

**ATTITUDE OF SECONDARY SCHOOL STUDENTS TOWARDS THE STUDY
OF MATHEMATICS**

AGHOGHO VERA ETURE

EDU2202767

**DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY
FACULTY OF EDUCATION
UNIVERSITY OF BENIN,
BENIN CITY, EDO STATE.**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF CURRICULUM
AND INSTRUCTIONAL TECHNOLOGY, FACULTY OF EDUCATION,
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REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE (Ed)
IN DEGREE IN MATHEMATICS EDUCATION**

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CERTIFICATION

We the undersigned certify that this research work was carried out by Aghogho Vera ETURE in the Department of Curriculum and Instructional Technology, Faculty of Education University of Benin.

Prof.(Mrs). L.Eraikhuemen
Project Supervisor.

Dr. (Mrs). I.K Oteze
Project Coordinator

Date

Date

Dr. E. O. Idehen.
Head of Department

Date

DEDICATION

This project work is dedicated to God Almighty for his divine mercy and grace ,
for seeing me through my undergraduate programme in the university of Benin.

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ABSTRACT

The study was aimed at investigating the attitude of secondary school students towards the study of Mathematics in Ovia North East Local Government Area of Edo State. The study comprises of five research question and four hypotheses which were drawn from the research questions. The study is delimited to secondary schools student.

Ninety - four students were randomly selected from five public senior secondary schools; a random sampling method was used by questionnaire as the research instrument. The validity of the research instrument was done by the supervisor and two other experts in the Faculty of Education, University of Benin. The split half correlation of 0.669 was step up to full length using Spearman Brown formula which yields a reliability coefficient of 0.82 that indicates a high level of internal consistency in the instrument. The collected data was analyzed using descriptive statistics, including frequency distribution and percentages, as well as estimate for mean value. The hypotheses were thoroughly examined using Pearson r formula.

The findings revealed that students show positive attitude towards the study of Mathematics. Also, Mathematics teachers teaching methods in public senior secondary schools can encourage or discourage students to develop positive or negative attitudes to the learning of the subject. The findings also revealed that parents background do not affect how students respond to Mathematics as a subject. It is recommended that Mathematics teachers should engage in interactions within the classroom, encourage and monitor group study. And parent should encourage the students' with their choice of career to enable them, focus on their studies.

CHAPTER ONE

INTRODUCTION

Background to the study

It is widely believed that Mathematics is very important to economics, scientific and political development of any nation. So, Mathematics is a subject that determine individual performance and functionality in any given society. According to Obaniyan and Salman (2015), Mathematics is the foundation on which the whole essence of living revolves and the platform for scientific and technological innovation. Mathematical knowledge is increasingly being needed, where science and technology are rapidly developing.

Nigeria being a developing country encourages the study of science and technology in schools ,so as to be able to meet up with the manpower needs of the Nation. In Nigeria, state and Federal government build universities of technology ,polytechnics and technical colleges. As evidenced, are foundation college of technology, Auchi Polytechnic, Delta State polytechnic. With this, science and technology are important in our day-to-day living. UNESCO (2021):”Technology is the practical application of scientific knowledge to develop tools, systems and solution that meet humans needs and solve problems in

society.” The good thing about science is that it's true whether or not you believe in it.

Bature and Atweb(2021), describe Mathematics as “ a structured and logical discipline used for problem solving, critical thinking, and real world application in science, engineering and economics”. In communication, Mathematics is also very useful if one is Mathematically literates,one can communicate and present his or her argument in a logical manner because Mathematics helps in logical thinking, also in fashion industries, fashion designers uses Mathematical terminology like addition and subtraction why measuring fabrics for design. And Mathematics is the basis of all major technologies. Therefore, all students should learn Mathematics. Despite, the effort put in by the government to improve the student achievement in Mathematics, the result is not yet satisfactory, the performance of students in Mathematics are not encouraging. The Western African Examination Council WAEC(2024): The chief examiner are report shows that 1,805,216 candidates sat for the external examination and out of which 1,685,889 released, some of the students did well in in Mathematics, but percentage scores were not recorded. Therefore, with this report of WAEC (2024), towards student performance in Mathematics has been done in many countries.

Attitude of student towards Mathematics is one important factor that has been consistently studied. Attitude of secondary school students towards Mathematics is the way the students feel, think in relation to learning Mathematics, which may lead to anxiety and avoidance. Kassa and Woldessenbet (2022), define attitude as “ students emotional and cognitive readiness that affects their motivation and learning behavior in the classroom”. Despite the importance of Mathematics many secondary school students demonstrate negative attitude towards Mathematics, which often leads to poor academic performance and a reluctance to pursue Mathematics related courses or Likewise, the background of parents, peer groups, and also teachers method of teaching Mathematics can either stimulate interest or create fear and disinterest in the subject. Additionally, students career aspiration can shape how seriously they take Mathematics especially if they perceive it as relevant or irrelevant to their future goals.

