#### AN ANALYSIS OF FEMALE STUDENTS PERFORMANCE IN MATHEMATICS IN SECONDARY SCHOOLS IN SOKOTO METROPOLIS

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#### CERTIFICATION

This project work conducted by **AUDI**, Mukhtar **(111204021210)** has met the requirements for the award of Postgraduate Diploma in Education (PGDE) of Usmanu Danfodiyo University, Sokoto, and is approved for its contribution to knowledge.

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#### DEDICATION

This research work is dedicated to my late father Alhaji Audi Maikaji Tsafe for his support, training and endurance before his passing away. May Allah through his indefinite mercy forgive his sins, Ameen.

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#### ABSTRACT

This study assessed the performance of female students in mathematics in secondary schools in Sokoto metropolis. The population of the study consisted of the participants of all female secondary schools in Sokoto metropolis. The random sampling technique was used to take a sample of 200 students of SS II from all five female public secondary school in Sokoto metropolis. Promotional examination of students along with assessment Questionnaire were used for data collection for this research. Data collected were analyzed by employing simple descriptive statistics. The study found that the female students performance in mathematics is encouraging. One of the recommendations was that, the students should add more grease to their elbow by practicing what they are taught in class as this will help them greatly not only in their next promotional examination but also in their future studies.

# TABLE OF CONTENTS

Title pa	ge				i
Certific	ation			ii	
Dedicat	tion			iii	
Acknov	vledgment			iv	
Table o	f contents			vi	
Abstrac	t				v
CHAPT	ER ONE: Introduction				
1.1	Background to the Study			1	
1.2	Statement of the Problem			3	
1.3	Objectives of the Study		3		
1.4	Research Questions			3	
1.5	Significance of the Study			4	
1.6	Scope and Delimitations of the Study	4			
CHAPT	ER TWO: Review of Related Literature				
2.1	Introduction			5	
2.2	Early Stage of Mathematical Development	5			
2.3	The Development of Mathematics 1960 to present date	8			
2.4	The Concept of Evaluation		10		
2.5	Difference in Gender Performance in Mathematics	12			
CHAPT	ER THREE: Research Methodology				
3.1	Introduction			14	
3.2	Research design			14	
3.3	Population of the study		14		
3.4	Sample and sampling techniques		14		
3.5	Instrument			15	

3.5.1	Validity of the instrument		15		
3.5.2	Reliability of the instrument	16			
3.6	Method of Data Analysis			17	
СНАРТ	ER FOUR: Data Presentation and Analysis				
4.1	Introduction			18	
4.2	Data Presentation			18	
4.3	Grades and Interpretation			18	
4.4	Data Analysis			19	
4.5	Summary of Major Findings	31			
4.6	Discussion of Findings		32		
СНАРТ	ER FIVE: Summary, Conclusion and Recommendations				
5.1	Summary				34
5.2	Conclusion			36	
5.3	Recommendations			37	
	References			39	
	Appendix				42

#### **CHAPTER ONE**

#### Introduction

#### 1.1 Background to the Study

Mathematics often described as the language and backbone of science and technology is pervasive in all disciplines in today's world. Actually, mathematical competence is vital to every individual's meaningful and productive life. Outstanding mathematical ability, according to Adetula (1989), is a precious societal resource needed to maintain leadership in a scientific and technological world.

The line of demarcation between the developed (industrialized and wealthy) nations and the underdeveloped (non-industrialized and poor) nations is based on the level of mathematical attainment and ingenuity. Indeed without mathematics, there is no science, without science there is no modern technology and without modern technology there is no modern society.

Mathematics as a specialized cognitive tool is an undisputed agent of nation's development and wealth creation. Its application is universal to all learning and everyday living from counting possession to measuring

properties, predicting events, computing taxes/profits, drawing maps/plans, planning budget or warefare, providing models, synthesizing results.

All these are indication that mathematics is useful in domestic and business deals, scientific discoveries, technological breakthrough, problem solving and decision making in different situation in life (Kolawole and Olutayo, 2005). Actually, mathematics is a key to productive and fulfilling life and is a big servant to humanity.

