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The Relationship between Teachers' years of teaching experience and the impact on Student`s Academic Achievements in Senior Secondary School Mathematics in Taraba state.

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ABSTRACT:
This study examined the relationship between teacher's years of teaching experience and the impact on Student`s Academic Achievements in Senior Secondary School Mathematics in Taraba state. Nigeria. The study adopted simple survey design. A review of related literature to the study was carried out. Data collected and collated were based on a set of Scales in the Questionnaire Mathematics Teacher's Years of Teaching Experience Related Scales (MTYTERS) consisting of twenty four (24) items and was administered to eighteen (18) public schools across the State; three LGA from each senatorial zone of the State, consisting of nine (9) LGAs with sample size of 900 students. These instruments were validated and found to be reliable at 0.89 and 0.91 respectively. One hypothesis were generated and tested at 0.05 significant level and Data were analyst using Chi-square and Pearson correlation Statistical Method through SPSS statistical Software computer package. The Null hypothesis was rejected and the alternative upheld. Findings revealed that there is significant moderate positive relationship between teacher's years of teaching experience and the impact on Students Achievement in senior secondary school Mathematics. Hence from the findings made, the researcher drew conclusion and recommended among others that Government through the Ministry of Education should ensure that qualified and experienced teachers be employed into the school system to help stimulate and enhance academic achievement in senior secondary schools mathematics.

KEYWORDS: Questionnaire, Student`s Achievements, Years of teaching Experience, Pearson correlation, Chi-square, SPSS.

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INTRODUCTION:

Over many decades, the use of mathematical techniques has been gaining a lot of grand in social and biological science and as well as in the field of commerce and management. In fact the exactness and precision of mathematical language, methods and concepts have made it possible to explore large areas of research in these subjects which remained hidden so far from the keen eyes of the researchers. Relentless time, one could say that mathematics is probably the most convenient shoulder to lean on for not just pure sciences but also subjects like commerce and economics. However, because of it's important to the society, there is need to break a new ground to fashion out which ways the subject could be well understood by the students to maximize their performances. Nevertheless, it is observed in decade(s) that secondary school student's achievement have been very low in their final examinations and class activities in the subject. The low achievement may not only be as a result of any changes in content of mathematics, but also lack of instructional materials usage by the teachers in delivering the content. Therefore the role of mathematics cannot be over emphasized in life-like activities, students' academic achievement, Nation building and National deployment.

Mathematics Education in Nigeria seems to be passing through the furnace of transformation. This could be inferred from the efforts of the Mathematical Association of Nigeria (MAN) in the last few decades to popularize the teaching and learning of mathematics at all levels of instruction. Consequently, the mere knowledge of mathematical concepts without the corresponding knowledge of their application to real life seems to be fading away. This among other things has influenced human learning and challenged educators, especially in the area of mathematics education, to experiment with innovative instructional methods for core curriculum across all levels of educational system. In Nigeria, mathematics has continued to be one of the core subjects at all levels of education so that, every child will acquire appropriate mathematical skills and knowledge to solve human problems in all spheres of life (Nigerian Educational Research and Development Council [NERDC], 2008). Learning and understanding of some mathematics topics have not only been frustrated by the nature of the topics but also by clumsy methods and teachers experience in teaching (Etukudo, 2000; Etukudo & Utin, 2006). The resultant effect is the poor achievement level of students both in internal and external examinations. In view of this, Iji (2002) in trying to find solution to this ugly situation of poor performance in mathematics in public examination identified teaching techniques by the teachers as one of the contributory factors. This point to the fact that good teaching helps the learners to learn more qualitatively and quantitatively and poor teaching would lead to poor learning and poor performance. One may associate this poor mathematics achievement by Nigerian students to some pedagogies adopted (Salau, 2002). He lamented on poor achievement of students in mathematics and points out that introduction of suitable instructional materials and employment of experience teachers are the likely solution. Literature and available records have shown a variety of efficacious innovative teaching strategies that have been identified by researchers to alleviate this problem of poor performance of students in mathematics, but their performance continues to deteriorate year after year. However, none of these research efforts has sought solution to this problem from the dimension of using student-centred and home-based activity approach to teaching- which is Problem Based Learning (PBL). According to Shaibu and Usman in Kurumeh (2006), involvement of students in the teaching and learning process which means a departure from the traditional methods of teaching is another means of ensuring active learning in science and mathematics. The call for a departure from traditional methods of teaching with its attendant poor performance indices has been sounded by researchers

