STUDENTS' PERCEPTION OF THE FACTORS RESPONSIBLE FOR DECLINING INTEREST IN SECONDARY SCHOOL MATHEMATICS IN AGUATA LOCAL GOVERNMENT AREA OF ANAMBRA STATE

Jude I. Onebunne, PhD & Umeora Onyinye

Abstract

The study sought to determine the student's perception of the factors responsible for declining interest in learning Secondary School mathematics in public secondary schools in Aquata Local Government Area of Anambra state. The study adopted a descriptive survey research design. To guide the study, three research questions and one hypothesis were formulated. The population of the study was 925 Senior Secondary School (II) students. The sample size of three hundred (300) students were used which comprised of 147 male students and 153 female students. A 19 items structured questionnaire was formulated for the study. The data was analyzed using mean and standard deviation. The findings revealed that some factors are responsible for declining interest in secondary school mathematics, such factors include, teachers personality, their method of teaching and lack of instructional materials for teaching mathematics. Based on the findings, some recommendations were made which include: the teachers should develop the ability of working collaboratively with others and they should use instructional materials and good teaching method while teaching any topic in mathematics. Also best student in mathematics should be rewarded at the end of the year or term to motivate other students to study hard.

Keywords: Mathematics, Declining interest, Factors, Public secondary schools.

Introduction

Mathematics is a science that deals with one's ability to reason and think critically in order to provide solution to problems. It is described as that which has to do with calculation and using number in general. Also it involves looking for patterns and relationship which can be expressed in symbols.

Mathematics is a communication system in science, art and even in the business world (Okeke & Odiliobi, 2014). It is an indispensable tool used for transformation of technological development to reality (Otumogbosi & Ukpebor, 2009). It is the language of science and technology; hence the importance of mathematics in teaching and learning is inevitable (Ugbebor, 2009). It is vital in the sense that it helps to improve creative ability of the students as well as enables them to think critically in an independent manner. Mathematics also, is the bedrock of science and technology. No nation can develop its economy without good foundation in mathematics. (Okeke, 2014). Perception is a way people judge others with whom they come in contact with. It is an awareness of the element of environment through physical sensation (Merrian Webster Dictionary, 2008). A person's attitude to an idea or object determines what the person

thinks, feels and how the person would like to behave towards that idea or object. The way students perceive a subject determines their success or failure in that subject.

Mathematics has been made a core and compulsory subject at the pre-primary, primary and secondary school levels, due to its importance according to the National Policy of Education (NPE, 2004). This is certainly the time that without mathematics, we cannot survive scientifically (Aminu, 2005).

It was noted from various researchers like Ezeaku (2006) and Okoli (2008) that there are factors that contribute to students' declining interest in learning secondary school mathematics. Such factors according to them include methods adopted by the teacher while teaching, the qualification of the teacher, the use of instructional material in teaching mathematics, etc .The Students take little interest in learning mathematics and if they fail to have interest for this subject, then it would become less applicable. Anyam (2006) observed that in the West African School Certificate Examination, students have always recorded the highest failure in mathematics. Such mass failure has prompted so many students to change their career plan. Some opt for course which they never planned to study while others completely drop out of the school system.

Based on the researchers' knowledge so far, it is regrettable that in this contemporary time, some students perceive mathematics as a no go area, despite all the benefits of mathematics. Their instinct is based on the fact that mathematics is a difficult subject. There are contextual factors that cause students' declining interest in mathematics; such factor are, the personality of the teacher, quality of teaching, learning support material and self-confidence (Mutodi, 2014).

Teachers who didn't professionalize in mathematics have low subject knowledge, they lack basic knowledge needed in teaching some topics which they found difficult. This situation results in a vicious circle in our mathematics and consequently, poor achievement of the basic required knowledge of mathematics on the students. It is therefore hoped that this study will have answers to the students' perception of the factors responsible for the declining interest in secondary school mathematics.

In recent times, experience has shown that for some reasons, many students are scared of studying mathematics in secondary schools. They have passed out with the notion that mathematic is a difficult subject. This has caused reduction on the number of students who aspire to offer mathematics in higher institution.

Ezeaku (2006) and Okoli (2008) based on their research work opined that there is a declining interest in mathematics among students in Orumba North Local Government Area, this same problem has being noticed among students in Aguata Local Government Area and Anambra State in general. The cause of this declining interest is not yet known. This led the researcher into investigating on the students' perception of the factors responsible for declining interest in secondary school mathematics.

