FACTORS INFLUENCING THE ATTITUDE OF SECONDARY SCHOOL STUDENTS TOWARDS THE STUDY POF MATHEMATICS IN SELECTED JUNIOR SECODARY SCHOOL IN ILORIN WEST LGA KWARA STATE

BY

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CERTIFICATION

This is to certify that this research work was carried out by **SALIHU JAMIU ONIKOKO** with Matric Number: KWCOED/IL/22/0331 of the Kwara State College of Education Ilorin, Nigeria

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DEDICATION

This research project work is dedicated to Almighty Allah, for his unfalling blessings and giving me courage, hope, guidance, success, as well as good health throughout the duration of my studies

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Alhamdulilah Robil Alamin All praise and adoration is due to Allah SW and may his blessings continue to be on the noble prophet, his household, companions and entire Muslim ummah. With a sincerity of heart, I am expressing my special gratitude to my everlasting Almighty Allah for granting me the opportunity, ability and strength to attain this level in education

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ABSTRACT

The study focused on the 'factors influencing the attitude of junior secondary school in selected schools in Ilorin west L.G.A kwara state'. The discussion of the finding were done based on the research questions earlier raised in chapter one. The study answered nine research questions and tested two hypothesis were tested on the factors influencing the attitude of students in selected junior secondary schools in Ilorin west L.G.A towards the study of mathematics. it was established in the study that the first assumption that states that there are no factors influencing the attitude of students had to be rejected. While the second hypothesis that stated that their are factors influencing the attitudes of students towards mathematics was accepted. In view of the findings derived from this study and the conclusions arrived from them, the following are recommended for the policy and practice: Ministry of education should enable the provision of good and qualified teachers that good climate for effective teaching and learning of mathematics in junior secondary schools. Effective instructional materials should be provided in school to facilitate teaching and learning of mathematics. The government should schedule enlightment programmes for the parents and the students on the importance of mathematics. The government should organize encouraging activities and also also create rooms for gifting and scholarship to motivate the students in mathematics academic performance

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CHAPTER ONE
INTRODUCTION

Background of study

Pupils could like, enjoy, or the opposite, could hate mathematics. Attitude could be described as a long-term positive or negative emotional disposition towards mathematics (Mc Leod, 2012). Therefore this attitude are rather stable, contain both affective and cognitive factors (Goldin, 2022). A bidimensional definition of the attitude contains only the emotions and beliefs associated with mathematics (Daskalogianni & Simpson, 2020). According to a multidimensional definition, the attitude has three components: emotional response, beliefs regarding mathematics, and behaviour related to the subject (Hart, 2023). Some factors that influence attitude towards mathematics are confidence, beliefs in the importance of mathematics and its utility in practice, and mathematical anxiety (Ashby, 2023).

We are living in the world that is rapidly progressing scientifically and technologically which helps in the development of a state, countries, and nation worldwide. Mathematics pervades natural sciences, including astrophysics. It is also important in the scientific and technological development of countries (Enu, Agyman, & Nkum, 2015). This topic was

intrinsically linked to the planet and natural events (Abd Algani, 2019).We perform quick arithmetic in the back of our minds virtually every second. Of course, all of this is done instinctively, with no consideration given to using mathematics in all situations (Abd Algani, 2019). However, the study of science courses such as mathematics is encouraged in Nigeria all over states, The schools and institutions built by the government is an evidence.

Mathematics is perceived by society as the foundation for scientific and technological knowledge that is cherished by societies worldwide. It is an instrument for political, socioeconomic, scientific and technological developments (Githua & Mwangi, 2023). Mathematics has importance over and above the application of basic numeracy skills. It is also the prime vehicle for developing student's logical thinking and higher-order cognitive skills. Mathematics also plays a major role in a number of other scientific fields, such as Physics, Engineering and Statistics. It is believed that more Mathematics lessons are likely to be taught in schools and colleges throughout the world than any other subject (Orton, Orton, & Frobisher, 2024). In fact, the benefit that the study of Mathematics offers in the society is so profound that it is often used by Universities to filter secondary school learners for entry into the prestigious science-based

degree programs. According to Adeneye & Abisola (2020) ‘mathematics not only enhances problem solving and analytical skills of students but promotes their logical, functional and aesthetic skills. In general human beings engage in daily usage of mathematics and this daily application of mathematics induces the human brain to articulate problems, theories and their solutions for the survival of human race. There is no gainsaying that mathematics at school prepares students to acquire functional and coping skills for adult life. Mathematical skills serve as catalyst for genuine invention, improved productivity, and expansion in social well-being of citizens. For any nation to be globally competitive, its citizens must display high mathematical and scientific literacy as a strong base for technological prowess. Many countries remain underdeveloped because they lack strong mathematical base cum scientific literacy.

In spite of the benefits that the study of Mathematics offer, it is commonly perceived that Mathematics is difficult, obscure, and of little interest to certain people. In this country students’ achievement in mathematics is at low ebb when compared to highachieving countries despite their adoption of mathematics as a filter of students into science, technology, engineering, and mathematics careers at the university level (Adeneye & Abisola, 2020). It cannot be denied that Mathematics plays an

important role in life but the reality is that many students, specifically, in Yala Local Government of Cross River State, Nigeria, find mathematics very difficult, hampering the desire to acquire the different mathematical skills and processes that are useful in their everyday lives. Mathematics phobia developed by many students keeps them away from understanding the importance and roles of mathematics. Many Nigerian students seem not to develop and demonstrate a deep understanding of and capacity to do mathematics (Awofala, 2017). This lack of understanding developed by mathematics students is highly connected to students' perception of mathematics.

Hence, in Nigeria the national objective in science and technology is to improve student attitude towards the study of mathematics positively. The Nigerian education accorded mathematics a special position in the school curriculum. In fact, it is made the core-subject for both art and science student. All the junior secondary school students must have to pass it before they can be given the opportunity to register for senior secondary school. In line with the recommendations of the Nigerian Educational Research and Development Council(NERDC, 2018), what the students learn at the JSS level will lay the foundation for the students SSS education and it should be systematically connected to it. Accordingly,

systematic connection with the content of Junior Secondary Education is one of the basic features of the Senior Secondary Education curriculum (NERDC, 2018).It is therefore assumed that astudent who is admitted into the SSS1 possesses the basic skills to cope with the challengesof schooling at that level (Faleye & Afolabi, 2018).

