TEACHERS' AND STUDENTS' PERCEPTION OF CAUSES OF POOR PERFORMANCE IN THE UNIVERSITIES MATRICULATION EXAMINATION

BY

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DECLARATION

I hereby declare that this project has been my personal production. The topic has not been previously worked on by anybody for higher degree. All sources of information and quotations are duly acknowledged by means of references.

8/9/99

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CERTIFICATION

This thesis, titled, "Teachers and Students Perception of causes of Poor Performance in the Universities Matriculation Examination by Anaja Abubakar Garba has met the regulations and requirements for the award of the degree of Master of Education (Psychology) of Ahmadu Bello University, Zaria and is approved for its scholarly contribution to knowledge"

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D E D I C A T I O N

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ABSTRACT

The research was designed primarily to investigate the current perception of teachers and students on causes of poor performance in the Universities Matriculation Examination in Science with particular reference to instructional materials, teacher's influence, teacher's motivation, students' attitude to science and peer group influence on performance in the Universities Matriculation Examination.

The study was carried out with a sample size of three hundred and sixty-one (361) students and one hundred and twenty-three (123) teachers randomly selected from selected schools from Bauchi, Cross River, Delta, Kogi, Ogun and Kaduna States.

Five empirical research questions and five hypotheses were formulated for this study. These are all related to perception of various factors responsible for candidates poor performance in the University Matriculation Examination.

Also, a fifty-one (51) item que, ionnaire made up of two parts, A & B was carefully designed and used to gather relevant data for the study. The findings as conceptualized by the researcher would go along way to provide relevant suggestions to the government, JAMB and other related agencies responsible for the development and administration of public examination of this magnitude.

The major test statistics employed in data analysis was the Pearson Product-Moment Correlation Coefficient (PPmr) and percentages.

The results revealed that both teachers and students were in agreement that lack of instructional materials in schools were significantly related to students' performance in the Universities Matriculation Examination in Science.

Also, both teachers and students indicated that schools were grossly understaffed and lacked qualified and experienced graduate teachers.

Teachers and students also indicated that teachers with higher academic qualifications and experience teach more effectively than those with lower qualifications.

There was a high agreement by both teachers and students that teachers' salaries and allowances are not regularly paid neither do teachers enjoy annual leave grant, and promotion. These were not given for an upward of five to ten years especially at state level. Besides, in-service training is not granted.

Both teachers' and students' perceptions indicated a high significant relationship between attitude and performance in the universities matriculation examination.

Teachers and students also agreed that peer group influence has significant relationship with performance in the university matriculation examination as shown by the correlation coefficient (r) value (0.6522).

It was recommended that government private organisations and other interest groups should provide enough instructional materials for schools and ensure that close supervision, is given to see that the .materials provided are properly used by the schools.

Teachers should be provided with the necessary incentives like their counterparts in other sectors of the economy. Qualified, and experienced teachers should be recruited while in-service training with full pay should be macle available to teachers. Regular promotion should be guaranteed to all deserving teachers to boost thier morale.

Students in schools should be given necessary orientations and adequate career guidance and counselling to enable them to develop positive attitude towards education and subjects offered at school. Students should be encouraged to keep friends who cherish hard work and dedication to work.

OPERATIONAL DEFINITION OF TERMS

Perception: Refers to the ability to see, hear or understand. It generally refers to the awareness of, and or towards something or issue.

Performance: Refers to students' academic achievement in a test or examination. A student who obtains a mark below fifty percent (50%) is regarded as having failed while a score of fifty percent (50%) and above is considered a pass mark.

UME: Universities Matriculation Examination. It is a placement text taken by students who are in their final year of Senior school as well as those who have completed their Senior School Certificate Examination (SSCE) but yet to gain admission to the Universities.

SS3: Senior School Certificate Class Three students in their final year of study in the Secondary schools.

SSCE: Senior School Certificate Examination. It is a certificate examination after a successful completion of a course of study in a secondary school.

AR: Awaiting Result of the Senior School Certificate Examination which is being awaited by the final year students of the Senior Secondary School.

ELDS: Educationally Less Developed States. This refers to States of the Federation that are generally back ward in formal education. They include River State, Cross River State and the sixteen (16) Northern States excluding Kwara State.

J.A.M.B: Joint Admissions and Matriculation Board. The body that offer university admissions to successful candidates.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

The Joint Admission and Matriculation Board was established in 1978 by Decree 2 of 1976 and charged with the following functions:

(a) To organize, administer and conduct matriculation examinations for undergraduate admissions into all universities and degree awarding institutions in Nigeria.

(b) To appoint examiners, moderators, invigilators, members of subjects panel and committees for a proper and satisfactory conduct of matriculation examination.

(c) To place in Nigeria universities candiates who satisfy matriculation requirements through a pass at the matriculation examinations including a general certificate in education, taking into consideration the number of places available in various universities.

In 1990 however, the board was restructured by the Federal Government and assigned with additional responsibilities. Decree 33 of 1989 empowers the board the general control of the conduct of matriculation examination for admission of qualified candidates into all universities, polytechnic and colleges of education. The purpose of the matriculation examination was to give an opportunity to candidates who excel in the examination on admission to read courses of their choice in any institution of higher learning in Nigeria.

In this regard, greater attention was given to science as already instituted in the admission quota of sixty, forty percent (60%:40%) science and arts/humanities respectively. This was intended to furnish the nation with the much needed manpower requirements in the fields of science and technology. Regrettably, in spite of all efforts towards helping the science-oriented stu ents, the performance of candidates in the sciences which form the basis for technological advancement as well as for the desired manpower needs have been disappointing. This has no doubt constituted the greatest concern of the Board, the educational planners administrators and of course, parents.

Education plays an important role in the economic development of Nigeria. It is also an imperative tool that must be used for social transformation of the country. It is in the light of this that the Federal government invest large sum of money in education. Apart from physical structures on which millions of naira is spent, local and foreign teachers are recruited to administer and manage the Nigerian educational resource centres and schools.

Education as a social endeavour has been receiving considerable attention in most parts of the world. It has even been considered a vehicle and means for national development. Many are of the view that no meaningful progress in national development can be attained independent of schools. Thus, in recent time, the Nigerian Government in her match towards technological and industrial development has shifted emphasis to the study of science. Hence the establishment of special science secondary schools across the country.

However, the performance of students in science subjects in our schools and public examinations still need much to be desired. For instance, the mean scores for mathematics was only 33%, chemistry 41.46% biology 49.24%, physics and agricultural science below 35% as against the performance in languages and humanities which were between 50% and 70%. (Jamb Annual Statistical Report 199). This deplorable state of affairs gives the Board the cause for concern.

It is in the light of the foregoing that the need for an indepth study of the present situation arose. This study has the goal of providing deeper knowledge on the causes of this state of affairs.

1.1 STATEMENT OF THE PROBLEM

In spite of the emphasis placed on the promotion of science as a subject by both the federal and state governments, the hope and aspirations of the governments seemed not to be achieved because the performance of candidates in science in the Universities Matriculation Examination over the years has been quite appaling. This trend prompted the question whether it is justified to continue incurring such a huge expenditure on science equipments in our schools.

Needless to mention, not all those who pass the examination met the university requirements. Judging from these results, it goes without saying that the number of candidates gaining entry into institutions of higher learning has been small. Invariably, those who manage to pass the matriculation examination do have serious deficiencies in either mathematics or other science prerequisites such that their chances of entry are jeopardized except where special consideration is given to candidates from educationally less developed states.

In view of this, one is prompted to raise certain questions as to why candidates' performance in universities matriculation science examination has been so poor in spite of the fact that the education sector has all the time been enjoying a lion share of annual budgets of both state and federal governments. The questions then arise: why do candidates fail at all? Do the schools lack the necessary teaching aids - textbooks, laboratory equipment, chemicals etc? Are the teachers not qualified enough to teach the science subjects? And how much can we attribute this state of affairs to lack of motivation of teachers?

1.2 OBJECTIVES OF THE STUDY

The desire to embark on this piece of research was informed by the researcher's personal experience as a member of the Joint Admissions and Matriculation Examination.

The objectives of the study therefore, are:

(1) To find out the factors responsible for poor academic performance in Universities Matriculation Examination in Science.

(2) To determine the relative importance of factors responsible for the poor academic performance in the Universities Matriculation Examination in Science.

(3) To determine the effect of factors such as instructional materials, teachers' influence, teachers motivation, student's attitude, peer group influence on performance in Universities Matriculation Examination in Science.

(4) To give suggestions and recommendations aimed at minimizing problems of poor performance in Universities Matriculation Examination in Science.

(5) To determine the relationship between instructional materials, teachers' influence, teachers' motivation, students' attitude to science, peer group influence and performance in Universities Matriculation Examination.

1.3 RESEARCH QUESTIONS

(a) Do instructional materials with regards to textbooks, maps, charts and chemicals affect students' performance in Universities Matriculation Science Examination?

(b) Do Teacher's influence with regards to qualification, teaching experience, attitude and method of teaching affect student's performance in Universities Matriculation in Sciences?

(c) Is there any relationship between teacher's motivation and performance in Universities Matriculation in Sciences?

(d) Does student's attitude to science affect performance in Universities Matriculation Examination in Sciences?

1.4 RESEARCH HYPOTHESES

The following null hypotheses (HO) were developed to enable the researcher solve the problems of this study.

1. There is no significant relationship between availability of instructional material use and performance in Universities Matriculation Examination in Science.

2. There is no significant relationship between the teacher's influence with regards to (a) qualifications, (b) teaching experience, (c) attitude and (d) method of teaching and performance in Universities Matriculation Examination in Science.

3. There is no significant relationship between the teacher's motivation and student's performance in Universities Matriculation Examination.

4. There is no significant relationship between students' attitude to science and performance in Universities Matriculation Examination.

5. There is no significant relationship between peer group influence and performance in Universities Matriculation Examination.

1.5 SIGNIFICANCE OF THE STUDY

A situation where the majority of candidates in Senior School (SS) awaiting result (AR) are allowed to enrol for the Universities Matriculation Examination can only be regarded as an experiment. After a few years, such an experiment needs an appraisal to see how far the objectives are being realized.