The purpose of this study is to find out the students' perception of the factors responsible for the declining interest of students in secondary school mathematics. Specifically, the study is designed to find out the extent of students' perception of the teachers' personality as a factor responsible for declining interest in secondary school mathematics in Aguata Local Government Area. Lack of Instructional material is a factor that contributes to the declining interest of students in secondary school mathematics and teachers' method of teaching is also, another factor responsible for declining interest of students in secondary school mathematics and teachers' method of teaching is also, another factor responsible for declining interest of students in secondary school mathematics.

However, it is hoped that the information obtained will enhance better strategies and measures for promoting student understanding and participation in mathematics related fields. The study will be beneficial for the students, the prospective mathematics teachers and curriculum planners.

To students, it will help to encourage them to appreciate mathematics, have a positive interest in mathematics and clear the misconceptions that mathematics is a difficult subject in their mind. It will also help the students to find solutions to their mathematical problems, thereby arousing the interest and attitude of students towards learning the subject.

To prospective mathematics teachers, the study will help them to know proper methods of teaching mathematics and how to go about difficult topics so as to maintain the students' interest in mathematics.

To curriculum planners, the study will help them to integrate the existing curriculum and make necessary adjustment in the study of mathematics. The result of the study will help to increase the number of students who offer science subjects in secondary schools.

Scope of Study

The study is limited to identifying the students' perception of the factors responsible for their declining interest in secondary school mathematic in Aguata Local Government Area of Anambra state. Such factors include; teachers' personality, poor accountability of instructional material and the teacher's method of teaching mathematics.

Research Questions

The study is guided by the following questions,

- 1. To what extent do students perceive personality of teachers as a factor that causes their declining interest in learning mathematics?
- 2. To what extent do students perceive lack of instructional material as a factor responsible for their declining interest in learning mathematics?
- 3. To what extent do students perceive teachers' method of teaching as a factor responsible for their declining interest in learning mathematics?

Concept of Mathematics

Mathematics is the science that deals with the logic of shape, quantity and arrangement. It is all around us, in everything we do. It is the building block of everything in our daily lives, including mobile devices, architecture (ancient and modern), and art money engineering and even sports. Since the beginning of recorded history, mathematics discovery has been at the forefront of every civilized society, and it is used in the most primitive cultures.

Mathematics is the study of measurement, properties and relationships of quantities and sets using numbers and symbols as seen in the American heritage dictionary of the English language (2007). It is that branch of science that uses numbers and symbols. Numbers and symbols are arranged using systematic mathematical rules.

The study of mathematics is based on reasons. It deals with logical reasoning and quantitative calculations also, it is recognized as the foundation of science and technology without which a nation will never be prosperous and economically independent. It has been found to be the foundation of educational thoughts and general development (Noun, 2006). Mathematics today has an enormous impact on science and society, though the influence is silent and hidden, yet it is shaping our world in many ways (Aguela & Usman, 2007). Also, it is the major source of social and economic changes in the contemporary history of mankind. It was developed as a result of human efforts to solve some problems.

Critically examining these concepts, one would discover that they have helped to point the meaning of mathematics. This shows that mathematics is a course that one cannot do without. Mathematics being the key point of any field of study aided to supply health over sickness, food abundance over famine, affluence over poverty, critical thinking over superstition and education over ignorance. It is therefore essential that every Nigerian should develop an understanding attitude of mathematics and become a nation with technological development. Hence, students declining interest in secondary school mathematics is a big disadvantage to the nation and the world at large.

For a good successful national development, there is need for good output in mathematics performance (Adeniyi, 1998 as cited in Ozor,2008). He opined that technology and industrial development have voracious appetite for mathematics because the subject is the basic need for engineers and technicians who will take them. He landed that mathematics performance of the students in Nigeria secondary schools continued to deteriorate year after year.

Concept of Students' Perception in Teaching and Learning

Perception is defined as a belief or opinion often held by many people and based on how things is seen, the quality of being aware of things through the physical senses, especially sight. Also it is someone's ability to notice and understand things through the physical senses, especially sight. Also it is someone's ability to notice and understand things that are not obvious to other people (Cambridge Advanced Learners' Dictionary & Thesaurus).

Perceptions of mathematics is conceptualized as a mental representation or view of mathematics, apparently constructed as a result of social experiences, mediated through interactions at schools, or the influence of parents, teachers, peers or mass media. It is also referred to some kind of mental representation of something, originated from past experience as well as associated beliefs, attitudes and conceptions (Hanmila & Laine, 2007).

In Nigeria, mathematics is perceived by majority of students as a difficult subject, accessible only to few students who perform well in mathematics are treated as "nerds". Many people generally dislike mathematics. It is seen as a subject reserved for the selected few. It often evokes feelings of stress; anxiety and fear (Atallah, Bryant & Dada, 2009).

