RELATIONSHIP BETWEEN THE STUDENTS ACADEMIC PERFORMANCE IN JUNIOR AND SENIOR BUSINESS STUDIES EXAMINATIONS IN OGBOMOSO NORTH AND SOUTH LOCAL GOVERNMENT AREAS

BY

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**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL,
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DECLARATION

I hereby declare that this thesis has been written by me and that it is a record of my own research work. It has not been presented in any previous application for a higher degree. All quotations are indicated by quotation marks and the sources of information are specifically acknowledged by means of reference.

ELISHA O. OLUYOMI _____ DATE

CERTIFICATION

This Thesis entitled **"RELATIONSHIP BETWEEN THE STUDENTS ACADEMIC PERFORMANCE IN JUNIOR AND SENIOR BUSINESS STUDIES EXAMINATIONS IN OGBOMOSO NORTH AND SOUTH LOCAL GOVERNMENT AREAS." by Elisha Oloruntemi Oluyomi,** meets the regulations governing the award of the degree of M.Ed. Business Education (Marketing) of the department of Vocational and Technical Education, Ahmadu Bello University, and is approved for its contribution to knowledge and literacy presentation.

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DEDICATION

This thesis is dedicated to my Lord and Saviour

JESUS CHRIST

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ABSTRACT

This study was set to determine the relationship between the students academic performance in junior and senior business studies Examinations in Ogbomoso North and South Local Government Areas.

The study used the students who wrote JSCE business studies in 1988 to 1992 a period of five years. Federal and state colleges were randomly selected of the twelve schools offering business studies both at junior and senior schools. The same set of students was those who wrote SSCE Commerce; Book keeping & Accounts in 1991 to 1995 another period of five years. The students grade scores in JSCE were correlated with their grade scores in SSCE.

A sample size of two hundred and seventy - six (276) students. 20% of the total population was studied. It comprised of one hundred and fifty three (153) males and One hundred and twenty - three (123) females from all the One thousand three hundred and eighty (1,380) students population from the twelve schools that offered Business studies at both Junior and senior school levels.

Four hypotheses were tested using pearson product moment correlation coefficient (PPM) to test for significant relationship and t-test to test for significant difference. Alpha level of 0.05 was set for the study as significant level.

The study showed that JSCE business studies students performance

can be a predictor to their SSCE performance in both Commerce, Book Keeping & Accounts. It showed a relationship between the JSCE business studies performance and their SSCE

Commerce; Book Keeping & Accounts as tested in hypotheses 1 and 2. In JSCE Business studies and SSCE Book Keeping & Accounts, the r-calculated of 0.2361 was greater than r - Critical of 0.197 while in JSCE business studies and Commerce, the r - calculated of 0.2105 was greater than r - Critical of 0.197 both at of 274 and at significant level 0.05.

The findings also showed a no significant relationship in hypothesis three which stated that there is no significance difference between the performance of male and female students in Book Keeping & Accounts. It was found that there was no significant difference in the performance of male and female students in Book keeping and Accounts; t-test was used to test this hypothesis at 0.05 level of significant.

In hypothesis four, a significant difference was found among male and female students performance in commerce as the t-calculated was greater than the t - critical, the hypothesis was rejected at degree of freedom 274 and at a level of significance 0.05.

The study found that there is a relationship between the students academic performance in junior and senior business studies junior examination. The performance of students in JSCE business Studies

examination can be used to predict students performance in Senior business studies examination in commerce and Bookkeeping & Accounts.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Since the various individuals, organizations and governments of various levels in Nigeria have continuously placed education on the priority list of their desired social services, emphasis is now on schools achievement on Nigerian Students.

Teachers, Guidance Counsellors and educationist in general have also investigated the predictive value of JSCE performance over SSCE performance. Business studies as an integral part of the total educational programme is, therefore, chosen in this study to address the above problem that is, whether or not students performance at JSCE has a predictive value over their performance at SSCE.

Business studies in Nigeria dates back to 1891, when Mccallum recommended the inclusion of Business Education subjects in the Secondary school curricula in Nigeria. This marked the beginning of the call for Business Education in the public school curricula. In the past, business studies in Nigeria was regarded as the learning and teaching of some basic business subjects both in the organised or and in an unorganized school system. The latter was popular before and shortly after the advent of Western education.

Even with the emergence of business education within the Western

education system there was no curriculum that was predominantly meant for business education. This is because the then educational planners did not know the component of Business Education (Aina,1977). Prior to the involvement of governments in business education, vocational education was left in the hands of private individuals who operated purely on profit basis.

Tracing the history of various schools that started business education in Nigeria, Cookey-Gam (1984) stated that, in 1942, St. Paul's Commercial College, Aba and Central Commercial Academy, Enugu, were established to formally train pupils for clerical jobs. In the same year, St. John's College, Ubiaja was established and followed by St. Augustine Secondary Commercial School, Onitsha in 1947 and Secondary School of Commerce, Owerri in 1948. Between 1955 to 1958 government participation in business education became noticeable in the Western Nigeria.

The establishment of Technical College in Ibadan (now Ibadan Polytechnic) and Adeyemi College of Education at Ondo, as well as the Olunloyo College of Education at Ibadan was the outcome of the assistance sought by the government from Ohio University, Anthens, USA. (Aina and Oladunjoye, 1985). Initially, there was no interest in the development of business education in Nigeria. It later became clearer to the government that business education provides more than immediate employment to graduates of Junior School certificate. It involves competent and adequate training of a sub professionals and professionals at both senior schools and tertiary institutions.

The success of any programme such as business education depends therefore on various factors which include a well defined curriculum and the quality of graduates been produced. Students ability to perform excellently at SSCE and even after secondary and tertiary institution that is their efficiency outside school in their various business vocation should therefore, be properly monitored and guided enough at the early stage of their educational career.

Achievements of the goals of the business studies programme in Nigeria, just like any other programme cannot be total without the evaluation of students performance at various levels. Babatunde (1994), stressed that educators keenly interested in quality of teaching, students' performance and research should gear their resources and research efforts towards performance evaluation.

1.2. Statement of the Problem

One area of emphasis in the educational system in the country is that of vocational and technical skills. There is a growing need for commercially inclined graduates that could play effective role in the business life of the country either as employers of labour or as employees (Gana, 1987).

The importance of vocational education is spelt out in the National policy on Education (1981 revised). A lot of work has been carried out on correlational subjects generally, but only a few researchers have shown keen interest in the area

of correlating the junior school certificate examination performance of students in business studies with their performance in senior school certificate examination in business studies.

Laudable efforts have been made by governments, organizations and individuals to ensure that both quantitative and qualitative graduates are turned out from Nigerian post-primary and post-secondary institutions in business based areas. Unfortunately, previous researches have not been able to come out with the predictive value of performance in JSSCE to that of SSCE, particularly in business studies so as to determine the quality and quantity of graduates turned out in the area. Speculative statements, such as the students who performed brilliantly in junior school certificate examination would do same in the senior school certificate examination has caught the attention of various researchers to investigate whether this is true or not.

Public outcry every year for adequate and qualified graduates from the schools to meet the challenging needs of the business life is a concern (Aremu, 1975, Ogunwuyi, 1989). This undesirable situation remains to be seen inspite of the government heavy investments in business studies in Nigeria today. Could it be blamed on teachers or students? Could it be due to lack of predictive studies in this subject area? Could it be that predictive studies done in the past cannot be generalized for other studies? The issues being addressed by this study therefore is a relationship between the students academic performance in junior and senior

business studies examinations in Ogbomoso North and South Local Government Areas.

1.4 Hypotheses

This study was conducted to test the following hypotheses.

1. There is no significant relationship between the students academic performance in junior school certificate examination and senior school certificate examination in Book keeping and Accounts.
2. There is no significant relationship between the students academic performance in junior school certificate examination and senior school certificate examination in commerce.
3. There is no significant difference between the academic performance of male and female students in Book keeping and Accounts.
4. There is no significant difference between the academic performance of male and female students in commerce.

Objectives of the Study

1. To determine the relationship between the students academic performance in junior and senior Business studies Examinations in Bookkeeping & Accounts.
2. To determine the relationship between the students academic performance in junior and senior Business Studies Examinations on Commerce.

3. To determine the difference between the academic performance of male and female students in Bookkeeping and Accounts

4. To determine the difference between the academic performance of male and female students in Commerce.

1.6. Significance of the Study

It is the belief of many educators and the society in general that a deficiency in cognitive achievement will automatically effect students efficiency and retard their academic progress at the higher institution of learning. A good performance is required in any discipline. This study is significant in the following ways:

It will contribute to the knowledge of students teachers, parents and educational administrators to know if, performance of students in JSCE can serve as a predictive index pointer to their performance in SSCE business studies.