A woman has an important role to play in the society in relation to mathematics and science education. Auhinen (1970) in Okoroh (2004) argued that with the fast automation and computerization of jobs, only persons with appreciable knowledge, skills and abilities in mathematics and science will be required in the job market. He added that moreso, suitable development could not be achieved as long as women were not in mathematics and in the science.

Odogwu (2002) supported Auhinen saying that female education is an important aspect of societal development. Our girl child require a strong knowledge of mathematics to help them to understand science and technical subjects.

#### 1.2 Statement of the Problem

In view of the importance of mathematics which prepares a child for science and technical or technology related professions such as engineering, technology and computer science, this study sought to analyze the performance of female students in mathematics in secondary schools in Sokoto metropolis.

#### 1.3 Objectives of the Study

The objectives of this study are:

- 1. To assess the performance of female students in mathematics
- 2. To find out factors that affect their performance in mathematics

# **1.4 Research Questions**

In an effort to achieve the stated objectives of this study, the following questions are set.

- 1. What is the level of female students performance in mathematics in Secondary Schools in Sokoto?
- 2. What are the factors responsible for their performance?

#### 1.5 Significance of the Study

The study will be useful in the following ways:

This is a study that concentrated on female students performance in mathematics thus, when completed, female students are likely to improve their performance in maths which will help them greatly in science subjects, it will also provide important information that should be of help not only to teachers and parents but also to educational administrators, policy makers and government in the task of improving the teaching and learning of mathematics.

#### **1.6 Scope and Delimitations of the Study**

This project is limited to the analysis of female student's performance in mathematics in secondary schools in Sokoto metropolis.

The research is limited to senior secondary two (SSII) in the selected secondary schools in Sokoto metropolis.

#### **CHAPTER TWO**

# **Review of Related Literature**

#### **2.1 Introduction**

This chapter is divided into three major parts. The first part focuses on the historical trend of the development of mathematics, the second part dwells on the concept of evaluation and the last part focuses on differences in gender performance in mathematics.

#### 2.2 Early Stage of Mathematical Development

Development of mathematics was proposed out around the River Nile in Egypt by 550 B.C., since farming was regarded as the main sustenance of the entire political structure then. Land was divided to accommodate the competing agricultural needs around the river that provide better irrigation system for farming. There was no distinction between mathematics and mathematics education until 1890s when educationists worldwide were concerned about how to make the school curriculum functional and dynamic as against achieving narrow objectives of solving agricultural problems that mathematics was subscribed for (Jones, 1970).

History had it that various moves to position school subjects according to their relevance and contribution to the development of the society sees mathematics as one of the subjects that cut across all human endeavours and that was why it was suggested by various interest groups that it should be made compulsory for all in order for everyone to contribute meaningfully to the total development of the society. Prominent among the interest groups, according to George (1986) were "humanists" led by Elliot and Harris who emphasized the importance of traditional disciplines of knowledge as an embodiments of western cultural heritage. To this end they suggested that mathematics should be made compulsory for all to do as a symbol of individuals contribution to societal progress.

Prior to the colonial administration the influx of the early missionaries to Africa and Nigeria, in particular, had the mission of spreading the gospel which was feasible only through education as those missionaries were in need of the local men that would interpret the bible. The school curriculum comprised the missionaries needs in the areas of readings, writings, calculations and arithmetic with a domination of foreign contents. The arithmetic was designed

to an extent to make it easier for the missionaries account for day to day spending and give report to the mother bodies in Britain, and not that relevant to the needs of average Nigerian. According to Badmus (1997) early mathematics books were efficiency arithmetic, dominated with a shilling arithmetic and authored by larcombe.

English and mathematics were made compulsory at the higher elementary teachers colleges where mathematics consisted of arithmetic, algebra and geometry. Some of these higher elementary colleges included the church missionary society (CMS)'s teacher training college in Abeokuta in 1859, though it was moved to Lagos in 1867 and later moved to Ovo in 1896 to become St. Andrews college, Ovo. Other denominations like Baptist founded Baptists training college at Ogbomoso in 1897, the Wesleyan Methodist missionary society established Hope Waddell (training) institute in 1892 and Nassarawa school in the northern part by the government in 1909 (Fafunwa, 1974; 1991).