(Okebukola, 2002; Iji, 2005; Etukudo & Utin, 2006; Abakpa, 2011; Mtsem, 2011). This is with the intension of obtaining admirable results. However, this departure cannot come only through such means as Computer Assisted Instruction, Mastery learning, Logo and Basic Instructional Packages as well as Contextual Strategy in teaching mathematics. There is still poor performance of students in public examinations yearly. Thus, research on instructional strategies that will improve the quality of learning of mathematics has continued to generate interest among mathematics educators and scholars as the conventional method has failed to meet the learners' needs. The implication of these lapses identified in the conventional teaching method is that nontraditional teaching methods that will improve students' achievement have to be explored. The low achievement in mathematics by the students has been a source of concern to the public and mathematics educators in view of importance attached to mathematics as a veritable tool for the overall development of the individuals and the society at large. Reports on various teaching techniques indicate that they improve students' learning and achievement. Yet results from public examination bodies on students' achievement are low. Thus, the need to explore other strategies that may enhance students' achievement in mathematics. As students become increasingly poor in mathematics achievement test, they are less inclined towards a learning approach which requires them to be self-directed and motivated. Mathematics should be ideal for students working in groups and can benefit them as they are more likely to brainstorm and come up with ideas and thoughts before they reach possible solutions. Idoko (2008) revealed that unprofessional and unqualified basic science teachers using inappropriate teaching methods in conveying practical skills to students are responsible for lack of interest and poor performance of students in basic science practical. This indicates that teacher's years of teaching experience and nature of skills in conveying practical skills are among the factors affecting the performance of students in the subject (mathematics).

PROBLEM STATEMENT/JUSTIFICATION:

One of the major problems facing education sector in Nigeria is the low level of the performance of secondary school students in both local and standardized examinations. It has become a great concern for researchers, educators and all education stake-holders over the years. It was observed that students usually fail in examinations owing to improper teaching methods and lack of essential teaching aids for instructional delivery (Afolabi, 2009).
This study therefore deemed it necessary to look specifically into how teacher's years of teaching experience contributes to academic achievement of secondary school students in Mathematics.

Nevertheless, Mathematics as the bedrock of all scientific and technological advancement is a pre-requisite to almost all courses in colleges of education, polytechnics and universities. Mathematics is a human invention, borne out of human mind, resolve to solve human problems. Thus as a creation of mind, it is concerned primarily with ideas, process and reasoning. Of all the factors that affect teaching-learning in the educational system of any society, lack of teacher's with more years of teaching experience seem to constitute the primary issue. Perhaps, the non-consideration of teachers experience among others seem not to have brought about an effective teaching and learning, which also could have resulted in students' poor achievement in WAEC and NECO examinations. Furthermore, It is surprising that despite the efforts of government, to improve the standard of education by providing the required human and material resources for the implementation of education at all levels, students' performance in Mathematics in internal and external examination is very poor in recent years. This situation makes one to wonder what could be the causes of this persistent

failure of students in mathematics examination. Some scholars attributed this high failure rate in mathematics to various factors which could be institutional and non- institutional. Hence, the need to adopt the employment of quality teachers with many years of cognitive experience that would positively influence candidates' achievement in both internal and external Examination. Therefore, the problem to be investigated in this study posed as questions are: Would students improve upon their academic achievement in mathematics if the teachers are well experienced in teaching? is considered. The problem which this study intends to solve, is what then is the impact of teachers' years of teaching experience on mathematics students' academic achievement in Taraba State-Nigeria?

OBJECTIVE OF THE STUDY:

To evaluate the relationship between teacher's years of teaching experience and students` academic achievement in senior secondary school mathematics.