This study is significant because, its findings will guide teachers and guidance counsellors, when counselling students on the subject combinations as it relates to their aspirations for higher education and job placement.

Vocational aspirations of young people in school start at the junior secondary school as pre vocational subjects, where students start to develop career interests.

This study is significant because, it is directed to the knowledge whether or not performance in JSCE can be used to predict performance in SSCE, hence, the

possibility of effective guidance of students to success in their aspired career.

Further significance of this study is seen in the area of identifying the degree of relationship between students performance in JSCE and SSCE which have classroom implications for instructions as it will identify potentially successful candidates, who need only a shorter period of teaching.

The study will equally show some significance on revealing the relationship that exists between female and male students performance in commercial subjects. This will clear the clouds of doubts as to whether commercial subjects are exclusively for females, males or both.

The problem will test the speculative statement that, students who performed well in junior school certificate examination will equally do well in senior certificate examination. Investigation was carried on whether or not graduates been turned out from our secondary schools in the past five years have been able to meet the need of the business world.

Further investigations would be carried out in the area of students efficiency and adequacy for higher studies in the business related courses after SSCE and to see if the early introduction of business studies in junior school justified the heavy investment at junior secondary school level.

1.8. Delimitation

This study has been restricted to those students who sat for 1988 to 1992 JSCE Business Studies and those students who sat for 1991 to 1995 SSCE in Business studies at Federal Government College, Ogbomoso, Oyo state.

1.9. Definition of Terms and Abbreviations

Extent of students performance: This is the ranking of students performance in SSCE qualitatively as Distinction, credit, pass, ordinary pass and fail (A,C,P & F)

Business studies: This is the integrated business studies offered as one of the pre-vocational subjects in junior school and the two subjects (accounts and commerce) at the senior school of the selected secondary schools.

USAID	United State Agency for International Development
J.S.C.E.	Junior School Certificate Examination
S.S.C.E.	Senior School Certificate Examination
C.E.M.	Centre for Educational Measurement
W.A.E.C.	West African Examination Council
S.P.S.S.	Statistical Package for Social Sciences
W.A.S.C.E.	West African School Certificate Examinations.
J.S.S.	Junior Secondary School
S.S.S.	Senior Secondary School
N.B.E.M.	National Board for Educational Measurement
B/s: BUS	Business Studies
Comm	Commerce

Accts	Accounts
Ho	Null Hypothesies
HI	Alternative Hypothesis
PPM	Pearson Product Moment Correlation Coefficient

CHAPTER TWO.

REVIEW OF RELATED LITERATURE

2.1. Introduction

The process of obtaining and providing useful information for making educational decisions has been a matter of concern to many educationists in Federal, State and Local Government levels. This concern was expressed at the conference of Oyo State Branch of All Nigerian Conference of principals of School (ANCOPS) (Ogunwuyi, 1989).

Previous research works on predictive study have been correlated between variables that are not business based. Although many studies have been carried out on prognostic study generally, very little has been done in business based subjects. With the studies done previously, both within and outside Nigeria in the area, there is still a paucity of knowledge on the predictive value of JSCE on SSCE in business studies.

This study is, therefore, designed to determine the predictive value of Junior School Certificate Examination students performance with that of senior school certificate examination performance of same students, in the selected collage. Literature has been reviewed under the following sub headings:

2.2.1. Examinations and performance in Business studies.

2.2.2. Concept of Evaluation in business studies

2.2.3. Teaching of business studies

2.2.4. Relationship between the school and evaluation in business studies;

2.2.5. Sex differences and academic performance in business studies.

2.2.6. Business teachers and level of job satisfaction.

The responsibility of making a choice of career rests with the students who should make adequate preparation for it, for the attainment of efficiency and success (Obikwere, 1974). Pearson (1990) opined that in the wise choice of vocation, there are three broad factors:

i. a clear understanding of yourself, your abilities, aptitudes, interests, ambitions, resources limitations and their causes;

ii. knowledge of the requirements and conditions of success, advantages, compensations, opportunities and prospect in different lines of work, and

iii. true reasoning on the relations of these two groups of facts.

Students should select occupations that are appropriate to their ability and interests. In another related opinion by the same author, Parson (1990) stated that vocational maladjustment is generally the result of lack of information about oneself or about the world of work. The best way to promote vocational adjustment is to give people information about themselves and about occupation (Pearson,1990).

On whether teacher should be involved in career guidance and counselling of students, Obikwere (1974) stated that Teachers should be utilized as source of

A-65694

information for occupation. The information about the world of work should be incorporated in the curriculum from primary schools upwards. The school counsellor is the expert on materials for inclusion in the curriculum and is a consultant to teachers and the administration as well as being available for some specialised instruction and assistance in developing specialised programme. Students expresses unrealistic vocational preferences both in terms of the opportunities available and of their aptitudes and abilities.

Okam (1966) stated that the problem of choice of career is a very difficult one. Few people can be happy doing a job which is beyond their capacity. The first problem is to make a choice and that choice should be one for which the individual is best suited by his physique, education intelligence, natural aptitude and character.

On realism of vocational choice in Nigeria, Yakubu (1973) came out with the findings that there is a significant relationship between choice of career and subjects studied. The results also indicated that a greater number of the students studied were interested in Biology and Chemistry. Consequently, the results of the career choice of the students showed that a greater percentage of the students indicated that they wanted to be either Doctors or pharmacists or Science teachers.

2.2.1 **Examinations and Performance in Business Studies**

Education, according to lovel (1971), frequently involves the assessment of attainment, and intelligence tests are not used since educational standards reached by children depend upon special abilities, temperament, industrious, parental encouragement and support, quality of teaching and general intelligence" These constitute the personal, academic and environmental factors that may be used to predict performance in examinations which form the basis of assessment of attainment of the individuals.

Examinations were originally introduced to yield an objective assessment of personal opinion. Today, examinations perform other functions such as the extent of the factual knowledge acquired by pupils; prediction of future educational achievement and providing a means of selecting suitable candidates for certain educational courses or occupations; testing the efficiency of the teachers or of the methods used; and provide an incentive whereby pupils and teachers are stimulated into working (Lovel 1971).

As a result of diversified functions which examinations are expected to serve, it is desirable to identify predictive value of former examinations on the later examination in relation to success or failure in such examinations. In a speech delivered during the National Conference of Principals of Secondary Schools held in Maiduguri on 26th July,1977, the registrar of WAEC disclosed that in 1976, a total of 51,193 out of 88, 336 Nigerian candidates who sat for the

West African School Certificate Examination failed to qualify for the school certificate. The failure figure represented 57.95 percent. Out of the 51,193 candidates who did not qualify for certificate a total of 23,965 of them failed woefully.

2.2.2 Concept of Evaluation in Business Studies

Educational evaluation has remained an important method of appraisal among the educationists. Its goal is to provide data on selected aspects of a programme in order to facilitate educational decisions making. Osuala (1981) and Mallar (1992) many educationists have advanced various definitions of evaluation. Lewy (1977), defined evaluation as the provision of information for the sake of facilitating decision making at various stages of curriculum development. Evaluation also implies the selection of criteria, the collection of data and data analysis.

Bloom, Hastings and Madus (1971), opined that evaluation is the systematic collection of evidence to determine whether a certain changes are taking place in the learner or not, and to determine the amount of degree of change in individual students. Stake (1967) maintains that evaluation is a full report in a story, supported perhaps by statistics and profile. It tells what happened, it reveals perceptions and judgements that different groups and individuals hold. It tells of the merit and shortcomings. As a bonus, it may offer generalization for the

guidance of subsequent educational programmes.

Shalveson (1976), stated that evaluation is used for collecting information and using information to judge the worth of something. In another contribution to the definition of evaluation, Stager (1978) sees, evaluation as assigning marks, selecting individuals for special opportunities or the qualities of instructional materials, assessing the effectiveness of various approaches to instruction and many other related kinds of activities are as well commonly referred to as evaluation.

Iyang (1981), defined evaluation as a process of ascertaining the decision to be made in selecting related information collecting and analyzing it in order to report to the decision makers in selecting any alternatives.

From the above views of various researchers and educationists, educational evaluation may be summarized thus:

1. It is diagnosis of curriculum in order to take a decision to further improve the entire or part of curriculum;
2. It focuses on goals of education, the effect on and degree of changes in behaviour of students;
3. It must be total and should be directed towards both the educational system and other sub-systems of the economy, and evaluation must be a continuous process.
4. Evaluation should be capable of diagnosing strengths and weaknesses in

curriculum, identification of the results of instruction, recognition of the need for teacher education and selection of new basis for changing educational policies. These definitions thus clarify the meanings and aims of evaluations.