Furthermore, it is seen as filters that hinder students from pursing their career aspirations in mathematics and science related field (Fisher, 2008). It is widely maintained in the literature that negative images and myths of mathematics are wide spread among the students. Many students view mathematics as a difficult, cold and abstract subject.

Mathematics is perceived by many students as an exclusive discipline (Buhagiar, 2013). From epistemological and pedagogical perspectives, it is perceived as a subject that involves a lot of work. The subject is seen as an obstacle, often dreaded and as hard work. Moreover, many students seem to concentrate on computations as the essence of mathematics.

Empirical Review

The study of Mutodi, (2014) sought to determine the influence of students' perception on mathematics performance at selected South African secondary schools. The influence of factors such as strength and weakness in mathematics, teachers' supports or learning materials, the individual life histories, interest in mathematics, difficulties or challenges in doing mathematics, self-confidence, myths and beliefs about mathematics were identified as construct of perceptions that influences students' performance. Five of seven constructs were found to be influential on students' performance in mathematics. Quantitative methods were used to analyze the data collected from a questionnaire which was administered to randomly select 124 school students in Polokwane, South Africa. From the regression analysis of the data, the following hierarchy of themes emerged as components of students' perceptions of mathematics, family background and support, interest in mathematics, self-confidence in mathematics, myths and beliefs about mathematics, teaching/learning material support, and difficulties in learning mathematics. Results from T-test suggest that there were significant difference in the perceptions and beliefs about mathematics between males and females, between mature and immature students and among students from different language background respectively.

In the study carried out by Okoye (2008), titled problems and preventions of Mathematics Phobia among Secondary School Students in Nnewi North Local Government Area of Anambra State. Questionnaire was used for data collection. Out of eight (8) selected secondary schools, fifty-two Students from each school were selected making a total of 420 student respondents. The result of the study show that students fear mathematics because of the attitude of their teacher, large numerical numbers and their notations in mathematics also make students to fear mathematics. Based on these findings, certain recommendations were made among which was the problem facing mathematics phobia are man-made and so to make mathematics easy, it should be the joint effort of those concerned. Finally, enough teaching aids should be made available in secondary schools to enhance the learning process.

In the study carried out by Okongwu and Ejieme (2009), titled students' perception of mathematics as a subject offered in secondary school education in Awka North Local Government Area of Anambra State. The population of the study comprises of ten (10) secondary schools in Awka North, five (5) secondary schools were randomly sampled using simple random sampling. A 230 questionnaire were prepared, the data were analyzed using mean. After data analysis the following findings were identified; Mathematics is difficult in nature, it is meant for intelligent ones, teachers related and students related factors affect students' performances in mathematics and this aids students' lack of interest towards the subject. Based on these findings, the researcher recommended that, government should provide adequate instructional materials for teaching and learning of mathematics.

The study of Anyi, (2015) sought to determine the causes of students declining interest in secondary school mathematics in Orumba South Local Government Area of Anambra State. Population of study consists of 516 SSII mathematics students and 13 mathematics teachers in the 13 government secondary schools. The instrument for collecting data was the questionnaire at which ten secondary schools were randomly selected; two hundred and ten (210) questionnaires were prepared, ten (10) for teachers and two hundred (200) for students. The researcher analyzed the data using mean and standard deviation. After data analysis, it was found that some factors are responsible for declining interest in secondary school mathematics, and lack of instructional materials for teaching mathematics. The researcher recommended based on the findings that government should provide enough and adequate laboratory equipment for the teaching of secondary school mathematics and mathematics teachers should endeavour to use instructional materials to teach the students and others.

Research Design

This study adopted a survey research design in carrying out the investigation in order to draw a sample from a large population and to analyze critically the perception of students on the factors responsible for their declining interest in secondary school mathematics in Aguata Local Government Area of Anambra State. Here, the data collected were interpreted and the result generalized to represent the perception of the entire population.

Area of the Study

The study covered all public secondary schools in Aguata Local Government Area of Anambra State. Aguata Local government is situated in the south senatorial zone of Anambra State. It is bounded at the east, west, north and south by Orumba South L.G.A., Anaocha L.G.A, Orumba North L.G.A of Anambra State and Ideato North L.G.A. of Imo state respectively.

Population of the Study

The population for this study consists of all the senior secondary two (SS II) students in public secondary schools in Aguata Local Government Area which are nine hundred and twenty-five (925) in number. The population comprises of four hundred and five (405) male students and five hundred and twenty (520) female students.

Sample and Sampling Technique

The researcher randomly selected ten (10) schools by simple random sampling from twenty one (21) Government owned secondary schools in Aguata Local Government Area. The sample size for the study is 300 students. Consisting the total number of 147 male students and 153 female students.