The attitude of students toward mathematics has been the subject of a great deal of attention from educators (e.g., (Chen et al., 2018; Goldin et al., 2016)).According to Yara (2019), Attitude of students towards Mathematics has been considered to be a very significant factor underlying their school experience and achievement. That is to say that the attitude students hold towards Mathematics determines how they approach the subject. In many cases, students have been found to approach Mathematics as procedural and rule-oriented. This kind of attitude prevents them from experiencing the importance of Mathematics and the many other approaches that could be used to develop competence in the subject. Clarke, Thomas, and Vidakovic (2019) postulate that attitudes and practices towards the learning of Mathematics are complexly affected by beliefs, emotions, social context and content knowledge. Studies confirm that emotional responses toward Mathematics that are found in students include like and dislike of Mathematics, anxiety associated with

Mathematics and self-confidence in relation to learning of Mathematics (Henderson & Rodrigues, 2018). These emotional factors have been found to have an impact on students' performance. That is to say that many students see Mathematics as an uphill task. They learn Mathematics with low enthusiasm and just for the sake of the grade for the next level in their the subject. subject of a great deal of attention from educators (e.g., (Chen et al., 2018; Goldin et al., 2016)). Students with a positive attitude toward mathematics tend to enjoy the subject, understand its value, and have confidence in it; thus, they are likely to prioritize the study of mathematics (Kiwanuka, Van Damme, Van den Noortgate, & Reynolds, 2020; Mullis, Martin, Foy, Kelly, &Fishbein, 2020), which could lead to high performance in the same (Guo, Marsh, Parker, Morin, & Yeung, 2015; Wigfield., Tonks, & Klauda, 2016). Although several researchers have reported a positive relationship between students' attitudes toward mathematics and mathematics achievement (Bhowmik & Roy, 2016; Chen et al., 2018; Dowker, Cheriton, Horton, & Mark, 2019; Guo et al., 2015; Lipnevich, Preckel, & Krumm, 2016), whereas there are some aspect that are being neglected which might actually be the cause of poor performance of students in mathematics and might also affect their performance in other exams in future This is in support of an argument by Daniel and Schouten

as cited in Alonge, Mordi, Nworgu and Busari (2017) that a prediction of future examination result could be made with reasonable success based on the result of an earlier examination and that grades could serve as prediction and criterion measures. these to the reports given by the WACE Chief Examiners' (2016) that just 27% of the students passed Mathematics with "C" grade and above. These may plausibly be explained by the limitations of previous studies: (a) the use of a variable-centered approach, (b) the omission of crucial covariates, and (c) the examination of small and non-representative samples.

First, most previous studies have used a variable-centered approach. These studies examined individual components of attitude (e.g., enjoyment of mathematics and the value placed in mathematics) separately, whereas for individual students these components are interrelated (Mullis et al., 2020). Second, some previous studies failed to control for the effect of student backgrounds (e.g., (Bhowmik & Roy, 2016; Lipnevich et al., 2016)). When students have sufficient educational learning resources at home, and their teachers provide them with good explanations and feedback, they can learn effectively and focus on studying mathematics, which leads to high mathematics achievement and development scientifically. However, because some studies did not statistically control

for these variables, their results might be biased (Zhu & Chiu, 2019). Third, a number of studies did not select nationally representative samples and instead used small and non-representative samples (e.g., (Dowker et al., 2019;)). Consequently, these individual studies have examined different types of students and reported mixed findings. Researchers have suggested examining the subgroup of students using a person-centered approach because the relationship between students' attitude toward mathematics and mathematics achievement could differ according to their characteristics (Berger, Mackenzie, & Holmes, 2020). . Attitudes can change and develop with time (Syyeda, 2016), and once a positive attitude is formed, it can improve students'learning (Akinsola & OlTherefore, this research will examine the existence of different selected Junior Secondary school students in Ilorin west Kwara state, with regard to the factors influencing their attitude toward the study of mathematics and to examine the relationship between attitudes toward mathematics and mathematics achievement, while keeping in mind the limitations of previous studies.

Statement of problem

Despite all effort toward the students academic development, it is obsered that most students are been influenced negatively which is

affecting their performance in schoolcertificate examinations. The attitude of a student towards mathematics can influence his life in many aspects. It cannot only affect his performance in mathematics but also in any other subjects. This can affect his reasoning faculty and his logical approach to day to day activities in life.

The problem associated with mathematics disturbs parents, teachers and educationist. The slow rate of development of this country is attributed to low technical knowledge and ability, low production technological facilities, and other skilled labour to facilitate development. Since, this problem can be more than half solved if mathematics is effectively learned, it become necessary to identify the factors that influence the attitude student toward the study of mathematics at the important level of study (JSS) and eradicate those that influence the student negatively to ensure positive result.

Purpose of study

The purpose of this research is to investigate the factors that influence the attitude of students in JSS level towards the study of mathematics using some selected JSS in Ilorin west LGA kwara state as a case study, attempt will also be made to find solution to this problems.

Research questions

The following questions will be asked from the student to identify those factors that influence the students attitude towards the study of mathematics and how it influence them: Are students not aware that mathematics is a prerequisite for professional courses like medicine, engineering etc?

i. Do jss student lack basic knowledge in mathematics?
ii. Does the way mathematics is taught influence the attitude of student towards the study of mathematics?
iii. Does lack of motivation influence student's attitude towards the study of mathematics?
iv. Does natural weakness influence the attitude of student toward the study of mathematics?
v. Do parent or peer pressure influence the attitude of students towards the study of mathematics?
vi. Do limited time for learning mathematics influence the attitude of students towards the study of mathematics?

vii. Do lack of instructional materials for teaching and learning mathematics influence the attitude of students towards the study of mathematics?

viii. Do students perform excellently in mathematics?

if the following questions are answered and analyzed it will be easy to determine the factors that influence the student and how it influences them towards the study of mathematics.