In an attempt to clarify confusion of concepts, smart (1985) defined Measurement as that which is concerned with qualifying the nature and extent of changes in altitude and performance. Assessment on the other hand considers measurement in the light of expected outcomes, while Evaluation involves the making of judgement about the nature and desirability of the recorded changes. Curriculum development goes beyond the general concept of evaluation, it employs systematic and scientific methodology Onwuka (1990).

2.2.3. Teaching of Business studies

In the modern schools, where commercial subjects are taught, there are many problems, ranging from poor or inadequate financing to poor allocation of funds to the Department of Commerce/ Business Education by school administrators who know little or nothing about the importance of the subject to the economy. Other problems encountered include lack of qualified teachers or administrators to head the units and departments of commerce and business studies. This is confirmed by Aremu (1975), while confirming the problems, stated that where commercial subjects are taught, and where teachers can utilize

their knowledge to advantage, the governments fail to assist these schools financially. The result is that these schools can not afford to pay the salaries of well qualified commercial teachers. Alternatively, these schools look for less qualified teachers preferable, the Royal Society of Arts certificate holders or West African School Certificate holders with passes in typing, shorthand, or book-keeping, perhaps with no teaching qualifications at all.

Amaefule (1986), expressed that, there were a few privately owned commercial secondary schools and many roadside commercial institutes, which offered business courses to secretarial aspirants for first - entry jobs.

Unlufun (1986) highlighted some problems of business education as:

1. Lack of qualified teachers
2. Shortage of text materials.
3. Academic snobbery
4. Question of relevance and legitimacy,
5. Lack of research facilities.

In reacting to the issue of Business Education in Nigeria, institutions, Gana (1987), identified the following as reasons for lagging behind in producing the quality and types of management man power on the nation.

1. Lack of management and business education programmes derived and based on the Nigerian economy, an environmental factors are apparently not available to both secondary and tertiary levels of education;

2. The functional content of the core areas of study such as management, Accounting, marketing, Finance etc were fashioned along the lines of those in Europe or North America with occasional punctuation by one or two Nigerian related management or business programmes;
3. Lack of teaching facilities and instructional support materials such as text books imported from abroad.
4. Little or non- availability of empirical data derived from management research conducted into the Nigerian business environment and its organisational problems;
5. The perpetual complains by the employers about the competence of the Nigerian management graduates and diplomat;
6. Inadequate training of Nigerian graduates and diplomats in Business Education in field such as management of small scale industries, farm and community development;
7. Little or non utilization of local resources within Nigeria in preparing management students for the world of work and;
8. Lack of adequate physical facilities such as laboratories and equipment to prepare the management students for the world of work.

It was high time the misconceptions about business education be examined. For long, the subject is considered as:

a. a dumping ground for the mediocre and

b. that it involves mere teaching of typing and shorthand.

Business education which contributes significantly to the personal and economic efficiency of all students; develop the understanding and appreciation for our economic system it also develop intelligent consumers of goods and services and lastly, it is an area which provides an adequate vocational programme for job entry qualifications. Briefly stated, Business Education is an area of vocational use as well as personal use goals. Aremu (1975).

The task of teaching commerce is enormous and has grown from what the students normally regard as simple, work over subject to a more complex one that employ scientific methods. Business Education encompasses subject matter content about its field. It utilizes validated theories to implement learning instruction, evaluation and measurement, curriculum and programme development as well as teacher education. Anyaduba (1986).

The following salient facts seem to emerge from the review on business education teaching generally and commerce in particular:

1. Business Education should be a cooperative joint venture between the industries professional associations and educational institutions;
2. Business Education instructions should start from primary school and the earlier the better.
3. Wider business course should be introduced. a wider in scope and content

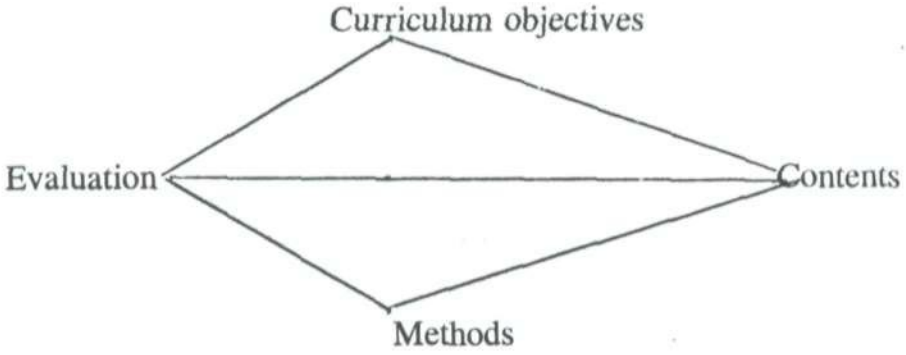
than those currently taught, particularly at the secondary school level;

4. School authorities should encourage, through adequate funding, research projects by individual teachers or departments in Business Education;
5. Educational institutions must make efforts to hire and retain qualified teachers. A succession of qualified business teachers could be developed within a school system through in service training and attendance at business education short term courses seminars, conference and workshops;
6. Business Educators at all levels should impress upon themselves and the public that business education is more than typing and shorthand.
7. Adequate relevant instructional text materials must be provided for effective instruction Business Education.

2.2.4. Relationship Between the School and Evaluation of Business studies

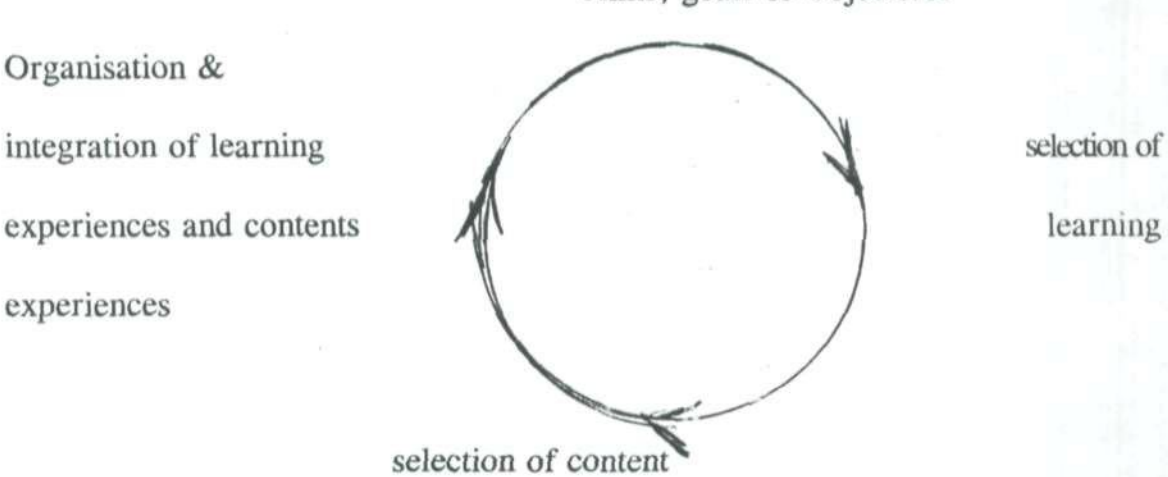
Analyst of education curriculum studies have agreed that curriculum development comprises elements. These elements differ from author to author Mallar (1992). Each author represents the development process in the model which help in its clarification.

Figure 2.3.31. Kerr model of curriculum Development.



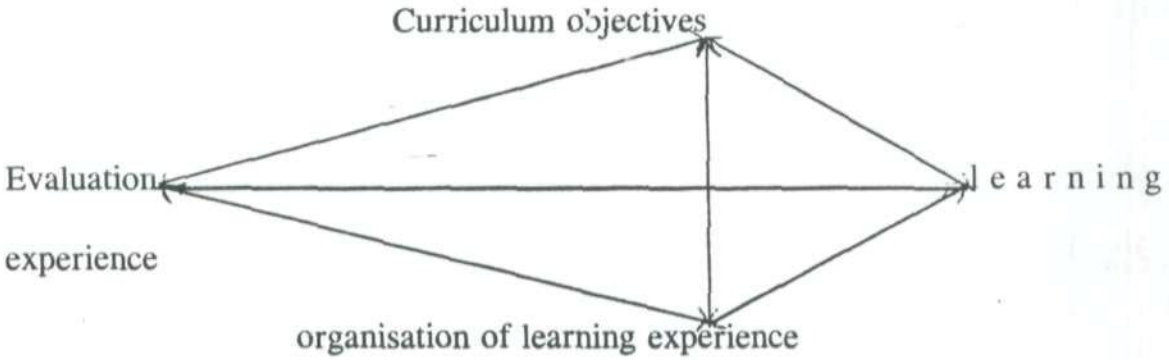
For Kerr (1968) these four elements in figure 2.3.31 above, are those considered most important in any curriculum development each element is, therefore, supported by the other. Kerr's model is given in triangular process form.