Now that the failure rates in universities matriculation examination in science over the years have become so alarming, the Board would want to know why this state of affairs persists. Besides, the situation where the government has been incurring a lot of finances in order to enhance manpower development, only to discover that the efforts have not been yielding the desired results is disappointing. Any obstacle needs to be removed and proper plans made for attainment of the desired goal. It is therefore, the intention of this researcher to diagnose the problems with a view to providing workable solutions to these since performance in the examination is used as a yardstick in determining the choice of candidates for higher studies. It therefore, plays a major role when the academic achievement of the universities are

being taken to task. The study intends to have a closer examination at some variables to find out the extent to which these affect the candidate's academic performance. It is hoped that this study would provide enough information that would aid the Board and the university admissions committee in the selection and placement of candidates for the science based courses and in the counselling candidates with respect to their course combinations when they eventually end up in the universities.

Since the emphasis on science and technology is still gathering momentum in the country's educational system, there is need to have data on the type of experiment the Board had been undertaking since its establishment as regards candidate's admissions into various course of studies. This will enable the country to have enough scientists like doctors, engineers, pharmacists technologists and science teachers.

The study will therefore, be valuable not only to the universities offering science-based courses but to other tertiary institutions offering sciences and technical courses in general. It is hoped that the study will open up the way to a number of such research studies aimed at helping the country to meet manpower needs in the fields of science and technology.

1.6 BASIC ASSUMPTIONS OF THE STUDY

This study is based on the following assumptions. That:

(1) All UME Science candidates have sat for the Senior Schools Certificate Examination (SSCE) in some of the science subjects they entered for at the Universities Matriculation Examination.

(2) Teachers in the respective schools are aware of their basic responsibilities toward the success of their students in UME.

(3) The candidate's choice of science subjects is voluntary and based on their inherent confidence and ability to pass them.

(4) Poor academic performance in UME science is a recurrent issue year in year out.

(5) Although poor academic performance in UME science is a common phenomenon, the main causes are not certain.

1.7 LIMITATIONS OF THE STUDY

This study is basically limited to Senior School three (SS3) students as well as those who have already completed but yet to gain admissions. They include those undergoing extra-mural or preliminary studies in tertiary institutions of higher learning.

The study covered only the analysis of teacher's and student's perception of the causes of poor academic performance in Universities Matriculation Examination in Science over the years. It is also primarily concerned with the investigation of the influence of instructional materials, teacher's influence, teacher's motivation and student's attitude to science and peer group influence on academic performance in UME.

The study covered only six randomly sampled states. The study does not include geology subject because it is not currently offered in both Senior School Certificate Examination and Universities Matriculation Examination.

1.8 SUMMARY

In this chapter, the background of the study was discussed. The section on the statement of the problem raised quite a number of empirical research questions which the study has attempted to answer.

Hypotheses were developed from the research questions for testing. It is envisaged that the answers to such research questions clearly brought into focus the relationship between the variables examined and the student's academic performance in Universities Matriculation Examination in Science.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Joint Admissions and Matriculation Board has been conducting universities matriculation examination since its establishment in 1978. The performance of students in this examination forms the requirement for admissions into universities.

One of the main objectives of any external examination of this nature is to predict students performance in their subsequent examinations. Thus, most universities in Nigeria use the result of this examination as a criterion for selecting students for admissions especially now that the 6.3.3.4 system of education is on course.

Even though many educationist have conducted researches involving demograhic and psychological variables that affect students' performance in colleges and universities examinations, not much have been done in the area of the causes or poor academic performance of students in the universities matriculation science examination.

In chapter one, the historical background of the study, the objectives and significance of the study among others were examined.

In this chapter, the literature on each of the variables raised was critically reviewed to see their authenticity and the extent to which they have affected the student's academic performance.

Suffice it to say that the literature on students academic performance has been massive and overwhelming. But investigations

were made by other researchers who carried out similar studies into these problems and suggestions for possible solutions were offered.

2.1 INSTRUCTIONAL MATERIALS AND ACADEMIC PERFORMANCE

Taylor and Vlastos (1975) cited in Olutola, (1989) examined the learning environment of the child and concluded that when classroom which vary in terms of furniture arrangement, aesthetic appeals and the presence or absence of windows are compared differences in achievements are non-significant. However, in an article titled. 'Equal Education Opportunities' published in the "Nigerian Herald" of Friday May 20, 1977, Tai Solarin expressed that:

> "While schools that are well cared for, provided with adequate number of teachers and good scholars, the ill-equipped schools will produce uneducated students". (Page 21)

Emphasizing further on this point, Morphet and Roe (1975) revealed the relevance of school facilities on education when they stressed that schools should be enriched with necessary educational facilities to ensure optimum performance by students. They further noted that facilities constitute one of the major concerns for school administrators.

According to Witkins (1975), it is necessary for teachers to plan the resource which they will use with their students. He identified the availability and use of pupils' textbooks,dictionaries and teachers' edition of pupils books and other reference book and other reference materials as factors enhancing academic performance. He further pointed out that visual aids such as wall pictures, maps, charts, film projectors, collection of specimen,

the school compound as well as subject apparatus are other factors required in the teaching-learning process to ensure maximum output. Commenting on the effect of instructional materials, Smith et-al (1966) are of the view that good learning situation are one of those that make it possible for pupils to use materials through which they can learn more effectively. Indeed, it is in the area of instructional materials that the greatest progress has been made in education during the past decade. It is the dearth of this in recent time that has contributed in no small measure to low academic standard. On the importance of libraries, they are of the view that:

> ... In working with the teachers of school, the library should be able to help teachers as they select materials for their pupils and professional materials for themselves. P.742.

Adebayo, (1975) in an unpublished M.Ed thesis carried out a survey of secondary grammar schools administration in Kano State from 1968 to 1972. From his studies, it was revealed that most of the secondary schools were devoid of necessary facilities such as adequate libraries, instructional materials and the teaching staff were made up of "unqualified teachers." In view of this, he said most of the students performed poorly in the General Certificate of Education particularly in the 1968 and 1970 examinations.

Bagudu (1984) cited in Dansarai (1986) also found that student performance in WASC/GCE differ according to the qualify of resources available in each school. His investigations further reveal that (after comparing Katsina school) they differ in their students performance in GCE when factors such as number of teaching staff, student-teacher staff housing and other physical facilities such as libraries playgrounds, sporting facilities were

compared.

Aphel (1984), found a definite trend in the relationship between academic achievement in biology WASC examinations and the quality of available educational facilities in school especially laboratories and quality of teachers. Furthermore, Adeyanju (1989) conducted a research on academic achievement in public and private schools. His findings were that the provision of teaching equipment is alarmingly lower in the public schools than in the private schools. Teaching aids and equipment are materials by which the subjects taught are made interesting and understandable to the students. For this reason, he suggested that government should endeavour to provide enough funds for procurement of necessary teaching materials and equipment. Where teaching aids and equipment are available, these should be inspected regularly. From this research finding, it can be inferred that academic performance is more likely to be in the private schools than in public schools. Still on the importance of instructional materials and teaching aids on academic performance, Farrant (1980) was more particular on the use of audio-visual material as an effective instrument of learning.

2.2 TEACHERS' MOTIVATION AND ACADEMIC PERFORMANCE

Many researchers were motivated to find out whether the presence or absence of certain environmental factors affect the academic performance of students in various examinations in schools. Thus, the work of Ukwuije (1988), revealed that environmental factors such as irregular payments of teacher's salaries, accommodation policy of teachers, improper qualification of teachers are responsible for student's poor academic performance.

Ajayi (1988), found that the poor condition of service for teachers, lack of sitting facilities and non-availability of teachers are factors which contribute to poor academic performance of

secondary school students. Similar views were expressed by Morphet and Roe (1974). Stephen (1964) and Dent (1947). Thus, a continuous evaluation of the schools in terms of their effectiveness in meeting accepted values and purposes is fundamental to a well developed and functional educational programme in our changing society.

In his study of teachers and student's perception of factors relating to poor academic achievement, Ukwuije (op.cit) found that approximately 57% of the factors in his study were accepted by both teachers and students as contributing to poor academic performance in secondary schools. His study further revealed that both teachers and students agreed that accommodation of teachers, irregular payment of teacher's salaries, lack of jobs and the like affect student's academic performance. According to him, the present SSCE, syllabus is never completed by these teachers within the given period due to lack of motivation and other incentives. But the final examination is based on the entire syllabus. This no doubt, affect students academic performance. His study further revealed that most teachers and students reside outside school compound while several other trek as much as four kilometers to school. Thus, students get fatigues and tired. This obviously affect academic achievement.

In another research on the system approach towards remediation of academic failures in Nigerian schools, Ajayi (1988) felt that lack of enough "input," in terms of human and material resources, appropriate curriculum and motivation are important factors. He further outlined certain factors including lack of motivation for teachers as well as poor leadership in schools as factors that tend to forestall the success of the educational system. Thus, in quite a number of studies, motivation has been viewed as

intrinsic in nature. Intrinsic motivation includes satisfaction with work, the opportunity to make one's own decisions while the extrinsic motivation refers to satisfaction with pay and other factors which are external to the task itself (Warr, 1978).

2.3 TEACHERS' INFLUENCE AND ACADEMIC PERFORMANCE

A number of studies have stressed the influence of teacher's qualification on students' academic performance. Thus, in an investigation on the performance of candidates of government girls college, Dala, Kano in external examinations between 1965 and 1972, Inyang, (1973) found that the performance has been "generally" poor. She identified staff as a contributory factor of poor academic performance. The elements in this include frequent staff transfers, shortage of qualified teachers and unsatisfactory condition of service.

Commenting on staff academic qualification also, Ozigi, (1978) is of the view that the quality and effectiveness of teaching depends to a greater extent on the qualification of teachers who are well endowed and knowledgeable in their subjects. These are more effective in classroom situation than those who are untrained and unqualified. Thus, he suggested that only professionally trained graduate teachers should be employed or allowed to teach in Nigerian Secondary Schools. Also, commenting on the issue of examination failures, the "New Nigerian Newspapers" editorial of 18th April, 1977 wrote that:

> The failure of so many student teachers in primary and post primary schools to produce certificates to qualify them to teach in the institutions has starkly brought into focus one of the fundamental defects that has led to the general decline in educational

> standard in the country. It has now become very clear that there is a real danger of turning out ill-read students with limited perspective, capable of achieving mediocre standards simply because those charged with the responsibility of informing their minds are themselves woefully inadequately endowed. (pg. 18)

The present decision of government to make the Nigerian Certificate in Education and first degree the minimum qualification for teaching in our primary and post primary schools lends credence to this editorial comment. This is a right decision at the right time. It prevents the educational system from collapse totally.