Research hypothesis

H0: there are no factors that influence the attitude of students towards the study of mathematics in JSS

H1: there are factors that influence the attitude of students towards the study of mathematics in JSS

Aims and objectives of the study

This research is made to find the factors that influence the attitude of student towards the study of mathematics, identify how it influence their attitude and its effect on them academically.

Significant of study

It is believed that this study will not only help the student to know their weakness in this subject and how to improve academically but it will also help the teachers to identify how to deal with the students. Moreover, the development of the student in this subject will also help in the development of the state, country and even the world as a whole.

Scope of study

The research was done to find the factors influencing the attitude of JSS students towards the study of mathematics by selecting Five (5) different jss in Ilorin west LGA, kwara state as a scope of the study

Operational definition

Factors: means something that helps to produce a result or a circumstance that could cause a change.

Influence: means the capacity to have effect on the character, development or behavior of someone or something.

Attitude: means a settled way of thinking or feeling about something or someone.

Junior secondary school: means a school that provides a three year post-primary course of full-time instruction suitable for pupils between the age of twelve years and fifteen years.

Students: means a person formally engaged in learning, especially one enrolled in a school or college.

Towards: means in the direction of something or someone

Study: means the devotion of time and attention to gaining knowledge of an academic subject, especially by means of books

Mathematics: a subject that deals with numbers, shapes, logics, quantity and arrangements.

CHAPTER TWO

LITERATURE REVIEW

This chapter present review of literature relevant to the title of the work. They are as follows:

- The historical development of mathematics in education
- Factors that influence the attitude of students towards the study of Mathematics
- How to Motivate Students to Have Interest in Mathematics
- Nigerian Basic skills designed to develop the mathematical skills of students at the Basic schools level.

The historical development of mathematics in education

The history of mathematics education is an integral part of the history of mankind's search for knowledge which is concerned with the individual's experience and knowledge of shapes and quantities.

The origins of mathematics thought lies in the concept of numbers, magnitudes, and forms. The ideas of 'numbers' concept evolving gradually over time is supported by the existence of language which preserve the distinction between 'one' 'two' and 'many'. But not of numbers lager than

two prehistoric artifacts discovered in Africa, dated 20,000 years old or more suggest early attempt to quantify time. The ishango bone found near the headwater of the Nile river (northern congo), maybe more than 20,000 years old and consist of series of tally marks carved in three column running the length of the bone. Common interpretation states that the ishango bone shows either earliest known demonstration of sequence of prime numbers or six-month lunar calendar.

The study of mathematics as a ‘demonstrative discipline’ began in the sixth century BC with the pythagoreans who coned the term ‘mathematics’ from the ancient Greek ‘mathema’ meaning ‘subject of instruction’. The European defined mathematics education as the didactics or pedagogy of mathematics, which means the practices of teaching, learning, and carrying out scholarly research to the transfer of mathematics knowledge.

Elementary mathematics were a core part of education in many ancients civilizations, including ancient Egypt, ancient Babylonia, ancient Greece, ancient Rome, and india. In most cases, formal education was only available in to male children with sufficient high status, wealth or caste. The oldest known mathematics textbook is the Rhind papyrus, dated from

circa 1650 BCE. In the middle Ages, the academic status of mathematics was declined, because it was strongly associated with trade and commerce, and considered somewhat un-christian. Although it was continued to be taught in European universities, it was seen as subservient to the study of natural, metaphysical and moral philosophy. The first modern arithmetic curriculum (starting with addition, then subtraction, multiplication, and division) arose at Reckoning school in Italy in the 1300s. The first mathematics textbook to be written in English and French were published by Robert Rocorde, beginning with the Grounde of Artes in 1543. However, there were many written on mathematics and mathematics methodology that date back to 1800 BCE. These were mostly located in Mesopotamia, where the Sumerians were practicing multiplication and division. There are also some artifacts demonstrating their methodology for solving equation like the quadratic equation.

In the 18th and 19th centuries, the industrial revolution led to an enormous increase in urban population. Basic numeracy skills such as the ability to tell time, count money and carryout simple arrithmetics, became essential in the new urban lifestyle. Within the new public education system, mathematics became a central part of the curriculum from an early age. By the twentieth century, mathematics was part of the core curriculum

in all developed countries. By the 18th-19th century, mathematics education was established as an independent field of research. Main events in this development includes the following; In 1893, a chair in mathematics education was created in all the universities of Gottingen, under the administration of Felix Kelvin.

The international commission on mathematical instruction (ICMI) was founded in 1908, and Felix Kelvin became the first president of the organization. In 1968, the shell centre for mathematics education was established in Nottingham. The first international congress on mathematics education (ICME) was held in Lycon in 1969. The second congress was In Exeter in 1972, and after that, it has been held every four years.

In the 20th century, the cultural impact of the 'electronic age' (MC Luhan) was also taken up by educational theory and teaching of mathematics. While previous approach focused on 'working with specialized 'problems' in arithmetic, the emerging structural approach to knowledge had 'small children meditating about number theory and set'…

Students' Perception of Mathematics and Mathematics Learning

Mathematical concepts as forms of teaching and learning have been in existing for many years, dated 5000 years ago (Kabeera, 2019). In line with this Awofala, Lawani & Adeyemi (2020) says that mathematics is as old as mankind in that God being the greatest mathematician ever framed the world with the idea of mathematics. It is believed that the notion of mathematics as a discipline was invented at the time when reading and writing was inaugurated by the Sumerians (Kabeera, 2019). Kabeera continues that from then to this day, mathematics has since become a dominant discipline among world academics with all education institutions throughout the world prioritizing it in their education curriculum. Throughout the world, mathematics is viewed as one of the fundamental intellectual tools that every educated individual should have (Kabeera, 2019). The world today looks at mathematics as an engine for the development of all scientific disciplines.

Akuezuilo & Chinweoke, 2009) Stated that mathematics is the bedrock of all Science Subjects and is therefore, needed for scientific and technological advancement of any nation. Mathematics plays a key position when it comes to determining how individuals deal with the various spheres of private, social, and civil life (Anthony & Walshaw, 2019). This explains why most institutions in the world pressurize the

students to study mathematics both at basic and secondary education (Anthony & Walshaw, 2019). On that accord therefore, Mathematics is considered as a central subject in all ordinary levels of education in Nigeria (National Policy on Education, 2024).