Figure 2.3.32. Wheelers Model of curriculum Development.



Whelers (1967) presented curriculum development process in cyclical form and focuses on the continuous nature of curriculum development.

Figure 2.3.33. Tylers Model of curriculum Development



Tyler's model clearly shows that the elements are inter related. The purpose of evaluation is served in the above diagrams using Elshers definition of diagnosing, revising a curriculum comprising programmes, determining objectives and anticipating occupation needs being achieved. Evaluation also deals with content of educational materials in lesson presentation and the outcome of education in terms of performance of students.

Several studies have been concerned with the effects of feedback regarding test scores on the individual subsequent test performance, Bridgeman (1974), found that successful, feed back was followed by significantly higher performance on a similar test than was failure, feed back on students, who had actually performed equally well to begin with.

This type of motivational feed back may operate largely through goals which the students set for themselves in subsequent performance, and may thus represent another example of self fulfilling prophecy. Returning students papers

with marks plus comments improved the students performance on the next test,(page, 1958).

When a child develops test anxiety or he performs poorly on tests and has experienced failure and frustration in previous test situations, such may likely have a negative effect on the child in the next test. Test anxiety affects also students performance in the preceeding examinations(Bridgeman, 1974).

2.2.5. Environmental Factors and Students Performance in Business Studies.

Environment factors are as important as the unborn factors in determining the individual students performance in test (Yahaya, 1993). The child's home base has long been recognised as one of the important factors that can influence children's academic performance. Research evidence has shown too, that children from homes that provide educational toys do better at school than their counterparts. This was confirmed by Dasfoor and Emovan (1972).

It was discovered that the children who did well were those whose parents bought them instructional toys. Ogunlade (1973) held that children from illiterate parents did worse than those of literate parents, attending the same schools. Research findings have also shown that not all children from elite homes or homes of upper socio economic class are successful secondary school students. Sometimes, a parent may posses academically useful characteristics but his child may not find identification with him.

It is really true that success at schools is dependent on children belonging to elite homes or homes of the upper class, then there would be no hope of success

by other children of lower socio economic class. The story is, in most cases different, for rural areas produce renowned rulers, educationists, doctors and the rest of such people who can be said to be the upper socio economic status.

Nema (1978), investigated the socio economic back ground of one hundred and twenty students of Bassawa Teachers' College, Zaria in Kaduna state of Nigeria and its impact on their academic achievement. He found that the adverse influence of number of children per family is minimal, and that socio economic background achievement.

Assistance and encouragement of students in the family by parents promote the academic performance of students. Fika (1978) studied the relationship between background and pupils educational achievement in Fika local government areas of Borno State, Nigeria. He interviewed seventy parents, and gave attainment test to seventy pupils, who were children/wards of the interviewed parents. He found that educational background with the pupils educational achievement. This study identified the need for parents to be literate in order to help pupils.

Teacher factor is one which has generated a lot of controversy among educationists. Over the years, a lot of blames have been on the teacher for the poor performance of student in schools. Teaching could either be effective or ineffective depending on the quality of the teaching materials and equipment available, (Adazape, 1982).

Some of the factors associated with teachers are teaching strategies and methods his interest on the job itself and towards the students. According to Anyanwu (1985), a teacher who is ill prepared, disillusioned, demoralized by poor

condition of serves and in experienced is not likely to be a facilitator of students learning. This finding agrees with that of Jegede and Okebukola (1963) which ranked the teacher factor as the highest source of students poor performance.

Closely related to the environmental variable is the problems in schools like inadequate laboratory facilities, lack of library resources, and also too much load on time table for the teacher. All these have influence on performance. (Amusat, 1994). The school location, that is, rural or urban have a relation with the students' performance. (Olorunmaiye, 1982).

Students who spent most of their lives in small towns and those who lived longer in a city passed relatively higher in examinations and test than those who spent more time in rural villages. Aina (1977), Dole (1969) and Mack (1973) found that religious background made meaningful contributions to performance predictions. Past research works in Nigeria have been silent about religion and its predictive validity on performance.

Waller (1965) contended that after a certain number of years in teaching, most teachers reach a point where they cease to make substantial improvement without further study and training. While it might be true that most teachers reach a point at which they cease to make substantial improvement without further study and training, the researcher holds the views that teachers' performance on the job is a function of years in teaching, that is teaching experience and level of training. The apparent decline in the performance of teachers after certain years of experience could be explained in terms of some environmental factors that relate to job satisfaction or systematic decline in body functions due to old age.

Parents/Guardian could stimulate their children's or ward's interest in

certain subjects. Moreover, children are likely to absorb the values of their parents even if the latter reject them. There exists the tendency for the children to follow in the career of their parents and older relation even when they may not be academically fit or capable Lipset (1962).

2.2.6. Sex Difference and Academic Performance in Business Studies

Psychologists believe that there are some genetic differences between the male and female sexes, and people conclude that these could also be some differences in psychological attributes of both sexes. The opinion commonly held by some teachers and members of the public is that the male students usually perform better than their female counterparts in some scientific problems which are seen as being too difficult to learn especially for girls. This belief stems from the fact that some psychologists contend that there are some genetic differences between the male and female sexes. Alele- Williams (1987) dispelled this belief by asserting that there is no known biological proof that women are inferior to men in intellectual ability. Also, Odunsi (1984) found that sex is not a factor which significantly influences students attitude towards science.

Several studies including those performed by Brendzel, (1971), Fogelman (1972), and Doddy (1980), have reported that males did better than females on tasks requiring logical operations. Several possible but tentative explanations for these findings have been suggested. Perhaps, females are not as good in logical reasoning questions and are little significance in latter years, hence are not motivated to develop this skills. Other factors that have been suggested as influencing reasoning include task content. Ehindero (19820, investigated sex

related differences in logical reasoning and shoed that males scored higher than females on male related tasks and female scored higher on female related tasks. It was proposed that a genetic epistomological explanation may account for gender differences in ability in both science and mathematics. Based on the study of Walberge (1969) Ernest (1974); Jacklin and Macoby (1974) on students' achievement in Physics, spatial skills showed that females did better on items dealing with verbal skills than males.

Ameh (1980) studied sex difference in science achievement and process skills among senior secondary one students in Zaria, Kaduna state of Nigeria. It was concluded, based on the results of the study, that differences in process skills exists between the studies according sex. Further analysis of the results showed that boys performed significantly at using numbers than girls. However, the girls have superior performance in the process of observing, and inferring. It was also noted that boys performed better in the process of measuring and experimenting than girls.

2.2.7. Business Teachers and Level of Job Satisfaction

Job satisfaction among Nigerian workers have reached a very low level and perhaps it is at the zero level with the business teachers. Writing on productivity and human needs, Gryder (1989) identified various theories which were classified as equity theory, expectancy theory and social learning; These can be employed in explaining the differences in human performance and that of students in particular.

According to Gryder, (1984) each person perceives differently and reacts to those perceptions in various ways. The equity theory is based on a sense of fairness. Employees often feel that over payment and underpayment are unfair. The expectancy theory on the other hand states that the strength of a persons motivation of performance comes from a belief that the performance will lead to a reward and the perceived valued of the reward. Lastly social learning theory, states that behaviour environment and individuals affect one another in a circular way.

Murray (1938) and Maslow (1954) believe that needs affect the way the individual performs. Maslow, therefore, categorized needs into five groups referred to as a wholistic dynamic theory. Herzberg (1968) says two types of factors affect how people feel about their jobs. The first factor was called 'satisfiers' and the second 'dissatisfies'. Different conditions of work incentives may facilitate performance (Dunnette, 1973) In a research conducted by Salawu (1987) on the causes and correlates of job satisfaction among business education lecturers in tertiary institutions, the author lamented that the rate at which business teachers were leaving the teaching job for more lucrative jobs in banks and in the private sector. The findings showed that business teachers in tertiary institutions are not satisfied with certain aspects of their jobs such as pay, recognition and benefits. This could be explained in terms of the expectancy theory and the equity theory. It is recognised that teachers in general are poorly remunerated compared

to their counterparts with similar qualifications in the private sector.