Understanding the attitude of students towards Mathematics is vital for developing strategies to improve teaching effectiveness, increasing student engagement, and ultimately raise performance levels. This study, therefore seeks to explore these influencing factors to better understand the root of students’ attitudes and ways to

promote a more positive attitude towards mathematics are most secondary school students.

Statement of the Problem

Students' attitude towards Mathematics play an important part in Mathematics learning. Many researchers contend that attitude are important factors that could influence a student achievement. The attitude of students towards Mathematics can create fear and anxiety among many secondary school students, and make them exhibit negative attitude towards the subject. This negative perception often results in low performance, lack of interest, and avoidance of Mathematics related Fields. While students' attitude are shaped by various internal and external factors there is a need to understand how specific factors influence attitude of secondary school students towards Mathematics, such factors as teachers' method of teaching, parental background, peer group, student career choice, may be contributing to students' poor attitudes.

Without identifying and addressing these factors, efforts at improving students' performance and interest in Mathematics may not be effective. Therefore, the study seek to explore key influence in order to provide insights that can help

educators and parents foster positive attitude towards learning of Mathematics among secondary school students.

Research Questions

To guide the study the following questions were raised:

- 1.What attitude do students have towards Mathematics?
- 2.Do teachers method of teaching influence student attitude towards Mathematics?
- 3.Do parents background influence the attitude of student towards Mathematics?
- 4.Do peer group influence the attitude of student towards Mathematics?
- 5.Does student career choice influence the attitude of student towards Mathematics?

Hypotheses

The following hypotheses corresponding to research questions 2,3,4,& 5 respectively were formulated to guide the study;

- 1.There is no significance relationship between teacher's teaching method and the attitude of student's towards mathematics.
2. There is no significance relationship between parental backgrounds and the attitude of students towards mathematics

3. There is no significance relationship between peer group influence and the attitude of students towards mathematics

4. There is no significance relationship between student career choice and the attitude of students towards mathematics

Purpose of the study

The purpose of the study is to investigate attitude of secondary school students towards Mathematics. Specifically the study aims to:

1. examine the general attitude of students towards Mathematics
2. determine the extent to which teachers' method of teaching affect student' attitude towards the subject.
3. explore the influence of parental background on students attitude towards Mathematics.
4. access the role of peer group influence in shaping student attitude towards Mathematics.
5. analyze how students career choice impact their attitude towards teaching Mathematics.

Significance of this Study

The findings of this study will be of significant to students, teachers, parents and future researchers.

The findings will help students become more aware of how their emotions, beliefs, social influences, and future aspirations and enabling better understanding of how to develop a more positive mindset and improve academic performance.

The findings will guide teachers in selecting an applying more effective teaching strategies that promote interest and engagement in mathematics.

It will provide inside on how parental support and background influence students attitudes in helping parents to better support their children learning.

The findings will serve as a foundation for further research into student motivation, attitudes, and academics success in Mathematics and other subject area.

Scope and Delimitation of Study

This study focuses on examining the attitude of secondary school students towards Mathematics. It covers key factors such as attitude student have towards Mathematics, teachers teaching Method, parental background influence, peer group influence, and student career choice influence, as they relate to Mathematics.

The study is delimited to 5 selected secondary school in Ovia North East Local Government Area of Edo State.

Definition of Terms

The following terms are defined as used in the study.

Attitude: A settled way of thinking or feeling about something. And also a favorable or unfavorable reaction towards something or someone exhibited in one's beliefs, feelings or intended behavior.

Method of Teaching: The way a teacher delivers instruction to help students learn. It includes the strategies, techniques, and approaches used to present content and engage learners.

Parental background: The social, economic, educational, and cultural characteristics of a child's parents or guardians.

Peer group: A group of people who are of similar age, social status, interests or background and who interact regularly with one another.

Career choice: The factors that affect or guide a person's decision when choosing a job, profession or future career path.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter focuses on review of literature with concept related to the study.

It is discussed under the following subheadings.

- Mathematics as a school subject.
- Attitude of secondary school students towards Mathematics
- Factors influencing attitude of secondary school students towards in Mathematics.
- Summary of Literature Reviewed.

Mathematics as a School Subject

Mathematics is the science that deals with the logic of shape, quantity and arrangement. According to National Council of Teachers Mathematics(NCTM,2020), Mathematics is “the study of patterns and relationship among quantities,numbers and shapes, and the development of model to describe real world phenomena”. Mathematics is all around us it is the building block for everything in our daily lives . Mathematics is a basic tool in the developing of science and technology, industry and hence the economic development of a modern society. Mathematics is used throughout the World as an essential tools in

many fields including Engineering, Medicine, Social Science and branch of Mathematics concerned with application of Mathematical knowledge to other fields, inspires and make use of new mathematical discoveries that sometimes leads to the development of entirely new disciplines. Mathematics need not to be learned by students in secondary school for the sake of career choice or advancement but student should be able to learn Mathematics with understanding and thereby be able to apply Mathematical ideas later in life.