Instrument for Data Collection

The instrument for the collection of data in the research work was a structured questionnaire. It contains items to which the respondents were asked to respond to the questions on a 4 point scale of:

Very High Extent	(VHE)	4points
High Extent	(HE)	3points
Low Extent	(LE)	2points
Very Low Extent	(VLE)	1point

Validation of the Instrument

The draft copy of the questionnaire was validated by four experts, one from mathematics education department, one from the School of Agriculture and Home Economics and two from school of education who examined and ensured that its face validated. The four experts were all from Federal College of Education (Technical), Umunze. Corrections based on the input of these experts were affected.

Method of Data Collection

The researcher went to the sampled schools and administered the research instrument (questionnaire) to the respondents; the copies of the questionnaire were collected immediately after completion from the students.

Method of Data Analysis

Data collected were presented in tables and analyzed using statistical mean and standard deviation

Formula for mean is:

 $\bar{x} = \frac{\sum FX}{N}$ Where: \bar{x} = Mean \sum = Summation X = Nominal Value N = Total number of respondents F = Frequency of the response $\bar{x} = \frac{4+3+2+1}{4}$ $\bar{x} = \frac{10}{4}$ $\bar{x} = 2.5$

Decision Rules

Thus, any item receiving a mean rating scale of 2.5 and above was accepted, while a mean rating score below 2.5 was rejected. A limit of real number scale was used to determine the mean range and decision level on each of the research questions as follows: 3.5-4.00 (VHE), 2.5-3.49 (HE), 1.5-2.49 (LE), 0.99-1.49 (VLE)

PRESENTATION OF RESULTS AND DATA ANALYSIS

This chapter consists of presentation and analysis of results. The analysis is presented in line with research questions.

Research Question One

To what extent do students perceive teachers' personality as a factor that causes their declining interest in learning mathematics?

Table 1: Mean distribution and standard deviation of students' responses on personality of teacher as a factor that causes their declining interest in learning mathematics.

									_		
	ITEMS	VHE	HE	LE	VLE	N	\overline{X}	SD	REMARK		
1	Teachers who are always harsh contribute to students' lack of interest in mathematics.	191	49	43	17	300	3.38	0.93	High Extent		
2	Teachers who are kind and gentle discourage students to have interest in learning mathematics.	52	67	85	96	300	2.25	1.08	Low Extent		

Nnadiebube Journal of Education in Africa, Vol. 3 No 1, October 2018

3	Teachers who are neatly and corporately dressed attract students to develop interest in learning mathematics.	35	31	82	152	300	1.83	1.02	Low Extent
4	Teachers who are always late to school discourages students to have interest in learning mathematics	186	74	29	11	300	3.45	0.81	High Extent
5	Teachers who always tell stories while teaching usually make students to have interest in mathematics	156	85	29	30	300	3.22	0.99	High Extent
	Grand mean					2.83			

Table 1 above shows that items 1, 4, and 5 with mean ratings of 3.38,3.45, and 3.22 respectively were accepted to a high extent, this implies that the items contribute to the students declining interest in mathematics. Also, items 2 and 3 with mean ratings of 2.25 and 1.83 were below the mean cut off mark of 2.5. However, the grand mean was 2.83 and it is above the cut off point. This shows that the respondents were on opinion that the personality of a teacher contributes to students' declining interest in learning mathematics positively to a high extent.

Research Question Two

To what extent do Students perceive lack of instructional materials as a factor responsible for their declining interest in learning mathematics?

 Table 2: Mean and standard deviation of students' responses on lack of instrumental

 materials as a factor responsible for their declining interest in learning mathematics

5/N	ITEMS	VHE	HE	LE	VLE	Ν	X	SD	REMARKS
6	Improper use of instructional materials encourage declining interest of students in learning mathematics.	163	89	33	15	300	3.33	0.86	High Extent
7	Absence of instructional material in teaching of mathematics encourages declining interest of students in mathematics.	40	47	121	92	300	2.12	0.98	Low Extent

Students' Perception of the Factor	ors Responsible fo	r Declining Interest In S	econdary	Onebunne & Umeora

8	Teachers who use instructional materials of different nature at the appropriate time during the instructional process improve students' interest in mathematics.	196	62	18	24	300	3.43	0.92	High Extent
9	Practical demonstration in teaching and learning of mathematics arouses students' interest in learning mathematics.	141	62	34	63	300	2.94	1.19	High Extent
10	Students cannot learn mathematics without instructional materials.	43	36	42	79	300	2.14	0.97	Low Extent
11	Inability of our mathematics teacher to select appropriate instructional materials in teaching reduces our interest in mathematics.	118	84	78	20	300	3.00	0.96	High Extent
	Grand mean						2.83		

From table 2 above; items 6, 8, 9 and 11 with mean rating of 3.33, 3.43, 2.94 and 3.00 respectively were above the cut-off point of 2.50; this implies that the respondents accepted the statement to a high extent. Also, items 7 and 10 with mean rating of 2.12 and 2.14 which are below the cut-off point are accepted to a low extent. However, the grand mean is 2.83 and it is above the mean cut off point. This indicates that respondents were on the opinion to a high extent that improper use of instructional material is a factor that contributes to students declining interest in learning mathematics.