Job satisfaction is one of the expectations of a workers from the organisation. It is an integral part of a psychological contract which a worker makes with his employer (Arene 1983). The exodus of lecturers from teaching could be explained as a breach of this contract between the worker and his employer, caused by job dissatisfaction by the lecturers.

The consequences of neglect of the psychological contract is the tendency of employee to have low job satisfaction and performance because their expectations are not met. many research evidences show direct relationship between occupational level and job satisfaction. The higher the level of job, the greater the job satisfaction (England and Stein, 1961). There is however an inverse relationship between educational level and employee morale (Vroom (1964). Masher, (1966) Gordon and Avey (1975). Although the findings are not entirely consistent, it appears that the higher the educational level of an employee, the lower his or her job satisfaction with pay, particularly with business subjects' teachers.

In predictive studies, Kapur (1972), Mack (1973) Reed, Feldhussen and Mondrass (1973) showed age to be significant variable in predicting academic performance. Aina (1977) found a systematic relationship between age and performance on Royal Society of Arts (RSA) Commercial examinations in shorthand stage 1. He also found sex not to be a predictor of academic performance.

However, in a review of past research work, where sex has been used by other researchers in prognostic studies, Hamilton (1970) and Macmillian (1970) found a significant relationship between sex and performance. In another related study by Ojo (1978) who investigated the extent to which teacher factors such as educational qualification teaching experiences age, sex and nationality contribute to the effective teaching of mathematics to post primary students, it was revealed that age experience, educational qualification, sex and nationality are not significantly related to the effectiveness of teachers on teaching mathematics.

Although, the findings of Ojo (1978) corroborate those of Onakanowoja (1980) the current researcher feels strongly that experience, age, sex and educational qualifications should be some of the variables that could be used in the research.

Abalaka (1988) worked on evaluation of Business education teachers ar katsina-ala and Ankpa Colleges of Education in Benue State and established the relationship between performance and teaching practice effectiveness of the programmes participants. He found that there was a low relationship of the subjects for the two colleges combined. He also established a significant relationship between performance in secretarial studies and that of teaching practice. This association suggests that the more one knows secretarial studies, the more likely one is competent in teaching the subjects.

However, the research findings of Abalaka (1988) did not reveal the difference in the performance of students taught by qualified and unqualified teachers which the present study seeks to address. Abalaka (1988) conducted the research among the tertiary institutions, while the present work is on the performance of students in SSCE commerce. Moreover, the study was conducted on teaching practice performance of practicing teachers.

Osu (1990) maintained that both what to teach and knowledge of how to teach are important. She stressed that one could not teach what he did not know. Osu (1990) further to say that if teachers of Business education are to achieve their destiny as envisioned, they must meet the challenge of education for business with breadth of knowledge and attainment of initial vocational skills.

Brown (1968) and Mills (1974) hinted on intellectual attainment that insufficient mastery of subject matter by the student teacher leads to faulty teaching. He further stressed that give and take in discussion, flexibility of method and the application of learning to the lives of boys and girls do not yield any result until the student teacher has, among other things, a greater mastery of knowledge which will facilitate teaching.

In a research by Babatunde and Igbayiloye (1985) and attempt was made to explain whether differences exist in on the job performance between University Business Education graduates (B.B.Ed) and non-University Business Education graduates (NCE) teaching business studies in secondary schools. Their findings

revealed that NCE teachers performed as effectively as University trained business teachers. However, the opinion of their supervisors differ. The supervisors believe that the University trained business teachers performed significantly better. They suggested that the difference in the performance could be attributed to their higher training received at the University level.

The research of Babatunde and Igbayiloye (1985) relates to the current one in terms of evaluation on performance of the products of business studies from tertiary institutions, which the secondary schools products serve. The present studies is, however, focused on the secondary school products who mainly are admitted into the tertiary institutions. Nonetheless their study differs from the current research. The previous work evaluated on the job performance while the current research is aimed at investigating students' performances in senior school certificate examination. Although teachers effectiveness is part of the present study, it is not the focus.

Nandang (1978) in a study in Plateau State found that using the three subjects of the three selected schools, Mock is a substantial predictor of WASCE but this generally not true in all schools and subjects in plateau State. In a similar study, Ayuba, 1978 studied the mock as predictor of WASC. He stated that the highly correlated grades between Mock and WASC results in all the subjects studied are due to the fact that kaduna State had a Joint Common Mock Examinations that was centrally administered from the Ministry of Education.

This confirms that mock results can be used as a predictor of WASCE. The two findings indicate that if proper standard is maintained in the setting and marking of mock examinations such as having a joint mock for schools in a state, it will be a very reliable predictor of WASCE results.

Gaiya (1978) found in Kaduna State that mock was a better predictor of WASCE when the mock was centrally set and marked in Kaduna State. Contrarily, Igube (1976) who found that there were fluctuations in individual schools' mock results and thus could not predict WASCE results.

In his findings, Atta, (1973) confirmed that the degree to which the mock examination predicts the performance of the fifth year students in WASC examinations also varies from one school to another. This degree of prediction is affected by:

a. changes in principals and

b. staff strength at a given time.

He further lists the following factors which have the same effect on variations of correlations between mock and WASCE:

i. staff continuity

ii. staff qualification

iii. industry and sense of responsibility of teachers;

iv. general academic standard of the fifth year students;

v. motivation, attitude to work by the candidates;

vi. discipline and general characters of the candidates;

vii the availability of the stock of proper equipment;

viii. time of starting and completion of WASCE Syllabus

ix. special coaching, attention and help in preparation for mock and WASC examinations;

x. Generosity or strictness of the teachers in marking based on common basis of awarding marks.

xi. usual moderation of examinations.

Titiloye (1979) found that students performance in WASC business studies in the selected schools in Kwara State were hampered by:

i. inadequacy of teachers;

ii. too heavy teaching load allocated to teachers;

iii. inadequacy of teaching aids;

iv. students weak academic background;

v. students not working hard enough;

vi. lack of teaching qualifications;

vii. lack of library facilities;

viii. lack of adequate guidance services and

ix. lateness in payment of school and examination fees, resulting in students missing lessons. Jen (1978) found that home environment is more closely correlated with school progress than with intelligence. Ojo'ar (1978) found

in his research in Benue State that secondary schools attain a higher academic achievements than their counterparts in the single sex systems of secondary schools.

2.4. Summary

Several researchers have agreed that there is a high correlation between students performance in SSCE and other pre-SSCE examinations such as mock, C.A. and JSCE. Others recorded high correlation between parents educational back ground, high socio economic backgrounds and academic performance of their children. When can therefore use these variables could be of value in predicting academic performance.

Others still found high correlation between the quality of staff available and the academic performance of the students in such schools. Some other researchers found high correlation between the mock examination and the WASCE results some still found that fluctuation in mock standard does not give the merit of predictive capabilities.

CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter describes the procedure and methods used for the study. It focuses on the research design population and sample description of research administration of the instruments and methods of data collection and analysis.

3.2 Research Design

In any study, the nature dictates the types of methods and instruments to be used or adopted for any specific situation. The nature of this study therefore, permits the use of the following methods.

In attempt to answer the questions raised in the statement of the problem, the research method has to lead to specific design. This study was designed to collect and analyse data on the predictive value of junior secondary school certificate examination performance of students on the performance of same students in senior secondary school certificate.

The researcher, in this study dealt specifically with institutional records about students academic records both in their JSSCE and SSCE. Documentary evidences from the students academic records were retrieved from the guidance and counselling department of the institution. The documentary records included the JSCE results of 1988-1992 students who also took SSCE in 1991-1995.

3.3. Population

The study population include all students who sat for 1988 to 1992 JSCE and 1991 to 1995 SSCE in business studies in the twelve schools that offered business studies both at junior and senior schools in Ogbomosho North and South Local Government Areas. The total students'population is 1380.

3.4. Sample and Sampling Techniques

Stratified Random Sampling Method was used in sellecting the four schools from which the 276 students were used as sample Borg, W. R. and Gall, M. D (1974).

3.5. Procedure for Data Collection

The researcher collected letters of introduction from the department of Vocational and Technical Education, Ahmadu Bello University, Zaria. The various institutions and examination bodies were first visited with these letters at the first preliminary visit and to book appointment for convenient time to do the work. Students record were retrieved for JSCE and SSCE in the four secondary schools (two federal and two states). They were authenticated at the Ibadan Zonal offices of WAEC and NBEM.

3.6. Instrumentation

The researcher will collect letters of introduction from the Department of Vocational and Technical Education, Ahmadu Bello University, Zaria. This

identified the researcher for permission to carry out the study in the selected colleges. The academic performance records of student in JSSCE, 1988, 1989, 1990, 1991 and 1992 were retrieved and the records of same students at SSCE 1991, 1992, 1993, 1994 and 1995. All these were used as the documentary evidence.