Furthermore, in a research on educational facilities and students' performance in WASC examination as criteria for establishing secondary schools, Olutola, (1978) found that schools with high student-teacher ratio and more qualified teachers perform better in the West African School Certificate Examination than those with less qualified teachers who normally perform and obtain poor results. Obe, (1983), in a study found that over 80% of the teachers sampled in his study agreed that there is shortage of qualified teachers heeded to develop reliable tests with respect to continuous assessments. Many of them are poor in keeping records. This is a pointer to the reason for poor academic performance of students in schools. To enhance effective performance, therefore, he opined that adequate facilities, infrastructure and good level of financing, are relevant towards achieving the desired objectives.

In his own study, Nwagwù (1982) indicated that divergent views have been expressed about falling standard in Nigerian education

as well as factors that might be responsible for the trend. One important factor according to him, was the quality of dedication and number of qualified teachers available. Hansall (1975), suspected that teacher quality and poor facilities and indirect effects of school size may be predisposing factors of performance. A related factor that seems to contribute was absenteeism especially in large schools.

Recognizing the importance of teacher's qualification on students' academic performance, Simpson, (1978) conducted a study and came out with a finding that the teacher is one of the most important factors influencing student's performance or achievement as well as the adolescents' feelings towards science. In an unpublished M.Ed Thesis, Cebawaza (1979) conducted a research and came out with a finding that "acute shortage" of qualified teachers in certain subject areas like Mathematics and English Language contributed to students' failure in Grade II Examinations in Niger State of Nigeria. Also, he identified low academic qualification of teachers as a contributory factor.

Girard (1968) identified four important factors which are always considered in respect of all teaching-learning situations. These are: the qualification of the teachers, the aptitude of the learner, the terminal examination aimed at evaluating the achievement in relation to stated objectives and the method and teaching materials used. He pointed out that it is generally agreed that the teacher is an essential factor for the success or failure of any teaching-learning situation. According to him a good teacher who has an excellent professional training is capable of overcoming all other pedagogical problems posed by the students including the programme, even though he will still have other variables to contend with. Teachers who are aware of the

requirements of the examiners will be able to prepare their students in accordance with the demands of the examiners. Where teachers are not aware of examination requirements, the students' performance in the examination will depend to a greater extent on share luck. The performance of students in any area of study in a school system is evaluated by examinations. Sakaba (1972), in an unpublished M.Ed Thesis found that the expansion of schools and consequent redistribution of teachers has led to a decline in students' performance in Sokoto State. His study further revealed that non-qualified teachers, coupled with frequent "over load" on the few available one has a positive correlation with students' performance. Further, Dent (1947) has strongly advocated for professional training of personnel before they are engaged in teaching if at all the desired outcome is to be achieved. He said:

> ...If a qualified observer were to go into a random selection of secondary schools today and carefully assess the personnel education and general interest and psychological methods of the teachers, and estimate what the children are getting, both by way of benefit and harm, from their daily contacts with those personalities and their subjection to those methods there is no doubt if he would record more than one teacher in for as being the right person in the right place. Pg. 27.

In view of this, Dent pointed out certain characteristics expected of teachers; a teacher should be above average in intellingence and mental vision. He should keep his mind alive, open to new ideas, yet shrewd and critical. There is no occupation in which it is easy to fall into "a mental rut" than teaching; and none in

which the effects are more fatal.

From the above, it could be inferred that the identification of qualified and able teaching personnel constitutes one of the most important of all educational concerns. If capable teachers can be obtained, the likelihood of attaining desirable educational outcome is substantial.

2.4 STUDENT'S ATTITUDE AND ACADEMIC PERFORMANCE

Ikejiofor , (1979) has contended that the cause of poor academic performance lies mostly with students themselves. He gave such reasons as lack of adequate preparation for examination, the hope of cheating and leakages, wastage of study time at social parties and sometimes drug addiction as some of the causes. Neal et al, (1970) cited in the Journal of Educational Research Volume 63 No.5 P.233 in a research on the relationship between attitude towards school subject and achievement. The result of this study revealed significant correlation between attitude and academic performance.

Belin et al, (1968) emphasized that attitude has effect on school work and learning. They opined that the way a student perceives himself in relation to his goals, the kind of person he believes himself to be in relation to his goals, and the kind of fears and aspirations he has will be the major factors in delineating the things for which he strives. Therefore, they assert that motivation is another key factor in the success of students in their academic work.

Nwafor, (1976) investigated the attitude of some Nigerian school students towards science subjects. The study was carried out at Ibadan. The findings revealed that most of the students showed favourable disposition towards science. The boys were

generally found to be more interested in science subjects at the time of entering secondary school than girls. He investigated the attitude of Nigerian secondary school students towards chemistry and determined the factors that affect such attitude. The result of the investigation showed that most students had positive attitude towards chemistry. Nwafor enumerated school environment, curriculum and teaching methods as the factors that influence the attitude of the students towards science. However Imo felt that the difficulty of the subject and the belief held by the students about science affected that attitude and performance.

Ofoegbu, (1981) carried out a study on the attitude of student teachers towards science in teacher training college in Imo State. The result of the investigation indicated that the student teachers generally had positive attitude towards science and scientists. A significant number of the respondents opted to offer science in the Teachers Grade Two Examination. Sex of the student as well as previous experience in science affected the attitude. The males showed more positive attitude towards science than the females. Also, the two year course student teachers had more postive attitude towards science than the three year course student teachers.

Daramola (1982), assessed the factors influencing enrolment in physics in the upper classes of higher school in Kwara State. On the attitude test results, he found that physics students have more positive attitude than non-physics students. Mathematics ability was one of the factors found to influence attitude towards physics. Students with higher mathematics ability showed stronger positive attitude towards physics than those with lower mathematics ability. Other variables include

awareness of the relevance of physics to anticipated careers and students' perception of physics as difficult subject. In his own contribution on the attitude to study, Akinmade, (1982), examined the attitude and perceptions of junior higher school students in science. The investigation indicated that attitude towards school was found to have dominant effect on attitude towards science courses. Students with more favourable attitude to school showed more positive attitude towards science. The investigator found that urban students had significantly better positive attitude than their sub-urban counterparts.

William, (1971) assessed the social attitudes towards science of freshmen at Kindo Junior College in relations to their understanding of science. The findings indicated that the unit of high school science covered was significant when correlated with the student's initial social attitude towards science, after one academic year in a science course. Men showed more positive changes in their social attitudes towards science than women.

2.5 PEER GROUP INFLUENCE AND ACADEMIC PERFORMANCE

The most widely held view is that peer group influence negatively affect academic performance and learning. This is not quite so. It all depends on individual orientation towards learning as well as the environment in which they were brought up coupled with their goals and aspiration in life. For example, Coleman, (1966) found that peer groups played a low value on academic achievement. In his study, he listed four things secondary school students would like to be and found out that 25% chose to become atlethe. His explanation for this is that athletic victories bring glory and consequent rewards of increased status to all students. What this in effect means is that peer group

have a tendency to influence members away from purely academic work to other social concerns. Such diversionary influence render almost ineffective whatever family pressure is on students. Consequently, while many students actually come to school for the first time with very high aspiration stemming from parental pressure and do record relatively good results in their early years, peer group influence make them become less academic in succeeding years (Wallace 1966).

However, Turner (1964) maintains that peer groups do not affect achievement. Instead, he pointed out that peer groups in schools are formed more on the basis of similarity of ambition. It might then follow that once formed, such peer groups will strive to develop the ambition which brough them together. Expectedly, where the factors that brought them together is academically oriented, like doing home work, attending class and the habit of keeping in the library, the influence of the peer group will simply be to maintain thses goals. This is because by coming together, their collective influenc reinforces one another towards the maintenance of the goals which brought them together. Furthermore, the fact that they have come together may mean helping one another in areas others find rather difficult. Therefore, working as a team, feeling happy to achieve academic goal that brought them together and even trying to be competitive at times among themselves are all common features of peer groups that are very helpful towards better school learning.

This view was confirmed by the work of Mcdill and Coleman (1965) who found that in schools where plans to attend college is high, peer-group status as a factor in college choice considerably increases during this period of schooling. In such

cases then, the peer-group put pressure on the students who because of their willingness to belong to the high status groups give more time to their books in order to succeed and therefore belong.

On the other hand, when the factors that lead to the formation of any particular peer groups are characterized by campus fun, absence from school and the like, the influence of the peer-group will be to alienate the individual from his studies.

2.6 GENERAL FACTORS AND ACADEMIC PERFORMANCE

So far, five variables have been reviewed, these are, instructional materials, teachers, motivation, attitudes and peer-roup respectively. However, there are other important variables one needs to look at. Although many factors have been agreed to affect performance in schools some are considered to be more important than others. These other important variables include the soico-economic background of the students, the nutritional factor, the family socialization process and support, the intelligence factor.

i. Socio-Economic Status and Academic Performance

Mollenkopt found consistent positive correlation between social-economic status (SES) and educational attainment. This finding shows that high socio-economic background is associated with good school performance, and that this factor is somewhat more powerful than the factor of instructional materials or educational condition within the school. But my view is that this conception cannot explain why students of both low and high socio-economic background performed poorly in the senior school certificate examination at least within the context of universities matriculation examination.

> In their investigation of voters' opinion on why they rejected so many "tax bond" issued on grounds of declining student's performance, Ryan and Cooper, (1980) discovered the problems in the amount of television that children watch. Since so much can be learned via television the hypothesis goes, children do not read as much as they should do. This will however, not explain the poor academic performance of students in universities matriculation science examination where majority performed poorly irrespective of whether they have enough time to watch television.

A child from a low socio-econmic status is handicapped in that there are few facilities and amenities at home to prepare him for school. He may suffer ill-health, and even find it difficult to make satisfactory adjustments at school.