The irony of the matter was that each missionary decided what to teach in arithmetic in her area of jurisdiction, no uniform arithmetic curriculum for the entire entity. In 1956

mathematics became one single subject in the West African school certificate examination and arithmetic remained a separate subject from mathematics in the teachers training colleges.

# 2.3 The Development of Mathematics 1960 to present date

Major conferences and projects held around the world such as conferences of sciences in the advancement of new states Rehovoth, Israel in 1960, African Education Programme held in Endicott House, Delham Massachussets in 1961, Entebbe secondary school mathematics, the joint school project (Ghana Project) and school mathematics project (SMP) among others spurred the African nations to look inward into how to make the school curriculum dynamic. This led to the series of workshops like African mathematics group (AMG) projects in 1964, which was chaired by Grace Alele- Williams.

In 1973, modern mathematics curriculum was drawn for the secondary schools as it was thought to make mathematics more meaningful, and make use of the set theory to make mathematic concepts meaningful but few teachers could do this. The efforts of the Nigeria Education Research Council (NERC), Mathematical Association of Nigeria (MAN), Institutes of Education of Universities and West African Examination Council made the nation to realize the flaws in the scope and contents of modern mathematics, which some educators believed were the handwork to re-enslave Nigeria via her school system. The poor mathematics result in WASCE 1974 was part of evidence that there was problem in modern mathematics. As a result of consistent failures in mathematics for which modern mathematics was high around 1977 due to examination tension, increased and culminated in the malpractice scandal of 1977 tagged 'Expo 77'. This made different mathematicians like Iya Abubakar, Chike Obi, Adegoke Olubunmo, James Ezeilo and their contemporaries to cry out and suggested for the cancellation of modern mathematics.

The 1977 Benin conference on modern mathematics marked a great turning point on the mathematics curriculum as the participants met something different from their expectation. While the participants were deliberating on the way out of correcting the problems engendered by modern mathematics the then federal commissioner of education announced that government was no longer interested in the continuation of modern mathematics. This singular pronouncement caught the stakeholders with great surprise as the conference upholds the pronunciation to be the end of the subject. At the conference NERDC was mandated to come up with proposal to put mathematics curriculum especially at all levels on sound footing. This body organized series of workshops among which was a national critique workshop on mathematics curriculum at Onitsha in March 1978 under eminent mathematician, Professor J.O.C. Ezeilo and came up with primary school mathematics curriculum, primary teacher education mathematics curriculum and secondary schools mathematics curriculum.

# 2.4 The Concept of Evaluation

All aspects of human endeavour require one sort of evaluation or the other. But what readily comes to mind when the word evaluation is mentioned is evaluation of the school or educational program. This can readily be justified if the view that evaluation is an integral part of curriculum studies is held, and that curriculum in turn focuses essentially on what goes on in the school and outside the school. Evaluation, which is the mechanism for servicing the curriculum, involves the systematic collection of data or information for the purpose of assessing the worth of a programme, project or activity as well as for taking further decisions on it (Okpala, Onocha and Oyedeji, 1993). Evaluation is conducted in order to determine the extent to which instructional objectives have been attained (Adevemi, 1989). This is often reflected in the performance of students in either internal or external examinations. The term evaluation has a variety of definitions. In ordinary usage, it means the assigning of some value to an entity in relation to certain criteria. In the context of education, the entity concerned is "learning". Educational evaluation however is not only concerned with the outcomes of learning but also the conditions of learning. Although, educational evaluation in its fullest sense is concerned with entire system of education. It is however possible to evaluate only a narrow aspect of the educational enterprises. Indeed, in the formal school system, as is the concern of this project, one often confined to just the evaluation of individual is achievement or performance in specific disciplines. Evaluation

increases motivation for learning and encourages good study habits (Okpala, Onocha and Oyedeji, 1993).