SIGNIFICANCE OF THE STUDY:

The study is mainly focused on the evaluation of the relationship between Teacher's years of teaching experience and students` academic achievement in senior secondary school mathematics. It is hoped that, the study would help the educators, government, industries, and curriculum planners toward holistic realization of the student's potentialities in school. They will understand the significant of the use of experience teachers in teaching for optimum academic achievement. Parents will use the knowledge of the results to involve and advise their children and wards at home in terms of scheduling engagement and responsibilities for them. Mathematics teachers and counsellors would also be assisted by the outcome of this study to sequence academic activities and the attainment of the school goals. However, mathematics teachers will be armed with the requisite information about the various factors that influence students' academic performance and foster ways to enhance students' interest in the teaching and learning process. Also to improvised adequate teaching and learning equipment for the effective teaching and learning of mathematics.

Furthermore, findings from this study maybe of utmost importance to educational and curriculum planners because it would act as a feedback or evaluation to the curriculum implemented, to ascertain if the required experience, expertise, qualification stated for entry into secondary teaching, meets the educational needs of the learners, to make further prescription or better analyse the effects of teachers attitudes on students' Academic performance.

Finally, it will be of great importance to future researchers who would seek reference on recent literature review and to give an up to date analysis on the research topic and equipment for teaching and learning of mathematics.

RESEARCH QUESTION:

To what extent does the teacher's years of teaching experience relates to student's achievement in senior secondary school Mathematics?

RESEARCH HYPOTHESIS:

In order to achieve the purpose of this study, this hypothesis is formulated to guide the

researcher. There is no significant relationship between teacher's years of teaching experience and student's achievement in senior secondary school Mathematics.

SCOPE OF THE STUDY:

This study is however delimited to senior secondary students (SS2) in eighteen (18) public schools across the State; three LGA from each senatorial zone of the State, consisting of nine (9) LGAs in Taraba state in North Eastern part of Nigeria.

REVIEW OF RELATED LITERATURE:

The reviews of related literature focus on the following sub-headings:
(i) Objectives of senior secondary school general mathematics.
(ii) Taxonomy of educational objectives
(iii) Relationship between teachers' teaching methods and students' performance in mathematics.
(iv) Students' perception of mathematics and academic achievement.

OBJECTIVES OF SENIOR SECONDARY SCHOOL GENERAL MATHEMATICS:-

Apart from the general aim of secondary school education in Nigeria which is geared towards education preparing individuals for useful living in the society and higher education as important in:
(i) Providing trained manpower at sub professional level in applied sciences, technology and commence;
(ii) Inspiring students' with a desire for self-improvement and academic excellence;
(iii) Providing technical knowledge and vocational skills necessary for agricultural, industrial, commercial, and economic development.

The Federal Republic of Nigeria (FRN) (2006) specified the objectives of the senior secondary school general mathematics curriculum to include the test of the following:
(i) Habit of effective and reflective thinking;
(ii) Communication through symbols, expression and graph;
(iii) The ability to distinguish between relevant data;
(iv) Computational skills;
(v) The ability to recognize word problems and translate them into mathematics expressions before solving them with related mathematics knowledge;
(vi) The ability to be accurate to a degree relevant to the problem at hand;
(vii) Precise, logical and abstract thinking.

TAXONOMY OF EDUCATIONAL OBJECTIVE:

According to Bloom (1956) in Esu, Enukoha and Umoren (2006), the major categories in educational objectives is the Taxonomy of abilities and skills that can be ranked from simple to complex beginning from memory, comprehension, application, analysis, synthesis and Evaluation. These stages are developmental because it is only what one understands, that he can apply.

Cognitive objectives are those objectives, which emphasize remembering or reproducing something, which has previously been learnt. They also include objectives which have

involve the solution of some intellectual problems for which the individual has determined the essential problems and recorded the materials or combined it with some ideas, methods and strategies.

According to Krathwohl (1964) in Esu, Enukoha and Umoren (2006), the major categories in the affective domain of the taxonomy of educational objective includes receiving, responding, value, organization and the characterization by a value or value complex. The affective domain includes the objectives which emphasize tone, emotion, or a degree of acceptance or rejection. They vary from simple attention to selected phenomena to complex, but internally consistent qualities of characters and conscience.