Mathematics serves both theoretical and practical purpose. Theoretically, it provides a structured framework for understanding abstract concepts, while practically, it is applied in daily life, such as in budgeting, construction, navigation, data, analysis and digital technology, it is also an essential tools in field like Engineering Economic so computer science and physics. Olasimbo and Nwachukwu (2020) noted mathematics is not only a school subject but also a critical life skills and support informed decision making a personal and professional contexts. Amoo and Fasan (2021) define Mathematics as “a tool for developing mental discipline and for encouraging logical reasoning and critical thinking.

Mathematics is a fundamental subject that plays a vital role in the intellectual development of individuals and the progress of society at large. So the importance of Mathematics in education system as a school subject cannot be overemphasized. It enhances logical reasoning, critical thinking, problems solving skills, and decision making abilities, which are essential for both academic success and every day life. According to Yusuf and Adigun(2022),Mathematics equips students with the analytical tools needed to understand and interpret data, make sound judgments, and solve practical problems.

In education, Mathematics serves as a the foundation for learning in other disciplines, particularly in science Technology, Engineering, and Mathematics (STEM) fields. The National Council of teachers of Mathematics(NCTM,2020),emphasize that a strong foundation in Mathematics is crucial for preparing students for modern careers and informed citizenship in an increasingly data driven world. Moreover, Mathematics is important in managing daily activities such as budgeting, time management, shopping and planning. A students who develop a positive attitude towards Mathematics are better positioned to succeed not only academically but also in real life situation requiring logical and numerical reasoning.

Therefore, the importance of Mathematics cannot be over stated. A positive student attitude towards the subject is crucial for academic achievement, career development, and over all cognitive growth. Ajiboye and Oduwaiye (2023) add that the relevance of Mathematics in career readiness cannot be overemphasized, especially for student pursuing Science, Technology, Engineering, and Mathematics(STEM)Fields. A strong foundation in Mathematics boost students confidence and encourage them to take on challenges in competitive professional areas, also critical not only for academic performance but also for producing capable individuals who can thrive in a complex, technology driven world.

Attitude of Secondary School Students towards Mathematics

Attitude refers to an individual feelings, beliefs, and behavioral tendencies towards an object, subject, or experience. In the context of Mathematics education, students attitude encompass their interest, motivation, confidence, and emotional response to the subject. The attitude a student holds towards Mathematics greatly influence their learning behavior, performance, and over all academic success. Research as consistently shown that many secondary school students develop negative attitude towards Mathematics due to various factors such as fear, anxiety, low self-esteem, poor teaching methods and lack of relevance of everyday life

(Yusuf & Adigun,2022). The students attitude may be positive or negative towards the study of Mathematics in secondary school, these negative attitude results in low participation, reduce performance, and even total avoidance of Mathematics related courses or careers.

Attitude of secondary school students in the classroom contexts was influenced by their personal judgment about their capability. If the students attitude towards the subject is negative or positive towards the study of Mathematics in secondary school, the negative attitude towards learning will decreased their performance, and the positive attitude towards learning will also perceive as like and enjoyment and interest in mathematics it can also need the opposite of this feeling which is extreme cases include “Mathematics phobia”. Conversely, students who perceive Mathematics as useful, applicable to real life, and essential for future careers are more likely to develop positive attitudes. More so , those who see it as abstract, difficult, or irrelevant are more likely to have negative feelings towards the subject. “Attitude is an individual disposition or tendency to respond positively or negatively to an object, situation or another person(Segarra & Julia,2021:Di Martion et Al.,2022).

Factors Influencing Attitude of Secondary School Students Towards Mathematics.

The attitude of student towards Mathematics is shaped by a variety of interrelated factors that affect their interest, engagement, and performance in the subject. These factors can be categorized into personal, instructional, environmental, background, choice which leads to the key factors as:

Self-Confidence and interest: Personal beliefs in one's ability to succeed in Mathematics, is a major determinant of attitude. Students who believe they can solve problem tend to approach subject with confidence and curiosity. On the other hand, those with low self-esteem may avoid participation or assume they are naturally “bad at mathematics.

Teachers method of teaching: The way Mathematics is taught plays a significant role in shaping student attitude. According to Yusuf and Adigun(2022), student centered, interactive, and engaging teaching method positively influence attitude, while abstract and rigid approaches often lead disinterest and anxiety “.Teachers who connects Mathematical concepts to real life situations help students appreciate it's relevance and applicability

Parental background influence : Parents educational background, social-economic status, and involvement in their child's education significantly affect attitude. Uche and Nneji (2020) found that students whose parents value education and provide

academic support are more likely to have a positive outlook on Mathematics”. Encouragement and provision of learning resources at home boost confidence and motivate the student positively. while parents who disinterest in mathematics, in his or her days in secondary school may transfer that feeling to the child through take home assignment and this may lead to negative attitude of a students.