Research Question Three

To what extent do students perceive teachers teaching method as a factor responsible for their declining interest in learning mathematics?

Table 3: The mean responses of students on the teachers' teaching method as factor responsible for their declining interest in learning mathematics

5/N	ITEM	VHE	HE	LE	VLE	Ν	\overline{X}	SD	REMARKS
12	Students don't understand mathematics when their teacher is copying note on the board.	181	47	40	32	300	3.26	1.05	High Extent

Nnadiebube Journal of Education in Africa, Vol. 3 No 1, October 2018

13	Mathematics is interesting when the teacher uses vocabulary to explain concepts.	52	54	88	106	300	2.17	1.09	Low Extent
14	Students' understands mathematics when their teacher makes use of good example.	252	37	9	2	300	3.80	0.51	High Extent
15	Mathematics is interesting whenever the teacher uses demonstration method to teach.	190	69	23	18	300	3.44	0.87	High Extent
16	Students understand mathematics when their teacher uses long formula to teach.	30	51	135	84	300	2.09	0.92	Low Extent
17	Inability of the teacher to select appropriate tea ching methods for different topics causes students declining in mathematics.	150	96	29	25	300	3.24	0.93	High Extent
18	Students' interests are increased when their teacher give them plenty exercises to solve.	92	130	35	43	300	2.90	0.99	High Extent
19	Teachers who apply the skill of stimulus variation and questioning skill always arouse student's interest in learning mathematics.	186	95	15	4	300	3.54	0.56	Very High Extent
	Grand mean						3.06		

From table 3 above, it was found that the items, 12, 14, 15, 17, 18 and 19 with mean ratings of 3.26, 3.80, 3.44, 3.24, and 3.06 respectively were above the cut-off point; this indicates that the respondents accepted the items in the table to a high extent. Also, the items, 13 and 16 with mean ratings of 2.17 and 2.09 were below the cut-off point. This implies that the items were accepted to a low extent.

However, the grand mean of 3.06 was above the cutoff point. This show that the respondents were on the opinion to a high extent that teachers teaching method is the factor that contributes to students declining interest in learning mathematics.

Summary of Findings

The findings from research question one (table 1) revealed to a high extent that teachers personality is a factor that caused students declining interest in learning mathematics.

From research question two (table 2), it was found out that, the respondents were on opinion to a high extent that instructional material is a factor that contribute to students declining interest in learning mathematics.

From research question three (table 3), it was found that students interest in learning mathematics are increased to a high extent when their teacher uses; good examples to teach, explains concept by demonstration, gives students exercises to solve, also, when the teacher applied stimulus variation during instructional process. From the same table also, it was found that the students interest in learning secondary school mathematics are declined whenever their teacher uses vocabulary to teach, when she copy only note on the chalkboard and use only long formula to teach.

Discussion of Findings

In the study of the students' perception of the factors responsible for their declining interest in learning mathematics in the Secondary School, research question one sought to find out the extent to which students perceive personality and competence of teacher as a factor that affect their interest and performance in mathematics. The result from table (1) indicates that the personality of teacher contributes to students declining interest in learning mathematics positively to a high extent. Also teachers dressing code and appearance contribute to students' declining interest to a low extent. This is supported by Andrew (2008) who stated that, the way the teacher dress, his efficiency in use of mathematical terms increases students interest in learning mathematics.

The teachers' mastery of subject matter and their ability to communicate well with the student makes them to develop interest in learning mathematics. This shows that teachers need to develop that competence that will attract the interest of students in learning mathematics. He or she must be seen as a manager of instruction, as a caring person, as an expert and as a cultural and civic person (Caena 2011).

Research question two sought to find the extent to which students perceive instructional material as a factor responsible for their declining interest in learning mathematics. The analysis of table (2) attested that most of mathematics teachers do not use instructional materials; some of them find it difficult to select and use instructional material at the appropriate time. Thus instructional material is seen as factors that contribute to students declining interest in mathematics to high extent.