The commitment of Nigeria to scientific and technological development as contained in the national development plan, is reflected in her desire for her citizens to acquire "scientific competence" would need to have strong mathematics background.

#### 2.5 Difference in Gender Performance in Mathematics

The gender issues in mathematics have been a source of aversion (Harbor-Peters, 2001). Mathematics has been male stereotyped, since the subject is viewed by students as abstract, difficult and only reserved for boys. Research results showed that boys performed better in mathematics reasoning abilities than girls in primary schools for instance Agwagah (1993) found that female students performed significantly higher than their male counterparts in mathematics.

Other studies have indicated that females are better than males in verbal skills and this gives the female advantage on items involving verbal communications. They also score relatively higher than the females in mathematics tests that match course work (Willingham and Cole, 1997). Males tend to outperform females in geometry and in arithmetic and algebraic reasoning questions.

#### **CHAPTER THREE**

#### **Research Methodology**

#### **3.1 Introduction**

This chapter deals with the methodology adopted for the study it consists of the research design, population of the study, sample and sampling techniques, the instrumentation used in carrying out the research, validity ad reliability of the instrument and method of data analysis.

# 3.2 Research Design

The research design adopted for this study was a descriptive survey design. This was preferred as to provide a detailed description of the population in relation to their performance in Mathematics.

# 3.3 Population of the study

The population of the study includes all female secondary school students in Sokoto metropolis

#### 3.4 Sample and sampling techniques

Five female secondary schools were selected as sample for this research. This is because these selected schools are the only public female secondary schools in Sokoto metropolis. The investigation covers a total of 200 students, the promotional examination results of 100 students of the year 2011/2012 (SS I going to SS II) in mathematics and another 100 SSII sampled student's responses from the designed questionnaire (across the 20 arms of SS II classes of the chosen schools), bringing the total to two hundred (200) students sample size.

A total of 20 student's results for the year 2011/2012 of each of the five schools were used. Also in administering the questionnaire a minimum of 5 students sampled from each of the twenty classes were used giving a total of two hundred sample size as mentioned earlier.

# **3.5** Instrumention

The instruments used in the study were the year 2011/2012 (SS I going to SS II) promotional examination results in mathematics, and a questionnaire used to elicit additional information from the same SS II.

#### **3.5.1** Validity of the instrument

The instrument used were validated, this is because the promotional examination used in the study is conducted by the state ministry of education, ministry of science and technology and Arabic and Islamic Education board Sokoto respectively. And the examination is standard and accepted. It is the main instrument used for promoting or demoting the students in secondary schools.

For the questionnaire, the researcher is assisted by his supervisor who is a research expert in subjecting it to content validity some items on the questionnaire were reframed while some were deleted for vagueness.

# **3.5.2** Reliability of the instrument

Reliability of the questionnaire was established using a test-retest technique. The questionnaire was administered and re-administered after a period of two weeks. The results of the first and second test were correlated using Pearson product moment correlation coefficient and the value obtained was 0.86.

For the reliability of other instrument a mathematics achievement test consisted of 20 multiple choice questions with 4 options drawn to test students knowledge of the topic on which the treatment was based and it yielded reliability coefficient value of 0.74.

# 3.6 Method Of Data Analysis

The statistical method employed in analyzing the data was descriptive form. Frequency, percentage and tabular methods were used. This statistical method was selected simply because the study had compared simple variables and was a descriptive survey that did not require complex statistical data analysis available for research work.

#### **CHAPTER FOUR**

#### **Data Presentation and Analysis**

#### 4.1 Introduction

This chapter deals with 3 major parts. The first part provides detail analysis of student's performance in mathematics. The second part deals with the analysis of the students responses to the designed questionnaire. Finally the remaining part deals with the discussion of the findings.

#### 4.2 Data Presentation

This section presents the data collected in the study. The size of data for analysis is a total of 200 students, 100 student's performance in mathematics (SS I to SS II promotional examination 2011/2012) and another 100 SS II sampled student's responses from the administered questionnaire.