A large number of such objectives in our educational literature are expressed as interest, attitude, appreciation, values, emotional sets and biases.

Sampson (1966) in Esu, Enukoha and Umoren (2006) opined that, the major categories in the psychomotor domain of the taxonomy of educational objectives include the following: perception, set, guided responses, mechanism, complex overt responses and origination.

The psychomotor domain expresses objectives which emphasize muscular and motor skills, some manipulations of objects or some acts that requires neuromuscular co-ordination.

Such objectives when found on our educational literature are related, to handwritings speech, physical education as well as trade and technical courses.

VALUES OF TAXONOMY OF EDUCATIONAL OBJECTIVE:

(i) It makes for a tightening of the languages of educational objectives such that, the objectives give direction to the learning process and determine the evidence to be used in appraising the effect of the learning experience.
(ii) It enables authors of educational objectives to know exactly what they mean and the learners to equally have a clear view of what is intended.
(iii) It provides a convenient system of describing and comparing test items, examination technique and evaluation instruments.
(iv) It makes possible for the compression and studying of educational problems as well as serve as a tool clarifying and organizing educational research results:
(v) It envisions the possibility that we select the principle of classifying educational outcome which will reveal a real order amongst those outcomes.

SECONDARY SCHOOL STUDENTS' PERCEPTION OF MATHEMATICS AND ACADEMIC ACHIEVEMENT:

Perception according to Monbipon (1986) refers to an innate feeling which leads to the development of attitude. He asserts that, attitude formation is built on already existing perception about a person, a thing or an event.

Relating perception to learning of mathematics, Monbipon (1986) in Fredrick (1980), asserts that students perceived mathematics from several influences, He pointed that students' perception of mathematics could be based on experience, age, other student perception, societal perception and surrounding learning circumstances.

Monbipon (1986) in Fredrick (1980), assert that perception based on experience occur in an

instance where a student after being taught mathematics using the available resources and skills could not still understand mathematics. He asserts that is generally not out of place for such a students to come to a conclusion that mathematics is difficult. He asserts also that they cannot understand mathematics no matter how much they try.

Itah (1991) opines that perception is an inner feeling drawn after an experience through the senses. He asserts that we perceive by touching, seeing, smelling. he posits that most school children live on assumption that certain subjects are difficult, but the number of students who really perceives the school subject and concludes on its difficulty, is the number of students who took time to time to encounter the subject through experiences. He contends that perception instigates other innate feelings and hence becomes motivator. He maintains that a positive perception generates interest and inculcates positive attitude in students while a negative perception generates stress, fatigue and discourages participation. He also asserted that for which most school children perform poorly in mathematics is because their perception of mathematics is poor and built upon fear of event encountering the subject to see its level of difficulty.

Falowiyo (1989) contends that most students' perception of mathematics is determined by students' experience from school variables. Notably among these variables is the teacher factor. He maintained that an unqualified mathematics teacher with poor teaching methods will tend to make students have negative perception of mathematics.

In study with 250 students in Oyo State, he found that interest and perception has a direct relationship. He maintained that the level of interest a school child has on a school subject or a classroom activity depends on his/her perception of that subject or class activity.

Jackson (1984) posits that meaningful learning is determined by the level of readiness of the learner. He opined that students' readiness must be in line with physical and psychological readiness. He contends that a child seated quietly in a class could be seen to be physically ready to learn but his psychological readiness depends on his anticipation and emotion at that point in time. He maintained that student's perception out-weighted other psychological factors like emotion fear. He asserts that this position was taken based on his findings that perception makes students to draw certain conclusion about a school subject and that when it is done, it becomes difficult for the child to depart from such conclusion.