> In the same vein, Obeya (1981) made the following remarks: "It is known that parents from high socio-economic background in Nigeria provide adequate motivation for their children.
>
> They provide books and in various ways encourage their children to read. On the other hand, children from low socio-economic background are not given adequate motivation by their parents. They have little or no access to books, educational material and other supplements to reading readiness" (Pg. 249)

The above analysis could be somewhat misleading in the sense that although low socio-economic status parents often do not possess the financial means to provide books and other educational materials for their children, some still encourage and motivate their children to go and study in the library or even borrow

books from their friends to do their assignments. Apart from that, low socio-economic status parents send their children out to live with their educated relatives in the extended family system so that they can have better opportunity to study with high socio-economic status children in a more conducive environment.

This observation could be strengthened by the fact that parents of low socio-economic status encourage their children academically. For instance, there are many who are prepared to do without many comforts in order to provide education for their children. They realize the importance of school for the success of their children and make every effort to be positive in their support of the children.

ii. Nutritional Factors and Academic Performance

Farrant (1980) expressed his opinion on the possible causes of backwardness and poor academic performance among students by saying:

> There are children whose backwardness is due to malnutrition. The physical environment can be powerful force for good or ill in child learning. If he comes from a poor background, he may suffer from kwashiorkor and other symptoms of malnutrition .... The combined effect of the problems that arise in such an environment can greatly reduce the child's working efficiency and have a very bad effect on his progress in school. Pg. 101.

From this view, it can be inferred that inadequate or unbalanced diet is an important factor that may cause poor academic performance among students. This view is shared by Harrel et al (1955) who opined that diet as an environmental factor has been shown to increase children's intelligence quotient (I.Q)

Out at finding the underlying factor causing poor academic performance and difference in scholastic achievements. Curry (1962), found out that when a child has above average intellectual ability, he will probably over-come the effect of home environment.

However, as the intellectual ability decreases, the effect of the home begins to have a more serious effect on scholastic achievement. He concluded that people from upper social segment achieve greater academically than those from lower social segment or socio-economic background. While Curry's findings might be accepted as another way of explaining the factor determinants of academic performance, the study does not explain why both children from lower as well as higher socio-economic level failed to perform hence the need to further examine other factors become imperative.

iii Family Socialization Process, Support and Academic Performance

According to Nile (1981), "The influence of family socialization process, parental interest and support are more important than the socio-economic status in the academic performance of children." To him, family environment and the kind of support it gives will influence the success or failure of a child.

In support, Bank, (1978) said that school achievement is seen in terms of particular value orientations, or different personality structures, and school success is to be understood as a consequence of what has been called an achievement syndrome. A logical step forward is to locate the origins of this achievement in the socialization process.

Factors of Intelligence and Academic Performance

Blackmore, (1980) held strong belief on the importance of talents or intellegence. In his study of Uganda, he accounted for intelligence as one of the factors that affect academic performance. According to him, intelligence, sex and teachers' level of English were the

factors most closely related to variation in performance, not socio economic background or birth place. Roth (1970) also said that the dependence of talent upon learning process is more important than the dependence upon surroundings and maturity. The fact however, still remains that the influence of surrounding and level of maturity upon learning process is quite significant and cannot be under estimated.

Obemeata (1981) revealed that the intelligence which is observable and measurable is influenced to a significant extent by socio-economic bacground (SEB). Buttressing his contention, he based his argument in Jones' review of a number of studies and concluded that higher socio-economic background children tend to do better than the lower socio-economic background children in test of intelligence as well as academic achievement.

SUMMARY

From different works, researches, books and journals reviewed, it was clear that even though no agreement has been reached on different variables or factors, it was observed that different variables bore a lot on academic achievement of students.

It can be inferred from the foregoing that the identification of qualified and able teaching personnel constitute one of the most important of all education concern. Obtaining capable teachers is an intrinsic interest and obligation of education. If competent teachers can be sought, the likelihood of attaining desirable education outcome is substantial. On the other hand, even though the school may have excellent material resources in the form of equipment, textbooks, libraries, laboratories, if teachers are not motivated, the chance of attaining the desired educational outcome is minimal.

From the review, it is also clear that a study of student's academic performance covering the entire country to reveal the existing trend not only in UME but other public examinations is yet to be conducted, due probably to financial constraints. But it must be stated that the only single important variable influencing academic performance could not be pointed out by any of the authors. Thus, academic achievement is determined by an interplay of a number of factors which could be innate and environmental.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter deals essentially with the methodology adopted for data collection. There are four categories of population used for this study. These include the population of states, schools, teachers and students respectively.

The chapter also gives a vivid explanation of the sampling procedure and the size of the population. Also, the instrument used for data collection was described. A pilot study was carried out for validity and reliability of the instrument. A conscious effort aimed at ensuring that procedure for effective administration of the instrument was arrived at and method of statistical data analysis was described in detail.

3.1 POPULATION OF THE STUDY

The population of this study comprises four main categories:

i The population of states;

ii. the population of the schools;

iii. the population of teachers; and

iv. the population of students.

i. Population of State

At the time of this study there were thirty (30) states excluding the Federal Capital Territory (FCT), Abuja in Nigeria. The Thirty States and the Federal Capital Territory (FCT) therefore, constitute the population in terms of states.

ii. Population of Schools

There are many secondary schools diversely located across the thirty states of the Federation and the Federal Capital Territory (FCT) Abuja. However, the study concerned itself

with only science secondary schools established in each state. From enquiry on school statistics in the state. Ministries of Education, there were on the average five (5) science secondary schools in each state. This gives a total of one hundred and fifty (150) Science Secondary Schools across the country.

iii. Teacher Population

Teachers' population comprise all the teachers employed in the science secondary schools across the thirty states in the Federation. The teachers were those specifically teaching the senior school III classes and who hold the education pre-requisite teaching qualifications. There were a total of one hundred and eighty (180) teachers and they constitute teachers' population in this study.

iv. The Students' Population

The students' population comprised essentially senior school three (SS3) in their final year.

There were a total of twelve thousand (12,000) students in Science Secondary Schools across the country and they constitute the students population in this study.

3.2 SAMPLING PROCEDURE AND SIZE

Sampling procedure involves the systematic process employed to select the required proportion of the population. In this study, samples were drawn from each of the four elements of states, schools, teachers and students as indicated under population for this study.

(i) Sampling of States

Boll and Gall (1971) in Adetoro (1986) suggested twenty percent for maximum population of one thousand (20% of 1000), ten percent for population of up to five thousand (10% of 5000) and five percent for population of about ten thousand (5% of 10,000)

Twenty percent of thirty states (20% of 30) therefore, gave the sample size of states for this study. Thereafter, the researcher made use of a table of one thousand random numbers to draw up the number of states needed as sample. This was to ensure that each state has equal chance of being selected without bias to serve as a fair representative of the population. Eventually the states selected were Bauchi, Cross River, Delta, Kogi, Kaduna and Ogun.

The choice made for sampling of states was purposive as the use of Morgan and Kretchie table would have resulted into selecting twenty eight (28) out of the thirty (30) states in Nigeria. The strength of the prospect of doing this in spite of its useability level is diluted by a possible population explosion when students are to be selected.

(ii) Sampling of Schools

Since there are one hundred and fifty (150) science secondary schools, twenty percent (20%) of one hundred and fifty (20% of 150) gave a total sample of thirty (30) schools or five schools per each of the six (6) states sampled for the study. To obtain this number, a process of simple random sampling technique was employed. Under this technieque the researcher used the "fish bowl" method in which names of science secondary schools obtained from the State's Ministries of Education were placed in a bowl and shuffled thoroughly before the desired number of schools was drawn. This method was used because, "it has a limited chance of bias" since Van Dalen et al (1966) once said that:

> "To prevent the investigator from biasing the results by exercising direct control over the device of units, some mechanical device is employed to draw the sample. The names of all units may be placed in

a bowl or cards and shuffled thoroughly before the desired number of ships are drawn (P.298).

By this method, the school sample was obtained with each school having an equal chance of being selected without bias.

iii. Sampling of Students

Enquiry from the Ministries of Education on students' enrolment in SS3 gave an average of eighty (80) students in a class divided into two groups of (i) and (ii) or four hundred (400) students per school.

Since five schools in a state were used, this means that there were a total of two thousand (2000) SS3 students in one state or twelve thousand (12,000) in all the six states sampled.

To obtain the students' sample therefore the researcher used Morgan and Krechie (1971) who suggested the use of a table. According to them for a population (N) of above 10,000 but not more than 15,000, as in this case, the sample size is 375. The students sample in this study was 375.

iv. Sampling of Teachers

The teachers teaching the SS3 students in the sampled schools were used. There were one hundred and eighty teachers. Table population (N) of 180 gives the total sample(s) of the teachers as (123). That is, one hundred and twenty three (123) or about twenty (20) teachers per each state sampled for the study (that is 23 by 6) or four (4) teachers per school.

However, the researcher further employed the use of "opportunity sampling plan" to obtain teachers' opinion or perception. This was because a number of teachers in the sampled schools were not available due to one reason or another at the time the questionnaire was administered. This technique

involved volunteer such as was used by Milgram (1963) in Burns et al (1981). Thus, only those found were made to respond to the questionnaire. They totalled 96 as against the recommended 123.

3.3 INSTRUMENTATION

In this study, the instruments used in collecting required data were the questionnaire and UME scores of affected students in science. The questionnaire contained series of questions used to elicit information from the respondents (teachers and students). Afolabi (1992) says that "questionnaire enable the researcher to determine what a person knows (knowledge and information), what a person thinks (attitudes and beliefs) and the experiences and personal data about a person (biography and self concept). The information gathered was transfored into scaling and by counting the number of respondents who responded to a particular question"

The questionnaire contained structured questions or closed responses for which the respondents selects from the options. This type of item format was chosen by the researcher for two reasons:

1. They enchance consistency of response across respondents.
2. Data tabulation is generally straight forward and less time consuming than the open ended items for which the respondent constructs a response.

The items were divided into parts one and two. Part one was made of five sections A - E comprising of items on instructional materials, teacher's influence, teacher's motivation, students' attitude and peer group influence while part two was made up of general factors perceived to be influencing performance in Universities Matriculation Examination.

The items were pre-tested with similar subjects from a different state to test the validity and reliability before the final draft was made for the study.

