenting styles tend to have the ability to cope with rejection. As a result of parents' high responsiveness to the child's emotional needs, while having high standards, which is what this style of parenting entails, such adolescent grows up to have high self-esteem (Moghaddam, Validad, Rakhshani & Assareh, 2017). And self-concept which in turn helps them withstand rejection. This is supported by findings from the study by Çardak, Sarıçam & Onur (2012), which stated that democratic/authoritative parents' children have less rejection sensitivity than other children. The researchers carried out multiple regression analysis which revealed 7.4% variances in the model, accounted for by the predictor variables. Despite being significant, 7.4% variance is still low. Moreso, considering the respective inputs of the variables, findings revealed that gender, parental status, permissive parenting and authoritative parenting styles made significant contributions. Our findings on the predictive nature of gender on adolescents rejection sensitivity is in agreement with that of Downey and Feldman (1996) which revealed that gender is a significant predictor of rejection sensitivity. Our findings, however, contradicts the findings of Inman and London (2021) which found out that gender did not significantly predict rejection sensitivity. Our findings also showed that parental marital status is a predictor of adolescents' rejection sensitivity. This finding agrees with that of Arshad, Khadim and Masood, (2018) where it stated that maternal/paternal control is a predictor of anxious domain of rejection sensitivity. However, evidence has also emerged in literature that no significant effects of parental influence predicted rejection sensitivity (Park, DiRaddo & Calogero, 2009). Furthermore, results from the regression analysis reveals that parenting styles were a predictor of rejection sensitivity. Specifically, permissive parenting style had negatively predicted rejection sensitivity significantly while authoritative parenting style positively predicted rejection sensitivity significantly. This means that adolescents brought up with permissive parenting styles will have lower rejection sensitivity. This finding is contrary to expectation as permissive parenting style has been found to be a predictor of negative outcomes (Cherry, 2015; Coste, 2015). There is conflicting evidence as some researchers' report that kids with permissive parents thrive. According to Garcia and Gracia, (2009) teenagers brought up with permissive parenting style had higher self-esteem. The researchers opined that they would less probably perceive humanity as unfriendly, aggressive, and therefore unlikely to be emotionally sensitive. Furthermore, they are likely to do well in school. Other studies have found permissive parenting style to predict optimal child outcomes (Garcia et al, 2018; Garcia & Gracia, 2014; Garcia & Serra, 2019; Martinez et al, 2007). More so, adolescents reared with authoritative parenting style will have higher rejection sensitivity. This finding is also contrary to expectation as authoritative parenting style has always been a predictor of positive child outcomes. An explanation for this finding could be that as a result of being involved in decision making by their parents, when they are not involved by their peers without reasons, they might perceive and anxiously react to it as rejection.

### **Conclusion and Limitation**

The researchers established that there is a significant relationship between parenting styles and adolescents peer rejection sensitivity. Regression analysis showed that gender, parental status, authoritative parenting style and permissive parenting style predicted adolescent's rejection sensitivity. It is concluded that factors related with parenting (styles and marital status) may be linked to those that influences healthy

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peer relationship. This shows that unhealthy parenting and its components could affect adolescents' accomplishment in their social relationship with their peers.

Our findings have significant implications for parent-child/guardian-ward relationships and adolescent's psychosocial development. The impact of parental related factors (styles and marital status) on adolescents peer relationship cannot be glossed over. In essence, intervention programmes should be set to help adolescents who as a result of parental factors are struggling with relating with their compeers. For students who are struggling to cope with the school environment reporting various cases of rejection and reacting to rejection from peers, can be aided by educationist and school administrators as they will be able to come up with effective strategies to deal with peer relationship problems. These could include interfacing with parents to discuss these problems.

Although this study offers an insight of the workings of rejection sensitivity especially among contemporary adolescents, there are still limitations. Our data primarily consists of female in-school adolescents of about 69.2% which could bring about gender bias. However, this is understandable, given the greater number of female students in the faculties of humanities, social science and education when compared to their male counterparts (Trusz, 2020)

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# INFLUENCE OF EARLY AND NORMAL SCHOOLING ON ACADEMIC ACHIEVEMENT AND SOCIAL SKILLS OF SECONDARY SCHOOL STUDENTS IN DELTA STATE

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#### Abstract

Schooling prepares the individual academically to fit in and compete well in the larger society. It also prepares the individual to contribute his or her quota in national growth and development. All of these cannot be achieved in an underdeveloped stage of the child. Meanwhile, limited studies are available investigating the impact of early schooling on children academic achievement. This study therefore examined the influence of early and normal (late) schooling on academic achievement of secondary school students in two Educational zones of Delta State. The expost-facto research design was adopted. The population of the study comprised 14,749 senior secondary school one (SSS 1) students in the two zones. The sample was made up of 600 students drawn from 15 Co-educational secondary schools. Three research questions were raised and three hypotheses were tested at 0.05%alpha level. The research questions were answered using the mean (x) and standard deviation (SD), while the hypotheses were tested using the T-test. Data were collected using students academic records. The findings of the study showed a significant difference in academic achievement of students in favor of the normal (late) entrants. Based on the finding, the study recommended that: awareness campaign is needed to guide parents on the growth and development of their children in order to avoid academic abuse and violence of their children.

Keywords: early schooling, academic achievement, brain development

### Introduction

In all countries, formal education is perceived as an indispensable tool in national development. Nigeria as a developing nation also stresses this belief in accepting education as a veritable tool and instrument for the acquisition of appropriate skills, abilities, knowledge and competence, both physical and mental equipment for the individual to earn a living from and contribute to the development of his or her society. According to Asiwe (2018) citing Aggarwal, understands the education of the child as "a process which draws out the best in the child with the aim of producing well-balanced personalities, culturally refined, emotionally stable, ethically sound, mentally alert, morally upright, physically strong, socially efficient, vocationally self-sufficient and internationally liberal". That was why, in 1999, the Universal Basic Education (UBE) was launched and the UBE act of 2004 placed early child care and education (ECCE) into the mainstream of Nigeria Education (UNESCO 2006). Since then, there have been several efforts made to educate the child early enough through

schooling. Hence parents everywhere, especially in Delta State, are rushing their tender children to school irrespective of their age (Otubelo, 2015)

However, worthy of note is the fact that schooling is an academic training which takes place formally in an institution where pupils and students are instructed in Arts, Science and languages (Asiwe 2019). Schooling involves mental or cognitive processes, that require development and maturity for effective and meaningful learning to take place. According to neuroscientists, the part of the brain involved in learning is the prefrontal lobe, which according to these scientists must fully develop and mature like other organs of the body before it can be put to use for long term benefit (Hockenbury, 2011). On the other hand, the part of the brain involved in social skills is the parietal lobe. Neuroscientists such as Giedd, (2004) noted that this part of the brain, when scanned by magnetic resonance imaging (MRI) revealed that it undergoes neuronal pruning for development, reinforcement, strengthening for normal functioning from ages 5 years, 8 years, 12 years, 16 years and 20 years upward in a gradual process. In the light of this, maturation and acquisition of social skills are very important tools for schooling.

Today, however, most children who are between 1-2 years are already introduced to academic training in schools by their parents. The reason for this is the belief that it is the computer age and the children are super kids. Therefore, their earlier exposure to schooling will yield early academic achievement or reward to the children, the family and the society at large. Again, the belief that any subject can be taught effectively in some intellectually honest form to any child at any stage of development also tend to heighten the influence of early schooling for the children, according to Elkind (2006) making reference to Jerome Brunner on effective teaching. Even now, there is an ongoing explosion of programme aimed at educating the fetus in the womb. This is called Fabric Pouch made by Baby plus. According to Elkind (2010), the fabric pouch is to be strapped to a pregnant woman's stomach and gives off scientifically designed rhythmic sound that resemble a mother's heartbeat. The rhythm of the sound increases as the pregnancy progresses. According to the Baby plus, the sound patterns introduce the baby to a sequential learning process. Babies and children enriched with the baby plus are more relaxed at birth with opened eyes and hands, crying little. These children reach their milestones earlier and have longer attention span than their counterparts without baby plus.

Early schooling according to Educational experts, is a branch of education theory that relates to the teaching of children from birth up to the age of late childhood (Barnett. W, Steven& Jason, T., 2013). Early schooling in view of this study is a period the child progresses faster into schooling than he should from early childhood when he begins between 1 or 2 years nursery school, 3 or 4 years primary school, 8 or 9 years secondary school and 14 or 15 years tertiary school, despite the standard period of schooling by NERDC (2014) and National Policy on Education (NPE) 2012. While

normal schooling, is a period the child begins schooling normally from middle to late childhood between 3 or 5 years nursery school, 6 or 7 years primary school, 12 or 13 years secondary school and 17 or 18 years tertiary school; as set out by NERDC (2014) and NPE (2012). Specifically, NERDC (2014) and NPE (2012) mapped out, nursery schooling for 3 years upward to prepare the child for the primary level of education and 6-12 years upward for primary school for the child in order to inculcate in the child permanent literacy and numeracy and ability to communicate effectively. While the secondary school shall be 12-18years upwards for the child to prepare himself for useful living within the society and for higher education.

But right now, a look at most primary and secondary schools reveal that the primary six class seems to have been faced out in Delta State. A child now reads from primary one to five and is admitted into secondary school. In the secondary school, most of the students from JSS2 and SS2 begin to enroll to write the junior secondary school certificate examination and senior secondary school certificate examination (SSCE) with the West African Examination Council (WAEC) and National Examination Council (NECO) and even Joint Admission and Matriculation Board (JAMB), respectively. Meanwhile, the academic achievement of these early schooling students is always very low in Delta State. This has prompted the springing up of miracle examination colours, with malpractices.

Theoretically, Jean Piaget (1961) outlined four different stages of cognitive development that also involve life skills for proper academic learning to take place according to their age brackets. These stages are:

- (a) Sensori motor from birth to 2 years
- (b) Preoperational from 2 years to 7 years
- (c) Concrete operation from 7 years to 11 years
- (d) Formal operation from 11 years to 17 years upwards

From these stages, Piaget's work suggests that increases in cognitive performance cannot be attained unless both cognitive readiness brought about by maturation and appropriate environmental stimulation are present. For example, at the sensory motor stage, the level of cognitive development of the child, (0-2 years) is very low. Children under this age have relatively little competence in representing the environment using images, language or other kinds of symbols. They have no awareness of objects or people that are not immediately present at a given moment they also lack life skills or social skills to sustain a satisfactory school environment, coupled, with weak muscular dexterity (Roberth, 2010).

Observation by Ann-Marie (2019), has shown that this period set the stage in which most parents in Delta State introduce their infant children to formal education. The children are woken up to prepare for school as early as 5:00am. In addition to this,

parents also ensure that these children are enrolled to attend extra-mural class after the normal school hours where they will stay learning till the evening. And while in the school, their school teachers will hold the tender hands of these children whether in the primary or secondary school, to force them to write letters of the alphabet and to solve some mathematics. Again, this same child who has spent almost the whole day in the school, returning home burn-out, worn-out and emotionally sapped will be given homework to submit the next day.

Over the years, as a school teacher, the researcher has keenly noted the declining nature of academic achievement of underage students in the secondary schools in Delta State, with sudden increases in some behavior ranging from poor social skills, vices, cultism delinquency, examination malpractices and substance abuse. Otubelu (2015) observed long ago, the underachievement of under aged pupils and students in the schools in Delta state and called it waste of time and resources on the parts of parents and future harmful effects on the part of children. Now, this underachievement of the students in the secondary schools continues to spill over to the tertiary institutions, creating worries in the minds of parents and the society at large. Many persons strongly believe that the poor academic achievements of the children is a result of the poor standard of education in Nigeria (Obiagele, 2006). Based on this, and looking for means to remedy this problem, policy makers in education continue to map out ways to improve the academic achievement of pupils and students.

In Aba, Nigeria, Okwuonu (2015) conducted a study with a sample of 300 students with early entrants and 120 with late entrants of students into secondary schools. The study was conducted from junior secondary school one to senior secondary school (1-6). His instrument for data collection was achievement test of the core subjects:-mathematics, English language and one basic science subjects. He used the mean and standard deviation to analyze the data. He found from the study that the students with late entrants achieved higher than their counterparts academically in the first three years of secondary schooling. And the gap between them in academic achievement is wide in almost the years of the secondary schooling.

Although, studies support the view that pupils exposed to schooling at the normal age cut-off, tend to perform better academically than their counterparts who started early, Fox and Powel (2010) carried out a study in Sweden with a sample of 200 early entrants to High school, compared with115 late entrants in first grades. Using the first grade in academic record, they found in their own result that there was no significant difference in the academic achievement at the first and second grade levels of the early and late schooling of the students.

Studies also showed that male students and female students on the average perform differently in various aspect of academics engagement. The works of Eagly, Benbow and Wood (2006) and that of Denworth (2017) showed that male students perform on

spatial and mathematics more than female students. On the other hand, female students score higher in language skill than male students.

In Delta State, academic achievement record of the Junior Secondary School Certificate from 1999 till date are clear indication of the rapid decline in the academic achievement of the students. This is shown by many reports from the secondary schools in the Local Government Areas as well as from the Examination and Standard Department, Ministry of Basic and Secondary Education. Some factors such as poor quality of teachers, inconsistence educational policy, faulty foundation of primary school poor reading culture and lack of equipped library have been underscored as the causes of the low academic achievement of the students in the secondary schools level (Alanin, Nnadi, Gowon & Olayinka, 2012).

Is low academic achievement of students actually the responsibility of teachers and the government? Is it really lack of good foundation, Or can it be linked to early schooling with poor social skills and mental underdevelopment of the students? Age as a factor for academic achievement can be seen in late 60's and early 70's in Nigeria wherein, pupils who were admitted into primary schools from home. They were expected to have their hands crossed over their heads to touch their ears. This was a sign of maturity and for school readiness. The chronological age for a child's hand crossing over his/her head to touch the ear was between 6-7 years upward. Meanwhile, those whose hands were not able to cross over "their heads to touch their ears were not matured enough for schooling. Their age invariably was below 5 years. The children whose years were 6 and 7 above, can be admitted into the secondary school at 12 or 13 years minimum, upon their completion of the primary school.