IMPACT OF TEACHERS' YEARS OF TEACHING EXPERIENCE ON STUDENTS' ACHIEVEMENT IN MATHEMATICS

Teacher experience has to do with the increased awareness of diversifying search for new ideas, new commitments and new challenges. Teachers' experience and knowledge of subject matter are unique qualities for teaching effectiveness. According to Rice (2010) the magnitude of the effect of teacher experience varies depending on the teacher's level of education and the subject area. He further opined that experience gained over time, enhances the knowledge, skills, and productivity of workers. These qualities facilitate students' skills and abilities to think about chemistry processes, useful for exploration and analysis, and also enables thorough understanding of chemistry concepts. Experienced teachers are great asset to novice teachers who need advice, encouragement and continuous guidance. Okey (2012) stated that experience is directly related to teachers' ability to plan lessons, address divergent student responses, reflects on their teaching effectiveness and their ability to stimulate student inquiry. Akinyele (2001) and Commey-Ras (2003) commented that experience improves

teaching skills while students learn better at the hand of teachers who have taught them continuously over a period of years. Senechal (2010) found that teacher experience has a significant positive effect on student achievement, with more than half of the gains occurring during the teacher's first few years, but substantial gains occurring over subsequent years; albeit, at a slower rate. Furthermore, teachers with long years of experience are confident that even the most difficult student can be reached if they exert extra effort; while teachers without experience feel a sense of helplessness when it comes to dealing with unmotivated students (Gibson & Dembo, 2001). With adequate pedagogical exposure, the teacher exhibits cordial relationships with students and participation in class increases. Domike (2002) outlined phase experiences in the teaching career. He opined that experiences in the teaching profession have to do with factors such as exploration, stabilization, experimentation and diversification. These phases are outlined as shown; Phase 1: Career exploration phase which is starting out, (1-5 years) is a period of survival, discovery and enthusiasm. Teachers take up responsibilities during this phase with uncertainties and complexities of the environment. At the fourth year of the teacher's profession, stability plays a great role to characterize the teacher's response to commitment. With unattractive incentives, the teacher is interested in enhancing his educational attainment for greener pastures. Pedagogical mastery is identified and pursued with vigour and greater flexibility applied. Between 1-10 years, beginning teachers were found to have pitfalls in their application of instructional methods and in group dynamics.

Between the 15-25 years of teaching, in mid-career years, teachers draw a balance sheet of their career lives and examine the possibility or unlikelihood of changing careers. At this stage, teachers are more critical, direct and dominance prevails. After the phase of uncertainty, from 26-33 years of professional experience, some teachers achieve serenity and greater confidence to invest in teaching.

Maduabum (2007) posited that newer teachers may be excited about new discoveries, but teachers with more experience can distinguish valuable ideas from passing facts; though, there may be exceptions. Experience brings humility, good judgment and ability to see the larger story. Experience and immersion in the subject affect teaching in diverse ways. It grows knowledge repertoire, improves utilization of more materials and ideas in profound ways. Experienced teachers are good assets to novice teachers who need encouragement, advice and guidance. Akinyele (2001) and Commey-Ras (2003) who posited that long years of teaching experience improves teaching skills and students learn better at the hands of teachers who have taught them continuously over a period of time.

Lochran (2001) argues that "the outcome" question is what currently motivates teacher education. She set down three ways in which outcomes of teacher education are constructed. One of them is long term impact outcome (refers to the relationships) between teacher qualifications and student learning. Teacher qualification encompasses teachers' scores on tests and examinations, their years of experience, the extent of their preparations in subject matter and what qualifications they hold in their area of expertise and their on-going professional development. He went on to posit that the relationship between teacher qualification and student learning as the percentage of variance in student scores accounted for by teacher's qualifications when other variables are held constant or adjusted.

Specifically, highly qualified teachers are required to;
1. Have sufficient subject matter knowledge and teaching skills.
2. Hold at least a National Certificate in Education (NCE).

Among teacher behaviors that have been shown to lead to high student achievement are efficient classroom management skills, systematic teaching approaches providing clear teaching goals and using advance organizer.

Teacher qualification may affect students' academic achievement, according to a study conducted by Abe (2014) in Sky Journal of Education highlighted three ways in which teacher qualification can be quantified that is;
(i) Level of education;
(ii)Years of experience in preparation of subject matter and pedagogy and;
(iii) Certification in their expertise area and their on-going professional development.