3.7. Statistical Analysis

Information obtained from students academic records in JSCE were compared with the students records in their SSCE performance. JSCE were judged by Centre for Educational Measurement (CEM), now (NBEM), Minna, as Fail (F), Pass (P) Credit (C) and Excellent or Distinction (A). While SSCE were judged by West African Examination Council F9 - fail, P8 - Pass, P7 - pass, C6 - Credit, C5 - Credit, C4 - Credit, A3 - Good, A2 - Very Good and A1 - Excellent.

Table 3.7.1 National Board for Educational Measurement (NBEM) JSCE Grading System.

Grade	Raw Score
A	75 and above
C	60 - 74
P	40 - 59
F	0 - 39

Table 3.7.2 **West African Examination Council SSCE Grading System**

Grade	Raw Score
A1	75 and above
A2	70 - 74
A3	65 - 69
C4	60 - 64
C5	55 - 59
C6	50 - 54
P7	45 - 49
P8	40 - 44
F9	0 - 39

The computer and statistical package for the social sciences will be used in the data analysis. This system provides its user with a unified and comprehensive package which makes possible analysis of a variety of data in a simple and understandable manner. It performs descriptive statistics of simple *frequency distribution, simple correlation partial correlation and cross tabulation* (Aina (1977).

Statistical tools that will be used for data analysis in this study are:

i. Pearson Product Moment correlation (PPM) co-efficient which determines the nature of relationship between two variables. That is positive/negative and strong/weak.

ii. T - test which reveals the level of significance difference between two variables.

Tables would be used to present raw scores, summarize the scores to aggregate scores and frequencies and percentages determined. Percentages reduced different sets of numbers to comparable sets of number and to a common base (Kerlinger, 1973), Akale (1987) also argued that any set of frequencies can be employed at a level of significance of 0.05. This level of significance chosen is usually used in social sciences and behavioural sciences research. The data used in this research will satisfy the level of measurement for Pearson Product Moment correlation coefficient.

CHAPTEF FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

The study was intended to determine the predictive value of junior school certificate examination business studies' students performance on their performance in the senior school certificate examination commerce and accounts.

In this chapter, a summary of the data collected as well as the analysis of the data and findings based on the analysis are presented. The first part of the analysis deals with the relationship that exists between the variables selected for testing and the second part deals with the difference that exists in the selected variables.

Hypotheses were tested using Pearson Product Moment Correlation Coefficient PPM(r) and the t-test. Students grades were converted to grade points. The grades collected were for candidates who sat for JSCE business studies 1988 to 1992 and their corresponding grades for SSCE commerce and accounts from 1991 to 1995.

All these grades, collected from the counselling and academic offices of each schools were authenticated using the computer print out from WAEC Lagos office and NBEM Minna office, stamped and well kept in each school administrators office.

4.2 Presentation of Data

This section presents discussion on the data gathered from the students academic records for JSCE business studies and SSCE commerce and accounts in the years studied.

Table 4.201 Summary of Students Performance in JSCE Business Studies From 1988 to 1992.

	F		P		C		A		TOTAL		Population
	M	F	M	F	M	F	M	F	M	F	Per year
1988	3	2	9	16	6	5	0	0	18	23	41
1989	8	4	6	9	10	11	0	1	24	25	49
1990	2	0	2	9	7	13	0	0	21	22	43
1991	0	0	24	21	10	10	1	0	35	31	65
1992	0	1	38	11	15	12	0	1	25	53	78
									TOTAL		276

The total number of male students with credit and above pass is 49 out of the total number of 123 males in the study. This is aout 40% credit pass. In the case of female students, it recodrs 53 out o 153 female students in the study. This is about 35% credit pass. Conclusively, male performed creditably in business studies than females in the years studied.

Table 4.202: Summary of Students Performance in SSCE Commerce

	F		P		C		A		TOTAL		Population
	M	F	M	F	M	F	M	F	M	F	Per year
1991	2	8	8	8	8	4	2	1	20	21	41
1992	15	17	8	7	2	0	0	0	25	24	[illegible]
1993	7	14	7	6	7	1	0	0	21	21	42
1994	18	19	7	3	8	5	4	2	37	29	66
1995	21	11	9	8	16	4	8	1	54	24	78
									TOTAL		276

In commerce, out of out of 157 male students, only 55 cridit and above giving a 35% credit pass performance. Female students who had credit pass and above were only 18 out of 119 female students in the study. This gie a 15% credit pass. Male students also did better than female students, even though the performance was generally poor.

TABLE 4.203: Summary of Students Performance in SSCE Accounts from 1991 to 1995.

	F		P		C		A		TOTAL		Population
	M	F	M	F	M	F	M	F	M	F	Per year
1991	1	2	12	13	5	6	1	0	19	21	40
1992	19	10	5	9	1	4	0	0	25	23	48
1993	11	1	5	10	10	4	1	0	27	15	42
1994	11	4	8	7	14	14	4	4	37	29	66
1995	16	9	18	11	12	5	7	2	53	27	80
									TOTAL		276

In accounts, out of 157 male students 58 of them recorded credit pass and above, making a 37% credit pass in teir number. On the other hand, female students recorded 39 credit pass out of 119 female students in the study. This is just 33% credit pass in their number. The diference observed in the % pass was insignificant. The results in the three subjects Business studies, Commerce and accounts were generally low. The data were analysed to seek answers to the specific research questions. The findings are based on the nulll hypotheses drived from the research questions.

4.3 Hypotheses Testing

Table 4.1 Summary of Students Performances in Each School

SCHOOL	BSC %	BSwc %	Cc %	Cwc %	BKc %	BKwc%	M F	TOTAL
Fed. Govt. College Ogbomoso	88 51.1	81 47.9	62 37	107 63	71 42	98 58	108 61	169
Adeniran Memorial Grammar School Ogbomoso	7 19.4	29 80.6	2 6	34 94	4 11	32 89	18 18	36
High School Ogbomoso	39 55	32 45	9 13	62 87	19 48	52 52	31 40	71

KEY:
*BSc = Business studies credit percentage pass
*BSwc = Business studies without credit pass
*Cc = Commerce with credit pass
*Cwc = Commerce without credit pass
*BKc = Account with credit pass and above
*BKws = Account without credit pass

Hypothesis One

This hypotheis stats that thee is no significant relationship between the studnts performance in JSCE Busiens studies and SSCE accounts.

Pearson Product Momment Correlation Coefficient PPM(r) was used for testing the hypothesis at -05 level of sifnificance r calculated (0.2361) was found to be greater than r critical (0.197) at the degree of freedom 274.

Table 4.2 gives the details of the r correlation summary. The hypothesis was rejected because it was found to be significant at .05 and the alternative hypothesis retgained. The findings here confirmed the work done earlier by Iroko (1978) and Olorunmaiye 1982). These researhers have indicated sifnificant correlation and systematic relations between Mock and WASC results in Book keeping

TABLE 4.2: **Shows the Ppm(r) Results on Relationship Between the Students Performance in JSCE Business Studies and SSCE Accounts.**

EXAM	N	X	SD	r Cal	r Crit	DF
BS	276	2.304	0.616	0.2361	0.197	274
ACCTS	276	2.098	0.919			

r calculated 0.2361 > r critical 0.197 at 0.05 level of significance ∴ Ho = Rejected.

Hypothesis Two

The hypothesis states that there is no significant relationship between the students performance in JSCE Business studies and SSCE commerce.

Pearson Product Moment Correlation Corfficient PPM(r) was used for testing the hypothesis at .05 level of significance.

TABLE 4.3: **Shows the Ppm(r) Results on Relationship Between the Students Performance in JSCE Business Studies and SSCE Commerce.**

EXAM	N	X	SD	r Cal	r Crit	DF
B/STUD JSCE	276	2.304	0.6162			
				0.2105	0.197	274
SSCE COMM.	276	1.8514	0.9665			

From table 4.3 r calculated is grater than r critical that is, r cal = 0.2105 > r critical = 0.197 (r cal > r critical).

Thus, the null hypothesis is rejected and the alternative hyupothesis retained, which states that there is a sifnificant relationship between the students performance in JSCE business studies and their SSCE commerce.

The existing relationship between the two subjects could be explained thus: That even though, business studies was being taught as an integrated pre-vocational subject in JSS, it contain relevant items for SSCE commerce in its content, which could serve as a pivot on which the SSS commerce revolves.