# 4.3 Grades and Interpretation

The grading format for the examination is stated below in table 4.1

Grade	Mark range	Equivalent
A	70-100%	Excellent
В	60-69%	Good
С	50-59%	Credit
D&E	40-49%	Pass
F	0-39%	Fail

 Table 4.1: Summary of grades and interpretation

# 4.4 Data Analysis

Analysis of the Students performance in Mathematics

Table 4.2: Student performance in Nana Girls Secondary School Sokoto

Grade	Frequency	Percentage%
А	2	10%
В	3	15%
С	3	15%
D & E	8	40%
F	4	20%
Total	20	100%

Table 4.2 shows the performance of the students that sat for the 2011/2012 (SS I going to SS II) promotional examination in mathematics in Nana girls secondary School, Sokoto.

It can be seen from the table that 10% of the sampled students performed well with excellent "A" grades category while 15% of the total number of the sampled students scored "B" grades, another 15% of the students scored credit "C grades. 40% of the total number of the student scored ordinary pass while 20% of the students got fail "F".

Table 4.3: Students performance in Hafsatu Ahmadu Bello Model Arabic Secondary School Sokoto.

Grade	Frequency	Percentage%
А	-	-
В	4	20%
С	6	30%
D & E	4	20%
F	6	30%
Total	20	100%

Table 4.3 shows the performance of the student's promotional examination in mathematics at Hafsatu Ahmadu Bello Model Secondary School, Sokoto.

It could be observed from the table that none of the students had scored excellent (A-grade), while 20% of the total number of the sampled students had scored "B" grades. 20% of the students scored credit "C" grades and also another 30% of the student got fail "F".

Table	4.4:	Student's	performance	in	Government	Girls
Colleg	e, So	koto				

Grade	Frequency	Percentage%
А	5	25%
В	3	15%
С	6	30%
D & E	2	10%
F	4	20%
Total	20	100%

Table 4.4 shows the students performance in mathematics at government girls college Sokoto (G.G.C Sokoto).

It could be observed that 25% of the total number of the sampled student in the school had scored "A" grades which is excellent while 15% of the student scored "B" grades and 30% of the students scored credit "C" grades. Also 10% of the students got ordinary passes while 20% of the students got fail "F". This results from G.G.C Sokoto is a good result compared to the performance of the students from the previous schools.

Table 4.5: Students performance in Government Girls Day Arabic Secondary School Yar Akija Sokoto

Grade	Frequency	Percentage%
А	-	-
В	4	20%
С	10	50%
D & E	1	5%
F	5	25%
Total	20	100%

Table 4.5 reveals that 20% of the total number of the sampled students in the school has gotten "B" grades while 50% of the students had scored credit and 25% of the students scored fail "F", and 5% of the students scored ordinary pass, it also shows that none of the students had scored excellent "A".

This is also a good performance because 70% of the total number of the student had passed the subject at credit level.

Table 4.6: Students performance at Government GirlsSecondary School Kofar Marke, Sokoto

Grade	Frequency	Percentage%
А	2	10%
В	5	25%
С	6	30%
D & E	3	15%
F	4	20%
Total	20	100%

Table 4.6 shows that 10% of the total number of the sampled students in the school got "A" grades, 25% of the students scored "B" grades, 30% of the students scored credit

"C", 15% of the studens scored ordinary passes, while 20% of the students failed.

This result is good with only 20% of the student with fail "F" and more than 50% of the student with passes at credit level.

# Analysis of Student's Responses on the Administered Questionnaire

This part presents the data collected from the administered questionnaire distributed among 100 students of SS II in the 5 females secondary school in Sokoto metropolis. Table 4.7 below provides information on the ages of the respondents on the questionnaire.

Grade	Frequency	Percentage%
14	4	4
15	16	16
16	34	34
17	22	22
18	19	19
19	5	5
Total	100	100

Table 4.7: Summary of Students ages

Table 4.7 shows that students in SS II are found in ages of 16 to 18 years. The table shows that 34% of the student are in the age of 16 years and 22% are in the age 17 years. Also 19% of the students are in the age of 18 years.

While 16% of the students are in the ages of 15 years. 5% of the students are in the ages of 19 years old and 4% of them (students) are in the age of 14 years.