In South Africa, a study carried out by Buddin and May (2009) on the teacher licensure test scores and other teacher attributes effect on elementary student achievement showed large differences in teacher quality across school district. Teacher license test scores were unrelated to teacher success in the classroom; student achievement was not related to the teachers' advanced degrees, student achievement increases with teacher experience but the correlation is weak.

In America, Dan and Dominic (2010) reporting on evaluating the effect of teacher Degree Level on educational performance in America released by the National Commission on Teaching and America's Future offers a general indictment of the teaching profession. The report states that many newly hired teachers are unqualified for the job. In particular, the commission reports that one fourth of high school teachers lack college training in their primary classroom subject and that teacher recruiting and hiring practices nationwide are 'distressingly haddock' Teacher qualification may influence student achievement in urban secondary schools.

In South Africa, Buddin and May (2009) studied teacher qualifications and student achievement in urban elementary schools. The study examined the teacher licensure test scores and other teacher attributes effect on elementary student achievement. They used longitudinal approach. The results showed large differences in teacher quality across school district. Teacher license test scores are unrelated to teacher success in the classroom; student achievement is not related to the teachers' advanced degrees, student achievement increases with teacher experience but the correlation is weak. In Florida Journal of Educational Policy Dan and Dominic (2010) examined the number of qualified teachers and the relationship to students' academic performance in public secondary schools in a sample of Local Government Areas in Nigeria. This descriptive study used a post-hoc dataset. An instrument titled "Quantity and Quality of Teachers and Students' Academic Performance" was used for the study. Findings of the study showed teachers' qualifications, experience and class size were significantly related to students' academic performance. These finding were used to guide planners about the need for qualified teachers to facilitate effective teaching and learning in secondary schools in Nigeria.

In Nigeria, Owalabi (2012) examined the effect of teacher's qualification on performance of senior secondary school physics students in physics. The purpose was to determine whether the status of the teacher has any impact on the performance of students in physics. The study used descriptive survey design. Data was collected using questionnaires and document analysis and was analysed using inferential statistics. The study found that students taught by teacher with higher qualifications performed better than those taught by teacher with low qualifications. The results also revealed that students taught by professional teachers

performed better, however teachers' experience in teaching the subject was of significant advantage in physics. Based on the results it was recommended that students in the year of examination should be taught by experienced teachers.

IMPACT OF TEACHERS' QUALIFICATION ON STUDENTS' ACHIEVEMENT IN MATHEMATICS

Abe (2014) in a study on effect of teacher qualifications on students' performance in Mathematics in secondary schools; the study examined the effect of teacher's qualifications on student performance in mathematics. Three hundred students were randomly selected from ten schools which were purposefully selected. The results showed that a significant difference existed between students taught by professional teachers and non-trained teacher. It was recommended that only trained qualified teachers should teach mathematics in secondary schools. Training of un-trained teachers helps them to improve their teaching methods and in turn help to improve performance of students in mathematics.

A study in Kenya by Musau and Abere (2014) examined performance of teachers on subject such as Mathematics, Technology and science in secondary schools of Kitui. The study looked into the extent to which teacher qualification influenced students' academic performance in Science Mathematics and Technology subjects. The study applied ex-post-facto survey research design. Data was collected using questionnaire and document analysis. It was analysed using descriptive and inferential statistical tools. The study found that there was no significant difference in performance of students taught by teachers who had undergone refresher courses and those taught by teacher who had not undergone refresher courses as they were both graduates. The study recommended that teachers should undergo more regular in-service and refresher training of Science Mathematics and Technology to enable them embrace and conform to the emerging technologies and teaching methods.

These studies have shown that there is some relationship between teacher qualification and students' academic achievement; these studies were carried out in secondary schools with specific subjects. The studies have reported that teachers without being expert of the said subjects would not perform to the same level as qualified teachers. The studies reviewed dealt with teacher qualification and experience influence on student performance with a lot of focus on the secondary education level.

Afangideh (2011) asserts that teacher qualification influences students' performance and professional preparation is needed by chemistry teachers through adequate and informed exposure to courses for teaching effectiveness. The Education and Training Commission of Europe (2010) also points out that teacher qualification is an essential factor thnat provides learners with personal fulfilment, better social skills and more diverse opportunities.