Peer group influence: peer can shape how student perceive Mathematics. As noted by Oduwaiye and Ajiboye (2023), student tends to adopt the mindset of their close friends, whether positive or negative regarding Mathematics. peer support in the form of group studies and encouragement can enhance understanding and reduce fear of failure. While, a student fear can increase due to peer group influence, student who is an average in Mathematics may dislike the subject due to evolvment with students who struggle and constant exposure to negative talk about Mathematics, can reinforce anxiety and limit a student’s willingness to participate.

Student career choice: Student career choice plays a crucial role in shaping their interest and attitude towards Mathematics. When students perceive Mathematics as a necessary foundation for their chosen career, they tend to engage more positively with the subject. According to Ajiboye and Oduwaiye (2023), students

who aspire to careers in Science, Engineering, Technology, Medicine, finance or data related field often recognize the value of Mathematics and thus develop a more motivated and persistent attitude towards learning it. For these students, Mathematics is not just a school subject but a gateway to future opportunities. Conversely, if a student believe that his or her future path does not require Mathematics, he/she may see the subject as irrelevant and disengage from it. On the other hand, Olasimbo and Nwachukwu (2020), noted that students aiming for careers in Arts, entertainment, or non-STEM Fields may feel less compelled to excel in Mathematics. This perceived lack relevance often leads to reduced interest, low motivation, and negative attitude.

Additionally, students who are uncertain about their future careers may struggle to find purpose in learning Mathematics, resulting avoidance.

Therefore, students attitude towards Mathematics required a comprehensive approach that address both academic and emotion al needs. Teachers and parents must work to together to create support environment and promote a positive attitude that values and enjoy Mathematics to secondary school students.

Summary of Literature Reviewed.

The literature reviewed in this chapter has highlighted that Mathematics as school subject, attitude of secondary school students towards Mathematics and factors influencing students' attitude towards Mathematics. It began by establishing Mathematics as a vital school subject, recognize globally for its foundational role in scientific, technological, and economic development. Mathematics as a subject is important in managing daily activities, such as budgeting, time management, shopping and planning.

The review also explored the attitude of secondary school students towards Mathematics. The studies show that students attitude towards Mathematics might be negative or positive. It can also need the opposite of this feeling which is extreme cases include "Mathematics phobia". The attitude a student holds towards Mathematics greatly influence their learning behavior, performance and over all academic success.

Moreso, the review identified some key factors influencing attitude of secondary school students towards Mathematics. These factors can be categorized into teachers method of teaching, parental background influence, peer group influence and student career choice.

The review examine how teachers method of teaching influence students' attitudes. It was revealed that teaching methods that are interactive, engaging, and learner- centered tend to improve students' interest and reduce anxiety towards Mathematics. In contrast, traditional, rigid, and teacher dominated methods may contribute to negative perception of the subject.

Parental background was identified as another major factor Influencing students 'attitude. Research suggests that the educational level, occupation and involvement of parents in their children's academic lives can either positively or negatively affect their motivation and perception of Mathematics.

Peer group influence was also reviewed, with findings indicating that friends and classmates of secondary school students play a significant role in shaping their attitude towards learning positively or negatively.

Finally, students' career choice were discussed as a strong motivational factor. The literature shows that students who aspire to pursue careers in science, technology, or other Mathematics related fields tend to have a more positive attitude towards Mathematics, as they recognize its importance for their future ambitions. Conversely, if a student that his or her future path does not require Mathematics, may see the subject as in relevant and disengage from it.

In conclusion, the reviewed literature shows that students' attitude toward Mathematics are influenced by multiple interconnected factors, including teachers method of teaching, parental background, peer group, and student career choice. Therefore, a strong foundation in Mathematics boost students confidence and encourage them to take on challenges in competitive professional areas.

CHAPTER THREE

METHODOLOGY

This chapter describes the methodology for the study. It is discussed under the following sub headings.

- ❖ Design of the study
- ❖ Population of the study
- ❖ Sample and sampling techniques
- ❖ Research Instrument
- ❖ Validity of the instrument
- ❖ Method of Data collection
- ❖ Method of Data Analysis.

Design of the study

The research design used for this study is based on survey research. The survey research method has been selected to investigate the attitude of secondary school students towards Mathematics. The design offers a unique mean of data collection which provide insight into life experience and also aimed at collecting data by seeking responses. It involves studying a subset of individuals considered to be the representative of the entire group and making generalization

Population of the study

The target population of this research work comprised of the 24 public secondary schools with a population of about 3400 secondary school students in Ovia North East Local Government Area of Edo State.