Enemuo (2001) stated that when an instructional style and students' cognitive style are not matched, content achievement will decrease. Teachers who do not appropriately use the available instructional materials and are not able to improvise an instruction model or design will not be able to teach very well. Uzoagulu (2008) stated that, an instructional material helps students to understand better, arouses and maintain students' interest in learning. It also helps them to recall fast what is being taught. Due to difficult nature of the subject and how important mathematics is, the use of instructional material is very necessary in the teaching and learning process.

Research Question three sought to find out to what extent students perceived teachers method of teaching as a factor responsible for their declining interest towards learning mathematics. From the data analyzed in table (3), it was found that teachers' teaching method is one of the factors that causes student's interest to decline in learning mathematics to a high extent. This is in line with Onyema, 2002 who stated that "general hatred for mathematics by students may be due to the teaching method rather than the difficulty of the subject ". Incompetent teacher may employ wrong teaching methods of learning process which might result to general hatred of mathematics by the students. From findings, students in almost all the ten selected schools do not appreciate the method used by their teacher in teaching.

In conclusion, students interest in learning mathematics are increased when their teachers uses an appropriate method to teach. The success of any method employed by a teacher depends on certain factors amongst which are physical realities of the school, the teachers' method of approach and choice of teaching materials (Maduabum, 2017).

Implication of Findings

The study has implications for teachers, students and government.

The findings of this study revealed to a high extent that teachers' personality, improper use of instructional material and teachers teaching method are factors responsible for students declining interest in learning secondary school mathematics.

Teacher's harshness to students makes them to dislike the teacher and the subject. In that case they will find it difficult to concentrate during instructional process hence causing a declining interest and low performance in mathematics. Also, if instructional materials are not properly utilized by the teachers, it will also make the content of the lesson to be vague thereby reducing the level of understanding of the topic. For that reason, students should utilize their time and textbooks very well in order to be guided to problems and increase their interest in learning mathematics. Hence, governments should provide enough equipment to enhance the interest of the students.

However when mathematics teacher adopt a wrong teaching skill and method while teaching, the instructional objectives of the lesson may not be achieved at the end of the lesson. This will increase students declining interest in learning mathematics.

Recommendations

Based on the findings of this study, the following recommendations are made by the researcher;

Government should endeavour to pay teachers at the stipulated time in order to enhance their effectiveness in teaching.

Workshops, Conference and Seminars should be organized from time to time for mathematics teachers so that they will be up-to date in the best way of selecting adequate teaching skills and strategies needed in teaching mathematics.

Teachers should develop the ability of working collaboratively with other staff in order to create effective learning environment for students.

Secondary school mathematics teachers should use instructional materials while teaching any topic in mathematics.

Best students in mathematics should be rewarded at the end of the year or term to motivate other students to put more effort in studying mathematics.

Limitation of the Study

The research was supposed to be carried out in all the secondary schools in Aguata Local Government Area of Anambra, but due to time, energy and resources, the research was carried out in ten government secondary schools in Aguata Local Government Area. Therefore, generalization of the entire perception of students on the factors responsible for declining interest in Secondary school mathematics was based on the ten samples studied. Also the teacher influenced the students' choice of response.

Suggestion for Further Studies

The study was taken in Aguata Local Government Area of Anambra State. The researcher suggests the following topics for further investigation in the same jurisdiction.

- 1. Students' perception of the factors responsible for declining interest in learning mathematics in all other Local Government Areas of Anambra state.
- 2. The influence of students' perception on mathematics performance.
- 3. Strategies for enhancing Secondary School Students' Interest in mathematics.

Summary and Conclusion

The main purpose of this study was to investigate the students' perception of the factors responsible for declining interest in learning secondary school mathematics in Aguata Local Government Area of Anambra State. Ten (10) Secondary Schools were randomly selected out of 21 government Secondary schools in Aguata Local Government Area. Three hundred questionnaires were distributed to the students. The data was collected and analyzed using mean and standard deviation.

From the findings, it was discovered that the student's perception of the factors such as, teachers' method of teaching, lack of instructional materials and teachers personality was to a high extent the causes of their declining interest in learning mathematics.