If this method of admission into schools then and that of today (computer age) are anything to go by, what is the influence of early schooling on academic achievement of the students? Specifically, what is the influence of (early) schooling compared with (normal) schooling on academic achievement of male and female students differently in Delta state? If schooling and learning are best achieved upon cognitive maturity and experience, upon effective development of social skill and upon physical, moral and emotional growth of the children, what happens if these psychological constructs are rushed too early in a child or are gradually followed at a normal age of the child i.e late schooling? It is on these bases that the research work was aimed at studying the influence of early schooling compared with (normal) schooling on social skills and academic achievement of students in the secondary schools in Delta State.

# **Statement of the Problem**

It is worrisome to observe that large number of students are admitted into secondary schooling very early, at childhood stage. According to Elkind (2010) most parents feel that when children are into schooling early they tend to perform highly academically and enhance themselves, their families and the nation earlier in life. But the problem

over the years, coming from the reports of ministry of education, examination and standard division, and from parents is that, there is a rapid decline in academic achievement of the teenage students in secondary schools. This was attributed to poor quality of teachers and poor foundation, with little or no attention paid to early schooling compared with normal schooling and its influence on academic achievement of the students in the secondary schools. Available literature shows that not much has been purely devoted to early entrance into secondary schooling, its influence on academic achievement of the students in Delta state.

It is against this background that the study was set out to examine the influence of early schooling on academic achievement of students using the core subjects, English language and mathematics.

The study has the following research questions listed below:

- (1). What are the mathematics and English language mean achievement scores of students admitted early and normal to secondary schooling?
- (2). What are the mathematics and English language mean achievement scores of male students admitted early and normal to secondary schooling?
- (3). What are the mathematics and English language mean achievement scores of female students admitted early and normal to secondary schooling?

While the following null hypotheses were tested at 0.05 alpha level.

- H01: There is no significant difference in the mean mathematics and English language achievements scores of students who started secondary schooling at early and normal age
- HO2: There is no significant difference in the mean mathematics and English language achievement scores of male students who started secondary schooling at early and normal age
- Ho3: There is no significant difference in the mean Mathematics and English language achievement scores of male students who started secondary schooling at early and normal age.

## Method

This study adopted an ex-post facto research design, which involves the collection of information or data that have already occurred and seeks to establish cause-effect relationship by linking some already existing observation to some variables as causative agents, (Alordiah, 2016). This design is appropriate for this study because it focused on facts already on group which is age of entering into secondary school (early and normal) on academic achievement of students, without any manipulation. The population of the study is made up of 14,749 SSS1 students in the North and South Educational zones of Delta State. The sample on the other hand is made up of 600 students drawn from fifteen (15) co-educational secondary schools in the major towns of Delta south and Delta north. Academic records of the students based on their Junior Secondary School Certificate Examinations (JSSCE) results were collected

from the ministry of Education, Exams & Standard division for data analysis. Three research questions were raised and answered with the mean(x) and standard deviation (SD) while three hypotheses were tested at 0.05% alpha level.

 Table 1: Mean and Standard Deviation Scores of Students in English Language

 and Mathematics Based on their Age of Schooling

Age of Schooling	Ν	English (Mean)	Std. Deviation	Maths (mean)	Std. Deviation
early 7-11	300	40.11	5.20	39.85	6.79
normal 12-13	272	44.50	7.36	44.04	6.63
Total	572	42.20	6.68	41.84	6.97

Table 1 above shows the mean and standard deviation scores of students in English Language and Mathematics based on their age of schooling. It shows that those that entered school at the normal school entrance age scores higher that those who entered school earlier in both English Language and Mathematics.

Table 2: Mean and Standard Deviation Scores in English Language andMathematics of Male Students who Entered School at the Earlier and those whoEntered at Normal Age

Gender	N	English (Mean)	Std. Deviation	Maths (Mean)	Std. Deviation
Male (Earlier Age)	171	40.63	4.39	42.52	4.87
Male (Normal Age)	86	44.98	7.45	45.97	7.01
Total	257	42.80	5.92	88.49	5.94

Table 2 shows that male students who enrolled in school at the normal age had higher mean scores in English language and mathematics than male students who enrolled at earlier age.

Table 3: Mean and Standard Deviation Scores in English Language andMathematics of Female Students who Entered School at the Earlier and those whoEntered at Normal Age

Gender	Ν	English (Mean)	Std. Deviation	Maths (Mean)	Std. Deviation
Female (Earlier Age)	161	40.32	5.82	38.44	7.19
Female (Normal Age)	155	44.33	7.96	42.50	6.40
Total	316	42.32	6.89	40.47	6.80

Table 3 shows that female students who enrolled in school at normal age had higher mean score than those who enrolled at an earlier age.

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Table 7: t-test Statistics on Differences in Mean Scores of Students who Entered School at the Earlier and those who Entered at Normal age in English and Mathematics

	Age of schooling	Ν	Mean	Std. Deviation	Т	Df	Sig. (2- tailed)	Remark
English	early 7-11	300	40.11	5.20	-8.298	570	.000	Significant
	normal 12-13	272	44.50	7.36				
Maths	early 7-11	300	39.94	6.47	-7 5/18	570	000	Significant
	normal 12-13	272	44.04	6.50	-7.540		.000	

An independent-samples t-test was conducted to compare the mean differences in the achievement of students who enrolled in school at an earlier age and those who enrolled at the normal age in English Language and Mathematics. Table 7 revealed that there was significant difference in the scores for early 7-11 (M=40.11, SD=5.20) and normal 12-13 (M=44.50, SD=7.36) in English language. The table indicates that t-cal > t-crit. (t-cal = -8.298, df = 570 =,  $\alpha$  = 0.05). Therefore the hypothesis that there is no significant difference in their English Language achievement is rejected.

Furthermore, the table revealed that there was significant difference in the scores for early 7-11 (M=39.94, SD=6.47) and normal 12-13 (M=44.04, SD=6.50) in Mathematics. The table indicates that t-cal > t-crit. (t-cal = -7.548, df =  $570 = , \alpha = 0.05$ ). Therefore the hypothesis that there is no significant difference in their mathematics achievement is rejected.

 Table 9: t-test Statistics on Differences in Mean Scores of Male Students who

 Entered School at the Earlier and those who Entered at Normal Age in English

 Language and Mathematics

	Age of schooling	Ν	Mean	Std.	Т	df	Sig. (2-	Remark
				Deviation	l		tailed)	
English	male early	140	39.87	4.37	-7.116	255	000	
English	Male normal	117	44.73	6.50	-/.110	255	.000	significant
	male early	140	41.67	4.98				
Maths	male normal	117	46.07	6.09	-6.370	255	.000	significant

An independent-samples t-test was conducted to compare the mean differences in the scores of male students who enrolled in school at an earlier age and those who enrolled at the normal age in English language and mathematics. Table 9 revealed that there was significant difference in the scores for early 7-11 (M=39.87, SD=4.37) and normal 12-13 (M=44.73, SD=6.50) in English language. The table indicates that t-cal >t-crit. (t-cal = -1.774, df = 255=,  $\alpha = 0.05$ ). Therefore the hypothesis that there is no significant difference in their English Language mean scores is rejected.

Furthermore, the table revealed that there was significant difference in the scores for early 7-11 (M=41.67, SD=4.98) and normal 12-13 (M=46.07, SD=6.09) in mathematics. The table indicates that t-cal > t-crit. (t-cal = -6.370, df = 255=,  $\alpha$  = 0.05). Therefore the hypothesis that there is no significant difference in their mathematics is rejected.

Table 11: t-test Statistics on Differences in Mean Scores of Female Students whoEntered School at the Earlier and those who Entered at Normal Age EnglishLanguage and Mathematics

	Age of school	Ν	Mean	Std.	Т	df	Sig. (2-	Remark
				Deviation			tailed)	
English	female early	160	40.32	5.84	-5.111	212	.000	significant
English	Female normal	155	44.33	7.96	-3.111	515	.000	-
Matha	female early	160	38.43	7.21	5 202	212	000	
Maths	female normal	155	42.50	6.40	-5.303	313	.000	significant

An independent-samples t-test was conducted to compare the mean differences in the scores of female students who enrolled in school at an earlier age and those who enrolled at the normal age in English language and mathematics. Table 9 revealed that there was significant difference in the scores for early 7-11 (M=40.32, SD=5.84) and normal 12-13 (M=44.33, SD=7.21) in English language. The table indicates that t-cal >t-crit. (t-cal = -5.111, df = 313=,  $\alpha = 0.05$ ). Therefore the hypothesis that there is no significant difference in their English Language mean scores is rejected.

Furthermore, the table revealed that there was significant difference in the scores for early 7-11 (M=38.43, SD=7.21) and normal 12-13 (M=42.50, SD=6.40) in mathematics. The table indicates that t-cal > t-crit. (t-cal = -5.303, df = 313=,  $\alpha$  = 0.05). Therefore the hypothesis that there is no significant difference in their mathematics is rejected.

#### Discussion

The result of the data in table I indicated that those that entered school at the normal school entrance age achieved higher than those who entered earlier in both English language and mathematics. Also, the analysis of hypothesis I table 7 using t-test indicated that there is significant difference in academic achievement both in English language and mathematics for those who entered school at the normal school entrance age against those that entered at earlier school entrance age. This finding is in agreement with earlier findings by Okwuonu (2015) who opined that the students who entered into secondary school late, achieved higher academically in the first three years of their secondary school than their counterpart who entered earlier. Again, the result of the data on table 3 showed that male students who entered school at the normal age had higher mean (x) scores in English language and Mathematics than male students who enrolled at the normal age had higher mean (x) scores in English language and Mathematics than female students who enrolled at the earlier age. The analysis of

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hypothesis 3, table 9 indicated a significant difference in academic achievement in favour of the male students who entered school at the normal age over the male students who entered earlier. Again the analysis of hypothesis 5 on table II indicated a significant difference in academic achievement in mathematic and English language of female students who enrolled in school at the normal age over the female students who enrolled at earlier age.

Finally, the findings of this study on gender differences in academic achievement in mathematics and English language showed that male and female achieved differently in these two core subjects. For example, the result of the data in table 3 and 4 indicated that the mean score in mathematics is higher for male students than for female students who entered school at earlier age, and also higher for male students than female students who entered school at normal age. While in English language the data showed that the female students who entered school at the normal age scored higher than the male students. This findings again agreed with the findings by Eagly, Benbow and Wood (2006) and Denworth (2017) who reported that on the average, male students score higher on spatial and Mathematic achievement than female students. While females on the other hand, score higher in language skills than males, because of the differences in their corpus callosum.

# **Conclusion from the Study**

In conclusion, findings from the study indicated that: Schooling in a formal setting will be facilitated when the child is mature to take in the cognitive tasks presented to him. This is very critical given that enrolling students too early in school may not only have a negative impact on students' academic achievement but also on their emotional well-being. Gender differences in academic achievement in mathematics and English language is an eye opener to counselors guiding students on career choices for proper placement for self enhancement and for national development.

# Recommendations

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

- 1. Awareness campaign is needed to guide parents on the growth and development of their children in order to avoid academic stress and frustration of their children. This awareness campaign can be done by the various school counsellors through the Parents Teachers Association (PTA).
- 2. School Authority, Teachers, proprietors and proprietresses should follow strictly the laid down policy of Education specifying the various age brackets children are expected to be admitted into school and into learning.

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# SOCIOECONOMIC VARIABLES: DETERMINANTS OF MATHEMATICS ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS

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# Abstract

This study aimed at investigating the impact of some identified family socioeconomic variables on academic achievement of secondary school students in Anambra State. To guide the study, two research questions were formulated and two hypotheses were tested at 0.05 level of significance. The design adopted for this study was the survey research design. The population of the study was the 6,868 senior secondary one (SS1) students in Anambra state out of which 120 students were selected using multistage sampling technique. The instrument for data collection was a bio data form prepared by the researchers. The data was collected by administering questionnaire to the selected students and getting the Mathematics scores of S.S.1 students selected for the study from their mathematics teachers. The research questions were answered using mean and standard deviation and hypotheses tested using ttest of independence. The findings of the study revealed the difference in the mean mathematics achievement scores of students based on parental occupation and educational attainment. It was also discovered from the study that there is significant evidence to conclude that there is different between the mean achievement scores of students of parents with low and high educational attainment. Based on these findings the researchers recommended among others that parents and government should provide mathematical tools and laboratories in secondary schools to encourage and motivated students to study harder for a better performance in mathematics.

Keywords: Socio-economic, variables, determinants, mathematics, achievement

# Introduction

Mathematics as the queen of all sciences as opined by Gauss (2012) needs to be given more attention than other science subjects because it renders calculation services to every other science subjects. No science subject can be studied effectively without mathematical calculations. Hence world technological development depends majorly on mathematics. For effective understanding of mathematical concepts, conducive state of mind is a necessary condition, mathematics being a subject that requires critical thinking. For a student to possess the right state of mind which poses a fertile ground for learning, family Socio-economic variables are expected to be balanced. Parents who understand the value of mathematics possess some incentives to support their wards' understanding of concepts in mathematics. Some parents do not take interest in the progress of teaching and learning of mathematics in the secondary school due to some socio-economic issues based on parental occupation, parental educational attainment and parental level of income. Motivation and encouragement help the students to excel (Obidigwe, 2011). Uneducated parents may not be in a position to assist their children, and as their influence are weak as compared to the educated parents. Highly educated parents usually show interest and care in their children's academic achievement and their choice of subject and career in secondary school. In other words, children from families who have good socio-economic background tend to get all the attention needed for good achievements in mathematics while the reverse may be the case for a student who came from families with poor socioeconomic background. Hence Family socio-economic status has been found to have positive correlation to the academic achievement of students in their field of studies.. Students from good family socio-economic background tend to get all the attention achievement in mathematics while the reverse is the case for a student in mathematics while the reverse is the case for a student in mathematics while the reverse is the case for a student from a poor family socio-economic background (Dalve, 2016, Idris, 2020, Khan, 2015, Ogunshola & Adewale 2012).