Sampling and Sampling technique

The sample used for this research consists of 94 senior secondary school students from 5 randomly selected secondary schools out of 24 secondary schools in Ovia North East Local Government Area of Edo State. Twenty Students were selected from each school as respondents, giving a total of one hundred Students.

Research Instrument

The research instrument used for the collection of data for this study is the structured students' questionnaire based on "Attitude of Secondary School Students Towards the Study of Mathematics". The questionnaire was designed by the researcher to elicit information from the students on their attitude towards Mathematics as a subject in secondary school in Ovia North East Local Government Area of Edo State. The demographic variables included in this study are gender, age, and class of the respondents.

The questionnaire used in this study consists of two sections. Section A consists of the demographic data. While section B is a four point modified Likert scale which elicited responses from the respondents as to the attitude of secondary school students towards the study of Mathematics and the factors affecting their attitude.

Validity of the Instrument

The research instrument used for the collection of data for this study was developed by the researcher and given to the project supervisor and two other experts in the field for validation. Their comments were used to modify the final copy.

Reliability of the Instrument

The reliability of the measurement instrument was assessed using the split half method. And it was administer to 94 students in public senior secondary schools in Ovia North East Local Government Area of Edo State. The value of the split half correlation is 0.96127 and was step up to full length using Spearman Brown formula. In this analysis, the data set was randomly divided into two equal halves and the Pearson correlation coefficient was calculated between the scores of these

halves. The obtained coefficient of 0.98, indicates excellent internal consistency in the instrument.

Method of Data Collection

The various procedures which were adopted by the researcher for the research work is as follows:

The researcher visited the schools, permission was taken from the principal of each school who directed the researcher to the senior section of each school.

The researcher was introduced to the class teachers of the respondents and completed questionnaire were collected on the spot.

Method of Data Analysis

Data collection was organized and analyzed using frequency counts, simple percentages and mean. A benchmark of 2.50 mean was set, such that mean value of 2.50 and above was “agree” while below 2.50 was categorized as “disagree”. The benchmark was reached from the average of the points allowed to the four options of the modified Likert scales, this as SA = 4 point, A = 3 point, D = 2 point, SD = 1 point for positively worded items, while the reverse is the case for negatively worded items.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents, analyzes, and interprets the data collected from the respondents in relation to the research questions and hypotheses formulated for the study.

PRESENTATION OF RESULTS

Table 1: Demographics Information of Respondents

| CLASS | GENDER | | TOTAL | FREQUENCY | PERCENTAGE TOTAL |
|--------------|--------|-----|-------|-----------|------------------|
| | M. | F | | | |
| SS1. | 6. | 20. | 26. | 36. | 38.3% |
| SS2. | 20. | 24 | 44. | 44. | 46.8% |
| SS3 | 11. | 3 | 14. | 14. | 14.9% |
| GRAND TOTAL: | 47. | 47. | 94. | 94. | 100% |

SURVEY,2025

The demographic data regarding the educational level of the respondents is as follows:

Among 94 respondents, 36 belong to **Senior class 1** of the senior secondary school, in which 16 belong to male students and 20 belong to the female students, accounting for 38.3% of the total sample. Out of the total number of respondents,

44 individuals belong to the **Senior secondary (Class 2)**, making up 46.8% of the sample in which 20 belong to male students and 24 belong female students. Finally,14 individual belongs to the **Senior Secondary (Class 3)**, making up 14.9% of the sample belong to the male students and 3 belong to female students This distribution offers a complete perspective from both **SS1,SS2 and SS3 students**, that involved both the male and female students of the senior secondary school.

Research Question 1: What attitude do students have towards Mathematics?

Table 2: Attitude of Students Towards Mathematics

| | | | |
|---|------|------|--------|
| I enjoy learning Mathematics | 2.90 | 2.50 | Agreed |
| I feel anxious whenever I have a Mathematics test | 2.67 | 2.50 | Agreed |
| i believe Mathematics is important for everyday life | 3.29 | 2.50 | Agreed |
| I often feel that mathematics is too difficult for me to understand | 2.65 | 2.50 | Agreed |
| Grand mean —> | 2.90 | | |

The table 2, shows students attitudes towards Mathematics. Four key factors were examined, each with it's mean score, grand mean of 2.90 and a criterion mean set at 2.50 for comparison.

I enjoy learning Mathematics generated a mean score of 2.90. Then mean score of 2.67 belongs to I feel anxious whenever I have a Mathematics test. Also, mean score of 3.29 belong to, I believe Mathematics is important for everyday life and the mean score of 2.69 belong to, I often feel that Mathematics is too difficult for me to understand. While the grand mean 2.90 is greater than the criterion mean set at 2.50, which indicate positive attitude of students towards Mathematics.

Hypothesis 1: There is no significant relationship between teacher's method of teaching and student's attitude towards Mathematics.