Students believe and attitudes (perception) towards mathematics present it as an abstract and difficult subject that can only be understood by gifted students. Kareera (2019), it is extensively said that student's unenthusiastic perceptions and myths towards mathematics are very broad. Sam as cited in Kareera (2019) added that many students are petrified of mathematics and feel powerless in the presence of mathematical ideas. Sam lament further those students consider Mathematics as unbearably a difficult, frosty and abstract subject. Many people especially student's believe that it is only academically gifted mates that can be powerful in the presence of mathematics or those who 'inherited mathematical ability, while others hold the view that the general challenges in mathematics performance is as a result of the permanent State over which they have no or little control (Kabeera, 2019). Tobias (2023) advances that many aged people have been deprived of many professional and personal opportunities because of their poor performance in mathematics and therefore to many, these negative experiences remain and keep haunting

them throughout their lives. McLeod in Kabeera (2019) argues that, the role of parents towards the child's better mathematical performance should not be underestimated. Parents play a primary role towards building students beliefs and attitudes mathematics and thus better performance. Parents' take on mathematics greatly communicates sense of the subject to the child and greatly influences the way it is facilitated thus arousing the interest of the children to pursue it with a good attitudes and results into better performance in the long run (Sam in Kabeera , 2019).

Perceptions and beliefs about mathematics originate from past experiences; comprising both cognitive and affective dimensions (Mutodi, 2024). Rensaa (2019) agreeing with this fact says that Perceptions and beliefs about mathematics lays heredity in the people's lived and past experiences which comprises both cognitive and affective dimensions . Cognitively, it relates to a person's understanding or knowledge and credence's in addition to other cognitive demonstrations while affective domain refers to a person's to attitudes, feelings and emotions about mathematics (Kabeera, 2019). The perceptions towards mathematics (Kabeera , 2019) are vital towards the effective facilitation of learning and teaching the discipline. This concept influences the instruction of mathematics both positively and negatively, the school system, family

background and student's attitudes towards the school altogether have an effect on the way students view mathematics (Kabeera, 2019). Kabeera projected further that student's positive discernment towards mathematics can steer many into mathematic success. Therefore an approach to get better of the students attitude towards mathematics at a young age wouldpresent the opportunity for many students to perform well in mathematics while at a higher level of education (Kabeera, 2019). It is important to note that an individual's perceptions affect his desires and love towards mathematics and hence deconcetration while learning it which in the end brings about horrendous results to both the students and the institutions (Kabeera, 2019). Hannula (2006) pointed out that mathematics phobia is within the student's structure of believes. Philipp in Kabeera (2019) expand that beliefs are vehicles of conveniences through which manages to construe the world.

FACTORS THAT INFLUENCE THE ATTITUDE OF STUDENTS TOWARDS THE STUDY OF MATHEMATICS

There are different factors that influences the attitude of students in Junior Secondary school towards the study of mathematics which some of them are as follows: The environment is an important factor that can affect

humans attitude. A motivating environment which involves both living and nonliving things influence the attitude of students towards the study of mathematics positively why a non-motivating will actually do the opposite. Good teaching/learning process and environment can changestudents' behaviour into positive one, all mathematics teachers that are teaching young mathematics learners must have experience and ability to manage classroom, so that the students can get motivation in learning mathematics. If students are motivated well to learn, they will find learning of mathematics easy. According to Hapsari and Widhianningrum as cited in Rosi and Sari (2019), reinforcement is a response to a behaviour which increases the likelihood of its recurrence. In the learning process particularly mathematics, provision of reinforcement is a form of positive response of teachers to the behaviour of students so that students' behaviour can be repeated again at a later time. That is, when students are motivated enough to participate in the classroom discussion, then, that reinforcement will make the students to participate again. Rosi and Sari (2019) said that designing the environment of the class properly, the students can be motivated to learn. Reinforcement is one factor to create a good environment of teaching process in the class. However, reinforcement is a stimulus or event that follows the occurrence of a

response and maintains the strength of that response occurring again. Based on the foregoing, Goodluck, and Ateh-Abang (2017) define reinforcement as the procedure or process of increasing or stamping in desirable behaviour of an individual. For instance, if a student attracts the attention of his classmates (the reinforcer) by arguing with the mathematics teacher (response) in class (stimulus situation) by saying "sir the solution is not correct," the frequency of the student arguing with the teacher in class may increase because the student enjoys argument. Similarly, if a mathematics teacher gives a prize (reinforcer) to any student that answers all the questions (response) in class (stimulus situation), the response is likely toincrease in order for such student to continue to win prizes. There are also interactions between the conditions of reinforcement.

A list of educational implications of reinforcement were outlined. Reinforcement as a behaviour modification technique can be applied to a wide range of behaviour problems and can be used in every human setting but its monotonous application makes reinforcement to lose its values before the client. According to Lindsey (2017), positive reinforcement positively helps students in the classroom. Based on the researchers' experiences, many of junior secondary schools teachers are struggling to identify and use teaching strategies that can motivate and improve th

students' performance in mathematics. Although the choice of teaching strategy to the young generation may be simple, it is actually the application that is proven to be difficult. Teachers, new and old, are experiencing adversity when applying current teaching techniques such as positive reinforcement in their classrooms. Teachers of junior secondary schools may need to be effectively trained to teach with these unfamiliar strategies, so that the teaching and learning of mathematics will become simple to teachers and students. Although it takes time to become fluent in a#y teaching strategy, it is vital that teachers start with building a positive relationship between their students, and their teaching peers as well. It is only when a student trusts their positive role model that they are able to benefit from positive reinforcement in their classroom.76 Goodluck and Ateh-Abang (2017), conducted research on reinforcement and its educational implications. The research focused on the nature and concept of reinforcement and its educational implications. Reinforcement is the process of increasing or stamping in desirable behaviour of an individual through the mechanisms of positive, negative, primary or secondary reinforcers. A reinforcer is the pleasurable stimulus that leads to an effect called reinforcement. Conditions or patterns of administering

reinforcement are continuous schedule and partial (intermittent) schedule pattern.