JUDE I. ONEBUNNE, PhD Department of Educational Foundations School of Education Federal College of Education (Technical), Umunze

UMEORA ONYINYE

Department of Mathematics Education School of Sciences Federal College of Education (Technical), Umunze

REFERENCES

- Abdullah, M. N. & Jasmi, K. A. (2016). Communication style towards student by excellent islamic education lecturers in teaching education institute of Malaysia. *International Journal of Academic Research in Progressive Education and Development, 5(3): 2226-6348.*
- Adenegan, K.E (2010): Enhancing quality control of mathematics education through improvisation and utilization of instructional materials for teaching mathematics in Nigeria schools. *Journal of Educational Administration and planning (JEAP), Ondo VOL.2 No.1, Pg 49-55.*
- Adeniye O.A. (1998): *Principles and Practice of Mathematics Education in Nigeria;* General Studies Division Enugu University of Science and Technology (ESUT), Enugu.
- Aguele S. & Usman M. (2007): *Mathematics Education for Dynamic Economy in Nigeria;* School of Science, Ahmadu Bello University, Zaria.
- Ajayi. I.A (2004). Towards effective use of information and communication technology for teaching in Nigeria College of education. *Asian Journal of information technology 7(5), 210-214.*
- Alschuler S. M. (2006): The Best Laid Plans; Modern Concept of Volition and Education Research.2(2)14-22.
- American Encyclopedia (2000), Encyclopedia of Science volume 6, New York; Frank and Wagnolis. Pg. 221.

American Heritage Dictionary of English Language,(2007); Definition of Mathematics.

Ames C.& Ames R. (2004): System of Students and Teacher's Motivation Towards A Qualitative Definition; *Journal of Educational Psychology. Volume 3(2), 111-121.*

- Aminu P.L. (2005): Mathematics for Political and Social Empowerment. Principles of Law of the Society.
- Andrew H.Schwartz9 (2005): Personality, Gender and Age in the language of social media: The open vocabulary Approach. Plus One 8(9): e73791.doi:10.1371/ Journal.phone.0073791.
- Anyam(2006): Effect of students perception on teaching and learning mathematics.www.uniproject.com
- Appova, A. and Arbaugh, F. (2017). Teachers" motivation to learn: Implications for supporting professional growth. Professional Development in Education, 5257(March): 1-17. Available: http://doi.org/10.1080/19415257.2017.1280524
- Attalla, F, Bryant, S. & Dala, R (2009); Learner and teacher conceptions and dispositions of mathematics from a middle Eastern perceptive. Us China Education Review,7(7).
- Ball, D.L (1993) An eye on the mathematical horizon. Dilemmas of teaching elementary school mathematics. *Elementary School Journal 9, pg 379-397.*
- Balogun I.C.(2001): Some Factors Affecting Mathematics Education in Schools. *The Nigerian Journal 1(1). Pg. 1998.*
- Bransford, J.D.Brown, A.L and Cocking R.R(2000). *How people learn: Brain, mind, experience and school:* Expanded Edition. Wishington D.C. National Academy Press.
- Bulagiar, D. (2013). Views of mathematics. Jesuit in Malta, ST Aloysius College.
- Burns, R. A. and Machin, M. A. (2013). Employee and workplace well-being: A Multi-level Analysis of teacher personality and organizational climate in Norwegian teacher from rural, urban and city schools. *Scandinavian Journal of Educational Research*, *57(3): 309-24*
- Cambridge Advanced Learners Dictionary; Definition of Mathematics.
- Carver, C & Sheler F (2000). Perspective on personality Retrieval August 23, 2007 from http://wi,derdom.com personality/1-9-learning perspective personality.Htm.
- Chauhan, S.S (1985). Advanced educational psychology New. Delhi. Vikas Publishing House, PVL Ltd.
- Denisial, S. P and Jeyanthi J. A. (2015); Problems faced by students in learning mathematics at higher secondary school, *American journal of scientific studies, vol. 7.* Oxford University press USA. ISBN: 1.135.455.67
- Dickson C.R. (2009): Development and Instructional Analysis of Children's Meta Cognition and Reading Comprehension; Journal of Educational Psychology 80(2), 131-142.
- Enemuo S. (2001), Curriculum Innovation in Mathematics for the Achievement of High Performance in Mathematics. Vol 1, 12-17.
- Ezeaku, T.T. (2016): Improving the Teaching and Learning of Mathematics Through The Use of Mind Maps. National Council of Teachers' of Mathematics. 1-15.

Ezema B.C. (2011): The *Effect of Contingent and Non-Contingent Reward and Control on Motivation.* Organizational Behavior and Human Performance 8,817-229.

Federal Republic of Nigeria (F.R.N, 2004). The National policy on education.