TABLE 3: Teacher's Method of Teaching and Attitude of Students Towards Mathematics.

| Variable | N | Mean (\bar{x}) | Standard deviation (SD) | Pearson (r) | Sig (two tailed) | Decision |
|------------------------------|----|--------------------|-------------------------|-------------|-------------------|-----------------------|
| Teacher's Method of Teaching | 94 | 10.95 | 1.87 | 0.35 | 0.20 | Reject H ₀ |
| Student Attitude | 94 | 11.24 | 2.46 | | | |

$\alpha < 0.05$

The mean score for teachers method of teaching is 10.95 and students attitude towards Mathematics is 11.24 with population size at 94. While the standard deviation score for teachers method of teaching is 1.87 and students attitude towards Mathematics is 2.46. And Pearson (r) results is 0.3531, the significance level 0.05(two tailed) of pearson (r) is 0.20. This analysis results report shows that the calculated Pearson(r) is greater than Pearson(r) significance level 0.05 (two tailed). The report indicate that there is significant relationship between teachers method of teaching and students attitude towards Mathematics.

Hypothesis 2: There is no significant relationship between parents background and students attitude towards Mathematics.

TABLE 4: Parents Background and student's Attitude Towards Mathematics

| Variable | N | Mean (\bar{x}) | Pearson (r) | Standard deviation | Sig (two tailed) | Decision |
|--------------------|----|--------------------|---------------|--------------------|------------------|-----------------------|
| Parents Background | 94 | 9.92 | 0.08 | 2.45 | 0.20 | Accept H _o |
| student's Attitude | 94 | 11.24 | | 2.46 | | |

$\alpha < 0.05,$

The data analysis of table 4, shows the mean score of parents background is 9.92 and students attitude towards Mathematics is 11.24. The calculated Pearson

(r) score is 0.08, while the standard deviation for parents background is 2.45 and students attitude towards Mathematics is 2.46. The calculated Pearson (r) score is 0.08, the significance level 0.05(two tailed) is 0.20. This result shows that the calculated pearson (r) is less than the Pearson (r) critical value at 0.05(two tailed).Therefore,this indicate ,there is no significant relationship between parents background and students attitude towards Mathematics.

Hypothesis 3: There is no significant relationship between peer group and student’s attitude towards Mathematics.

TABLE 5 : Peers Group Influence and Student’s Attitude Towards Mathematics.

| Variable | N | Mean (\bar{x}) | Pearson (r) | Standard deviation | Sig (two tailed) | Decision |
|--------------------------|----------|--|----------------------|-------------------------------|-----------------------------|-----------------------|
| Peers Group Influence | 94 | 10.29 | 0.12 | 2.48 | 0.20 | Accept H ₀ |
| Student’s Attitude | 94 | 11.24 | | 2.46 | | |

$\alpha < 0.05$

The table 5 analysis shows the mean score of a peer group is 10.29 and students attitude towards Mathematics is 11.24. While the standard deviation for peer group influence is 2.48 and students attitude towards Mathematics is 2.46. And pearson(r) calculated score is 0.12, the Pearson (r) significance level 0.05(two tailed) is 0.20. The result shows the pearson (r) score is less than the Pearson (r)(two tailed). This indicate that, there is no significant relationship between peer group and students attitude towards Mathematics.

Hypothesis 4: There is no significant relationship between parents career choice and student attitude towards Mathematics.

TABLE 6 : students career choice and students attitude towards Mathematics

| Variable | N | Mean (\bar{x}) | Pearson (r) | Standard deviation | Sig (two tailed) | Decision |
|-------------------------------|----------|--------------------------------------|----------------------|---------------------------|-------------------------|-----------------|
| Students career choice | 94 | 12 | 0.62 | 2.52 | 0.20 | Reject H_0 |
| students attitude | 94 | 11.24 | | 2.46 | | |

$\alpha < 0.05$

The result from table 6, shows the analysis on Mean score for students career choice is 12 and students attitude towards Mathematics is 11.24. While the

standard deviation for students career choice is 2.52 and students attitude towards Mathematics is 2.46. The Pearson(r) calculated score is 0.62, the Pearson(r) at significance level of 0.05 (two tailed) is 0.20. The analysis report shows that Pearson(r) significance level 0.05 (two tailed) is less than the Pearson(r) calculated score. The report indicates that, there is significant relationship between students career choice and students attitude towards Mathematics.

Discussion of Findings

The results are based on research question data and result of hypothesis test of the variables, such as teachers method of teaching, parents background, peer group influence and students career choice used for the analysis are revealed.

The results of attitude of students towards Mathematics is based on the report of the grand Mean, through the data gotten from the research questions 1 with the help of the research instrument, it was revealed that students have a positive attitude towards the study of Mathematics. The finding implies that important of Mathematics makes students put effort in the study of the subject.

While the results of hypothesis test revealed that there is significant relationship between teachers methods of teaching and students attitude towards Mathematics. The findings implies that the (pearson r) analysis showed that the teachers method of teaching influence on how students' perceive or develop positive attitude towards Mathematics. In other words, teaching approaches that are interactive, practical and students centered are more likely to promote interest and confidence in Mathematics.