Rewards also create learning interest in students. Rewards of various kinds should be used in such a way that students can be motivated. The use of positive reinforcement of various kind which can be in form of material reward, symbolic and/or psychological should be employed because they help in creating self concept in the learning of mathematics. The teacher must however be cautious such that the reward does not become an end in itself but means to create learning desire in the students . Therefore, award or praise the child for a work done and the teacher should note that praise should not only be by clapping hands of classmates but also by teacher's handshake. Praise can also be used following students' responses in such ways as: a nod by the teacher, smile, a good look, verbal, praise friendly movement towards the child, writing students' response on the board by the teacher etc. however, blame should be used where necessary but sparingly because it creates personality maladjustment.Welcome to Gboard clipboard, any text you copy will be saved here.

The home also influence the attitude of students towards the study of mathematics. The child's first teacher is the home. The parents especially the mother influence the child's learning from the initial stage. Therefore, the role parents play in the child's interest in mathematics at home is very significant. If the mother is equipped with the knowledge of mathematics she can help in training and encouraging the child in mathematics. There is therefore the need for every man and woman to be mathematically literate. In addition, parentshould have time to ask their children what have been done in their class daily and demand to see it even if they may not be mathematics oriented. Also; they should supervise how theirbchildren spend their spare time at home even on holidays.

How to Motivate Students to Have Interest in Mathematics

According to Janelle (2016) effective Mathematics teacher must take the following strategies into consideration in order to build students' interest in Mathematics:

1. Build on skills students have mastered: When you build on skills students feel comfortable with, it will give them a sense of accomplishment. You will also be learning how to motivate students to want more.

2. Demonstrate the Usefulness of Mathematics in the Real World: An effective element to switching students to Mathematics is to show them how it is used in their lives. Many children do not understand that the tools they use every day (Twitter, instagram and texting) come from an engineer. When you help students make this connection, and they will be able to appreciate how Mathematics can translate into career.

3. How to Motivate Students to Set Achievable Goals:Help students to start and set a small goal to work towards, if they achieve their first goal, move to a higher one. Once students get a taste of achieving their aims on a regular basis, it will motivate them to strive for even more.

4. Present a Reasonable Challenge: Present your students with a challenge that is both within their reach and can ignite their excitement. After all, it's difficult to motivate a love for Mathematics if there is no enthusiasm behind it. Children love a challenge and this can very well be the key factor to get your students hooked on the subject.

5. Incorporate Technology into Lesson: Children love technology and any time that you can incorporate it into your lesson, the better. There are numerous Mathematics applications on the market that provide students

with challenging games or at the very least, a different point to approach the problems. Make use of them generously.

6. Mathematics Teacher must be Enthusiastic while Teaching: Children tend to attach a value to each subject, and when they see their teacher values mathematics, and then they too will understand its importance.

7. Entice Students with a Magical Mathematics Problem: Magic is something that mystifies people, and sometimes all it takes to motivate a student to love Mathematics is to give them one bewildering problem that can get them hooked.8. Play Games: Make Mathematics interesting by using recreational Mathematics to motivate students, such as puzzles, board games, and manipulative chess can teach students to strategize and calculate, while other games can teach Mathematics related skills to help keep their minds sharp.

8. Play Games: Make Mathematics interesting by using recreational Mathematics to motivate students, such as puzzles, board games, and manipulative chess can teach students to strategize and calculate, while other games can teach Mathematics related skills to help keep their minds sharp.

9. Incorporate Music into your Lessons: Many students do not realize how closely related music is to Mathematics-every genre of the former uses calculation in some way and your classroom will greatly benefit from understanding this relationship. In today's classroom, Mathematics is taught as a procedural tool and nothing more. Effective teachers will take the strategies listed above to not motivate students to understand the lessons, but also see Mathematics in a new, more applicable light. Present this difficult subject in a way that students will love and see its effects take shape.

Nigerian Basic skills designed to develop the mathematical skills of students at the Basic schools level.

Mathematics is very important subject in the Basic schools that needs proper administrations in order to realize its objectives. Therefore, adequate funding of mathematics subject in the Basic schools is critical for the development of the programme as it will help to provide needed human and materials resources for smooth implementation of mathematics curriculum. Adequate funding will also help to provide adequate training and retraining programme for the mathematics

teachers and to improve their allowance. Satisfactory funding of mathematics programme will aid effective administration of mathematics programme at the Basic school level. To realize the objectives of mathematics programme at the Basic school level, there is need for continuous investment into the programme. The paper draw the following conclusion that teaching of large classes, inadequate mathematics laboratory, and shortage of instructional materials, poor motivation, ineffective capacity building programme, poor supervision and negative attitude of students towards learning of mathematics are among the major problems mathematics teachers in the Nigerian Basic schools face on daily basis. Therefore, the following are recommended:

1. Increment in the funding of Basic school education in Nigeria by the government. This will help to employ more teachers which will reduce the high teacher-student ratio in the classes.

2. The government should provide well-equipped mathematics laboratory in all the schools alongside other laboratories to safeguard mathematics equipment, concretize the teaching of mathematics, and also projects produced during workshop for further use;

3. Constant training and retraining programme should be organized for mathematics teachers.

4. More mathematics instructional materials should be provided for mathematics teachers in all Basic schools in the country.

Kabeera (2019) examined the influence of student's perception on mathematics performance in three selected Rwandan secondary schools. The study took a qualitative case design and it explored the perceptions of high school students towards mathematics in three secondary schools in Rwanda. It further analyzed relationship between the teachers and the students and how this relationship can positively or negatively influence the student's perceptions towards the general mathematics performance. The study's sample size was 30 comprising of students from three selected schools and 6 mathematics teachers. The students were interviewed in their respective focused group each consisting of 8 students also secondary data from other researcher was used. The research revealed that Language is one of the factors that have influenced the students' perceptions towards mathematics. It was equally exposed that age greatly influences the way students view mathematics, it highlighted that students from the age of 14-

18 usually view mathematics as a hard subject. The study found out that there was a significant discrepancy in perceptions between the ways girls perceive mathematics to boys. The research's results show that there is a grand relationship between teachers, learning materials, and school administrators' supports on the self-confidence of students of all ages, gender, beliefs, and attitudes, and thus influence positive attitudes towards mathematics. The study also revealed that gender related factors influence the student's perceptions towards mathematics, it noted that girls tend to develop a low self-esteem that they cannot out compete boys in mathematics. It therefore recommends that learners should not ground themselves in myths and baseless beliefs that if not well addressed can easily affect the student's performance in mathematics as well as making them insignificant in the society later in life. Though the study of Kabeera (2019) is assumed as a basis for this present study, still it differs from this present study in areas such population of interest. The present study adopts junior secondary school students in Yala Local Government Area of Cross River State, Nigeria.