MATERIAL AND METHODS:

STUDY DESIGN: The study adopted simple survey design. Data collected and collated were based on a set of Scales in the Questionnaire Mathematics-Teacher years of Teaching Experience - Related Scales (MTYTERS) consisting of twenty four (24) items and was administered to eighteen (18) public schools across the State; three LGA from each senatorial zone of the State, consisting of nine (9) LGAs with sample size of 900 students. These instruments were validated and found to be reliable at 0.89 and 0.91 respectively. One hypothesis were generated and tested at 0.05 significant level.

STATISTICAL ANALYSIS: Data were analyst using Chi-square and Spearman rank correlation Statistical Method through SPSS statistical Software computer package version 21 to test for the relationship between the dependent and independent variables at level $p < 0.05$ considered as the cut off value for significance.

DESCRIPTION OF STUDY AREA: The area for this research consists of nine (9) local Government areas which includes Bali-Wukari-Takum-Donga-Jalingo-Gassol-Zing-Ardo-kola-Gashaka-LGA. Three from each senatorial zone of Taraba State.

RESULTS:

Hypothesis Ho:

There is no significance relationship between teachers' years of teaching experience and students' Academic Achievement in Mathematics.

Table 1.1: Chi -Square Analysis on the relationship between teachers' experience and students' Academic Achievement in Mathematics.

S/N	Affirmative (SA+A)	Decline (D+SD)	TOTAL	DF	X^2 -Cal	X^2 -Crit.	Level of sign.	Decision	Teacher's years of Experience
21.	166	82	248	3	20.5857	7.815	0.05	Rejected	1-5yrs
22.	104	107	211						6-10yrs
23.	116	120	236						11-15yrs
24.	118	87	205						15 and above
Total	685	215	900						

Source: fieldwork, (2023)

The table shows that the X2 calculated value of 20.5857 is higher than the X2 critical value of 7.815 at 0.05 level of significance. The null hypothesis is therefore rejected and the alternative upheld. This implies that there is significance relationship between teachers' years of teaching experience and students' Academic Achievement in Mathematics.

Table 1.2: Distribution of teachers by teaching years of experience

YEARS OF EXPERIENCE	FREQUENCY	PERCENTAGE
1-5 years	8	44
6-10 years	5	28
11-15 years	3	17
15 and above	2	11
Total	18	100.0

Source: fieldwork, (2023)

According to the findings, 28 % of the respondents had been in service for 6-10 years, 17% of teachers had a teaching experience of 11-15 years, while 44 % had been in service for period between 1-5 years and 15 years and above 11% simultaneously.