Dalve, (2016), advocated that Mathematics is a thing of the mind, as such if a student is not psychologically balanced due to factors as family challenges, poverty, lack of motivation from the parents, it would be a difficult task for that student to achieve something worth his/her stay in school and performance in mathematics is not an exemption. In a situation where a student is constantly distracted by such family related psychological factors, that student would not be able to give full attention to thinking deeply for a better understanding of mathematics. For a student to achieve good grades in mathematics, he/she needs to meditate, understand and get mastery of the topics that has been thought. To this end the researchers investigated the impact of some identified family socio-economic variables on academic achievements of secondary students in mathematics in Anambra State.

Family socio-economic background plays a very big role on a child's life. Family socio-economic background refers to all the socioeconomic in the family which influence the child physically, intellectually and emotionally. (Muola, 2011). Children coming from different family socio-economic backgrounds are affected differently by such variations and that is why they perform differently in school. Fleege, in Eke (2016) noted that with some families socio-economic background may vary from time to time for the same individuals and if not ideally managed will tend to destabilize the children in such homes academically. The author further stated that because parents are the ones who are primarily responsible for establishing the family and exercise control over it, they are responsible for the type of family socio-economic background that exists. This means that parental attitudes are very important in promoting healthy family and healthy family socio-economic status is possible when parents adapt to the actually defined roles of parents to the needs of the changing young generation.

Academic achievement refers to the extent to which students have achieved mastery of the objectives of the subjects they are exposed to in school. According to (Aremu & Sokan, 2013) academic achievement has been observed in school subject especially mathematics and English among secondary school students. It is the outcome of determination, hard work of student in academic pursuit. Pandney, (2018) defined academic achievement as the performance of the pupils in the subject they study in school. This to an extent determines the students' status in the class. Academic achievement also encourages the students to improve their grade, develop their talents and prepare for future academic challenges that may be higher than the ones they've been through. Teachers evaluate in the form of assignment, test and examination to describe how well a student has done. Poor academic achievement is an outcome of academic work that is adjudged by examiner and some significant others as falling below an expected standard (Adesemowo, 2018).

Some socio-economic variables in a home influence the learning capabilities of a child either positively or negatively (Heiss in Izundu 2018). Some of the variables include parental occupation type, parental educational attainment and parental level of income among others. Students whose parents were highly educated and exposed to Mathematics before in life tend to show more success in Mathematics than their peers whose parents were less educated and not exposed to Mathematics. In cases like this, the students will not feel confident enough to ask their parents questions at home. Even when the parents show interest and make suggestions, they may doubt them knowing their academic level and their level of exposure.

Influence of the academic attainment of parents and their economic status on academic achievement of their children is evident in all countries. Pamela and Kean (2011) stated that those students whose parents have tertiary level of education achievement, on average significantly do better in tests of science, reading and Mathematical ability than those whose parents have only basic schooling. Thus, across these three disciplines, the average grades achieved by students with well-educated parents ranged from 70% to 45% higher than those achieved by students with poorly educated parents mostly in developing countries. Although, majority of the literature on parents' education pertains to the direct, positive influence on achievement (Deci & Ryan, 2015), the literature also suggests that the influences the beliefs and behavior of the parent, lead to positive outcomes for their children and youth (Pamela & Kean, 2011). More so, Alston and Williams (2014) found that parents of moderate to high income and educated background held beliefs and expectations that were closer than those of low income and low level educated families to the actual achievement of their children, low-income and low-level educated families instead had high expectations and achievement beliefs that did not correlate well with their children's actual school achievement.

Family is perceived by scholars as agent of socialization which is the first point where children begin to acquire the skills necessary to perform as a functioning member of their society, and is the most influential learning process one can experience. Although cultural variability manifests in the actions, customs, and behaviors of whole social groups the most fundamental expression of culture is found at the individual level. This expression can only occur after an individual has been socialized by his or her parents, family, extended family, and extended social networks. This reflexive process of both learning and teaching is how cultural and social characteristics attain continuity (Chao, 2011). This study therefore adapted the socialization theory which was developed by Charles Cooley in 1929 and it refers to the parenting practices that influence children's development. Socialization is a lifelong process that involves inheriting and disseminating norms, customs and ideologies hence providing an individual with the skills and habits that are necessary for participating within one's own society. Socialization therefore is the means through which individuals acquire skills that are necessary to perform as functional members of their societies and is the most influential learning processes. Although cultural variability manifests in the actions, customs and behaviors of the whole social groups, the most fundamental expression of culture is usually found at the individual levels, and this expression is usually socialized by one's parents, extended family and extended social networks (Echebe, 2016).

Chao (2011) highlighted that usually it is assumed that cultural models define desirable endpoints for development that inform socialization goals which define the ideas about parenting in terms of parenting ethno theories. He however added that the cultural model is represented mainly by familism which encompasses loyalty, reciprocity and solidarity with the members of the family and therefore the family is an extension of self. In other words, a child's performance outside the home goes a long way to express the type and level of family he emanates from. Therefore this study added to the knowledge of socialization theory by relating the influence that family socioeconomic background influences this aspect of a child's life, which is achievement in school.

Parental attachment theory was proposed by Bowlby. The theory states that the child forms a strong emotional bond with another person (caregiver) during childhood with lifelong consequences. According to the theorist, sensitive and emotionally available parenting helps the child to form a secure attachment style which foster a child's socio-emotional development and wellbeing. Less sensitive and emotionally available parenting or neglect of the child's needs may result in insecure forms of attachment style, which is a risk factor for many mental health problems. The theory is relevant to this study in view of the fact that the proponent provides clues in emotional development of children which is grossly affected by socioeconomic of parents. He also made reasonable suggestions for parents and guardians. Parents and guardians can now see the necessity of forming secure attachment bond with their children. Such Socioeconomic Variables: Determinants Of Mathematics Academic ...

bonds will enable the children to end up with secure attachment and secure state of mind later in life. Parents will learn to understand the biological and psychological needs of the children, and to avoid unrealistic expectations of the child behavior. In this way, parents may seek to avoid frustration that occurs when they expect things beyond the child's capability. The persistent poor achievement of students in mathematics at all levels of education, primary, secondary and tertiary in both external and internal examinations has been a source of worry to all concerned educationist (Ezenwegbu, 2018). In their concerns, they seem to be asking these questions. What are responsible for the students' poor achievement in mathematics? How has the socioeconomic background of parents contributed to this perceived poor performance? Are they getting their desired support or motivation from their parents due to their educational and income level? It is based on these trending issues that the researchers intended to investigate the extent to which some identified family socioeconomic variables influence the mean academic achievement of secondary school students in mathematics. The main purpose of this study was to determine perceived influence of some identified socio-economic variables on the mean mathematics achievement of secondary school students. Specifically, the study sought to determine: the mean mathematics achievement scores of secondary school students based on parents' occupation and the mean mathematics achievement scores of secondary school students based on parents' educational attainment

# **Research Questions**

The following research questions were formulated to guide the study.

- 1. What is the mean mathematics achievement scores of secondary school students based on parents occupation?
- 2. What is the mean mathematics achievement scores of secondary school students based on parents' educational attainment

# Hypotheses

 $H_{o_1}$ : There is no significant difference between the mean achievement scores of students' of business and civil servant parents

 $H_{o_2}$ : There is no significant difference between the mean achievement scores of students' of parents' with low and high educational attainment.

# Method

The survey research design was adopted for this study. The choice of the design was informed by the objective of the study which is to collect data in order to determine perceived influence of some identified socio-economic variables on the mean mathematics achievement of secondary school students. Survey research according to (Check & Schutt, 2012: 160) is defined as "the collection of information from a sample of individuals through their responses to questions". This type of research allows for a variety of methods to recruit participants, collect data, and utilize various

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methods of instrumentation. This research design provides a quick efficient and accurate means of assessing information about a population of interest.

The population of the study was the senior secondary one (SS 1) students of all secondary schools in Awka South local government area of Anambra State. The sample size for this study were 120 respondents which were S.S.1 students from the six selected secondary schools in Awka South local government area of Anambra state. This sample was selected using multistage sampling technique. These schools were categorized into public and private schools. Three school each were selected from each of the two clusters using simple random sampling. After this, twenty students were selected from each of the selected schools which gave a total of one hundred and twenty (120) subjects. These subjects formed the sample of this study. The instrument for data collection was a bio-data form prepared by the researchers and the mathematics result sheet of the students gotten from the form teachers of S.S. 1 of the schools. The bio-data form is divided into two parts, the part A contained bio data of the students. The Part B contained statements on the variables under study structured to get information on socio-economic statues of parents. The bio-data form was face validated by 2 test experts. Corrections were made and effected by the researchers. The data for this research work was collected by administering the bio data form to S.S.1 students of the selected secondary schools with the help of the mathematics teachers. The mathematics result sheet was also gotten by the researchers from the form teachers of S.S.1 classes of the schools involved in this study. Data collected were analysed using Mean and standard deviation.

# Results

S/N	Students Parental Occupation	Mean of Stu	SD	
		Ν	Х	
1	Business	60	47.88	12.55
2	Civil servant	24	53.36	23.53
3	Self employed	22	60.96	21.15
4	Private professional (Doctor,			
	Lawyer, Teacher, Engineer,	14	70.5	18.71
	Accountant )etc	120	58.92	18.96
	Grand mean			

**Table 1:** Mean Mathematics Achievement Scores of S.S.1 Students in Mathematics in

 Awka South Local Government Area whose Parents are of Various Occupations

Table 1 showed that the mean achievement scores of students in Anambra according to parents occupation is 58.92. The table also showed that the students whose parents are into Business had lower mean Mathematics achievement score of 47.88 while the students whose parents are private professional (Doctor, Lawyer, teacher, engineer,

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account) had the higher mean mathematics achievement score of 70.5. But the case is different when compared with the mean scores of students of civil servant parents with mean of 53.36 against 47.88.

**Table 2:** Mean Mathematics Achievement Scores of S.S. 1 Students in Mathematics in Awka South Local Government Area according to Parents Various Educational Attainment

S/N	Students Parent	al Educational		dents Achievement
	Attainment		Scores	
		Ν	Mean (x̄)	S.D
1	None	12	64.5	16.64
2	FSLC	16	67.68	11.65
3	WAEC	36	68.5	13.76
4	Tertiary Education	56	73	18.33
	Grand Mean	120	68.25	15.09

The result from table 3 showed that the mean achievement scores of S.S.1 students in Mathematics in Anambra state according to Parental Educational attainment is 68.25. The table also showed that the students whose parents had WAEC Certificate score lower mean Mathematics achievement score of 64.5 while those students whose parents attended Tertiary Institutions had the higher mean Mathematics achievement score of 73 which clearly indicates that parents' educational attainment has impact on students' academic achievement.

**Table 3:** t-test of Means Achievement Scores of Students of Business and Civil Servant

 Parents

	Ν	$\overline{x}$	SD	df	Τ	Р
Business	60	47.88	12.55	82	1.66	0.191
Civil servant	24	56.33	23.53			

p - value > 0.05. Therefore, we do not reject the null hypothesis There is not enough (or significant) evidence to conclude that there is different between the mean achievement scores of students of business parents and civil servant parents.

**Table 4:** t-test Table of Mean Achievement Scores of Students of Parents with Low
 and High Educational Attainment

	Ν	$\overline{x}$	SD	Df	Т	Р
Low	64	47.88	12.55	118	2.03	0.035
High	56	73	18.33			

p - value < 0.05. Therefore, we do reject the null hypothesis

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There is enough (or significant) evidence to conclude that there is different between the mean achievement scores of students of parents with low and high educational attainment.

### Discussion

The discussion was carried out in line with the findings of the study. The first finding of this study showed mean differences among students across the different parental occupation of parents of S.S.1 students in Awka south LGA of Anambra state as outlined in Table 1. Though the there was no significant difference found between the mean achievement scores of students' of business and civil servant parents evident from the result of tested hypothesis in table 3. The mean mathematics achievement score of students whose parents were private professionals was more than that of the self-employed, followed by the civil servants and the least mean achievement score of student whose parents were into business was the least which is an indication that parents occupation can influence secondary schoolstudents' mathematics achievement score. This is in line with the report of the Programme for International Student Assessment (PISA), (2016) that students whose parents were in professional or managerial occupations were found to have higher mathematics achievement scores than others. In other words, students whose parents had occupations that specifically required strong mathematical skills that is, physical mathematical and engineering science professionals tended to have higher mathematical scores than other students. It was also observed that students of official executives occupational category that includes legislators, senior officials, executives and managers in fact performed almost one proficiency level lower than students whose parents worked in the mathematics intensive occupational group. This in contrast to findings of Eke (2016) who reported amongst others that parental occupation does not significantly affect academic achievement of students. Though Bojuwoye (2011), said that parents of Nigerian secondary school students being largely illiterates are scarcely capable of reading well informed decisions about the future of their youths. Thus ever-so-often, it is the parents own perception of the nature of a particular kind of job rather than the demand on the employment market that provides many youths with the prime stimulus to select occupation.

Following the findings in tables 2 and 4, it was indicated that the students whose parents had tertiary education had the highest mean mathematics achievement score and there was significant evidence to ascertain the difference. This assertion is in line with the findings by Pamela and Kean (2011) that students whose parents have a tertiary education perform on average significantly better than the rest indicating that parents educational attainment impacts students' achievement score.

#### Conclusion

Academic performance among students is influenced by numerous factors. Yet, excelling in academics is important in ensuring that students not only pass exams but also lead rewarding lives. From the findings of the study, it is indicated that there is clear difference in the mean scores of students based on parents' occupation and educational attainment. It is also evident that there is different between the mean achievement scores of students of parents with low and high educational attainment. It is therefore implied that the lower socio-economic status of parents, the lower the students average points in performance. It implies that parents' socio-economic status influences the performance of the students in secondary schools.