From table 4.3 r calculated is greater than r critical that is, r cal = 0.2105 > r critical = 0.197 (r cal > r critical).

Thus, the null hypothesis is rejected and the alternative hypothesis retained, which states that there is a significant relationship between the students performance in JSCE business studies and their SSCE commerce.

The existing relationship between the two studies could be explained thus:

That even though, business studies was been taught as an intergrated pre-vocational subjects in JSS, it contains relevant items for SSCE commerce in its content, which could serve as a pivot on which the SSS commerce revolves.

Hypothesis Three

This hypothesis states that there is no significant difference in the performance of male and female students in SSCE accounts.

The grade point scores were computed for male and female students in SSCE accounts.

T-test was used in testing for the significant difference in the two variables male and female in SSCE accounts at .05 level of significance.

Male students in accounts has a total number of 153 and female students were 123 in SSCE accounts. There were 276 cases in all the variables combined. Table 4.6 gives the details of the t-test summaries on hypothesis four.

TABLE 4.6: Shows the T-test on the the Differences Between the Performance of Male and Female Students in SSCE Accounts

VARIABLES	N	X	SD	SE	r Cal	r Crit	DF
MALE	153	2.1046	0.968	0.078	0.14	1.96	274
FEMALE	123	2.0894	0.859	0.77			

t cal. < t critical = 0.14 < 1.96

From the table, t calculated value is 0.14 and t critical value at 274 degrees of freedom is 1.96 which is greater than calculated. The null hypothesis is retained and the alternative hypothesis rejected.

This means that there is no significant difference in the performance of male and female students in SSCE accounts. This may be due to the fact that female

students intgensified their efforts more on this subject and also explored male lstudents for more help.

Hypothesis Four

This hypothesis states that there is no significant difference in the performance of male and female students in commerce.

Grade points scores were computed for male and female students in SSCE coomerce.

T-test statistical tool was used in testing the hypothesis, that is, the significant difference in the two variables in SSCE commerce at .05 level of significance.

TABLE 4.7: Shows the T-test on the the Differences Between the Performance of Male and Female Students in SSCE Commerce

VARIABLES	N	X	SD	SE	r Cal	r Crit	DF
MALE	153	2.0196	1.016	0.082	3.28	1.96	274
FEMALE	123	1.6423	0.860	0.078			

t cal. > t critical = 3.28 > 1.96 = rejected

From the table, t calculated value of 3.28 is geater than the t critical value of 1.96 at degrees of freedom of 274.

This means that there is a significance difference in the performance of male and female dtudents in commerce. Thus, the null hypothesis is rejected and the alternative hypothesis is retained.

The difference in the performance of male and female may be attributed to poor level of interraction among the different sexes. Most state schools have only

facilities for day students. This do not allow for close interraction among male and female students for group study or to form discussion groups for academic purposes among themselves.

Societal values attached to the study of commerce favours female students, since the public sees the subject as good for female students, the female students should have taken the advantage over the male ones, who may have seen themselves as been frustrated into studying the subject. Hence, no seriousness in the subject.

It could be that, the schools with boarding facilities are not encouraging male and female students to study together during preps and other study time.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study was designed to correlate the students performance in JSCE business studies with the students' performance in SSCE commerce and accounts. The study was undertaken to determine the predictive value of students' performance in JSCE business studies to their SSCE commerce and accounts.

Population was all the students who wrote JSCE business studies 1988 to 1992 and who also wrote SSCE commerce and accounts from 1991 to 1995 in Ogbomoso south & north LGAs of Oyo state. The population sample students were 276 altogether.

Academic records of each of these sample population of students were retrieved and computed into meaningful data for analysis. Pearson product moment correlation coefficient PPM(r) was used for all the hypotheses testing the correlation between the selected variables. T-test statistical tool was equally used for testing all hypotheses on significant difference.

Only the two combined variables whose t calculated value were found greater than the t critical value at the level of significance .05 were regarded as been statistically significant.

For hypothese one a and b, two and three PPM(r) was used in testing them and for hypotheses four and five t-test statistic was used.

If the calculated values was greater than the critical values, the hypothesis was rejected. On the other hand, if the calculated value was less than the critical

value the hypothesis was retained. For example, if r calculated is 1.011 and r critical from the table is 0.089 the hypothesis was rejected.

5.2 Summary of Findings

The study stated four hypotheses. Except in hypothese 1', '2' and four that was rejected and the alternative hypotheses retained, the other one null hypothesis was retained.

In hypotheses one and two, it means that there ware significant relationships between the students' performance in JSCE business studies and their SSCE commerce and accounts.

It then implied that whatever the grade score of a student was in JSCE business studies the same was maintained in the SSCE commerce and accounts.

Hypotheses three and four tested the differences in the male and female students' performance in commerce and accounts and it was found that there was no significant difference in the performance of the sexes in SSCE accounts. The null hypotheses was retained and the alternative hypothesis rejected.

The last hypothesis, that is, hypothesis four stated that there is no significant difference in the performance of male and female students in SSCE commerce. In this hypothesis, it was found that there was significant difference as the t-calculated was greater than the t-critical, therefore, the null hypothesis was rejected and the alternative hypothese retained.

5.3 Conclusion

Based on the findings of this study, it can be concluded that there as a relationship between the students academic performance in junior and senior business studies examinations. The performance of students in Business studies junior examination can be used to predict their performance in senior examinations in commerce, Bookkeeping and accounts. However sex difference has no effect on the students academic performance in Book keeping and Accounts. Female students performed a little better than male students in commerce, though the difference is just but insignificant.

5.4 Recommendations

Based on the findings of this research, the followings are recommended.

1. Teachers of business studies at JSS should pay equal attention to the teaching of each units that is, type writing, shorthand. commerce, office practice and bookkeeping. Each of this unit should be given same time allocation and periods on the time table. None of the five should suffer neglect.
2. Federal and state governments should encourage and intensify the training of business teachers. The federal ministry of education should cooperate with the training organs and institutions to design a curriculum capable of breeding teachers that can handle the five units in the business studies effectively.
3. The quality of teachers should be complimented with quality of

teaching/learning materials and equipment to the business studies department of various schools. Motivation and incentives in terms of allowances, regular payment of salaries and other financial benefits are complimentaries that could be given by governments and various school administrators.

4. Awareness campaign should be mounted by business organisations and associations, clubs and societies. The general public and students should be informed of the immeasurable and great opportunities that exists in commercial or business world. Those who excel in these subjects in their SSCE performance should be encouraged to read related courses in higher institutions and should also be willing to come to teaching profession to keep the flag flying.

5. The vocational skills and technicalities involved in commerce and accounts should be highlighted always to the students, school administrators, guidance counsellors in schools and the general public. Business teachers should do this, to correct the age long misconception in the public, that commerce is for female or that it is a simple work over subject that needs no extra hardwork.

6. Male and female students should be allowed and encouraged to interract academically in discussion groups and preps.

7. Research should be conducted in related studies in another larger geographical location, since this is limited to Ogbomoso LGAs or in another subject area.

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NOTE: The probabilities given are for a two-tailed test of significance, that is with the sign of r ignored. For a one-tailed test of significance, the tabled probabilities should be halved.

df	P = .10	.05	.02	.01
1	.988	.997	.9995	.9999
2	.900	.950	.980	.990
3	.805	.878	.934	.959
4	.729	.811	.882	.917
5	.669	.754	.833	.874
6	.622	.707	.789	.834
7	.582	.666	.750	.798
8	.549	.632	.716	.765
9	.521	.602	.685	.735
10	.497	.576	.658	.708
11	.476	.553	.634	.684
12	.458	.532	.612	.661
13	.441	.514	.592	.641
14	.426	.497	.574	.623
15	.412	.482	.558	.606
16	.400	.468	.542	.590
17	.389	.456	.528	.575
18	.378	.444	.516	.561
19	.369	.433	.503	.549
20	.360	.423	.492	.537
21	.352	.413	.482	.526
22	.344	.404	.472	.515
23	.337	.396	.462	.505
24	.330	.388	.453	.496
25	.323	.381	.445	.487
26	.317	.374	.437	.479
27	.311	.367	.430	.471
28	.306	.361	.423	.463
29	.301	.355	.416	.456
30	.296	.349	.409	.449
35	.275	.325	.381	.418
40	.257	.304	.358	.393
45	.243	.288	.338	.372
50	.231	.273	.322	.354
60	.211	.250	.295	.325
70	.195	.232	.274	.302
80	.183	.217	.256	.283
90	.173	.205	.242	.267
100	.164	.195	.230	.254

SOURCE: Table VII of Fisher and Yates, *Statistical Tables for Biological, Agricultural, and Medical Research*, published by Longman Group, Ltd., London (previously published by Oliver and Boyd, Edinburgh). Used with permission of authors and publishers.