This is a clear indication that a good number of students started school earlier. Some must have the opportunities of attending nursery schools before the primary education. From the records it shows that majority of the students had completed their primary schools at about the ages of 11 years. This provides an insight to the background of the student's foundation of their academic career.

Responses	Frequency	Percentage%
Yes	83	83
No	17	17
Total	100	100

Table 4.8: Students interest in mathematics at J.S.S

Table 4.8 shows students interest in mathematics at their junior secondary school (J.S.S) 83% of the total number of the sampled students have shown interest in mathematics and only 17% disliked it.

Responses	Frequency	Percentage%
Yes	90	90
No	10	10
Total	100	100

Table 4.9: Students interest in mathematics at S.S.S level

Table 4.9 shows students interest in mathematics at their senior secondary school (S.S.S) level.

The interest of the students in mathematics have slightly increased at senior level than in junior secondary school. It can be seen from the table that 90% of the total number of the sampled students show interest in mathematics at senior secondary school level, only 10% of the students show lack of interest in maths at S.S.S

Table 4.10: Students responses on their performance in maths at J.S.S.C.E (Exam)

Grade	Frequency	Percentage%
А	35	35
В	8	8
С	55	55
D	2	2
Е	-	-
F	-	-
Total	100	100

Table 4.10 reveals students responses on their performance at their junior secondary school certificate examination (J.S.S.C.E).

Table 4.11: Students best subject in Science at J.S.S

Subjects	Frequency	Percentage%
Mathematics	47	47
Integrated science	50	50
Introductory	3	3
technology		
Total	100	100

Table 4.11 shows students best subject in science at J.S.S level.

It could be seen from the table that 50% of the total number of the sampled students had shown integrated science as their best subject while mathematics accounted for 47% of the total number of the students. Then introductory technology accounted for 3% of the total number of the students.

This has shown that, the students show positive attitudes towards integrated science and mathematics during their junior secondary school. The table further reveals that only few students show positive attitudes towards introductory technology.

It can be seen from the table that 35% of the students scored Excellent "A" while 8% of the students got "B". 55% of the students got credit "C", only 2% of the students scored "D". None of the students got either E or F.

Subjects	Frequency	Percentage%
Mathematics	40	40
Biology	36	36
Physics	15	15
Chemistry	9	9
Total	100	100

Table 4.12: Students best subject in science at S.S.S

Table 4.12 shows student's best science subject at senior secondary school.

It could be observed from the table that 40% of the total number of the sampled students showed a highest interest in mathematics, followed by interest in biology with 36% of the students, and physics with 15% of the total number of the sampled students. And also followed by chemistry with the lowest number of the respondents showing interest in it, only 9% of the students have shown interest in it.

Table	4.13:	Problems	facing	student's	performance	in
mathe	matics	5				

Problems listed by students	Frequency	Percentage %
Lack of mathematics textbooks	220	36.7
Subject difficulty	180	30
The behavior of the subject	50	8.3
teacher		
Teaching method used	105	17.5
Lack of understanding	30	5
Lack of concentration of	15	2.5
students		
Total	600	100

From the table above it can be seen that 36.7% of the sampled students responded that lack of mathematics textbooks are the major problems affecting their performance in mathematics, 30% of the student responses are the subject difficulty is responsible for their poor performance in maths. Also 8.3% of the students show that, the behavior of the subject teachers is responsible for their poor performance.

17.5% of the students show that teaching method used by their mathematics teacher is affecting their performance, while 5% of the students responded that lack of understanding is their problem. While 2.5% show lack of concentration as their problem.

### 4.5 Summary of Major Findings

- 1. The level of female students performance in mathematics in secondary schools in Sokoto metropolis is good, this is because majority of the students examined in this study have passed the subject at credit level which is a clear indication that the performance is good.
- 2. The study found that, the factors responsible for the students performance in mathematics were the interest they have shown in the subject (mathematics) at both junior and senior secondary school sections, the other factor was the good behaviour of their mathematics teachers. Also some students have shown lack of mathematics textbooks as the factor responsible for their poor performance in mathematics.