- Fisher,A(2008): *Teaching comprehensive and critical literacy*: Investigating guided reading in three primary classroom. Literacy 42; pg 19-28.
- Francesca Caena (2011), Review on Teachers' core competences requirements and development. Journal of Educational Rearch, vol.95, no 6, pp 359-364.
- Garcia etal (2011): Research on impact of Teacher personality style on Academic excellence of Secondary students. *Reterived, National Forum of teacher Educational Journal volume* 21, Number 3, 2011.
- Göncz, L. (2017). Teacher personality: A review of psychological research and guidelines for a more comprehensive theory in educational psychology. *Open Review of Educational Research*, 4(1): 75-95.
- Hannula, M.S (2007). The effect of achievement, and gender classroom contexts on upper secondary students' mathematical beliefs. Lyon France.
- Heystek, J. and Terhoven, R. (2015). Motivation as critical factor for teacher development in contextually challenging underperforming schools in South Africa. *Professional Development in Education, 41(4): 624-39.*
- Hoppey, D. and McLeskey, J. (2013). A case study of principal leadership in an effective inclusive school. *The Journal of Special Education, 46(4): 245-56.*
- Iliya, A. and Ifeoma, L. G. (2015). Assessment of teacher motivation approaches in the less developed countries. *Journal of Education and Practice*, 6(22): 10-18.

Jackson, P.W (1990). Life in Classroom. New York, NY. Teachers College Press.

- John C. (2002), Problems of Teaching and Learning of Mathematics. *Elementary School Journal,* 33,593-600.
- Klassen, R. M. and Tze, V. M. C. (2014). Teachers" self-efficacy, personality, and teaching effectiveness: A met analysis. *Educational Research Review*, 12: 59-76. Available: http://doi.org/10.1016/j.edurev.2014.06.001
- Maduabum (2017): Teaching Methods; Introduction to General Principles and Methods of Teaching. Pg. 82.

Merriam Webster Dictionary 2008, Definition of Perception.

Mertler, C. A. (2016). Should i stay or should i go? Understanding teacher motivation, job satisfaction, and perceptions of retention among Arizona teachers. International Research in Higher Education, 1(2): 34-45.

- Mkpa R. (2008): Effect of Laboratory on Students in Mathematics. Enugu; University of Nigeria Nsukka: *Journal Printing Press.*
- Mutodi Paul (2004): The influence of students' perceptions of mathematics performance. Article in Mediterranean Journal of social sciences.
- Noun (2006): A Report on National Task Force on Mathematics; Nigeria Educational Research Council, Lagos.
- Odonwodo and Ezengwu(2009); Research on effect of student perception on teaching and learning mathematics. *Journal printing press.*
- Okafor & Maduabum (2011): Concept of Method in Curriculum Development. Theory and Practice for Tertiary Institution in Nigeria. Pg.29.
- Okeke, M.N, Odiliobi, C.S(2015) : The effect of cooperative learning strategy on students' achievement and retention on geometry pg 15. *Journal of Empirical Research in Science and Technology Education. Vol.4 Number 1.*
- Okoli C.R. (2008): Impact of Instructional Materials in Science Education. *Studies in Science Education. 46(1), 55-98.*
- Okoye (2008): An assessment of computer and ICT skills among secondary school teachers. Journal of empirical studies 2008.
- Onyema (2002); Effect of students perception on teaching and learning mathematics. A case study of Igboeze North Local Government Area of Enugu State.
- Otumu-ogbisi R,O& Ukpebor, J.N(2009). Mathematics Education A tool for Technology Development in Nigeria. ABACUS; the journal of mathematics Association of Nigeria.
- Ozor A.I. (2003): A Comparison of the Attitude and Opinion of Low and High Mathematics Achievers in Junior and Senior Classes of Secondary Schools. "Lagos Education Review". *A Journal of Students in Education. 1(1),39-49.*
- Salvin, R.E. (2004). Students motivating students to Excel Cooperative Incentives, Cooperative Task and Students Achievement. *Mediterranean Journal of social sciences*.
- Schiefele, U. (2017). Classroom management and mastery-oriented instruction as mediators of the effects of teacher motivation on student motivation. *Teaching and Teacher Education, 64: 115-26.*
- Seegars M.S.& Boekaerts A.(2003): Task Motivation and Mathematics Achievement in Actual Task Situation; *Learning and Instruction.3;133-150.*
- Underhill (2008): When Extrinsic incentives Displace Intrinsic motivation. *Designing Legal Carrots and sticks to confront the challenge of motivational crowdingout*.Digitalcommons.law.yale.edu/cgi/viewcontent.cgi/article=1484 content

Nnadiebube Journal of Education in Africa, Vol. 3 No 1, October 2018

- Usman A.P.(2007): Mathematics Education for Dynamic Economy In Nigeria In The 21st Century. Article 35 (3).
- Uzoagulu P.A (2008): Administering and Guidelines for Use of Instructional Materials in Teaching and Learning of Mathematics: *Hand Book of Research on Teaching 3rd Edition P* 850-87.