Uwineza, Rubagiza, Hakizimana & Uwamahor (2018) carried out a study on gender attitudes and perceptions towards mathematics performance and enrolment in Rwandan secondary schools. The study

used questionnaires, interviews and classroom observations to collect data from a sample of 150 participants including 60 females, 84 males' students, as well as 6 male mathematics teachers, who were purposefully selected. The main findings from this study show, in general that, boys and girls demonstrate shared perceptions towards the importance of mathematics subjects. However, boys manifested more negative perceptions towards girls' ability to perform well in mathematics. Besidessome few females also manifested negative perceptions, which can explain their low confidence in mathematics. A particular trend which was highlighted in this study indicates the role of the teacher in shaping gender differences that are observed in mathematics learning. Hence a more longitudinal study, particularly focusing on teachers' classroom gender related practices, attitudes, beliefs with their impact on students' performance can provide more generalizable findings. The study recommends further research on teachers' gender related classroom practices, attitudes and assessments and their impact on students' performance with respect to gender. Such research may contribute to the improvement of quality mathematics education and performance, as well as to the subsequent increase of girls' enrolment in mathematics combinations. While considering the findings from this study as

informative and not generalizable, the study suggests a more longitudinal study which can lead to generalization. The study of Uwineza, Rubagiza, Hakizimana & Uwamahor (2018) though addresses perception of students towards mathematics but in comparison with this present study, there is variance in variable of interest. The present study is not greatly attached to genter. Also in terms of population of interest. The present study is interested in junior secondary school students in Yala Local Government Area of Cross River State, Nigeria.

Afari, Aldridge, Fraser & Myint (2013) investigate students' perceptions of the learning environment and attitudes in game-based mathematics classrooms. A pre–post design involved the administration of English and Arabic versions of two surveys (one to assess students' perceptions of the learning environment and the other to assess their attitudes) after modification to ensure their relevance for college- level mathematics students in the UAE. For a sample of 33 classes (352 students), eight of which (90 students) were exposed to mathematics games, students involved in mathematics games perceived statistically significantly more teacher support, involvement, personal relevance, enjoyment of mathematics lessons and academic efficacy. The findings of the study provide that the use of mathematics games, can enhance

students' attitudes towards mathematics. The study recommends that in many classrooms, the teacher's willingness to incorporate games or different pedagogies in their lessons could be a key to success in improving the classroom environment and students' attitudes towards mathematics. Afari, Aldridge, Fraser and Myint (2013) failed to critically address students belief towards mathematics outside the used of games and academic performance in mathematics. The present study also differs from the study of Afari, Aldridge, Fraser and Myint (2013) in terms of methodology and population of interest. The present study is interested in academic performance in mathematics of junior secondary school students in Yala Local Government Area of Cross River State, Nigeria.

Mutodi (2014) investigate The Influence of Students` Perceptions on Mathematics Performance. A Case of a Selected High School in South Africa. The influence of factors such as strength and weaknesses in mathematics, teacher support/learning material, family background and support, interest in mathematics, difficulties or challenges in doing mathematics, self- confidence and myths and beliefs about mathematics were identified as constructs of perceptions that influence students' performance. Five of the seven constructs were found to be influential on students' performance in mathematics. Quantitative methods were used to

analyses the data collected from a questionnaire whichwas administered to randomly selected secondary school students (n=124) in Polokwane, South Africa. From the regression analysis of the data, the following hierarchy of themes emerged as components of students' perceptions of mathematics. These were (i) weaknesses in mathematics (ii) family background and support, (iii) interests in mathematics, (iv) self-confidence in mathematics, (v) myths and beliefs about mathematics (vi) teacher /learning material support, (vii) difficulties in learning mathematics. Results from t- tests, Anova and suggest that there were significant differences in the perceptions and beliefs about mathematics between males and females, between mature and juvenile students and among students from different language backgrounds respectively. Correlation analysis results showed strong positive relationships between performance and perception constructs such as self-confidence, interests in mathematics, teacher and learning support material as well as myths and beliefs .The respondents tend to view lack of proficiency in mathematics as a challenge, and attribute success in mathematics to effort and perseverance. Students also perceive difficulty in mathematics as an obstacle, and attribute failure to their own lack of inherited mathematical ability. These findings suggest that differences in (i) myths and beliefs about mathematics success, ((ii)

motivation given by mathematics teachers and parents, (iii) mathematics teachers' teaching styles and learning materials and (iv) self confidence in mathematics may lead to differences in perceptions about mathematics. These in turn may lead to differences in attitudes towards mathematics and learning mathematics which have a bearing on performance. The study of Mutodi (2014) suggests core premises for this present study, particularly in terms of population of interest.

CHAPTER THREE

RESEACHR METHODOLOGY

This chapter will discuss the following content:

Research design

Population

Sample and sampling technique

Instrumentation

Validity of the instrument

Reliability of the instrument

Procedure for data collection

Method of data analysis

Research Design

The research design for this study is descriptive survey method. The descriptive survey method was adopted to enable the researcher to make appropriate study as it will enable researcher to collect accurate information on the given phenomena of quantity and quality of equipment and facilities, qualification of personnel and effect of the available facilities and equipment on factors influencing the attitude of student

towards the study of mathematics selecting some junior secondary school in Ilorin west LGA kwara state. This is because the research will be done after the event as occurred.

Population

The population for this study were made up of the mathematics students, teachers and principal in selected junior secondary in Ilorin west LGA kwara state. While, the target population are the students in the various schools.

Sample and Sampling Techniques

The researcher made use of the students of ten (10) selected junior secondary school. Purposive sampling techniques was adopted to select five schools, sum of hundred (150) questionnaires were distributed to the students in total.