Table D

Critical values of t

PERCENTILE:	75	90	95	97.5	99	99.5	99.95	
df α_1:	.25	.10	.05	.025	.01	.005	.0005	df
α_2:	.50	.20	.10	.05	.02	.01	.001	
1	1.00	3.08	6.31	12.71	31.82	63.66	636.6	1
2	.81	1.89	2.92	4.30	6.96	9.92	31.6	2
3	.79	1.64	2.35	3.18	4.54	5.84	12.9	3
4	.77	1.53	2.13	2.78	3.75	4.60	8.61	4
5	.75	1.48	2.02	2.57	3.36	4.03	6.87	5
6	.74	1.44	1.94	2.45	3.14	3.71	5.96	6
7	.73	1.42	1.89	2.36	3.00	3.50	5.41	7
8	.72	1.40	1.86	2.31	2.90	3.36	5.04	8
9	.71	1.38	1.83	2.26	2.82	3.25	4.78	9
10	.70	1.37	1.81	2.23	2.76	3.17	4.59	10
11	.70	1.36	1.80	2.20	2.72	3.11	4.44	11
12	.69	1.36	1.78	2.18	2.68	3.05	4.32	12
13	.69	1.35	1.77	2.16	2.65	3.01	4.22	13
14	.69	1.34	1.76	2.14	2.62	2.98	4.14	14
15	.69	1.34	1.75	2.13	2.60	2.95	4.07	15
16	.69	1.34	1.75	2.12	2.58	2.92	4.02	16
17	.69	1.33	1.74	2.11	2.57	2.90	3.97	17
18	.69	1.33	1.73	2.10	2.55	2.88	3.92	18
19	.69	1.33	1.73	2.09	2.54	2.86	3.88	19
20	.69	1.32	1.72	2.09	2.53	2.85	3.85	20
21	.69	1.32	1.72	2.08	2.52	2.83	3.82	21
22	.69	1.32	1.72	2.07	2.51	2.82	3.79	22
23	.68	1.32	1.71	2.07	2.50	2.81	3.77	23
24	.68	1.32	1.71	2.06	2.49	2.80	3.75	24
25	.68	1.32	1.71	2.06	2.49	2.79	3.73	25
26	.68	1.32	1.71	2.06	2.48	2.78	3.71	26
27	.68	1.31	1.70	2.05	2.47	2.77	3.69	27
28	.68	1.31	1.70	2.05	2.47	2.76	3.67	28
29	.68	1.31	1.70	2.05	2.46	2.76	3.66	29
30	.68	1.31	1.70	2.04	2.46	2.75	3.65	30
40	.68	1.30	1.68	2.02	2.42	2.70	3.55	40
50	.67	1.30	1.68	2.01	2.40	2.68	3.50	50
60	.67	1.30	1.67	2.00	2.39	2.66	3.46	60
80	.67	1.29	1.66	1.99	2.37	2.64	3.42	80
100	.67	1.29	1.66	1.98	2.36	2.63	3.39	100
200	.67	1.29	1.65	1.97	2.35	2.60	3.34	200
500	.67	1.28	1.65	1.96	2.33	2.59	3.32	500
1,000	.67	1.28	1.65	1.96	2.33	2.58	3.30	1,000
∞	.674	1.282	1.645	1.960	2.326	2.576	3.291	∞

Source: Row values for df = 50 and df > 60 < ∞ were calculated by Gregory Camilli. Other values were obtained from table 12 in E. S. Pearson and H. O. Hartley (Eds.), *Biometrika Tables for Statisticians*, 3rd ed. (1966), by permission of the *Biometrika* Trustees.

Note: α_1 and α_2 correspond to "one-tailed" and "two-tailed" tests, respectively. Since the t-distributions are symmetrical, the t-value at percentile, P, is equal in absolute value to, but differs in sign from, the t-value for percentile, $100 - P$. For example, for df = 20, $_{.05}t_{20} = -1.725$ and $_{.95}t_{20} = 1.725$.

Table H

Critical values of *chi-square*

PERCENTILE: 50	75	90	95	97.5	99	99.9
df α: .50	.25	.10	.05	.025	.01	.001
1	.45	1.32	2.71	3.84	5.02	6.63	10.8
2	1.39	2.77	4.61	5.99	7.38	9.21	13.8
3	2.37	3.11	6.25	7.81	9.35	11.3	16.3
4	3.36	5.39	7.78	9.49	11.1	13.3	18.5
5	4.35	6.63	9.24	11.1	12.8	15.1	20.5
6	5.35	7.84	10.6	12.6	14.4	16.8	22.5
7	6.35	9.04	12.0	14.1	16.0	18.5	24.3
8	7.34	10.2	13.4	15.5	17.5	20.1	26.1
9	8.34	11.4	14.7	16.9	19.0	21.7	27.9
10	9.34	12.5	16.0	18.3	20.5	23.2	29.6
11	10.3	13.7	17.3	19.7	21.9	24.7	31.3
12	11.3	14.8	18.5	21.0	23.3	26.2	32.9
13	12.3	16.0	19.8	22.4	24.7	27.7	34.5
14	13.3	17.1	21.1	23.7	26.1	29.1	36.1
15	14.3	18.2	22.3	25.0	27.5	30.6	37.7
16	15.3	19.4	23.5	26.3	28.8	32.0	39.3
17	16.3	20.5	24.8	27.6	30.2	33.4	40.8
18	17.3	21.6	26.0	28.9	31.5	34.8	42.3
19	18.3	22.7	27.2	30.1	32.9	36.2	43.8
20	19.3	23.8	28.4	31.4	34.2	37.6	45.3
21	20.3	24.9	29.6	32.7	33.5	38.9	46.8
22	21.3	26.0	30.8	33.9	36.8	40.3	48.3
23	22.3	27.1	32.0	35.2	38.1	41.6	49.7
24	23.3	28.2	33.2	36.4	39.4	43.0	51.2
25	24.3	29.3	34.4	37.7	40.6	44.3	52.6
26	25.3	30.4	35.6	38.9	41.9	45.6	54.1
27	26.3	31.5	36.7	40.1	43.2	47.0	55.5
28	27.3	32.6	37.9	41.3	44.5	48.3	56.9
29	28.3	33.7	39.1	42.6	45.7	49.6	58.3
30	29.3	34.8	40.3	43.8	47.0	50.9	59.7
40	39.3	45.6	51.8	55.8	59.3	63.7	73.4
50	49.3	56.3	63.2	67.5	71.4	76.2	86.7
60	59.3	67.0	74.4	79.1	83.3	88.4	99.6
100	99.3	109.1	118.5	124.3	129.6	135.8	149.5

Source: Adapted from table 8 in E. S. Pearson and H. O. Hartley (Eds.), *Biometrika Tables for Statisticians*, 3rd ed. (1966), by permission of the *Biometrika* Trustees.

Notes: 1. The α-values pertain to nondirectional hypotheses.

2. For df > 30, the central chi-square distribution is approximately normally distributed with a standard deviation of 1. Appendix Table B can be used for df > 30 using

$$z = \sqrt{2\chi^2} - \sqrt{2df - 1}$$

TABLE I

Table for Determining Sample Size from a Given Population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size.
S is sample size.

Figure 1. Relationship between sample size and total population

Daniel

PROCEDURE FOR CHOOSING BASIC ANALYSIS TECHNIQUES

1. What level of measurement am I using?	2. Am I looking for difference between groups or relationship among variables?	3. How many groups or variables do I have? Two or more groups or variables	4. Are the groups independent or related?	5. Suggested statistical analysis Techniques
Interval/Ratio	Difference (Between Groups)	Two Groups	Independent	t-test for Independent Samples
			Related	t-test for Related Samples
		Two or more Groups	Independent	Analysis of Variance - ANOVA
			Related	Repeated Measures correlated ANOVA COVAR Analysis of Variance
	Relationship (Between Variables)	Two Variables		Product-Moment Correlation
		Two or more Variables		Multiple Regression/Multiple or Canonical Correlation
Ordinal	Difference	Two Groups	Independent	Mann-Whitney U-test
			Related	Wilcoxon Matched Pairs Signed Ranks Test.
		Two or more Groups	Independent	Kruskal-Wallis Test
			Related	Friedman Analysis of Variance
	Relationship			Spearman Rank Order Correlation
Nominal	(Difference)	One Independent Variable		Chi-square Goodness-of-Fit
		Two or more Independent Variables		Chi-square test for Contingency Tables
	Relationship			Contingency Coefficient

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