## Recommendations

In view of the findings discussed in this study, the following recommendations were made:

- the government should provide mathematical tools and laboratory in secondary schools to encourage and motivated students to study harder for a better performance in mathematics.
- The researchers also recommended that parents should do their best to see that their children study mathematics at home no matter their occupation; they should find time to know how their children are faring in their academics especially in the mathematics.
- The researchers further recommended that parents can also support the schools by way of providing mathematics learning tools to schools to help enhance achievement.
- More so, the researchers also recommended that the educated parents should carry on with the good work they are doing by helping their children at home while the uneducated parents should try as much as they could to get enrolled in primary adult education centres and enroll for continuing education. programmes as that will help them to be in good position to help their children's mean mathematics achievement scores.
- The researchers also recommended that the students should study hard both in school and at home for better mean mathematics achievement score as their parental income level does not impact their mean mathematics achievement score.

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# WEAPON POSSESSION AND USE: RURAL-URBAN AND SCHOOL-TYPE DIFFERENCES IN THE MOTIVATING FACTORS AND DEGREE OF INVOLVEMENT OF IN-SCHOOL ADOLESCENTS IN ANAMBRA STATE, NIGERIA

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#### Abstract

The Nigerian nation is currently facing an alarming security situation. Virtually all regions of the country are battling one form of security challenge or the other. Evidence from previous research implicates the involvement of in-school adolescents in various violent crimes. Therefore, the purpose of this study was to determine the motivating factors and degree of involvement in weapon possession and use based on school location (rural and urban) and type (mixed-gender and gender specific). Four research questions guided the study. The study adopted a descriptive survey research design. The population consists of all in-school adolescents in public secondary schools in Anambra State, Nigeria. Five hundred students made up the study sample. The sample was obtained, using multistage sampling techniques. Data were collected with a research instrument titled School Location and Type Influences on Weapon-carrying Questionnaire (SLTIWQ), duly validated by two experts from Educational Foundations, NAU, Awka. Its reliability was tested using the Cronbach Alpha technique which yielded an alpha coefficient of 0.75. The research questions were answered using the frequency counts and percentages. Result revealed that weapon possession and use by adolescents cut across school location and type. The study also revealed that situations that have motivational effect on the students are homogeneous. Any student, irrespective of where his school is located, or the type, can be entrapped in the evil web of weapon possession and use, as well as other crimes. However, the rate of weapon-carrying and use and violent extremism was significantly higher with students in urban-located schools as well as mixed-gender schools than those in rural areas and the gender specific schools. Based on the findings, it was recommended that measures put in place by stakeholders in fishing for delinquent students in need of psychological attention in Anambra state secondary schools should not be limited to urban and mixed schools but extended to the ones in the rural as well as single-sex schools. Education planners should also provide curriculum/subject content that teaches children at all levels the risks associated with weapon possession and violent extremism in schools.

Keywords: Weapon possession/carrying/use, homogeneous, In-school adolescents, mixed gender and gender specific.

#### Introduction

The adolescents of today are definitely the adults of tomorrow as well as the future workforce of any society (Okudo in Nwikpo, 2016). In the words of the United Nations Secretary-General, "adolescents are central to everything we want to achieve, and to the overall success of the 2030 Agenda" (WHO, 2017, pp 5). This explains why the World Health Organization (WHO) made the health and development of adolescents an integral part of the Global Strategy for Women's, Children's and Adolescents' Health, 2016 -2030 (Global Strategy, 2016). Adolescents are in the age bracket as college/school-aged people which justifies the priority given to the place of school, especially the secondary level, with a goal to turn out well-adjusted youth who can hold forth their own in generations to come. For many parents, one factor they consider key in sending children/wards to secondary school is the right type of school where they will have opportune moment to acquire an enriching educational experiences fit to prepare them for tertiary education and/or employment. A secondary school can be either mixed gender, otherwise called coeducational or gender specific which can also be referred as single-sex and can be located in the urban or rural areas. For the coeducational school enthusiasts, Robertson (2019) generalized their perspective thus, "There's a cross pollination that goes on in the academic environment. The diligence and attentiveness of girls positively affects boys, while the liveliness of boys inspires girls. They learn from and are inspired by each other." On the other hand, Matthews, (2019), averred that advocates of the single-sex school hold that single-sex classrooms do help girls to maintain confidence, keep their options open when it comes to careers and academics, and stay safe from being pushed to put being 'cool' before learning. A mother, Kimberley Noble enthused that she's relieved that her 13-year-old daughter Lucy doesn't have to deal with the peer pressure of the co-educational classroom, where, according to her, some girls are pushed to grow up too soon or act a certain way to impress boys. Further on the positive impact of single sex school, Adams (2019) observed that in boys' alone school, boys are more engaged in learning without being in a gender pressure cooker. They enjoy a longer time to be boys and to explore various interests.

Aside from school type, location is another school variable of interest to categorize schools. These are the rural and urban schools. The ones located in the rural areas are the rural schools while the ones in the metropolis make the urban ones. Given the above, we have rural and urban secondary schools. Kotler (2017) opined that rural schools offer many advantages in terms of smaller classroom sizes, the opportunity for more personalized attention between teacher and individual students, innovative curricula such as place-based education, and a strong sense of community values and identity. Conversely, Global data (2017) documented that urban students typically gain greater overall access to education, receive a higher quality education, and outperform their rural counterparts.

School at all levels (primary, secondary or tertiary), is one of the core institutions of modern society to varying degrees in virtually all nations including Nigeria. The

events that transpire therein have immense implications as various literature reveal. Onyejiaku and Onyejiaku (2011) asserted that decisions made by teenagers are mostly influenced by peer loyalty which could have either positive or devastating consequences for their own adjustment or safety as it could be observed that adolescents make decisions based on their social milieu.

Whether coeducational or single-sex, urban or rural based, the place of school as an agency of socialization cannot be overemphasized. However and quite unfortunately, despite the attention the institution has received over years, it cannot be said to be entirely free from the nagging challenges that are considered frustrating to the effort being made by stakeholders at keeping the adolescents safe and healthy. Students' unwholesome practices and behaviours hold sway in today's schools in alarming dimension. This development is scary as it is excruciatingly worrisome, especially in contemporary times.

Globally, the adolescents are regrettably found to have been involved with weaponcarrying and use, even up to the extent of becoming violent extremists. Available indices on the in-school adolescents' involvement in weapon-related violent acts and other unwholesome behaviours project a very disturbing picture of the school system (Nwikpo, Anierobi, Okeke & Ifejiofor, 2020; Savona & Mancuso, 2017; United States' Department of Health and Human Services for Disease Control and Prevention, 2018). Data sources from the United States Department of Health and Human Services for Disease Control and Prevention on high school students carrying weapons confirmed that in 2017, the proportion of students who reported carrying weapons, at least, on one occasion in the past 30 days was 15.7%. On his own part, Corbett (2019), observed that for the 2018-2019 school year in the US, at least 392 incidents of kids bringing guns to school were reported in the media. In Europe, the youth are culpable of possessing and using same in weapon-relating violence. According to a recent report based on open-source data and funded by the European Union, the rates of lethal and non-lethal shootings in Sweden are among the highest in Western Europe, noting further that the victims of those shootings in the country are considerably younger than victims in other countries. Savona et al (2017) reporting media sources, put incidence of lethal and non-lethal shootings in Sweden at 440 from 2010 to 2015, in a population of about 10 million in comparison with the corresponding numbers in countries of similar population size, such as Belgium (11.3 million), Greece (10.8 million), Portugal (10.3 million) and Austria (8.7 million), were 196, 251, 240 and 163 victims respectively, have been recorded. In their part, Murnan, Drake and Price cited in Nwikpo et al (2020), stated that weapon-related violence among adolescents is a serious public health concern, especially as the adolescents themselves are not immune from becoming victims while perpetrating the violence. In the same vein, Muula, Rudatsikira and Siziya (2008) also cited in Nwikpo, et al (2020), opined that deaths and injuries which arise from interpersonal violence among adolescents are major ...... N.N. N. Nwikpo, V. U. onwumelu, A. I. Eluemuno & E. I. Anierobi .

public health concerns in the United States. The bearing of weapons among adolescents is a critical factor in many of these deaths and injuries.

Nigeria is not exempted to this endemic and cancerous menace of weapon-related violence. She is currently facing an alarming security "pandemic". Virtually all regions of the country are battling one form of security challenge or another which plagues and interferes with human existence. On daily basis, news of shootings and killings of innocent armless citizens reverberate in every region of the country including the Southeastern region of Nigeria. As Agara and Dike (2021, p141) put it, "the attacks are directed at random and symbolic targets (not necessarily military) particularly areas where civilians are likely to congregate like markets, malls and religious places of worship like churches and mosques." Agara and Dike (2021) referred to our era as the age of terrorism. In 2018, Amnesty International report documented the violent clashes between members of farmer communities and members of herder communities in parts of Nigeria, particularly in the northern parts of the country which resulted in attacks and reprisal attacks, with at least 3,641 people killed between January 2016 and October 2018, 57 percent of them in 2018 alone. To highlight the obvious, the Nigerian nation is currently under siege. As the global surge of radicalized criminals and violent extremists continue to soar, especially in the face of Boko Haram, Islamic State of West Africa Province, ISWAP, killer herders, so-called unknown gunmen and bandits' and cultists' activities while not forgetting the brutality of law enforcement agents who rather than protect the lives of Nigerian citizenry, had transformed themselves into agents of death and pain. Quite recently, the human rights organization, Amnesty International raised an alarm over the many deaths and disappearance of young men of the southeastern region of Nigeria in the hands of the security operatives who ironically were sent to intervene and avert the chaos in the region (Ojewole, 2021). According to the organization, at least 115 people were killed by security forces in four months in the region. This figure was exclusive of the number who are daily gunned done by the so-called herdsmen, bandits and the vicious gang that go by the name -unknown gunmen who do not only send their victims to early grave but burn down both private and publicly owned structure. How about the cultists whose operational areas seem to be the tertiary institutions and their environs? Their notorious activities are never complete without leaving a trail of blood and tears behind. At Awka the Anambra state capital alone, it was reported that no fewer than 60 youths had lost their lives to cult activities between the months of January to June, 2021 (Chukindi, 2021).

On why adolescents carry weapons and engage in violent and other unwholesome behaviours, many researchers found various underpinnings. One of the studies from the high-income countries (France) was that of Begue, Roche and Duke (2016). They empirically found that the odds of weapon carrying increased among adolescents who suffered from past victimization, who had a negative relationship with their mother and repeated a grade at school. Duah (2021), also averred that many adolescents arm themselves with weapon following bullying victimization. Many other previous studies

identified certain motivations for weapon-carrying and use among students to include having friends who engage in delinquency (Mattson, Sigel & Mercado, 2020); selfdefense, victim coercion (Brennan, & Moore, 2009); drug abuse, physical fights, peers' carrying guns, and gender (Cao, Zhang, & He, 2008); aggression, victimization, and friends (Dijkstra, Gest, Lindenberg, Veenstra & Cillessen (2012).); year of exposure to violent content in video, computer, and internet games, as well as peer aggression and biological sex (Ybarra, Huesmann, Korchmaros, & Reisner, 2014). Some view the reasons for adolescent unwholesome behaviours from the perspective of escapism ( Ezeonwumelu and Okoro, 2020; Kircaburun & Griffiths, 2018; Kardefelt-Winter, 2014). Some adolescents who carry weapons and engage in other risky behaviours gave their reason as a conscious effort to overcome hurtful feeling occasioned by past unpleasant reality of haven been previously intimidated, abused or bullied. To some of them, carrying weapons is imperative because of the sense of security it gives them. To people in this category, the tendency to carry weapon is for defensive motive (Nwikpo at al, 2020). In the same vein, Onuoha (2014) enumerated factors such as poverty, unemployment, illiteracy, and weak family structures as reasons why the youth join militancy and insurgency; carry and use weapons in Nigeria. Following the surveys, interviews, and focus groups conducted in Nigeria in 2013, Onuoha observed that those factors contribute to making young men vulnerable to radicalization.

#### **Review of Literature**

Several researchers, in recent times have found out that adolescents (both in-school and out-of-school) are involved in this menace of weapon-carrying and use in Nigeria. Some did not only reveal an involvement of adolescents but established a very high level of involvement in the crime. Nwikpo et al (2020), in their study of the prevalence of weapon-carrying and use among the students of Anambra state, Nigeria, revealed a terrifying confirmation of high degree of involvement of school adolescents in weaponcarrying (67.6%). The study also revealed that weapon-carrying cuts across gender, although the rate was significantly higher with males than females. Obikeze (2009) also found a relatively very high degree of adolescents' involvement in violence in Anambra state secondary schools. Some forms of violence which his study implicated senior school adolescents to have involved in include destruction of school properties, riots, cultism, beating teachers, bullying junior students, among others. Although Obikeze did not specifically mention use of weapon in his finding, it is presumable that some types of weapons were involved in carrying out riot and cultism activities whether in or out of school. One factor adduced for high proliferation of small guns and other light weapons in Anambra state and few other Nigerian states namely Adamawa, Benue, and Plateau, is the massive craft weapons production in the states (Nowak & Gsell, 2018). According to them, the high demand of craft weapons in the state is equally driven by insecurity and conflict as well as cultural and societal factors. This seems to partly account for high weapon use across age-groups and gender in the state. This seems to further explain their findings from the National Small Arms and

Light Weapons Survey (NSALWS) that about one-fifth (17 per cent) of civilian, rural weapons holders, countrywide, possess craft weapons and one-tenth in urban areas. The fact that craft weapons are often produced in clandestine workshops, probably in the remote areas as safeguard to the blacksmiths' anonymity and safety might have been a factor that accounted for the number of users in the rural areas against the urban areas. Afolabi and Deji (2014), in their comparative study on the prevalence of violence in public and private schools in Osun State, Nigeria, using 100 students they picked through systematic random sampling, revealed various forms of violence among inschool adolescents which include weapon carrying. According to them, weapon carrying is used in threatening and attacking opponents. They noted other forms of violence such as verbal abuse, forceful collection of other people's properties, physical assaults and intentional act of damaging properties. They equally concluded that public schools recorded more weapon-related form of violence than private schools (18% & 3.3%). Fawole, Balogun and Olaleye (2018) on their part, studied gender based violence in public and private secondary schools and the type of violence the students experienced. The study was carried out in Ilorin, South Local Government Area (LGA) of Kwara State. They found that GBV was a common problem experienced by both public and private senior secondary school students. Although there had been extensive studies which focused on weapon carrying and use among adolescents (both in-school and out-school) in high income countries, the same could not be said concerning Nigeria, particularly Anambra State. The few that exist either addressed illegal stockpiling and use of firearms by the terrorists and other gunmen in Nigeria (Iloani and Echewofun, 2016) or investigated the susceptibility of democracies to terrorism than totalitarian states (Agara etal, 2021). Iloani and Echewofun (2016) in an article titled "Illegal Guns Flooding in Nigeria, Fuelling Violence" queried how the guns being used by cattle-rustlers, armed robbers and Boko Haram found their way into Nigeria when the constitution of the country prohibits illegal gun buying/selling or use. Many had also studied the issue of violence in secondary schools in Anambra State without direct connection to weapon involvement (Egenti, 2017; Obikeze, 2009). Even many media reports on weapon use in the state were not focused on schools especially secondary schools. Such reports include Gunmen attack on police facility in Anambra State (Premium Times, 2021; Nigeria: At least 115 people killed by security forces in four months in country's Southeast (Amnesty International, 2021).