Instrumentation

Questionnaire is the instrument to used for this study. The research questionnaire contains nine (9) items. The questionnaire contains two sections (section A & B). section A deals with personal data of the respondent and section B which is the central focus on selected variable for

the search work ranging from quantity to quality equipment and facilities provided.

Validity of Research Instrument

In order to collect valid and reliable data, questionnaire and personal observation were done. This research was also validated by presenting the copies of designed questionnaire to the supervisor for proper vetting.

Reliability of Research Instrument

In other to ascertain the reliability of the instrument, pilot study was carried out on some random junior secondary school student and test-re-test method were used at an interval of weeks, response were grouped, tabulated and after two weeks they were read ministered to some respondents and the statistical correlation between them were done to show that the instrument used is reliable for this study

Procedure for Data Collection

The questionnaire items was planned and arranged to cover the scope of the research. The questionnaire were personally administered by the researcher for easy distribution and collection, the form were given to

the students with the guide of the research and the teacher to ensure proper monitoring.

Method of Data Analysis

Hypothesis were formulated and tested for this study using analysis of frequency and percentage and each aspect of the research is tabulated.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

This chapter presents information on the data analysis and results questionnaires administered on the students based on the research purposes and research questions

A total number of hundred (100) copies of the questionnaire were administered to the students and all the hundred (100) copies were responded to and returned for the Analysis.

Analysis of Demographic information of the students

Table 1; Gender

Variable	**Frequency**	**Percentage (%)**
Male	44	44.0
Female	56	56.0
Total	100	100.0

Table 1 above shows the sex (gender) of the students. It can be observed that male respondents are 44.0% while famale respondents are 56.0% which indicates that majority of the respondents are females

Table 2; Age range

Variable	**Frequency**	**Percentage (%)**
09-10	20	20.0
11-12	26	26.0
13-14	34	34.0
15-16	20	20.0
Total	100	100.0

The table 2 above shows the age range of the students in jss. From the table it can be discovered that 20.0% of the students are 09-10 years old, 26.0 % of the students are 11-12 years old, 34.0% of the students are 13-14 years old and 20.0% of the students are 15-16 years old

Table 3: Class

Variable	**Frequency**	**Percentage (%)**
Jss 1	22	22.0
Jes 2	34	34.0
Jss 3	44	44.0
Total	100	100.0

The table 3 shows the classes the students are, it can be seen from the table above that 22.0 % of the students are in jss 1, 34.0% of the students are in jss 2 while 44.0% of the students are in jss 3.

DISCUSSION OF THE RESEARCH QUESTIONS:

Research questions one: Are students not aware that mathematics is a prerequisite for professional courses like medicine, engineering etc?

Table 4:

Response	**Frequency**	**Percentage (%)**
Yes	49	49.0
No	51	51.0
Total	100	100.0

From the table above it is revealed that most of the respondents i.e 51.0% of the respondents were aware that mathematics is a perequisite for professional courses like medicine, engineering, etc while 49.0% of the students claimed not being aware.

Research questions two: Do jss student lack basic knowledge in mathematics?

Table 5:

Response	**Frequency**	**Percentage (%)**
Yes	50	50.0
No	50	50.0
Total	100	100.0

From table 5 above, it can be observed that 50.0% of the jss students agreed that lack of basic knowledge in mathematics influence there attitudes towards the study of mathematics while 50.0% disagreed

Research questions three: Does the way mathematics is taught influence the attitude of student towards the subject?

Table 6:

Response	**Frequency**	**percentage (%)**
Yes	46	46.0
No	54	54.0
Total	100	100.0

The table 6 above shows that 46.0% of the students agreed that the way mathematics is being taught do influence their attitude towards the study of mathematics. While 54.0% did not agree

Research questions four: Does lack of motivation influence student's attitude towards the study of mathematics?

Table 7:

Response	**Frequency**	**Percentage(%)**
Yes	58	58.0
No	42	42.0
Total	100	100.0

From table 7 above it can be observed that 58.0% of the students agreed that lack of motivation influences their attitudes towards the study of mathematics and 42.0% of the students do not agree.

Research questions five: Does natural weakness influence the attitude of student toward the study of mathematics?

Table 8:

Response	**Frequency**	**Percentage(%)**
Yes	72	72.0
No	28	28.0
Total	100	100.0

Table 8 above shows that 72.0% of students agreed that natural weakness do influence the attitude of students towards the study of mathematics. While 28.0% of the students disagreed.

Research questions six: Do parent or peer pressure influence the attitude of students towards the study of mathematics?

Table 9:

Response	**Frequency**	**Percentage (%)**
Yes	61	61.0
No	39	39.0
Total	100	100.0

from table 9 above it can be observed that, 61.0% of students agreed that peer pressure and parents influence the attitude of students towards mathematics. While 39.0% of students do not get influenced by it.

Research questions seven: Do limited time for teaching and learning mathematics influences the attitude of students?

Table 10:

Response	**Frequency**	**Percentage (%)**
Yes	75	75.0
No	25	25.0
Total	100	100.0

Table 10 above shows that 75.0% of students agreed that limited time for learning mathematics influence their attitude and 25.0% of the students are not influenced by it.

Research questions eight: Do lack of instructional materials influences the attitude of students towards the study of mathematics?

Table 11:

Response	**Frequency**	**Percentage (%)**
Yes	54	54.0
No	46	46.0
Total	100	100.0

From table 11 above, it can be observed that 56.7% of the students agreed that lack of instructional materials influence their attitude towards the study of mathematics and 43.3% of the students disagreed

Research questions nine: Do students perform excellently in mathematics?

Table 12:

Response	**Frequency**	**Percentage (%)**
Yes	30	30.0
No	70	70.0
Total	100	100.0

The table 12 above shows that 30.0% of the students perform excellently in mathematic. While 70.0% of students do not perform excellently.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary of the Findings

The study focused on the 'factors influencing the attitude of junior secondary school in selected schools in Ilorin west L.G.A kwara state'. The discussion of the finding were done based on the research questions earlier raised in chapter one.