Both teachers and students were required to respond to the same questionnaire where applicable. This gave the basis for analysis of student, and teachers' perception on the issues raised. The questionnair adopted the Likert Scale (1932) which is a scale with a number of points that provide ordinal scale measurement. Each item consists of a statement followed by five (5) options (A - E), i.e. (A) strongly agree, (B) Agree, (C) Undecided, (D) Disagree and (E) strongly disagreeLewin (1979 P.15).

The questionnaire was carefully structured in such a way that it dealt with the variables reviewed in order to solicit various opinions from the respondents. For easy scoring, points were awarded to each response from five (5) to one (1) starting from strongly agree to strongly disagree. Respondents were not however, informed about the points awarded to avoid bias. High scores indicated a highly favourable response towards a particular item. Thus, respondents were required to choose items or statements that best describe their feelings and opinions.

During summary of results, these points were assigned numerical values that is, 5 to 1. This was tabulated over a number of items that concerned the same issue for analysis and interpretation. The questionnaire was basically designed to seek teachers' and students' perception of the causes of poor academic performance in Universities Matriculation Examination in Sciences. The results obtained formed the basis for assessing the extent to which the variables examined influenced student's poor performance in the examination.

PILOT STUDY

In order to ensure the validity and reliability of the instrument, the questionnaire was presented among science students and their teachers in some schools in the FCT. The pilot study made use of 10 teachers and 40 students. This was intended to solicit their thorough assessment, views, comments and criticism for the necessary corrections to be effected.

The researcher designed a total of fifty one (51) closed response items. These items were checklisted by the respondent (teachers and students) seen in appendix II. The responses of the checklist was computed and analysed (see appendix III).

On whether the respondent understood the purpose of the questionnaire, all the ten (10) teachers indicated that they quite understood the purpose of the questionnaire while 34 or 85% of the 40 students said that they understood the purpose of the questionnaire.

The result of the items which sought to know the time taken by the respondents react to the questionnaire indicated that 7or 70% of the teachers spent between 0 - 20 minutes while 3 or 30% spent between 21 - 40 minutes to fill in the questionnaire. Thirty six (36) of the 40 students or 90% spent between 0 - 20 minutes and 4 or 10% spent 21 - 40 minutes to react to the questionnaires. This shows that on the average the respondents spent about 20 minutes on the questionnaire. The result on the clarity of the instruments on how to complete the questionnaire indicates that the instruments were very clear for the respondents as 9 or 90% of the teachers attested to this while only one of them felt otherwise. The same trend was observed with the studentswhere 20 or 80% if them agreed that the instruction was clear with the exception of five who answered in the contrary and this represented 20% of the sample (Appendix III).

On whether the respondents found any item ambiguous or not, 2 teachers out of 10 or 20% indicated that some of the items were ambiguous and these were identified as items 7, 14, 17, 33, 26, 29, 30 and 35 (see appendix III). These were either deleted substituted or rephrased.

3.6 DATA ANALYSES

Tables, averages and percentages were used to find out the majority or dominant opinion expressed by the respondents (teachers and students). The percentages were computed such that they showed at a glance the views expressed by the respondents.

In order to determine the degree of relationship or association between each of two variables, that is, instructional materials and performance in Universities Matriculation Examination; teacher's influence and performance in UME; teacher's motivation and academic performance; students' attitude toward science and performance and peer group influence and performance in UME respectively, the Pearson Product Moment Correlation Coefficient (PPmr) was computed to test all the hypotheses. The Correlation Coefficient is a precise way of stating the extent to which one variable is related with another using two variables interval data. Besides, it permits one to measure a number of variables and their inter-relationship simultaneously. This test was performed using 0.05 critical level of significance which is the most "widely used and most accepted" in education and social science research. (Burnset al 1981).

3.7 SUMMARY

This chapter opened with a brief introduction of the issue raised. The population of the study was discussed. This was made up of four categories - those of the states, schools, teachers and students.

The chapter also discussed in detail the procedures for sampling the size of the sample population for the study. These include the sample for the states, schools, teachers and students.

The type of instrument used for the study was highlighted. This was the questionnaire which facilitate the gathering of relevant data.

The computation and analysis of results of the pilot study gave the validity and reliability of the instrument. This formed the basis of the final instruments used for the study. Finally, the method of statistical data analysis was discussed and the type of statistics used to test each of the fiv hypothese raised was identified.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 INTRODUCTION

To achieve the purpose of this study, the data collected were statistically analysed. The results are presented in this chapter.

4.1 RESULTS

The results of this study are presented according to the hypotheses stated in chapter one. But before the presentation of results of hypotheses a descriptive analysis of the demographic information was done and these results are presented below.

4.2 DESCRIPTIVE ANALYSIS

Out of a total of 375 students and 123 teachers randomly selected as samples, three hundred and fifty-two (352) students and ninety-six (96) teachers from six states in Nigeria eventually responded to the questionnaire. The states were Ogun, Kogi, Cross River, Bauchi, Delta and Kaduna State.

Table 4.1.1 below shows the pattern of distribution of the respondents.

TABLE 4.1.1: RESPONDENTS BY STATES

Respondent	Bauchi	Cross River	Delta	Kaduna	Kogi	Ogun
Students	61(17.3%)	60(17%)	52(14.8%)	60(17%)	59(16.8)	60(17%)
Teachers	16(16.7%)	15(15.6%)	15(15.6%)	17(17%)	16(16.7%)	17(17%)

The perception of the teachers and students to questions on instructional materials was examined. Question numbers would alternatively be referred to as item number in the course of this analysis. Thus, there were five items or questions involved in Section A dealing with instructional materials. The table below shows the frequency of rating and corresponding percentages by the respondents to each of the items.

TABLE 4.1.2: STUDENTS' PERCEPTION ON INSTRUCTIONAL MATERIALS

Item Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
1	Teaching aids such as textbooks are not adequately made available in my school	267	75.9	82	23.3	1	0.3	2	0.6	-	-
2.	Chemicals are sufficiently adequate for practical lessons in my school	2	0.6	1	0.3	2	0.6	152	43.2	195	55.4
3.	Maps, charts as study aids are available in my school	1	0.3	3	0.9	-	-	175	49.7	173	49.1
4.	My school laboratory has adequate science equipment	-	-	1	0.3	15	4.3	242	68.7	94	26.7
5.	The available teaching aids are not maximally being used in my school	248	70.5	102	29.0	-	-	-	-	2	0.6

Source: Field data (1997)

SA = Strongly Agree, A = Agree, UN = Undecided, D = Disagree SD = Strongly Disagree.

Table 4.1.2 above shows that teaching aids such as textbooks are not adequately made available in almost all the schools involved in this study. A A combination of the strongly agreed and agreed accounted for ninety nine percent 99.2 of the respondents indicating that textbooks are not adequately available in the schools. The opinion is almost the same for adequacy of chemicals for practical lessons. The number of those who disagreed that chemcials were adequate accounted for over ninety eight (98.6%) of the respondents. The rating for other instructional materials did not fare better. Three hundred and forty eight (348) representing 98.8% of the respondents

disagreed that maps and charts were available as study aids in the schools. The table further shows that the respondents did not perceive that their school laboratory had adequate science equipment as could be seen in item 4. It was also perceived among the respondents (students) that teaching aids where available were not adequately used as shown in item 5 of the table. The teachers' perception of teaching aid and textbooks did not differ from that of the students as shown in Table 4.1.3 below.

TABLE 4.1.3: TEACHERS PERCEPTION ON INSTRUCTIONAL MATERIALS

Item Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
1.	Teaching aids such as text-books are not adequately made available in my school	96	100	-	-	-	-	-	-	-	-
2.	Chemicals are sufficiently adequate for practical lessons in my school	79	82.3	17	17.7	-	-	-	-	-	-
3.	Maps, charts as study aids are available in my school	-	-	-	-	1	1.0	43	44.8	52	54.2
4.	My school laboratory has adequate science equipment	-	-	-	-	-	1.0	46	47.9	50	52.1
5.	The available teaching aids are not maximally being used in my school	1	1.0	-	-	3	3.1	50	52.1	42	43.7

Source: Field data (1997)

As shown in table 4.1.3 all the teachers agreed that such instructional aids as textbooks were not available. The variation is only between strongly agreed and agreed with eighty-two per cent (82.3%) for strongly agreed and eighteen per cent (18.7%) for agreement.

Apart from one per cent (1%) of the respondents who could not decide, the general perception is that chemicals are adequate for practicals in the schools. All the teachers (100%) expressed the view that maps, charts as study aids were not available in the schools. The teachers' perception on the school laboratory equipment shows a rating of ninety six percent (96.8%) in terms of inadequacy as against one percent (1%) who agreed that their school laboratory had adequate equipment. Three per cent of the teachers did not express any opinion on this items. Like the students, the teachers also expressed a strong view that the available teaching aids were not maximally utilized. The score on this among the teachers is ninety-nine percent (99.1%). Only one per cent (1%) disagreed.

The students did not respond to the items on teachers' motivation as only the teachers were instructed to respond to this section. From the frequency distribution done, it was observed that the rating tended to be inclined towards disagreed and strongly disagreed as depicted by the table below.

TABLE 4.1.4: TRS' PERCEPTION ON TEACHERS' MOTIVATION

Item Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
6.	Regular promotions are given to teachers in my school	-	-	-	-	-	-	12	12. 5	84	87.5
7.	Teachers in my school are provided with comfortable accommodation	-	-	-	-	-	-	34	35.4	62	64.6
8.	Salaries are regularly paid to teachers in my school	-	-	-	-	-	-	54	56.3	42	43.7
9.	Teaching profession is given due recognition by government	1	1.0	-	-	2	2.1	58	60.4	35	36.5
10.	Teachers in my school go on study leave with pay	-	-	-	-	1	1.0	47	49.0	48	50.0
11.	Teachers in my school often attend seminars and workshops	-	-	-	-	6	6.2	58	60.4	32	33.3
12.	Government provides free medical services to teachers in this school	-	-	-	-	3	3.1	56	58.3	37	38.5

A look at Table 4.1.4 shows that except in the variation between disagree and strongly disagree, all the respondents (teachers) maintained that regular promotion were not given to teachers in the affected schools.