From reviewed literature, the closest issue to weapon carrying among in-school adolescents extensively studied, were those of Fawole et al and Afolabi et al (2014). Fawole et al studied gender based violence (GVO) in public and private secondary schools in Kwara state while Afolabi et al studied school violence in Osun state and only mentioned threat with weapon as one of the forms of violence. The aforementioned studies neither focused on weapon possession and use in secondary schools nor focused on Anambra state as area of study. These are gaps which call for attention. Another gap exists in the fact that none of these studies looked at rural-urban differential as a factor, particularly in the Southeastern Nigeria. There is a paucity of

literature on weapon carrying/use in urban public in comparison with rural secondary schools in Anambra State and Southeast of Nigeria in general. The weapon carrying and use experience by school type has not equally been fully studied in the Southeastern region of Nigeria. These, therefore, were the gaps the current researchers addressed in this study.

Operationally, in this study, weapon is used generally to refer to all physical instruments that can be employed to cause injury, death, psychological harm, maldevelopment or deprivation etc. against oneself, another person (interpersonal) or against a group or community. Consequently, any violence perpetrated using instruments such as knives; sharp objects such as razor blade, hypodermic syringes and pieces of broken bottle; short axe; catapults; club and handguns/firearms etc, can be categorized as weapon-related violence.

# The purpose of the Study

- The general purpose of the study was to assess the motivation and degree of involvement of Anambra State in-school adolescents on weapon carrying/use based on school location and type. The specific objectives of this study are to:
- i. Find out if same factors motivate in-school adolescents' weapon carrying/use behaviour irrespective of school location
- ii. Find out whether the same factors motivate in-school adolescents' weapon carrying/use behaviour irrespective of school type
- iii. Find out the role of school location on the frequency of weapon carrying and use among in-school adolescents in Anambra State.
- iv. Find out the role of type of school on the degree of involvement of in-school adolescents in Anambra State, Nigeria.

# **Research Questions**

The following research questions guided the study:

- 1. What factors motivate Anambra state's in-school adolescents' weapon carrying/use behaviour irrespective of school location?
- 2. What factors motivate Anambra state's in-school adolescents' weapon carrying/use behaviour irrespective of school type.
- 3. What is the rate of weapon carrying and use among Anambra state students based on their school location?
- 4. What is the rate of weapon carrying and use among in-school adolescents based on their school type?

# Method

The study was a cross-sectional survey. The population consists of in-school adolescents in public funded secondary schools in Anambra State, Nigeria. A sample of five hundred respondents; aged between 16 and 19 were used. The sample was

selected using multistage sampling (stratified, simple random and proportionate) techniques using age, type and location of school as strata. The participants were selected from 12 schools out of the 3 senatorial districts in Anambra State. Two schools were selected from each of the six educational zones which made up the senatorial districts of the state. The six educational zones are: Aguata, Awka, Ihiala, Nnewi, Ogidi and Onitsha. Data were collected with a researcher-developed instrument titled School Location and Type Influences on Weapon-carrying Questionnaire (SLTIWQ), which was divided into 2 sections; Section A structured to capture demographic information while Section B consists of questions arranged in four clusters (A, B, C & D ). Cluster A and B which contain questions on the conditions under which weapon carrying and use was considered an option across school location and type were structured on a Yes/No scale while those which sought whether urban in-school adolescents are more likely than their rural counterparts to carry and use weapon and whether school type makes any difference at the rate students are involved in weapon carrying and/use were structured on a 4-point likert type scale. The research instrument was validated by two experts in Educational Psychology and one from Measurement and Evaluation. A trial testing was conducted, using 50 adolescents from Nnamdi Azikiwe High School, Awka who were not part of the final sample. A reliability co-efficient of 0.75 was obtained. Researchers and their assistants administered the questionnaire using Direct Delivery Method which allowed them the opportunity to explain any word/item which was not easily understood by the respondents. Following the use of the Direct Delivery method, the questionnaires distributed were all retrieved. It took the researchers one month to visit the schools for the data collection. Three schools were visited per week. To protect the anonymity of the students, the researchers instructed them not to write their names on the questionnaire. Data was collected and analyzed using frequency counts and percentages to describe the data.

## Results

	I carry/use weapon for the following reasons:	Urban %	Rural %
1.	Pain from past victimization	71	70
2.	Negative relationship with mother	58	54
3.	Affiliation with delinquent peers	80	77
4.	Failure to achieve a desired goal eg repeating a class	68	40
5.	Low school attachment/ Teachers' harshness	56.3.	56
6.	Drug use and alcohol consumption	65.4	59.6
7.	Exposure to violent videogames and films	70.8	45.4
8.	Defensive motive	65.5	57.6
9.	Inattention of society to adolescents' needs	58.2	63
10.	Emotional instability	70.2	45.8

**Table 1:** Percentages of situations which warrant weapon carrying/use by urban and rural in-school adolescents

Analysis in Table 1 revealed factors that do motivate weapon carrying/use among secondary school adolescents in Anambra State and where each stands in percentage rating across school locations. Affiliation with delinquent peers and pain from past victimization ranked first and second respectively for urban students as well as for the rural students. Majority of other factors did not reveal much disparity between the 2 groups. However, it was also observed from the result that failure to achieve a goal, emotional instability and exposure to violent videogames and films were some of the factors that push the urban students into a lifestyle of weapon carrying than it did to rural students. Teachers' abrasive disposition toward students has almost the same level of impact on both the urban and rural students' weapon carrying behavior.

Table 2: Percentage rating of situations which warrant weapon carrying/use across school type

	I carry/use weapon for the following reasons:	Mixed gender	Gender Specific
		%	%
1.	Pain from past victimization	70	67.5
2.	Negative relationship with mother	50	54
3.	Affiliation with delinquent peers	82	79.8
4.	Failure to achieve a desired goal eg repeating a class	60.3	55.7
5.	Low school attachment/ Teachers' harshness	71.	70
6.	Drug use and alcohol consumption	70	68
7.	Exposure to violent videogames and films	70.6	70
8.	Defensive motive	65	65
9.	Inattention of society to adolescents' needs	60	62
10.	Emotional instability	68	65

Analysis in table 2 revealed a homogeneous result. This implies that the factors have same motivational effect on in-school adolescents irrespective of type of school. Affiliation with delinquent peers, low school attachment/teachers' harshness, exposure to violent video-games and films. Defensive motive among others, have same level of force to sustain weapon carrying/use behaviour among the senior secondary school students both those in coeducational/mixed gender as well as those in gender specific schools.

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**Table 3**: Reported frequency of weapon carrying and use among in-school adolescents according to their school location

	<b>Urban</b> (n = 250)								$\mathbf{Rural}\;(\mathbf{n}=250)$						
Weapon carry and use by students	ing														
	Alwa	ays	Not	always	ľ	Never	A	Always		Not a	lways	Never			
F		%	f	%	f	%	f	%	f	%	f	%			
Frequency of carrying weapon	188	75.2	70	28	50	20	81	32	100	40	61	24.4			
Do not just carry but use when necessary	140	56	80	32	38	15.2	127	50.8	69	27.6	54	21.6			

Results in Table 3 above revealed significant difference in the urban and rural students' responses on frequency of weapon carrying and use. The result showed high weapon carrying rate by students whose schools are located in the urban areas as against their colleagues from the rural schools. While majority (75.2%) of the students in urban schools indicated that they always armed themselves with weapons, only 32% of their rural counterparts indicated same. The table also revealed little or no significant differences in the urban and rural students' responses on whether they carry weapon and also put it into use when they considered same necessary. 56% of urban students reported they do not only carry weapons but use them in weapon-related violence, and 50.8% of the rural students confirmed that too.

**Table 4:** Reported frequency of weapon carrying and use among in-school adolescentsaccording to their school type

Mixed-Gender (n = 250)					0)	Sing car						
	A	ways	Not	alway	ys	Never		Always	N	lot alwa	iys	Never
F	%	f	%	f	%	f	%	f	%	b f	-	%
Frequency of carrying weapon	170	68	100	40	32	12.8	75	30	105	42	56	22.4
Do not just carry but use when necessary	138	55.2	80	32	40	16	130	52	67	26.8	67	26.8

Results in Table 4 above revealed a significant difference in the students' responses on frequency of weapon carrying and use based on school type. The result showed higher weapon carrying rate by students from mixed-gender schools as against their colleagues from the single-sex schools. While only 30% of the students from single-gender schools indicated that they always armed themselves with weapons, more than

double of the number (68%) of their mixed-gender counterparts indicated they always carry weapons. 55.2% of mixed-gender students reported they do not only carry weapons but use them in weapon-related violence, and 52% of the single-sex students confirmed their involvement too.

#### Discussion

The purpose of this study was to explore the motivating factors and degree of involvement of 500 Anambra State in-school adolescents on weapon carrying/use based on school location and type. The growing concern of weapon carrying and use by adolescents in secondary schools in the recent time motivated the study. Consequently, a cross sectional survey was carried out and analyzed using descriptive statistics. Overall, findings revealed that weapon carrying and use of weapons were higher in urban public secondary schools (75.2%) than in public rural secondary schools (32%) among the adolescents. Although greater number of urban in-school adolescents carry weapon always, this study found out that in actual usage of the weapons carried, both urban and rural students were not remarkably different- 56% & 50.8% respectively. In each group, more than half of them were guilty of weaponrelated violence. The involvement of majority of urban students when compared with their rural counterparts may be as a result of exposure to unhealthy city lifestyle and media influence which more often than not, glamourizes the carrying and use of weapons. Many urban students might equally have parents who, due to the hustling and bustling nature of Nigerian city life, may not be available for them to monitor and attend to their needs. Children who lack parental monitoring and/supervision turn to their peers to feel the gap. If such peers are delinquent, they too become like their friends. This finding is in consonance with that of Dijkstra, Gest, Lindenberg, Veenstra, & Cillessen, (2012). This finding, however, does not agree with Nowak and Gsell (2018) who explained, based on their findings from the National Small Arms and Light Weapons Survey (NSALWS) that about one-fifth (17 per cent) of civilian, rural weapons holders countrywide possess craft weapons as compared with one-tenth in urban areas. The fact that craft weapons are often produced in clandestine workshops, probably in the remote areas as safeguard to the blacksmiths' anonymity and safety might have been a factor that accounted for the higher number of users in the rural areas against the urban areas.

Another relevant finding of the study was that the degree of involvement of in-school adolescents in the mixed-gender schools in weapon-carry and use behaviour is higher than their gender specific counterparts. This may be as a result of peer pressure and desire of mixed-gender school students to remain popular and impress the opposite sex with whom they share same environment of learning. This finding is supported by (Dijkstra et al., 2010) who has also found that weapon carrying is associated with being more popular among members of the peer group to which he affiliates. Mattson, Sigel & Mercado (2020) equally lend credence to this when they averred that having friends

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who engage in delinquency is a key motivator of adolescents' weapon possession and use behaviour. Furthermore, as observed by Robertson (2019), boys and girls of coeducational schools learn from and are inspired by each other. This inspiration could be positive or negative. When it comes from adjusted mates, it leads to psychosocial adjustment, but if it comes from delinquent mates, it leads to increased probability of unwholesome behaviours such as selling and using illicit drugs, weapon carrying and use, alcoholism etc (Vaughan, Perron, Abdon, Olate, Groom & Wu, 2012).

The study also revealed no great difference in the majority of situations that motivate Anambra state students' weapon possession/carrying and use behaviours across school type and location. Among the situations with same level of motivational effect on students and use are affiliation to delinquent peers and pain from past victimization. They motivate, sustain and increase weapon carrying and use across school location and type. These are the two main conditions under which adolescents see weapon carrying and use as warranted. This finding is consistent with Duah (2021) who established that bullying victimization and experiencing health strains significantly increased juvenile delinquency. The study, however, found a wider percentage difference in the level to which exposure to violent video-games and films motivated weapon possession and use between the rural secondary students and urban secondary school students. The city lifestyles and media presence would have been the reason. The finding is in agreement with Nwikpo et al (2020).

#### Conclusion

The study concluded that though any student, irrespective of where his school is located, or the type, can be entrapped in the evil web of weapon carrying, the rate of occurrence could be higher with students in urban-located schools. The study further concludes that the percentage of involvement of in-school adolescents in the mixedgender schools in weapon-carry and use behaviour is higher than their gender specific counterparts. Conclusion was equally drawn from the study that most conditions that warrant students of Anambra state to carry and use weapon are same and may not be dependent on type or location of school.