The result is consistent with the findings of Ajiboye and Oduwaije(2023), found that the use of learner centered strategies enhanced students interest and reduced

fear of Mathematics. These findings suggest that teaching methodology plays a crucial role in shaping how students perceive and engage with Mathematics.

The results of the analysis on the hypothesis which states that there is no significant relationship between parents background and students attitude towards Mathematics. This suggest that, while parents background characteristic such as my parents support me in teaching Mathematics, my parents rarely help me with my Math homework, there are learning materials at home that help me study Math, and my parents do not necessarily translate into shaping students specific attitude towards Mathematics instead factors such as teaching methods.

Therefore, with the study of Adeyemi and Adwwale (2021) who reported that students attitude towards Mathematics than by parental socio economic background and similarly, Ojo and Olaniyan(2022) emphasized that the role of parents is supportive but not decisive in shaping Mathematics attitudes.

The study indicates that although parents background factors are important in education generally, they do not affect how students respond to Mathematics as in subject. While the findings on peer group suggested that students are strongly shaped with my friends encourage me to do well in Mathematics, most of my

friends think Math is boring and unnecessary, I enjoy discussing Math problem with my classmates and my peer often discouraged me from trying hard in Math.

The results is consistent with the work of Ryan (2021). That peer group norms strongly predict students academic engagement and motivation. In the content of Mathematics, Okafor and Anaduaka(2019) reported that Nigerian secondary students attitude towards Mathematics are significantly influenced by peer pressure and the learning environment.

Therefore, the implication of this result is that Mathematics teachers should pay attention to peer interactions within the classroom, encouraging group study, mentoring and positive peer collaboration may help to build stronger Mathematical attitude among students. Finally, the analysis on students career choice report on the hypothesis which states students career choice has no significant influence on students attitude towards Mathematics, revealed that I want a career that requires good Math skills, I think Math will be useful in my future career and my career goals motivate me to study Mathematics the more likely to show a positive attitude towards the subject. On the other hand, students who think Math is not relevant to the job I want in the future tend to have weaker

interest and motivation. This findings support the argument that career aspirations are a strong motivationaping students attitude towards learning.

From table 2, the students reported that they believed Mathematics is important for everyday life with mean score of 3.29 which is greater than the criteria mean of 2.50, that show the students career choice have a significant influence on students attitude towards Mathematics, if their future career are example, Engineering, Medicine, Finance, Technology. Awofala(2017), found that Nigerian students with career interest linked to Mathematics displayed more positive attitudes and higher engagement in Mathematics classes.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

This chapter presents the summary of findings, conclusion and recommendations.

SUMMARY

The purpose of this research was designed to investigate the attitude of secondary school students toward Mathematics. Ninety-Four Students from senior secondary school in Ovia North East Local Government Area of Edo state were explored.

The researcher made effort to examine the general attitude of student's towards Mathematics determine the extent to which teacher's method of teaching affect students attitude towards the subject examine the influence of parental background on students attitude towards Mathematics access the role of peer group influence in shaping student attitude towards Mathematics and analyze how students career choice impact their attitude towards learning Mathematics.

The collections of data was carried out through the administration of questionnaire to ninety-four (94) students from Senior secondary schools in Ovia North East Local Government Area of Edo state.

The data where interpreted and discussed using mean, standard deviation table, while the hypothesis were tested using the spilt-half and spearman Brown

correlation. The sampling technique used for the research is the random sampling technique.

The finding based on the analysis study attitude of secondary school Students towards Mathematics, the researcher made the following finding. Firstly, students show positive attitude towards the study of Mathematics. The positive attitude of students are likely to play a significant part in the increase of academic performance record of students studying Mathematics. Additionally, the study shows that students believed Mathematics is important for everyday life. The simply mean that a positive attitude will lead to a positive way of problem solving skills.

Secondly, teachers teaching Mathematics in most public senior secondary school have required certificate to teach Mathematics and they have gone through the training and can be called a Mathematics professional. They knows how to use a particular teaching method depending on the topic, to encourage students and make the subject (Mathematics) interesting and easy to understand.

Thirdly, the researcher finding shows that parents do not think Mathematics is important for their future, so with this finding, students that their parent provide learning materials at home for may likely have more interest and positive attitude

toward the study of Mathematics, because the learning materials will serve as a medium of help to student in their assignment.

Furthermore, the researcher finding show that peer group influence attitude of secondary school students positively through the research question that says my friends encourage me to do well in maths. It shows peer group influence can assist secondary school students to show positive interest towards the study of Mathematics.

However, career choice influence is another finding the researcher identify. With the positive responses of students towards the research question that says, I think math will be useful in my future career, shows that career choice influence attitude of secondary school students towards the study of Mathematics.