The item dealing with comfortable accommodation for teachers and payment of salaries regularly also received one hundred percent disagreement. The variation observed were in the rating of disagree and strongly disagree. Sixty five percent (64.6%) strongly disagreed while thirty five percent (35.4%) disagreed that teacher were provided with comfortable accommodation. The percentage for disagree and strongly disagree in the case of regular salaries for teachers is fifty six per cent (56.3%) and forty four per cent (43.7%) respectively. The general perception of teachers is that, the teaching profession is not given due recognition by government. The only divergent opinion in this regard came from two per cent (2.1%) of the respondents who did not express any opinion and a negligible one per cent (1%) that felt that government gave the teaching profession due recognition.

Apart from one percent (1%) of the respondents who did not express their opinion all the teachers maintained that teachers were not going on study leave with pay. This was also the perception on teachers' attendance at seminars and workshops. The only difference here was the one per-cent that could not decide on whether or not teachers go on study leave with pay. Six percent did not express any opinion on whether or not teachers attend seminars and workshops. The general opinion on the provision of free medical care for teachers in the affected schools is totally negative. As could be seen in the Table the only variation here is in the degree of disagreement among the respondents. Thirty nine percent (38.5%) strongly disagree while fifty eight percent (58.3%) disagreed. However, three percent (3.1%) did not express any opinion.

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The students' perception on teachers' influence on students' performance was examined. On this, students expressed their opinion through the rating scale employed. This is shown in table 4.1.5 below.

TABLE 4.1.5: STUDENT'S PERCEPTION OF TEACHERS' INFLUENCE ON PERFORMANCE

Item Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
13.	Science teachers in my school are well qualified to teach the subject	6	1.7	75	21.3	4	1.1	217	61.6	50	14.2
14.	Teachers in my school are not always present to teach the subject	54	15.3	280	79.5	3	0.9	14	4.0	1	0.3
15.	My teachers are frequently going on strike	203	57.7	145	41.2	1	0.3	3	0.9	-	-
16.	I do not always understand the method my teachers employ to teach	25	7.1	321	91.2	1	0.3	5	1.4	-	-
17.	My teachers' lessons are uninteresting	45	12.8	296	84.1	4	1.1	7	2.0	-	-

Source: Field data (1997)

The first item in this section was on teachers' qualifications. Two hundred and sixty seven (267) or seventy six percent (75.8%) disagreed that the science teachers in the affected schools were well qualified to teach the respective subjects. Twenty three percent (23%) supported the notion that the teachers were qualified. One percent abstained.

The response of the students to the next item indicated that three hundred and thirty four (334) or ninety five percent (94.8%) of the total number of respondents felt that the teachers were not always present to teach the subjects. Only four percent agreed that the teachers were always present to teach the subjects.

The next item explains in part the reasons for the pattern of response. This is because apart from one percent that disagreed, all the students felt that the teachers in the affected schools frequently go on strike. On the same note, most students do not always understand the method the teachers adopt in teaching the subjects. This was also reflected in the response to the last item in this section. The teachers' lessons were felt to be uninteresting to most students. Though three percent of the respondents in this group had a divergent opinion, ninety seven percent had this strong view.

In examining the attitude of students to studies, it was observed that diverse opinion surfaced. A frequency distribution table showing the various rating is presented below as Table 4.1.6.

TABLE 4.1.6: ATTITUDE OF STUDENTS TOWARDS STUDIES PERFORMANCE

Item Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
18.	I have no interest in my teachers' lessons because they are not well taught	118	33.5	229	65.1	2	0.6	3	0.9	-	-
19.	My teachers are always assisting me in my studies	40	11.4	112	31.8	56	15.9	142	40.3	2	0.6
20.	Science subjects are very difficult for me to pass	55	15.6	289	82.1	2	0.6	6	1.7	-	-
21.	Science subjects are not interesting to me	39	11.1	310	88.1	2	0.6	1	0.3	-	-
22.	I hate reading always because I do not understand what I read	81	23.0	261	74.1	3	0.9	7	2.0	-	-
23.	Knowledge of science does not help me in any way to understand the world	48	13.6	55	15.6	139	39.5	108	30.7	2	0.6
24.	I enjoy having discussion on subjects but still fail	39	11.1	302	85.8	4	1.1	7	2.0	-	-
25.	My parents do not encourage me to read science subjects	32	9.1	209	59.4	8	2.3	102	29.0	1	0.3
26.	My parents are interested in science subjects	30	8.5	209	59.4	8	2.3	103	29.3	2	0.6
27.	I am ignorant of the level of standard JAMB expected in the examinations	300	85.2	44	12.5	1	0.3	6	1.7	1	0.3
28.	I am familiar with UME past questions papers before I wrote the examinations	6	1.7	5	1.4	3	0.9	160	45.5	178	50.6

Source: Field data (1997)

A close examination of Table 4.1.6 above reveals that most of the students have no interest in their teachers' lessons (items 18) because such subjects were not well taught. This could be seen from almost total agreement expressed by the students in the Table (98.6%). On the notion that teachers always assist students in their studies (item 19) the percentage of agreement was forty three percent (43.2%) while another forty percent (40.0%) disagreed. Sixteen percent (15.9%) did not express any opinion. Almost all the students (97.7%) either strongly agree or simply agree that science subjects are very difficult for them to pass. This is shown in item 20 in the Table. The students also do not consider science subjects as interesting. This could be seen in item 21 in the Table (99.2%). Another interesting observation is that almost all the students (97.1%) hate reading always because they did not understand what they read. The rating of items 22 in the Table gives credence to this assertion. Response to item 23 shows that most students actually acknowledged the role of science subjects. This is because though forty percent (39.5%) did not express any opinion, the percentage of disagreement was relatively low. On the other hand, thirty one percent (30.7%) felt that knowledge of science helps in understanding the world. This is illustrated by the rating of the next item by the respondents. Almost all the students agreed that they enjoyed having discussion on the science subjects though they sometimes fail them. Only two percent disagreed with this opinion. About nine percent or thirty two respondents strongly agreed that their parents do not encourage them to read science subjects. Two hundred and nine or fifty nine percent agreed that their parents' attitude did not encourage them to read science subjects. Twenty nine percent disagreed while two percent did not express any opinion. This pattern of response was also observed in item 26 as shown in the Table. Another interesting revelation in this study was that most of the students were not familiar with the level or standard that the Joint Admissions and Matriculation Board expected in the examination. This was shown by the rating of item 27 in the Table. In accordance with

the above, it was also observed that most students were not familiar with Universities Matriculation Examination past question papers before they wrote the examination.

Section E of the questionnaire concerns peer group influence on students' performance. The students' perception is summed up in Table 4.1.7. below:

TABLE 4.1.7 STUDENTS' PERCEPTION ON PEER GROUP INFLUENCE

Nos	Factors	SA		A		UN		D		SD	
		FR	%	FR	%	FR	%	FR	%	FR	%
30.	My friends encourage me to choose science subjects	309	87.8	41	11.6	1	0.3	1	0.3	-	-
31.	I always enjoy reading with my friends/classmates	34	9.7	316	89.8	1	0.3	-	-	1	0.3
32.	I am not interested in my choice of science subjects	307	87.2	43	12.2	2	0.6	-	-	-	-
33.	My friends have little interest in science subjects	28	8.0	278	79.0	34	9.7	12	3.4	-	-
34.	My friends always stay away from school during school hours	6	1.7	63	17.9	120	34.1	135	38.4	28	8.0

Source: Field data (1997)

Apart from less than one percent which expressed different opinion, all the respondents agreed that their choice of subjects were influenced by peer pressure. The only variation observed was the degree of agreement. Whereas three hundred and nine which constituted eighty eight of the total number of respondents, strongly agree, forty one or twelve percent simply agreed. This

was also observed in the case of reading with classmates and friends.

Another interesting observation made in this study is that most students often do not care very much about their choice of science subjects. Thus, ninety nine percent (99.4%) of the respondents do not really have interest in the choice of science subjects. The less than one percent (0.6%) who did not agree with the perception did not express an alternative opinion. Two hundred and seventy eight representing seventy nine percent of the respondents agreed that their friends have little interest in science subjects. Eight percent (8%) strongly agreed with the same view while three percent (3.4%) disagreed. Ten percent (9.7%) of the respondent did not express opinion. Eight percent strongly disagreed that their friends always stay away from school during school hours. One hundred and thirty five or thirty eight percent (38.4%) disagreed that their friends stay away from school while eighteen percent (17.9%) agreed and two percent (1.7%) strongly agreed that their friends stayed away from school during school hours respectively. Thirty four percent (34.1%) did not express any opinion.

The general factors affecting performance in the examination in the part two of the questionnaire was examined. It was observed here that the students and teachers do not seem to agree on common factors affecting the students performance in the examination.

In analyzing this part, a ranking system was adopted. The frequency and the corresponding percentages were ranked in their order of magnitude. The positions were placed by each factor per each of the two groups. A table showing the frequency and percentages including the ranking is presented below:

TABLE 4.1.8: RANKING OF GENERAL FACTORS

ITEM NOS	GENERAL FACTORS	STUDENTS			TEACHERS		
		FR	%	RANK	FR	%	RANK
1.	Students' low mental ability	38	10.8	8th	-	-	11th
2.	Students' poor reading habit	177	50.3	3rd	4	4.2	9th
3.	Absenteeism by teachers	-	-	12th	81	84.4	1st
4.	Absenteeism by students	4	1.1	10th	-	-	11th
5.	Parents' inability to provide study aids	83	23.6	6th	-	-	11th
6.	Parents' lack of interest in child's education	4	1.1	10th	71	74.0	3rd
7.	Lack of adequate G/C in schools	234	66.5	2nd	7	7.3	8th
8.	Inadequate preparation before teaching	-	-	12th	72	75.0	2nd
9.	Students too large to cope with	1	0.3	11th	2	2.1	10th
10.	Teachers' irregular attendance	-	-	12th	14	14.6	6th
11.	Non coverage of syllabus	104	29.5	4th	-	-	11th
12.	Non-inclusion of C/A in UME	322	91.5	1st	70	72.9	4th
13.	Wrong choice of subjects	9	2.6	9th	7	7.3	8th
14.	Failure to obey instructions	1	0.3	11th	46	47.9	5th
15.	Inability to answer all questions	59	16.8	7th	7	7.3	8th
16.	Anticipated questions do not come	-	-	12th	10	10.4	7th
17.	UME questions not from syllabus	96	27.3	5th	-	-	11th

Source: Field data

As can be observed from Table 4.1.8 the student responses indicate that that the "non-inclusion of Continuous Assessment" in the UME final scores was the highest single factor responsible for poor performance in UME. This was followed by "Lack of adequate guidance/counselling in schools", students'

poor reading habit was ranked third. Non coverage of the syllabus occupy the 4th position.