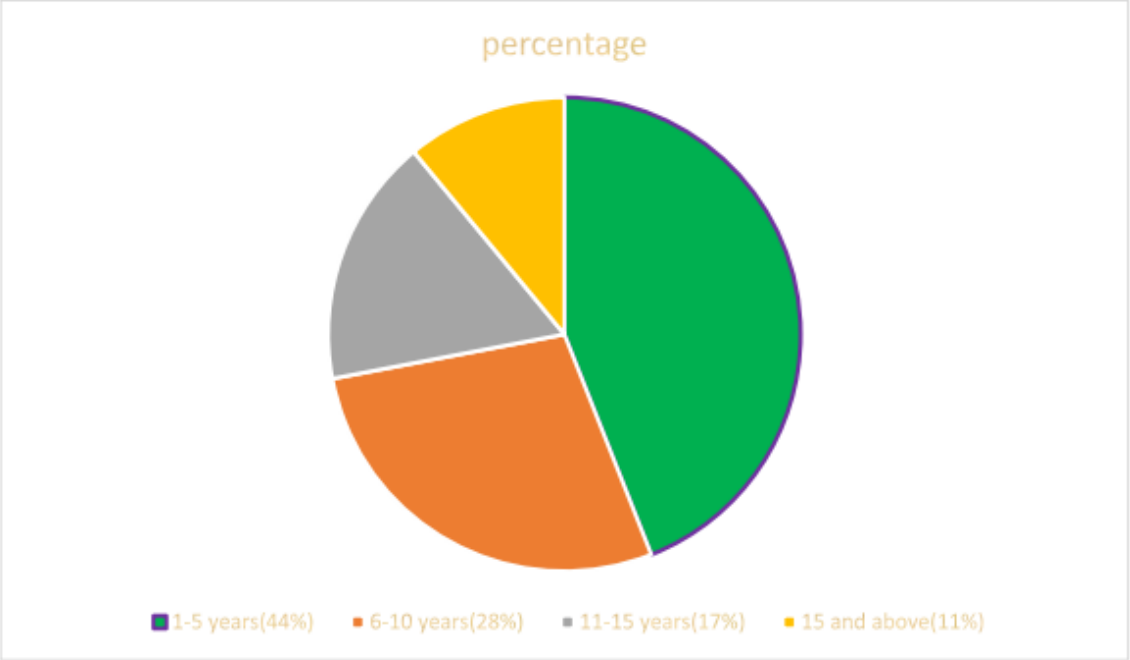


Fig.1: Pie-chart of percentages of years of teaching experience of mathematics teachers

Table 1.3 Pearson Correlation of Teachers years of experience and Students Achievement in Mathematics

		Experience	Achievement
Teachers Years of Experience	Pearson Correlation	1	0.5672
	Sig.(2-tailed)		0.000***
	N	900	900
Academic Achievement	Pearson Correlation	0.5672	1
	Sig.(2-tailed)	0.000***	
	N	900	900

Source: SPSS version 21.0 Computation (2023)

Table 1.3 shows that there is significant moderate positive relationship between teacher's years of experience and Academic Achievements in Mathematics. This implies that, the teacher's years of teaching experience have a moderate positive impact on Students' Academic Achievements of senior secondary school in mathematics. The investigation using Pearson product moment correlation shows a moderate positive relationship between teacher's years of experience on Students' Academic Achievements [r = 0.5672, N= 900, P<0.05]. The model is however significant at 5% alpha level such that the sig. value is 0.000** hence, the null hypothesis is rejected and the alternative upheld. It is therefore concluded that there is a significant relationship between the teacher's years of teaching experience and students' achievements in senior secondary school mathematics.

DISCUSSION OF FINDINGS:

From the analysis of results, the study reveals that there is significant relationship between the teacher's years of teaching experience and students' achievements in senior secondary school mathematics.

Form the finding above, the null hypothesis stating that there is no significant relationship between teacher's years of teaching experience and students' achievements in senior secondary school mathematics is therefore rejected and the alternative upheld. This implies that teachers' level of years of experience in preparation of the subject matter enhance students' Academic Achievement in Mathematics. This falls in line with Akinyele (2001) and Commey-Ras (2003) comments that experience improves teaching skills while students learn better at the hand of teachers who have taught them continuously over a period of years. This shows that teacher's years of experience in teaching mathematics is related significantly to students' achievement in the subject.

CONCLUSION

This finding shows that teachers' years of teaching experience relates to students' Academic Achievement in Mathematics.

RECOMMENDATIONS:

Based on the above findings of this study, the researcher made the following recommendations.
1. The school Authorities, industrialists, parent's Government and private individuals should encourage the teachers with more teaching experience that would promote learning in schools.
2. Curriculum planners should make the employment of experience teachers in schools compulsory at all levels of education.
3. Government and Ministry of Education should encourage teachers to further improve their Skills with good method of teaching.
4. Teachers with the highest numbers of teaching experience should be paired with the less experience once to learn from them for productivity in teaching.

SUGGESTION FOR THE FURTHER STUDY

Based on findings and the scope of this study, the researcher recommends further studies to be carried out in the following areas:
i. A replica of the study should be carried out within the secondary school context in other local Government areas to compare the results.
ii. A research study to be carried out in a different geographical region to determine the impact of teacher's years of teaching experience in other subject's area.

DECLARATION BY THE AUTHOR:

This research is an original work solely carried out by the researcher on the above study area and have not been published elsewhere or submitted to any publisher for consideration. Therefore, I solely bear the responsibility that is an original work. All works consulted are duly cited and acknowledged.

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