## 4.6 Discussion of Findings

The findings in the first research question showed that, the level of female students performance in mathematics in secondary schools in Sokoto metropolis is good, because majority of the students examined in the study have passed the subject (mathematics) at credit level which clearly shows that, the performance is good. This finding also shows that there are some students who have failed the subject but it was found that they are minority when compared with the number of students that passed at credit level.

The findings in the second research question show interest of the students in mathematics at both junior and senior secondary school sections and good behavior of their mathematics teachers as the factors responsible for their good performances. The study found that majority of the students have shown interest in mathematics on their responses to the administered questionnaire. The findings also show that, the teaching and learning interaction between mathematics teachers and students is good and friendly. This is because most of the students showed that, the behaviours of their

mathematics teachers are good and have contributed greatly for their good performance.

The findings also show that some students performed poorly because they do not have access to mathematics textbooks.

#### **CHAPTER FIVE**

## Summary, Conclusion and Recommendations

This chapter presents the summary of major findings on the analysis of female students performance in mathematics in secondary schools in Sokoto metropolis. The chapter also includes conclusion and recommendations.

# 5.1 Summary

The study has investigated the performance of female students in Mathematics in secondary schools in sokoto metropolis. The main objectives of the study in chapter one were to assess the performance of female students in Mathematics and to find out factors that affects their performance in Mathematics.

The literature review of chapter two has revealed that, the proposal of Mathematics development had begun around the river Nile in Egypt by 550 B. C., intended to solve Agricultural problems, because farming was regarded as the main sustenance of the entire political structure then. As time went on when there was a growing concern about how to make the school curriculum functional and dynamic Mathematics was subscribed. As time went on Mathematics became one single subject in West African school certificate examination in 1956. As a result of workshops and conferences held at various places in Nigeria Mathematics curriculum was developed at all level of education. The chapter also revealed how important the evaluation or assessment is in all aspect of human endeavour. It also talked about difference in gender performance in Mathematics.

Chapter three of the study has talked the population of the study, research design, sampling and sampling techniques, instrumentation, and method of data analysis.

In chapter four the data were collected and analysed by using descriptive statistics method. It was found in the findings of the study that, the level of female students performance in Mathematics in secondary schools in sokoto metropolis is good and one of the factors responsible for their performance was the interest they had shown in Mathematics.

Chapter five summarized the study, made a conclusion that the student performance in Mathematics is good, and came up with recommendations among which is, Government, parents and educational stakeholders should try and assist the female students by providing textbooks to them because of

the observation from the study that shows lack of mathematics textbooks as the major problem the students are facing.

# 5.2 Conclusion

The findings of this study have conclusively indicated that the students have performed well in mathematics. It was also concluded that about 23% of the total number of the students have performed very poor, but the percentage is smaller when compared with the percentage of those that have performed well.

It was also found that even the students that performed poorly, their failure was related to the lack of mathematics textbooks.

It was also observed in the findings of this research that interest of the students in mathematics has played an important role in their good performance.

It was also found in the findings of this study that most of the students have shown satisfaction for the good behavior of their mathematics teachers because only few percentage show that they are not satisfied with the way their mathematics teachers are handling the subject.

## 5.3 Recommendations

Based on the observations made, the following recommendations are proffered towards improving the performance of female students in mathematics subject.

Despite the fact that most of the students have performed well there is still need for more qualified mathematics teachers in order to enhance their (students) performance in mathematics.

Government, parent and other educational stakeholders should try and assist the female students by providing mathematics textbooks to them because it was observed in this study that, the major problem the female students are facing is lack of mathematics textbooks.

There is need for the government to pay more attention to the education of girl child because once a woman is educated the society will be educated too.

There is need for mathematics teachers to try more and see that their students get interested in mathematics because it was observed in this study that interest of the students in mathematics assisted them greatly in their good performance.

The students should not listen to the people that used to kill the interest of their colleagues by telling them that mathematics is a very difficult subject.

The students should put more effort by practicing what they are being taught in the class, this will greatly assist them during their WAEC.

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