Other factors include parents inability to provide required study aids, students' inability to answer all questions due to lack of enough time and students' low mentality which were rated 6th, 7th and 8th positions respectively.

The teachers' ranking on the other hand did not correlate with the students responses. The teachers see absenteeism by teachers as the single highest factor responsible for students poor performance. A close examination of the Table reveals that students did not perceive this as a factor of poor performance. Inadequate preparations by teachers before teaching was ranked second in this regard. This was not seen by the students as a factor in this perspective. Also, the teachers see parents' lack of interest in their children' education as the third factor. This was rated 10th by the students.

The non-inclusion of C/A in the final scores of the UME which was ranked first by the student was fourth in teachers' ranking. Non-coverage of syllabus before examinations questions outside the UME syllabus and parents' inability to provide required study aids were not considered as adverse factors to students' performance. Though wrong choice of subjects by students tends to be closely ranked, as shown in the Table, it only occupies the 8th and 9th position among teachers and students respectively. This was the case of students' inability to answer all questions which was rated 7th by the students and 8th by the teachers.

4.2 TESTING OF HYPOTHESES

There are five hypotheses involved in this study.

Hypotheses One: There is no significant relationship between availability of instructional materials and students' performance in Universities Matriculation Examination.

To test this hypothesis the Pearson Product-moment Correlation analysis was used. This is to determine the degree of relationship between the two variables.

The perceptions on availability of instructional material were summed up and the scores obtained from students' performance in the UME were correlated. The table below shows the correlation co-efficient obtained, the mean, standard deviation (SD) the degree of freedom (DF) and computed probability level of significance (P)

4.2.1 CORRELATION OF AVAILABILITY OF INSTRUCTIONAL MATERIALS AND USE WITH STUDENTS' PERFORMANCE

VARIABLES	MEAN	SD	DF	r	P
INSTRUCTIONAL MATERIALS	14.895	2.429	350	0.6112	0.002
PERFORMANCE	170.824	22.082			

The critical value (Table Value for P at 350 degree of freedom was 0.106. This is lower than the observed value (calculated value R) of 0.6112. The observed probability level of significance was 0.002 also lower than the usually accepted level which is 0.05. This implied that the correlation value of 0.6112 is significant at 0.002 level of tolerance. In other words, the test has indicated that there was a statistically significant relationship between availability of instructional materials use and students performance in the Universities Matriculation Examination (Science). As a result of this finding the null hypotheses which states that there is no significant relationship between availability of instructional material use and students' performance is hereby rejected.

HYPOTHESES TWO: There is no significant relationship between teachers' influence and students' performance in Universities Matriculation Examination.

To test this hypothesis the correlation co-efficient was determined with the use of Pearson Product Moment Correlation Technique. To do this the subsection of the questionnaire on teachers' influence and students' performance was used. However, the student group alone was used. This was informed by the fact that the teachers did not respond to this section of the questionnaire. Like hypothesis one, the students' rating was correlated with their performance. Table 4.2.2 below shows the result obtained from the Pearson Correlation Analysis.

4.2.2 CORRELATION OF TEACHERS' INFLUENCE AND STUDENTS' PERFORMANCE

VARIABLES	MEAN	SD	DF	r	P
TEACHERS' INFLUENCE	19.077	1.586	350	0.0362	0.392
PERFORMANCE	170.824	11.082			

From Table 4.2.2 above, the computed correlation coefficient ($\hat{r}$) was 0.0362. The critical value (Table value) at df 350 was 0.106. The observed probability level of significance was 0.392. It could be seen that the calculated R value of 0.0362 was less than the critical value of 0.106. The implication resulting from this test is that there is no significant relationship between teachers' influence and students' performance in the Universities Matriculation Examination (Science). On the basis of this finding, the null hypothesis which states that there is no significance relationship between teachers' influence and students' performance in the Universities Matriculation Examination was retained.

Hypothesis Three: There is no significant relationship between teachers' motivation and students' performance in the Universities Matriculation Examination (Science).

To test this hypothesis the Pearson Product Moment Correlation co-efficient was determined by the use of responses of the teachers. As earlier pointed out, this is the group that responded to the items on motivation. In testing this hypothesis, the students' achievement scores (UME) were used, along with corresponding scores on motivation as responded to by the teachers. The results of the test are shown in Table 4.2.3 below:

4.2.3 CORRELATION BETWEEN TEACHERS' MOTIVATION AND STUDENTS' PERFORMANCE

VARIABLES	MEAN	SD	DF	r	P
TEACHERS' MOTIVATION	10.604	1.021	54	0.1048	0.0712
PERFORMANCE	171.042	22.099			

The computed correlation coefficient as shown in Table 4.2.3 was 0.1048 at 54 degree of freedom. The critical value at the same degree of freedom was 0.263. The observed probability value was 0.0712. This level was higher than the normally accepted level of 0.05. The test thus shows non significant relationship between teachers' motivation and the performance of students at the Universities Matriculation Examination (Science). As a result of this, the null hypothesis which states that there is no significant relationship between teachers' motivation and students' performance was retained.

Hypothesis Four: There is no significant relationship between students' attitude to science and performance in the Universities Matriculation Examination (Science)

The Pearson Correlation Analysis was used in testing this hypothesis Table 4.2.4 shows the correlation coefficient (r) obtained in the test. The mean - the standard deviation (SD), the degree of freedom (DF) and the observed probability level of significance are indicated.

TABLE 4.2.4: CORRELATION OF STUDENTS' ATTITUDE TO SCIENCE AND PERFORMANCE IN UME (SCIENCE)

VARIABLES	MEAN	SD	DF	r	P
STUDENTS' ATTITUDE	41.236	5.699	350	0.6522	0.0001
PERFORMANCE (UME SCIENCE)	170.824	22.082			

The calculated correlation coeefiicient (R) shown in Table 4.2.4 is 0.6522 at 350 degree of freedom. The observed probability level of significance was 0.0001. This was lower than the usually accepted level for education research which is 0.05. It could also be seen from the Table that the calculated R value of 0.6522 is higher than the critical value of 0.106 at 350 degree of freedom. This implied that there is statistically significant relationship between the attitude of students towards science and their performance in science subjects in the Universities Matriculation Examination. On the basis of this finding, the null hypothesis that states that there is no significant relationship between students' attitude to science and their performance in UME science subjects is rejected.

Hypothesis Five: There is no significant relationship between Peer-Group influence and students' performance in Universities Matriculation Examination (Science).

In testing this hypothesis, the subsection of peer group and the students scores in the Universities Matriculation Examination (Science) were analyzed with the application of the Pearson Correlation Coefficient method. The results are shown in Table 4.2.5 below.

TABLE 4.2.5: CORRELATION OF PEER GROUP INFLUENCE WITH PERFORMANCE IN UNIVERSITIES MATRICULATION EXAMINATION

VARIABLES	MEAN	SD	DF	r	P
PEER GROUP	20.406	1.1681	350	0.179	0.008
PERFORMANCE	170.824	22.082			

The correlation coefficient observed from the test as shown in Table 4.2.5 was 0.179. The critical value at 350 degree of freedom was 0.106. The observed probability level of significance was 0.008. The computed P value was lower than the usually accepted level of 0.05. This is an indication that the relationship between peer group influence and students' performance in Universities Matriculation Examination was statistically significant. Therefore, the null hypothesis which states that there is no significant relationship between peer group influence and students' performance in Universities Matriculation Examination was rejected.

4.4 DISCUSSIONS OF FINDINGS

From the data collected and the analysis done for this study, many factors were observed to be responsible for students' poor performance in the Universities Matriculation Examination (UME) Science. Prominent among these factors are lack of instructional materials and use, students' attitude to science subject and the peer group influence. Instructional materials generally refers to the environment of the school system. In this context, instructional materials are viewed as those tangible and intangible facilities that are used in the classroom environment.

From the analysis of the data collected, it was observed that there was significant relationship between availability of instructional materials use and performance in the Universities Matriculation Examination.

(Table 4.2.1). This finding answered the research question which asked whether availability of instructional materials with regards to charts maps and projectors are factors that influence performance in the Universities Matriculation Examination. These were found significantly related at 0.05 level of confidence. This implies that availability and effective use of instructional materials are directly related to academic performance.

This finding and those of Witkins (1975), Adebayo (1975), Solarin (1977), Olutola (1978), Bagudu (1984) who individually found that there was a strong relationship between instructional materials and performance in various Examinations are good reference point. For effective teaching, therefore, there must be instructional resource materials for the students.

It was however, found from the analysis that a non significant relationship exists between teachers' motivation and performance in the Universities Matriculation Examination (Science). This finding again answered the research question which asked whether there was any relationship between teachers' motivation and students' performance in the Unversities Matriculation Examination. The finding of the present study is in contrast with those of Dent (1947), Stephen (1964), Morphet et al (1974) and Ajayi (1988). The results of these studies have clearly indicated that poor condition of service of teachers in schools with regards to promotion, staff training and development, irregular payment of salaries have been responsible for frequent strike actions and confrontation between teachers and their employers. This may have been one of the factors for decline in productivity and falling standards. This implied that when teachers are given the necessary incentives at the right time, teaching-learning process would be enhanced. The outcome of the present study however, may be because

of a number of extraneous factors. One of such is that only few science teachers were available at the time of this study for use in the study. It is possible that the available few are the motivated ones. The result is therefore logical. One however, would have expected as discovered by Ajayi (1988) and Stephen (1964) that the higher the motivational level of the teachers, the better the performance of their students.

In Nigeria, it is not uncommon to see teachers in schools without promotion for upward of five to ten years, salaries are not regularly paid, study leave with pay are not granted neither are teachers given the opportunity to attend seminars and conferences. Indeed, teachers are completely impoverished mentally and psychologically. It is sad to note that teachers who are the principal actors of knowledge dissemination are neglected. Minimum comfort is not guaranteed. The present wave of incessant strike actions embarked upon by teachers is a clear manifestation of the deplorable situation in the Education sector. It is therefore, recommended that those charged with the responsibility of planning and administration of our education programmes should strive to provide adequate motivation to teachers in schools to make them more dedicated to their duties. This would go a long way to uplift their morale and improve performance.