#### Recommendations

Based on the above, the researchers make these few recommendations:

- 1. Parents and guardians should provide the adolescents with the much needed family support; be there for them emotionally, monitor what they engage their time and energy in; role model good behavior; know who their children's friends and associates are and what they enjoy doing and censure what they watch in the TV etc.
- 2. Government should criminalize the use of adolescents for political thuggery and other crimes.
- 3. Government should censor media programmes which glamourize violence and crime. For example some movies shown in the media often promote weapon

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carrying and use by suggesting that the world is a hostile place and humans need weapon carrying as a self-defense.

4. Synergistic interventions that involve the parents, school authorities and students on non violence conflict resolution are urgently required.

#### Limitation of the study

A possible limitation to this study concerns the issue of the use of only questionnaire in collecting data. The use of both qualitative and quantitative approaches could result to more robust findings. Further, another possible limitation to the study is the use of only 500 students, a sample which cannot be said to be representative of the population of Anambra state students.

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# PERCEIVED EFFECTS OF VIRTUAL CLASSROOM ON MOTIVATION FOR TEACHING AND LEARNING IN SELECTED PRIVATE PRIMARY SCHOOLS IN CALABAR, CROSS RIVER STATE

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#### Abstract

The present study determined the perceived effects of virtual classroom on motivation for teaching and learning in selected private primary schools in Calabar metropolis. Four private primary schools were used for the study. A total of 760 pupils and 50 teachers constituted the population for the study. With the use of random sampling technique, the researcher drew 367 pupils from the population for the study. The 50 teachers were used for the sample of this study. Two self-developed instruments titled Motivation for Teaching Online Questionnaire (MTOQ) and Motivation for Learning Online Questionnaire (MLOQ) were used to ascertain teachers' motivation for teaching and pupils' motivation for learning respectively, using virtual classrooms. These instruments were validated by experts in Measurement and Evaluation. The reliability of these instruments was ascertained using Cronbach alpha method and it yielded coefficients of .67 and .75 respectively. The MTOQ was administered to the teachers in the four private primary schools selected for the study, while MLOQ was administered to the pupils in the same private primary schools where these teachers are working. These teachers also served as research assistants in helping the researcher administer the MLOQ to their pupils. Data generated were analysed using mean and independent t-test statistic. The result of the study showed that teachers were motivated to teach children as they use virtual classrooms, and that significant differences did not occur in the mean rating of male and female tachers on their perceptions on the effects of virtual classroom on motivation to teach. Students were also motivated to learn in virtual classrooms and their perceptions did differ significantly.

**Keywords:** Virtual learning, Virtual Classroom Virtual Learning Environment, Online Learning. Coronavirus, Motivation, Teachers' Motivation and Pupils' Motivation

## Introduction

Coronavirus disease is a contagious disease that first emerged in Wuhan China in 2019. It was later tagged COVID-19 by the World Health Organization (W.H.O) which stands for Coronavirus Disease 2019. The outbreak of COVID-19 affected all aspect of human activities globally ranging from education, research, sports, entertainment, transportation, worship, social interactions, economy, businesses and politics. Indeed, the entire world was in distress as a result of COVID- 19 threats, the reality of the situation was challenging to bear, and the education sector remains one of the worst–hit by Coronavirus outbreak (Onyema, et al, 2020).

The Coronavirus Disease outbreak poses serious concerns to global education systems. To manage this situation therefore, there was an urgent need for a total lockdown down all over the nation, which was meant to control the spread of COVID-19 in the country. Most governments decided to temporarily close educational institutions in an attempt to reduce the spread of COVID-19 (UNESCO 2020). This lockdown really affected so many activities, of which students generally suffered a lot of setback in their academic works, School closure carries high social, educational and economic costs, and the disruptions they cause touch people across communities, but their impact is particularly severe for disadvantaged persons and their families (UNESXO, 2020b). As at 12<sup>th</sup> January 2021, approximately 825 million learners were affected due to school closures in response to the pandemic.

In response to school closure, UNESCO recommended the use of distance learning programmes and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of Education (UNESCO, 2020). Even though technology can be used as an alternative to fill the gap resulting from school closures, it cannot replace the role of face to face interactions by students and the teachers (Onyeme, et. al., 2020).

With the outbreak of COVID-19, some schools resorted to the use of virtual learning approach to reach out to their students, so as to fill the vacuum created by the lockdown due to COVID 19. This was to ensure that these students continued to learn and survive in the changing world. Virtual learning is a means by which teachers reach out to their students through the use of technology. Virtual learning can be referred to as virtual classroom or virtual learning environment. In this study, Virtual Classroom (VC) and Virtual Learning Environment (VLE) are used. A virtual classroom is an online learning environment (Wang & Newlin, 2012).Virtual classroom is a digital learning environment that allows teachers and students to connect in online in real time. In this learning process, various technological gadgets are employed to facilitate the process. Such advanced technologies include internet, e-mail, website, mobile phone, etc (Mangal, & Mangal, 2009).

These advanced technologies are variable tools for rendering valuable assistance and good alternative to traditional method of education. This alternative could be in form of virtual classroom (Anakwe, 2017). Students can participate in lab exercises, ask questions and effectively interact with the teacher as if the action is taking place in a conventional classroom. VLEs provide a means to manage the learning experience, communicate the intended learning experiences and facilitate tutors' and learners' involvement in the experience (Sneha & Nagaraja, 2013). The main goal is to ease, motivate and provide learning experiences that go beyond the classrooms. Barker and Gossman (2013) claim that VLEs boast a wide spectrum of research showing positive impact across different context (p,22).

However, the fact still remains that the introduction of virtual classroom will definitely have either positive or negatives impact on teachers' and pupils' motivation for teaching and learning respectively. The fact that students were accustomed to different type of learning and communication impacted their motivation, at least in the first part of research process (Preto, Beluce & Oliveira, 2015). Notwithstanding the advantages offered by online learning, varieties of factors have been identified as crucial to the success of online courses (Andresen, 2009). Motivation is one such factor (Bekele, 2010). In online education, authors such as Filcher, and Miller (2000) indicate motivation as the most important determinant factor for the students' academic performance. Motivation is the reason for an action. Motivation is a driving factor influencing performance (Sankaran, & Bui. 2001). In addition, the learners prefer more engaging learning environment which learners and teachers would have direct interaction with other learners, spontaneity, immediate feedback and relationship (Clayton, Blumberg, & Auid, 2011).

Motivation can influence what we learn, how we learn and what we choose to learn (Schunk and Usher, 2012). Research shows that motivated learners are more likely to be actively engaged, exhibit enhanced performance, undertake challenging activities and display resilience in the face of difficulties (Schunk, Pintrich & Meece, 2009). Ryan and Deci,(2000b) added that motivated learners are more likely to undertake challenging activities, be actively engaged, enjoy and adopt a deep approach to learning and exhibit enhanced performances, persistence and creativity

Just as motivation is a key factor in learning, engagement and achievement in face-toface educational context so it is in online learning environment (Jones & Issroff, 2007). Given the important reciprocal relationship between motivation and learning (Brophy, 2010), it is not suppressing that motivation has been actively researched across wide range of traditional educational settings (Schunk, Meece& Pintrich, 2014). While studies that explore motivation to learn in online contexts are limited in both number and scope as others have noted (Beleke, 2010).

Therefore, it is important to note that motivation for learning in VELs has educational objective which must be prioritized, whether in conditions of on-site learning or in educational situations mediated by the use of information and communication technology (ICT). Furthermore, much emphasis has been on the students' motivation for learning in an online delivery of lessons. The role of students' motivation in the process of learning is well known and is supported by research. It is also important to note that in VLEs, teachers' motivation is equally necessary to ascertain because a teacher's level of motivation goes a long way to influence the motivation level of the students irrespective of the learning environment adopted. Teachers' motivation is the reasons emanating from individuals intrinsic to teach and sustain teaching. According to Kamstra (2020), during the COVID- 19 pandemic, keeping students motivated as classes move in an online has been crucial. However, the area of teachers' motivation

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has not received as much attention. Even teachers themselves sometimes overlook the importance of their motivation in the profession.

Even if virtual classroom has been in existence, its application in primary schools in Nigeria is still very "scanty". The adoption of virtual classroom was recently escalated in Nigerian schools. Teachers had no option but to embrace this change in their method of teaching. The pupils also had no option but to equally embrace this new approach to learning. Again, most of the studies that have proved the effectiveness of virtual classroom on teachers and pupils' motivation for teaching and learning respectively were carried outside Nigeria. Again, only a few of this type of study have been done in primary schools in Nigeria. Besides, emphasis have always been on students' motivation for learning in a VLEs, living aside teachers' motivation for teaching despite the challenges face by teachers in ensuring that their students are motivated while teaching them online. Therefore, considering the role that motivation plays in teaching and learning, there is urgent need to investigate the impact of virtual classroom on teachers' and pupils' motivation for teaching and learning respectively. In other to investigate this in selected private primary schools in Calabar, Cross River State, during the COVID-19 pandemic, the following purposes guided the study.

- 1. To find out the perceived effect of virtual classroom on teachers' motivation for learning during the COVID-19 pandemic.
- 2. To ascertain the perceived effect of virtual classroom on pupils' motivation for learning during the COVID=19 pandemic.

The following research questions guided the study:

- 1. What is the perceived effect of virtual classroom on teachers' motivation for teaching during the COVID-19 pandemic?
- 3. What is the perceived effect of virtual classroom on pupils 'motivation for learning during the COVID-19 pandemic?

The following null hypotheses were formulated to guide the study.

 $H_{01}$  There is no significant difference in the mean scores of female and male teachers on the perceived effects of virtual classroom on their motivation for teaching during the COVID-19 pandemic.

 $H_{02}$  There is no significant difference in the mean scores of female and male pupils on the perceived effects of virtual classroom on their motivation for learning during the COVID-19 pandemic

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## Method

The study was carried out in four private primary schools in Calabar metropolis. The survey research design was adopted for this study. The population for the study was 810 comprising 760 pupils (434 female and 326 female) and 50 teachers (19 female and 31 male) obtained from private primary schools in the study area. Simple random sampling was used to select 367 pupils while the entire sub-population of teachers was used in the study. The sample for the study was 417 respondents. The instruments for data collection were two researcher-developed instruments titled Motivation for Online Teaching Questionnaire (MOTQ) and Motivation for Online Learning Questionnaire (MOLQ) were used for this study to ascertain the perceived effects of virtual classrooms on motivation for teaching and learning respectively. These instruments were validated by three experts. Two from the Guidance and Counselling and one from Measurement and Evaluation unit of the University of Calabar. The reliability of these instruments was ascertained using Cronbach alpha method and coefficients values of .67 and .75 respectively were obtained.

Copies of the MTOQ were administered on the teachers in the four private primary school selected for the study, while MLOQ was administered on the pupils in the same private schools where these teachers are working. These teachers also served as research assistance in helping the researcher to administer the MLOQ to their pupils.

Data collected were analysed using mean, standard deviation and independent t-test using SPSS version 22 to answer the research questions and test the null hypotheses at p>.05. For the research questions, a cut-off point of 2.50 was used to guide decision making. In testing the null hypotheses, a hypothesis of no significant difference was retained for any item whose p-value was equal to or greater than p-value of .05 while it was rejected for any item whose p-value was less than p-value of .05.

### Results

**Table 1:** Mean Ratings and t-test Analysis of the Responses of Male and FemaleTeachers on the Perceived Effects of Virtual Classroom on Teachers' Motivation forTeaching during the COVID-19 Pandemic

1	2	3	4	5	6		7		8
S/N	Description of Items	$\overline{\mathbf{X}}$	SD	RM	Male t	eachers	Fema teache		p- value
		1			$\overline{\mathbf{X}}_{1}$	$SD_1$	$\overline{\mathbf{X}}_2$	$SD_2$	
1	I feel very shy whenever I'm teaching the pupils online	2.43	0.66	D	2.55	0.70	2.42	0.60	0.35*
2	I don't feel shy whenever I'm teaching the pupils online	2.75	0.45	А	2.64	0.31	2.58	0.40	0.32*
3	It is really very hectic for me to teach online	2.38	0.36	D	2.67	0.31	2.59	0.33	0.27*
4	Teaching my pupils online makes teaching very easy for me.	3.21	0.31	А	3.08	0.30	3.03	0.34	0.28*
5	I enjoy teaching my pupils online	3.18	0.33	А	3.21	0.31	3.11	0.32	0.29*
6	I get excited whenever I'm teaching my pupils online	3.25	0.38	А	3.10	0.32	2.97	0.39	0.31*
7	Nothing at all excites me about online teaching	2.06	0.30	D	2.36	0.33	2.24	0.35	0.10*
8	I don't enjoy teaching my pupils	2 47		D	2.66	0.42	2.53	0.40	0.30*
9	online.	2.47	0.44	А	3.44	0.49	0.47	0.52	0.21*
	I feel very much relaxed when	3.26	0.46	D	2.63	0.67	2.53	0.48	0.18*
10	teaching pupils online	2.44	0.56						
	I'm always tensed whenever I'm teaching the pupils online								

**Note:** N<sub>1</sub>=31; N<sub>2</sub>=19; X<sub>1</sub> = Mean of group one, X<sub>2</sub> = Mean of group two, SD<sub>1</sub> = Standard Deviation of group one, SD<sub>2</sub> = Standard Deviation of group two; p  $\alpha$  .05, df = 48, \* = Not significant; A= Agreed, D=Disagree

Table 1 columns 3 and 4 presents the mean ratings and standard deviation of respondents on the effect of virtual classroom on their motivation for teaching during the COVID-19 pandemic. The data in column 3 revealed that five items had mean values that ranged from 2.06 to 2.47 and were below the cut-off point of 2.50. The item numbers are 1, 3, 7, 8 and 10. Respondents therefore disagreed that with virtual classroom they are always shy when teaching pupils online, nothing excites them to teach students online, it is not hectic to teach online, they do not enjoy teaching online and are never tensed when teaching online.