The study answered nine research questions and tested two hypothesis were tested on the factors influencing the attitude of students in selected junior secondary schools in Ilorin west L.G.A towards the study of mathematics. it was established in the study that the first assumption that states that there are no factors influencing the attitude of students had to be rejected. While the second hypothesis that stated that their are factors influencing the attitudes of students towards mathematics was accepted.

This is to say that lack of basic knowledge of mathematics influence the attitude of students, the students unawareness that mathematics is one of the perequicite for science courses influences the attitudes of students, lack of motivation influences the attitudes of students, natural weakness influences the attitude of students, parents and peer pressure influences the

attitude of students, limited time for learning mathematics also influences students but what's most important is that they influence the students negatively which was determined from the response gotten in research questions nine that asked about the students performance in mathematics which just 30.0% of the performed excellently. This makes it more important to conduct this research.

Conclusion

The study is to find factors influencing the attitude of students towards the study of mathematics in selected junior secondary school in Ilorin-west L.G.A kwara state. The study has shown that that their are factors influencing the attitudes of students. From the study it can be concluded that the influenced students i.e the students that are influenced by the above factor s perform poorly than those that are not influenced by the examined factors. In the terms of lack of motivation and natural weakness, the two factors are very important to be studied because students who is weak minded and couldn't get proper motivation and encouragement might completely loose interest in the topic forever which will continue to affect him/her academically.

Recommendation

In view of the findings derived from this study and the conclusions arrived from them, the following are recommended for the policy and practice:

1. Ministry of education should enable the provision of good and qualified teachers that good climate for effective teaching and learning of mathematics in junior secondary schools

2. Effective instructional materials should be provided in school to facilitate teaching and learning of mathematics

3. The government should schedule enlightment programmes for the parents and the students on the importance of mathematics

4. The government should organize encouraging activities and also also create rOoms for gifting and scholarship to motivate the students in mathematics academic performance

5. The teachers should more encouraging and should be always ready to listen to student ls problems when teaching mathematics.

REFERENCE

Abd Algani, Y., (2019), Innovative Ways to Teach Mathematics: Are they Employed inSchools? Journal of Computer and Education Research(JCER), 7(14). 496-514. DOI: 10.18009/jcer.612199.

Faleye, B. A & Afolabi, E. R. (2018). Predictive validity of Osun state junior secondary certificate examinations (JSCE). Electronic Journal of Research in Education Psychology, 5(1), 131-144.

Clarke, P. A. J., Thomas, C. D. and Vidakovic, D. (2009). Pre-service Mathematics teachers' attitudes and developing practices in urban classroom:Research and Practice in Social Science, 5(1): 22-43.

Henderson, S and Rodrigues, S. (2018). Scottish Student Primary Teachers' Levels of Mathematics Competence and Confidence for Teaching Mathematics: Some implication for national qualifications and initial teacher education. Journal of Education for Teaching: International Research and Pedagogy, 34 (2):93-107.

WAEC, (2016). Examiners' Report 2015/2016, West African Examination Council, p. 45.

Yara, P. O. (2019). Relationship between teachers' attitude and students' academic achievement in Mathematics in some selected Senior Secondary Schools in South western Nigeria. European Journal of Social Sciences, 11(3):364-369.

Bhowmik, M., & Roy, B. B. (2016). A study on the relationship between achievement in mathematics and attitude towards mathematics of secondary school students. Scholar, 1(2), 49–55. Available at: https://doi.org/10.21013/jems.v4.n3.p7.

Kiwanuka, H. N., Van Damme, J., Van den Noortgate, W., & Reynolds, C. (2020). Temporal relationship between attitude toward mathematics and mathematics achievement. International Journal of Mathematical Education in Science and Technology, 51, 1–25

Rosi, K. & Sari, M. (2019). Teachers' Reinforcement on Students' Behavior in English Teaching Process at the First Grade Students of SDIT Padang Islamic School.

Goodluck, K. U. & Ateh-Abang, A. B. A. (2017). Reinforcement and Its Educational Implications. International Journal of Education, 33(3), 27-36.

Lindsey, R. (2017). Positive Reinforcement Positively Helps Students in the Classroom.An unpublished MED thesis, College of Brockport, State University of New York.

Janelle, C. (2016). How to Motivate Students to Love and Have Interest in Mathematics.

QUESTIONNAIRE

KWARA STATE COLLEGE OF EDUCATION ILORIN

SCHOOL OF SCIENCE

DEPARTMENT OF MATHEMATICS

FACTORS INFLUENCING THE ATTITUDE OF SECONDARY SCHOOL STUDENTS TOWARDS THE STUDY OF MATHEMATICS IN SELECTED JUNIOR SECONDARY SCHOOL IN ILORIN WEST LOCAL GOVERNMENT AREA, KWARA STATE.

Dear Respondent,

This questionnaire is a research instrument design to get an honest response from you on the Factors influencing the attitude of secondary school students towards the study of mathematics in selected junior secondary school in ilorin west local government area, kwara state.

Kindly feel free to respond to each of of the statements Contained in this questionnaire. Thank you for your anticipated cooperation.

Yours sincerely,

Personal data

Instructions: please tick (√)the appreciate options

1. Students name:

2. Name of school:

3. Students gender: male ( ) female ( )

4. Class: Jss 1( ) Jss2( ) Jss 3( )

5. Age range: 9-10 ( ) 11-12( ) 13-14( ) 15-16( )

List of factors influencing the attitude of students towards the study of mathematics in Jss

S/N	Items	SA	A	SD	D
1	Are students not aware that mathematics is a prerequisite for professional courses like medicine, engineering etc?				
2	Do jss student lack basic knowledge in mathematics?				
3	Does the way mathematics is taught influence the attitude of student towards the study of mathematics?				
4	Does lack of motivation influence student's attitude towards the study of mathematic				
5	Does natural weakness influence the attitude of student toward the study of mathematics?				
6	Do parent or peer pressure influence the attitude of students towards the study of mathematics?				
7	Do limited time for learning mathematics influence the attitude of students towards the study of mathematics?				
8	Do lack of instructional materials for teaching and learning mathematics influence the				

	attitude of students towards the study of mathematics?				
9	Do students perform excellently in mathematics?				