CONCLUSION

In conclusion, this study revealed the significant impact of attitude of secondary school students towards the study of Mathematics. The finding highlighted that features such as learning materials, reward and challenging tasks play important roles in enhancing student engagement and enjoyment in learning tasks there by contributing to their over all motivation im education pursuit.

Moreover, student attitude towards Mathematics can be changed from negative to positive through encouragement gotten from parent peer group towards class activities such as studying together using discussion method and this will help to shaping the mindset of those students having negative attitude towards Mathematics. That Math is boring and unnecessary, will have a positive re-think towards Mathematics as a subject.

However, the study also identifies the teaching method, some Mathematics teachers use in teaching students in the class room setting make the subject boring and Also negative attitude some teacher put in during teaching.

RECOMMENDATION

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

- Mathematics teacher should undergo a proper training sessions effective teaching of Mathematics. This training should focus on instructional strategies that will help in challenging tasks to sustain student interest & motivation.
- Mathematics teacher should always have mastery of topics and always translate abstract concepts to concrete forms so that the student can relate

the concepts to what they already know. They should relate Mathematics concept to real life situation.

- Encourage collaborative learning experiences through cooperative tasks.
- Mathematics teacher should show high commitment to their teaching task and enjoy the teaching of Mathematics.
- Government should introduced career talk and awareness programs secondary school student about Mathematics, by these student will have positive attitude towards the study of Mathematics.
- Parents should put effort in providing learning materials for their children and encourage with their activities e.g assignment.

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APPENDIX

POPULATION OF THE STUDY

| S/N | Name of School | Population |
|-----|---------------------------------------|------------|
| 1 | Ekosodin secondary School , Ekeosodin | 24 |
| 2 | Oluku secondary School, Oluku | 20 |
| 3 | Technical college, Technical | 20 |
| 4 | Uniben Demonstration Senior School | 30 |
| | | 94 |

QUESTIONNAIRE
UNIVERSITY OF BENIN, BENIN CITY
FACULTY OF EDUCATION
CURRICULUM AND INSTRUCTIONAL TECHNOLOGY
ATTITUDES OF SECONDARY SCHOOL STUDENTS TOWARD
MATHEMATICS

Dear Respondents

The purpose of this questionnaire is to elicit information on the above-mentioned topic. Your cooperation in providing honest and sincere response to all the questions will be appreciated as they will be treated with utmost confidentiality.

Thanks for your co-operation.

Instructions, please tick (appropriately in the provided)

SECTION A

Demographic Data

Gender: Male (), Female ()

Age: 12 - 15 (), 16 - 19 (), 20 - 23 ().

Class: J S S 1 (), J S S 2 (), J S S 3 (), S S 1 (), S S 2 (), S S 3 ().

SECTION B

Instructions:

Please read each of the following statements carefully. Indicate your level of agreement by ticking (✓) the appropriate box:

SA = Strongly Agree A = Agree D = Disagree SD = Strongly Disagree

Section A: Student Attitudes Toward Mathematics

| No. | Statement | SA | A | D | SD |
|-----|--|----|---|---|----|
| 1 | I enjoy learning mathematics. | | | | |
| 2 | I feel anxious whenever I have a mathematics test. | | | | |
| 3 | I believe mathematics is important for everyday life. | | | | |
| 4 | I often feel that mathematics is too difficult for me to understand. | | | | |

Section B: Teachers' Teaching Methods

| No. | Statement | SA | A | D | SD |
|-----|---|----|---|---|----|
| 5 | My math teacher makes the subject interesting and easy to understand. | | | | |
| 6 | My math teacher moves too fast and doesn't explain things well. | | | | |
| 7 | My teacher encourages us to participate and ask questions in class. | | | | |
| 8 | I find the teaching methods used in math class helpful. | | | | |

Section C: Parental Background and Support

| No. | Statement | SA | A | D | SD |
|-----|---|----|---|---|----|
| 9 | My parents support me in learning mathematics. | | | | |
| 10 | My parents rarely help me with my math homework | | | | |
| 11 | There are learning materials at home that help me study math. | | | | |
| 12 | My parents do not think mathematics is important for my future. | | | | |

Section D: Peer Group Influence

| No. | Statement | SA | A | D | SD |
|-----|---|----|---|---|----|
| 13 | My friends encourage me to do well in math. | | | | |
| 14 | Most of my friends think math is boring and unnecessary | | | | |
| 15 | I enjoy discussing math problems with my classmates. | | | | |
| 16 | My peers often discourage me from trying hard in math. | | | | |

Section E: Career Choice Influence

| No. | Statement | SA | A | D | SD |
|-----|--|----|---|---|----|
| 17 | I want a career that requires good math skills. | | | | |
| 18 | I think math is not relevant to the job I want in the future | | | | |
| 19 | My career goals motivate me to study mathematics | | | | |
| 20 | I think math will be useful in my future career. | | | | |