The result also showed that five items had mean values that ranged from 2.75 to 3.26 and were above the cut-off point of 2.50. The item numbers are 2, 4, 5, 6 and 9. Respondents therefore agreed that through virtual classroom, they enjoy teaching pupils online, they are always relaxed when teaching online, it is easy to teach online and are not tensed when teaching online. Data on the test of hypothesis 1 (columns 6 to 8) indicated that the ten items had p-values that ranged from 0.10 to 0.35. The

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values were greater than .05 indicating that there was no significant difference in the mean ratings of the two groups of respondents on their perception on the effect of virtual classroom on motivation for teaching during the COVID-19 pandemic

**Table 2:** Mean Ratings and t-test Analysis of the Responses of Male and Female Pupils on the Perceived Effects of Virtual Classroom on Motivation for Learning during the COVID-19 Pandemic

1	2	3	4	5	6		7		8
<b>S</b> /					Male	pupils	Female	e pupils	p-value
N	Description of Items	$\overline{\mathbf{X}}$	SD	RM	$\overline{\mathbf{X}}_{1}$	$SD_1$	$\overline{\mathbf{X}}_{2}$	$SD_2$	
	I'm always happy whenever I'm	3.47	0.58						
1	receiving lessons online.	5.47	0.58	А	3.20	0.61	3.05	0.47	0.26*
2	I feel very sad receiving lessons online.	2.03	0.51	D	2.48	0.58	2.32	0.57	0.21*
3	It's really not encouraging for me receiving lessons online	2.10	0.61	D	2.50	0.44	2.46	0.52	0.30*
4	It is really encouraging for me receiving lessons online	3.32	0.42	А	3.43	0.60	3.28	0.64	0.41*
5	I don't feel comfortable receiving lessons online.	2.26	0.63	D	2.49	0.53	2.35	0.45	0.22*
6	I feel very comfortable receiving lessons online.	3.29	0.54	А	3.46	0.67	3.31	0.58	0.12*
7	I cannot ask questions while receiving lessons online	2.34	0.56	D	2.52	0.56	2.39	0.46	0.19*
8	I enjoy asking questions while receiving lessons online	3.40	0.47	А	3.36	0.52	3.26	0.62	0.20*
9	I don't participate actively when receiving lessons online	2.25	0.17	D	2.51	0.61	2.47	0.49	0.16*
10	I participate actively while receiving lessons online	2.23	0.53	D	2.31	0.01	<i>۲</i> ד. <u>۵</u>	0.77	0.10
		3.13	0.50	А	3.32	0.51	3.24	0.53	0.27*

**Note:** N<sub>1</sub>=152; N<sub>2</sub>=215;  $\overline{X}_1$  = Mean of group one,  $\overline{X}_2$  = Mean of group two, SD<sub>1</sub> = Standard Deviation of group one, SD<sub>2</sub> = Standard Deviation of group two; p  $\alpha$  .05, df = 365, \* = Not significant; A= Agreed, D=Disagree

Table 2 columns 3 and 4 presents the mean ratings and standard deviation of respondents on the effect of virtual classroom on their motivation for learning during the COVID-19 pandemic. The data in column 3 revealed that five items had mean values that ranged from 2.03 to 2.34 and were below the cut-off point of 2.50. The item numbers are 1, 3, 5, 7 and 9. Respondents therefore disagreed that with virtual classroom they are sad, discouraged, uncomfortable receiving lessons, do not ask questions and do not participate actively in receiving lessons online. The result also

showed that five items had mean values that ranged from 3.13 to 3.47 and were above the cut-off point of 2.50. The item numbers are 1, 4, 6, 8 and 10. Respondents therefore agreed that they are always happy, encouraged, comfortable, ask questions and participate actively when receiving lessons online. Data on the test of hypothesis 1 (columns 6 to 8) indicated that the ten items had p-values that ranged from 0.12 to 0.41. The values were greater than .05 indicating that there was no significant difference in the mean ratings of the two groups of respondents on their perception on the effect of virtual classroom on motivation for learning during the COVID-19 pandemic.

#### Discussion

This study investigated the way virtual classroom impacted on motivation for teaching and learning during the COVID=19 pandemic in selected private primary schools in Calabar, Cross River State, Nigeria. Teachers reported that virtual classroom\_impacted positively on their motivation for teaching, students also reported that virtual classrooms motivated them to learn during the COVID-19 pandemic. The use of virtual classroom, in order words, was useful in the teaching and learning of these pupils in Calabar, Cross River State, Nigeria.

This study revealed that a significant difference did not occur in the perception of male and female teachers on their motivation for teaching in a virtual classroom during the COVID-19 pandemic. This could mean that both male and female teachers perceived the use of virtual classroom in their teacher as equally motivating. These advanced technologies are tools for rendering valuable assistance and good alternative to traditional method of education. This alternative could be in form of virtual classroom (Anakwe, 2017). Furthermore, Instructional videos were one of the most accessible media to use because the teacher already had time, and students could easily understand the subject matter. Several class teachers shared this opinion (Rasmitaaadila, et al. 2020). This result agreed with the work of Al-Qahtani (2020) who found out that majority of the students and teachers possess positive attitudes toward teaching and learning online. However, the findings disagreed with those of Hennesy, Ruthven. & Brindley (2005); Strunc (2020); Patrick, Hisley, & Kempler (2000) who found out that these form of teaching is capable of reducing teachers' enthusiasm for teaching.

There is a need to introduce the use of virtual classroom in public schools also, so that students in those schools can also benefit from it, hence it has been proven beyond reasonable doubt that it still remains the best substitute in emergency situations like COVID-19 pandemic. In a study carried out by on the perception of classroom teachers in primary school about the impact of School From Home (SFH) during the COVID- 19 pandemic for 3-4 months in 2020. Participants in the study were 67class teachers in primary schools in 5 Provinces, namely Jakata, West Java, Central Java, West Kalimantan, Indonesia. The instructional media that the teachers most often

used were learning videos, which were either downloaded from YouTube and or learning videos that teachers had created before the COVID- 19 pandemic. Some teachers said that instructional videos were one of the most accessible media to use because the teacher already had time, and students could easily understand the subject matter. Several class teachers shared this opinion

The result also showed that a significant difference does not exist in the perception of male and female pupils on their motivation for learning in a virtual classroom during the COVID-19 pandemic. Preto, et. al, (2015), investigated students' motivation in virtual learning environment and the result revealed significant rates for autonomous motivational behaviours. Students feel enthusiastic and motivated towards the use of VIEs, and they suggest that all teachers should indeed include them in their lessons. The result revealed significant rates for autonomous motivational behaviours. This finding is in agreement with the work of Preto, Beluce & Oliveira, (2015), whose study revealed significant rates for autonomous motivational behaviours in a virtual learning environment. The findings also are in support of Mosquera, (2017),who found that students feel enthusiastic and motivated towards the use of VIEs. This implied that when male and female pupils are taught in a virtual classroom irrespective of gender, they will be motivated to learn.

## Conclusion

Findings from this study that was carried out in selected private primary schools in Calabar metropolis showed that virtual classroom has significant effects on teachers' motivation for teaching as well as on pupils' motivation for learning. The introduction of virtual classroom as an alternative for the physical classroom due to the outbreak of COVID- 19 which later became pandemic in 2020 was embraced by teachers and pupils in some private primary schools, so as to fill the vacuum created by the pandemic. Based on this, it became necessary for one to imagine how this sudden change in the method of teaching and learning can have a significant effect on teachers' and pupils' motivation for teaching and learning respectively. Literature has showed that teachers' motivation equally plays a very vital role in pupils' motivation for learning, either in a face-to-face and online learning. In other words, a nonmotivated teacher can never motivate his or her students, while a motivated teacher influences the motivation level of his or her students positively. However, the importance of motivation in education cannot be over emphasised, be it in the physical classroom or in the virtual classroom. Considering therefore the role that motivation plays in teaching and learning, this study became very necessary.

#### Recommendations

Based on the findings and conclusion of this study, the following recommendations were made.

- 1. Primary school teachers in general should be helped to acquire the necessary skills needed to function effectively in a virtual classroom.
- 2. Pupils in public primary schools should be given an opportunity to learn in a virtual classroom. This will provide these children an equal opportunity to "key" in into the use of this new method of teaching whenever the need for it arises.
- 3. Government should introduce and encourage the use of virtual classroom from time to time in primary schools. This is to avoid being taken unawares just like what happened during the outbreak of Coronavirus disease.

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# ANALYZING PROFESSIONALIZATION IN BUSINESS EDUCATION IN NIGERIA: AN ISSUE FOR ORGANIZING AND MANAGING BUSINESS EDUCATION

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#### Abstract

It is expected that business education should be pursued with a view to satisfying the goals of manpower development. In spite of this, there are incidents where polarization had affected the country's education system which gave rise to a well-orchestrated phenomenon of educational imbalance. The objective of the study is to analyze how stakeholders can use teachers as resource persons in organizing and managing business education in Nigeria and how training of business education teachers will contribute in the administrative process. The study adopted a qualitative contents analysis. This method was used to address issue related to human resource, educational resource and training. Theoretical study was identified and reviewed. The paper concluded that for organizing and managing of business education in Nigeria, Government should live up to expectation by equipping the educational system with both human and material resources. Therefore, training of staff is a strategy by school management to create a spirit of creativity, innovation, morale and affiliation among teachers in the school system. The study recommended that experts in business education should be involved in business education curriculum review to make sure that the contents to be recommended and taught are in line to what it is obtainable in the contemporary day organization practices. Government should organize seminars, workshops and conferences for the training of human resources in business education

Keyword: business, teacher, education, training, professionalization.

#### Introduction

It is believed that business education has the capacity to inculcate the appropriate skills and values orientation to enable the individual to understand his environment and develop into a useful member of the society. In correspondence, Popham in Ajisafe, Bolarinwa and Edeh (2015) asserted that business education is a course that prepares students to take care of their own business matters and to function judiciously as consumers and citizens in a business economy. In the views of Edokpolor and Egbri (2017), business education can be seen as a systematic programme of instruction that equips students for the world of work and further studies at graduate and postgraduate levels. The importance of business education in the overall development of individuals and society cannot be overemphasized. This is because business education serves as an avenue for removing individuals from the shackles and manacles of poverty and unemployment. This probably might be the reason why Idialu in Amoor (2010) defined business education as the education that prepares its beneficiaries for

gainful employment and self-employment. Also, with business education more people would have skills that can make them ready employers of labour. By so doing, their dependence on the nation would be minimized as they become job creators which in turn will help to alleviate poverty and bring about nation's growth and development. In support of this, Amoor (2010) asserted that business education plays an important role in the economic development by preparing and equipping learners with the essential knowledge and skills that will help them to adequately impart knowledge into others; and take care of sophisticated office technologies and information system.

From a global perspective, social and economic development are achieved by application and advancement of professionalism. Thus, business education and education generally are keys to the building of educated economy and society. The kind of business education which is expected to be provided is that which meets the needs of the local markets or stakeholder. Consequently, institutions and institutes are saddled with the multifarious roles to be accomplished through research, teaching and development, dissemination of knowledge and information discovery. To meet up with these roles, business education should be pursued to produce graduates with the appropriate knowledge and skills needed to support social and economic transformation. It is imperative therefore for teachers to be trained and use as resource persons in order to pilot the affairs of business education in Nigeria. Based on this, the following questions were raised:

- 1. How can the stakeholders use teachers as resource persons in organizing and managing business education in Nigeria?
- 2. How can training of business education teachers contribute in the administrative process? This study hopes to provide answers to these questions.

# Method

The study adopted a qualitative contents analysis. The design is considered appropriate for the study because according to Hsieh and Shannon (2005), it is a method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. The researcher used this method to manipulate documentaries and developed themes and sub-themes for the purpose of addressing the issue of professionalization in business teacher education and training. Human resource, educational resource and training were reviewed. Theoretical study was identified and reviewed using books, journals and other periodicals.

## **Literature Review**

# **Professionalization in Business Education**

Unquestionably, business is a serious profession meant for serious minded professionals, and serious minded practitioners. It cannot be a place for charlatans, jokers and clowns. Business profession is not a dumping ground for the visionless and purposeless, a refuge for dregs, nor a haven for the dubious and criminal minded. In affirmation, Aimiuwu (2010) asserted that business is a crucible of creativity, the soul of business, driver of world economies, manager of competition, including global competitiveness. He further emphasized that business sets the corporate agenda, demanding and extracting the best from other professions in response. Business could be the most exciting profession to be in and the most rewarding for those who accept its values and embrace its disciplines. Business is clearly favourable to growth and may be a necessary condition for sustainable economic growth. In support of this, Edokpolor and Owenvbiugie (2017) explained that for sustained economic development to occur, the gains must be complemented by value creating autonomous productivity changes in the particular economy, savings and investment must rise and economic policy must be favourable to private initiative, capital inflows and efficient use of resources.

The contribution of business to economic development is not in doubt. There is consensus that economic development depends on business. This is in line with the postulation of Naude (2014) that business plays a major role in economic development through creation of jobs, strengthen market competition, increasing productivity, reduction of poverty by contributing to the Nigeria Gross National Product (GNP) and Gross Domestic Product (GDP). On the other hand, Haberler in Arodove and Iyoha (2014) asserted that experience has clearly shown that development policies that pay little attention to the vital contribution of trade, private enterprise and direct foreign investment, do yield sustained and efficient industrialization and growth. Realizing that the dynamic benefit of business explains why business is crucial to economic development. Haberler further said that business provides material means (capital, goods, machinery, and raw materials finished and semi-finish materials) indispensable for economic development. Secondly, business is the means and vehicle for the dissemination of technological knowledge, the transmission of ideas, for the importation of knowhow, skills, managerial talents and entrepreneurship. Thirdly business is also the vehicle for the international movement of capital and resources especially from the developed to the developing countries. Fourthly, international business is the anti-monopoly policy and the best guarantee for the maintenance of a healthy degree of free competition.

Finch and Michalopoulos in Iliya, Elisha and Hussaini (2016) had observed that by introducing greater market competition, it encourages more efficient utilization of resources and greater growth in productivity in the whole economy. Moreover, open trading policies permit quicker adaptation to new technologies and greater flexibility in responding to global economic developments.

For growing economy and thriving of businesses to occur, the institutions responsible for human capital development should be properly equipped to be able to educate, train and equip individuals with the necessary skill and knowledge required to

function effectively (Ogundola and Adeyeye, 2021). They further asserted that no nation can progress as expected without a good and effective education, such as business education which is planned to provide the essential competencies and skills to its citizens for self-actualization and national development.

Business education is a course offered at both the secondary and tertiary levels of education. It is a fundamental course that exposes students to the understanding of business concept. According to Abumchukwu (2010), business education is an aspect of total educational programme which provides the recipients with knowledge, skills, understanding and attitude needed to perform well in the business world as producer or consumer of goods and services. Amuchie and Matsayi (2018) added that business education provides knowledge, skills, understanding and other attitudes needed to perform well in the world of business as producers or consumers of goods and services that business offers. The importance of business education cannot be over emphasized. It is crucial for rapid economic growth by providing people with the skills they need to participate fully in the economy and in society (Fergerlind and Saha in Abumchukwu 2010). In consonance, Abumchukwu (2010) added that business education contributes in achieving national development through improving individual creativity, improving participation in the economy, high standard of leaving, self-reliant, employment creation and human capacity development. Since business education is the important instrument for the development of the individual, economy and society, special attention needs to be given to human resources in education by equipping them with the essential knowledge, skills, attitudes and values needed for proper organization and management of business education in Nigeria. However, professionalization in business education is a necessity for teachers who are the most important human resources in the educational system.

## **Human Resource in Education**

Every educational system depends on human resources for effective implementation of its programme. The term human resource in education refers to the8 personnel (academic and non-academic staff) employed and working in an educational institution. In the views of Oludare and Moses (2020), human resources in education refer to the lecturers or teachers, academic and the non-academic staff of an educational institution. Of all these personnel in the education system, teachers are the most important. They help to interpret and implement the curriculum of any course to the level and understanding of the learners. Studies by Nwaka and Ofojebe (2010) and Arubayi (2017) have shown that teachers are the important human resources. They further emphasized that teachers are the only human resource for effective for implementation and attainment of the educational policies and objectives at the practical level of classroom. It is the teacher who interprets and implements policy as represented in the school curriculum, which is designed to actualize educational goals. They help students to learn. Maintaining and improving educational standards is only Analyzing Professionalization In Business Education In Nigeria ...

possible through teachers. Teachers therefore are the most indispensable human resources in the education system.

Human resources in business education programme refers to business education lecturers and non-academic staff in business education departments in an institution who facilitate the implementation of business education curriculum. In this regard, business education lecturers are the most important of other human resources because they have the abilities, knowledge and skills to carry out their various duties such as teaching, research and many other functions that gear towards effective implementation of business education curriculum. To realize the goals and objectives of business education, its human resources should be treated with utmost priority. This is because mismanaging them or underrating their roles may be disastrous in education. In support of this, Omebe (2014) posited that human resource management in education is very important and toying with it would result in jeopardy. However, poor management of teachers hampers the extent to which curriculum can be effectively delivered. It should be noted that the principle of human resources in education is that the outcome of the educative process will be determined by the effectiveness of the teachers who aid learning for self-actualization and national development (Oludare & Moses, 2020).

To ensure effective human resource management, Effiom (2012) assert that educational institutions' managers are expected to manage available human resources for optimal results, ensure effective utilization of material resources, maintain and sustain regular flow of information among stakeholders. They should also enhance, protect and project positive image of the institutions, interpret, apply and enforce rules and regulations for the well-being of the institution and manage crisis. To be effective in fulfilling these functions, the human resource manager must acquire skills that will not only make such manager humane but fair, firm and fearless, focused and mission driven, purposeful and inspiring and ready to try out new ideas and methods. It is expected therefore that a manager who acquires these skills would be able to provide inspiring and transparent leadership, reconcile cultures and interest as well as reduce areas of conflict among workers in the educational institutions for a productive end, avoid discrimination among employees and things that affect relationship and hamper productivity in the educational institutions.

#### Professionalization in Business Education, what has gone wrong?

**Inappropriate Curricular:** Curriculum is expected to reflect the relevant local needs, meet community needs and expectations, develop indigenous culture, social norms and ethics while reflecting current knowledge and best practices with the goals and strategic objectives of an institution of learning in its fiscal concern. This is more desirable in business education. Unfortunately, business education curriculum is deficient in meeting such demand. In support of this, Akpan, Umanah, Umoudu and Ukut (2014) asserted that business education in the country has not been adequately

responsive to the changes in the labour market and the needs of various segments of the population. Ajisafe, Bolarinwa and Edeh (2015) in the same vein concluded that most of the business education courses do not cover the scope of knowledge and skills required for effective preparation of business education teachers in the contemporary society. They further explained that such inadequacies in the curriculum could lead to the production of half-baked graduates. In concurrence, Ejiogu (2000) affirmed that the quality of education in any given society depends considerably on the number and quality of the personnel. An institution of learning is only as good as the quality of its teaching staff. They are synonymous with the production of its graduates, its research products, and its service to the institution, community and nation. The achievement of the education system is recognized by the quality of instruction given to the students as well as the output production in form of graduates. The 21<sup>st</sup> century being essentially the millennium of technology, information and competitive knowledge, updating needs to be an almost permanent undertaking. A shallow knowledge offers little or no knowledge to learners thus producing illiterate graduates.

**Inadequate Financial Resources:** It has been observed that measures to promote institutions of learning and improve the quality to meet challenges of a constantly changing environment are often constrained by underfunding and inadequate financial resources. Jega (1994) confirmed that, there has been gross under-funding of the education sector in the past two decades in Nigeria. In support of this, Folorunso and Taiwo (2018) asserted that in Nigeria, educational institutions are not adequately funded. At times, funds meant for education are channeled to the other sectors of the economy. Even, the meager resources that actually went into the system were quite often mismanaged, misapplied or misappropriated by corrupt administrators of the institutions. Funding has remained a major issue in Nigeria education system over the years. Figures from the federal ministry of education seems to confirm a downward trend since the mid 80s even as enrolment explodes. The budgetary allocation to education as a percentage of total government looks thus:

Table 1: Federal Government Budgetary Allocation to Education Sector 1999-2019								
Year	Allocation as percentage of total budget							
1999	11 12							

I Cal	Anotai
1999	11.12
2000	8.36
2001	7.00
2002	5.90
2003	1.83
2004	10.50
2005	9.30
2006	11.00
2007	8.09
2008	13.00

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2009	6.54
2010	6.40
2011	1.69
2012	10.00
2013	8.70
2014	9.94
2015	7.74
2016	6.10
2017	7.38
2018	7.03
2019	7.02
Source: Central Bank o	f Nigeria (2019) Statistical Bi

Source: Central Bank of Nigeria (2019) Statistical Bulletin

Educeleb (2019) noted that Nigeria allocate 6.7% of 2020 budget to ministry of education, definitely these figures are far below what obtained in many less endowed states in Sub-Saharan Africa within the same period. While Nigeria spends an estimated 2.4% of its GNP on education, the sub-Saharan as a whole spends 5.1%. The amount of money devoted to education is far lower than the 26% of government expenditure recommended by UNESCO.

**Quality Assurance Mechanism Are Ineffective:** Quality assurance in education examines the effectiveness and efficiency of administration, teaching, learning and research. Quality assurance can be pursued through the internal monitoring mechanism of the tertiary institutions minimum admission requirement, approval of new programmes, programs monitoring and external examinations. The need for effective quality assurance mechanisms is not debatable because of the enormous importance attached to tertiary education as a driver of growth and development on one hand and as a result of globalization. No country that would like to compete effectively in the global economy would want to run a university or an educational system that compromises quality. Akunyili (2010) stated that universities are expected to be centers of excellence. The excellence in questions must be in both academic and character. That is why tertiary institutions graduation ceremonies, the graduates are announced as those who have been found worthy in character and learning.

The external quality assurance processes in the tertiary institutions are performed by the National University Commission (NUC) and the National Board for Technical Education (NBTE) and Teachers Registration Council of Nigeria (TRCN) while professional bodies on the other hand perform similar roles. While it is the statutory role of the NUC and NBTE to draw up minimum academic standards, accredit degree and other academic awards of universities and polytechnics with the aim of impacting on students' academic achievements, the professional bodies should supervise the instructions and examinations leading to approval of professional certificates.

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#### **Training of Resource Persons**

Resource persons are experts who provide solid information and opinions to participants in a learning situation. They are used to conduct educational activities. During educational activities, resource persons do not just add expertise but also make the activities lively and interesting for the participants by integrating their own experiences. In educational institution, to enhance achievement of intended educational goals and objectives, proper training has to be carried out.

Training is an integral part of an organization as it contributes considerably in increasing the quality of personnel working in an organization. According to Nmadu and Khalil (2017), training is a good technique for improving personnel skills and retaining competent human capital that will improve organizations' efficiency and effectiveness. Elozieuwa (2012) asserted that training equips individuals with the essential knowledge, skills, ability and attitudes needed for effective job performance. On the other hand, Salah and Musa (2014) asserted that training is one of the most important aspects of every organization which has a great impact on the effectiveness of human resources because no matter how carefully job applicants are screened before employment, definitely, a gap is always left between what employees know and what they should know. On this note, staff training is therefore needed to fill the gap.

The attention on staff training differs from one institution to another depending on the need of an organization, management decision, technological uses, the ability and willingness of an institution to benefit from training to raise the performance, experience, skills and knowledge of employees. Mograbi (2008) looked at staff training as a set of activities aimed at assisting an employee to acquire new knowledge, skills and attitudes necessary for the effective performance of a specific task or job. Staff training is an important part of staff preparation programmes, especially the aspects of teaching that are more skilled-like in their conception, but there are many other important aspects of teaching that could only be nurtured through reflective strategies and experiences. Training of staff is more likely to lead to diversity in practice at all levels of instruction. Ibrahim (2009) explained that there are several outcome areas that are potentially affected by staff training programmes. These include: staff knowledge, beliefs, teaching practice, school-level practice and student academic achievement. Training of staff provides them with knowledge, skill and ability that are relevance to the professional life of teaching profession. Staff training molds the personality of the trainee such that their attitudes are reshaped, their habits are reformed and their personality is reconstituted.

Training in relation to education system is the processes designed to enhance the professional knowledge, skills and attitudes of teachers so that they may in turn improve the teaching and learning process. In business education programme, business educators (teachers) who are professionals in business education need to be

trained to acquire knowledge and skills that will help them to organize and manage the affairs of business education. On the other hand, training is the process through which change of behaviour, knowledge and motivation of teachers could be achieved in order to improve the compatibility between the characteristics and capabilities of staff and the job requirements in the school system. In order words training of teachers is very important.

Training of teachers is more likely to lead to diversity in practice at all levels of instruction. Ibrahim (2009) explained that there are several outcome areas that are potentially affected by teacher training programmes. These include: staff knowledge, beliefs, teaching practice, school-level practice and student academic achievement. Training of teachers provides them with knowledge, skill and ability that are relevant to their professional life. It is also a strategy by school management to create a spirit of creativity, innovation, morale and affiliation among teachers in the school system. Training molds the personality of the trainees such that their attitudes are reshaped, their habits are reformed and their personality is reconstituted. Through training therefore, trainees learn new knowledge and skills for effective job performance. Mograbi (2008) looked at training as the activity of running pilot programs and design it in order to develop personnel collective performance with the aim of raising the level of efficiency of the organizational performance.

#### **Theoretical Framework**

#### Human Resource Management Model

The model was developed by American Society for Training and Development (ASTD). It provided the focus for understanding of human resource management. ASTD model identified nine (9) human resource areas: training and development; organization and development; organization/job design; human resource planning; selection and staffing; personnel research and information systems; compensation/benefits; employee assistance and union/labour relations.

A simple way to describe human resources management based on the above model is in process-system terminology. The significance of the process-systems view is that it recognizes the interdependence of HRM components with other aspects of management in an organization. More specifically, human resource planning for business teachers is required in our institutions of learning to meet the objectives of forecasting the staff requirement, cope with changes, develop strategies for effective utilization of manpower productivity and promotion of professionals.

#### Conclusion

Business education has the capacity to inculcate the appropriate knowledge, skills and values needed for an individual to understand his environment and develop into a useful member of the society. It is also a systematic programme of instruction that equips students for the world work and further studies at graduate and post-graduate

levels. This therefore is an indication that with the knowledge of business education, individuals would have the skills that can make them ready employers of labour and by so doing, their dependence in the nation is minimized and poverty alleviated. For this, human resources in education more especially teachers should be well trained so as to acquire the requisite skills and knowledge needed to pilot the affairs of business education programme. However, in Nigeria, effective implementation of business education is hampered by a myriads of challenges as a result of negligence on the part of Government. Based on this, this paper concluded that for organizing and managing of business education in Nigeria, Government should live up to expectation by equipping the educational system with both human and material resources. At this juncture, some recommendations were made.

## Recommendations

Having highlighted the challenges for implementing inclusive curriculum, the following recommendations are made:

- 1. Government should provide adequate infrastructural facilities in the education system. These include conducive classrooms, hostels, functional laboratories and libraries, regular water and electricity supply, staff residential accommodations, good and furnished offices, healthcare centers, recreational facilities and good roads as well as adequate security of lives and property.
- 2. Government should improve on the funding of business education programmes across all levels of education in Nigeria.
- 3. Business educators (teachers) should be adequately encouraged and motivated with good remuneration and good working conditions.
- 4. Experts in business education should be involved in business education curriculum review to make sure that the contents to be recommended and taught are in line to what it is obtainable in the contemporary day organization practices.
- 5. Government should organize seminars, workshops and conferences for the training of human resources in business education.

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