Analysis of data collected on teachers' influence indicate a non-significant relationship with performance in Universities Matriculation Examination. Teachers' influence in the context of this study refers to teachers' qualification, teaching experience, attitude to work and method of teaching. Thus, the finding shows that teachers' influence is not one of the factors affecting performance in UME. This answered the research question which asked, "Does teachers' influence affect performance in the Universities Matriculation Examination?" This finding is however contrary to the finding of similar previous studies.

•Ozigi, (1978) Nwagu, (1982) and Simpson, (1978) had found out that the quality and effectiveness of teaching depends on teachers qualification and experience and that the quality of teachers' dedication and experience are seen as essential factors for the success or failure of any teaching-learning situation. The implication here is that there is no significant relationship between teacher's influence and students' performance in the UME (Science). One reason that could be adduced here is the direction of influence or type of influence. The students may have interpreted the items in this section on a general basis.

Students' attitude to science and performance in the Universities Matriculation Examination was analyzed. Attitude here refersto feelings, thought and predisposition to behave in some particular manner towards some aspects of the environment. We may observe behaviour of individuals and measure this but from such observation it would be difficult to trace the underlying factors of feelings. Thus, the result of the analysis showed that there was a significant relationship between students' attitude and performance in the UME. This answered the research question which asked: "Does students' attitude to science affect performance in Universities Matriculation Examination (Science)?" The finding therefore failed to support the research hypothesis which say: "There is no significant relationship between students' attitude to science and performance in UME (Science)". This corroborates the finding of the previous studies of Neal et al (1970), Nwafor (1976) Ikiejiofor (1979), Ofoegbu (1981) and Daramola (1982 who had maintained that attitude towards anything is a function of environmental factors. For instance, the curriculum and teaching method can affect students' attitude towards a subject either postively or negatively. Students can develop positive attitude towards a subject probably because the teachers are qualified and could teach very well and facilities are

available and are maximally used. This provides a kind of motivation as a key factor in the success of students. However, where all these are lacking, the students may invariably develop negative attitude.

The observation here is that, if students develop positive attitude towards science subjects the tendencies are that they will perform better in the corresponding science examination.

Peer group influence on academic performance in the Universities Matriculation Examination was analyzed. Using students' responses for the analysis, it was observed that peer group influence has significant relationship with performance in the Universities Matriculation Examination (UME). The present finding is at variance with the findings of similar previous study. Coleman (1966) whose finding indicated that peer group formation are based on different goals and aspirations that brought the peer group formation together. This according to him determines the degree of influence on performance in examinations. However, that there was a significant relationship between peer group influence and performance in the UME (science) as found in this study is a confirmation of earlier finding of Turner (1964) whose finding showed that peer group formation are based on different ambitions and that once formed such groups will strive to develop and maintain that goal.

As noted earlier, peer group influence tend to be a dorminant factor in students' performance since the reading habit of students is determined by peer group influence. It has also been noted that their choice of subject is more or less basically the product of peer group influence. The finding of this study in this respect is therefore not surprising. From the analysis, it can be inferred that peer group influence may have both positive and negative implications on performance in the Universities Matriculation Examination.

On the analysis of the general factors that affect performance in the Universities Matriculation Examination as perceived by the respondents (Teachers and Students), those factors observed to have adverse effects on performance in the UME as rated by Teachers include absenteeism by teachers which may be due to the frequent strikes experienced during the period of this study in the country. This is in agreement with Iyewarum (1981) and Soyibo (1986) who confirmed teachers' poor attitude to work and frequent absenteeism from school. It would seem that most teachers regard teaching as a part time job or take to teaching as a last resort when all other alternatives have failed.

Teachers inability to adequately prepare before teaching as well as parents' lack of interest in their children's education were also observed to adversely affect performance in the Universities Matriculation Examination.

Another factor observed to be highly rated by both teachers and students is the issue of continuous assessment. There is no doubt that students now tend to depend to some extent on their continuous assessment scores towards achieving better scores in examinations. However, over dependence tend to have negative effect on the students' UME final scores where C/A is not considered at present. Both teachers and students feel that the objective of continuous assessment is to provide a situation whereby students are assessed out of several tests rather than one test as it has been the current practice in the Universities Matriculation Examination.

The role of adequate guidance and counselling in school tend to be re-emphasised here. Inadequate guidance and counselling services in schools was a factor observed as militating against better performance in UME. Career guidance is a tool towards preparation for a useful life in the world of work. It is to prepare the students to view his

potentialities in the light of what he can actually do. This opportunity grossly eludes most students in schools to the effect that most students pick up subjects without capabilities and potential for them. This finding is quite in agreement with that of Gesinde, (1976) who upheld that theoretical guidance to students enable students have direct contact with the world of work. There is no doubt that teacher's absenteeism could be responsible for non-coverage of syllabus before examination. As such, one factor tend to lead to and directly cause some others in a sort of vicious circle.

4.4.1 SUMMARY

In this chapter, the analyses and interpretation of data collected was presented. This helped in the resolution of the hypotheses of the study: The Pearson Product Moment Correlation Coefficient (PPmr) was employed to test five hypotheses. From the statistical analyses, three hypotheses (1,4 and 5) were rejected on the basis of statistical significant relatonship between the respective variables examined and performance in UME. Hypothesis 2 and 3 were retained on account of a non-statistical significant relationship between the variables.

Lastly, some major findings were discussed on the basis of the statistical analysis. Some findings were in agreement with past studies while others were at variance with findings of previous studies.

The next chapter presents the general summary, recommendation and conclusion of the study.

TABLE 4.2.6 SUMMARY OF THE FINDINGS

NO	HYPOTHESIS	RESULTS
1.	There is no significant relationship between availability of instructional materials and performance in Universities Matriculation Examination (UME) Science.	Rejected
2.	There is no significant relationship between teachers' influence with regards to qualification, teaching experience, attitude and method of teaching and performance in Universities Matriculation Examination in Science.	Retained
3.	There is no significant relationship between teachers' motivation and students' performance in Universities Matriculation Examination	Retained
4.	There is no significant relationship between students attitude to science and performance in Universities Matriculation Examination	Rejected
5.	There is no significant relationship between Peer group influence and performance in Universities Matriculation Examination.	Rejected

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter is a summary of the purpose and major findings of the study. Besides, it also outlines some recommendations on the findings. The researcher hoped that recommendations made in this study would be implemented by the authorities concerned with the development and administration of the examination.

5.1 SUMMARY

This study has attempted to make some useful contributions to knowledge and research by the discovery of finding teachers' and students' perception of the causes of poor performance in Universities Matriculation Examinations.

This helps in the development and effective administration of UME for students in post secondary institutions.

In this study, a total of thirty (30) science secondary schools comprising five secondary schools in each of the six states sampled were selected for this study while responses on the perception of of teachers and students was used for analysis. The study addressed five empirical research questions. Consequent upon these questions, five research hypotheses were tested in an attempt to answer the research.

The relationship between instructional materials and performance in Universities Matriculation Examination was tested. The result revealed that significant relationship exist between the mean scores of teachers and student's perceptions in performance in universities matriculations examination.

A non significant relationship was discovered between teachers' motivation and student's performance.

Availability of qualified and experienced science teachers in schools is no doubt an important contributory factor to high performance in any examination. The finding of this study does not however, reveal inadequencies is number of science teachers in schools as there are enough teachers some subject area while many subject areas are left without teachers and the few that are available are not adequate to manage the large number of students. In this respect, it is recommended that the government should as a matter priority embark on recruitment of more qualified teachers in the areas of deficiency. furthermore, the peer group influence and performance in UME showed significant relationship.

5.2 RECOMMENDATION

A number of recommendations are proposed on the basis of the findings of the study. Since there has been a consensus of opinion by teachers and students in relation to lack of instructional materials in schools and communities. Where such materials are provided, these should be supervised to ensure that the materials are put in place and are properly used.

In this respect, the Educational Resource Centres should be fully involved by improvising and supplying the much-needed materials and equipment. For instance, in most of the schools visited in the course of this study, it was observed that many of of the schools were not really provided with vital materials and equipment. Where the materials and equipment were provided, the teachers were not keen in using them because the teachers felt they were not given the right motivation.

Provision of teaching aids should not be left for the government alone, the Parent Teachers Association and local communities where the schools are located should also supplement government efforts. This can be done by conducting refresher courses particularly for the non-professionals in the profession.

The finding of this study revealed that teachers are not regularly paid their salaries, allowances and other entitlement by the government. This has resulted to frequent strike actions. Government should therefore meet with teachers' demands. A random discussion with some teachers in schools during the course of this study revealed that most teachers have never benefitted from such allowances as leave grants. This face off on teachers by government kills the morale of teachers. Consequently, this would have negative effect on student performance in the examination. Government should therefore see it as an obligation to give all that is due to teachers.

The establishment of National Primary Education Commission at both state and local government levels is a welcome development towards ameliorating the falling standard of education if properly coordinated. Government should ensure proper and successful implementation. Government should also establish a similar commission for post primary schools so that the expected high standard from primary school level are maintained at secondary levels. Otherwise, the exercise will be as good as building our castle in the air!

A positive significant relationship was found between students' attitude to science and performance in the Universities Matriculation Examination (Science).

Effort should therefore, be geared towards stimulating the interest of students' to develop positive interest towards the study of science in schools. This would no doubt improve the performance at the examination. It is recommended that the study of science subjects in schools should be more practical-oriented rather than the theoretical approach adopted by some schools without well-equipped laboratories. Government should equip all science schools with

laboratory equipment to enhance learning and high standard in the examinations.

Peer group influence has been found to have a negative impact on students' performance in the examinations. Formation of peer group should be such that should be result-oriented. In this respect parents and teachers should endeavour to encourage their wards to place a very high premium on academic achievement in schools.

Non-inclusion of continuous assessment (C/A) in the Universities Matriculation Examination final scores has been rated as the highest single factor responsible for the poor performance in the examination. To this end, examination department of Joint Admission and Matriculation Board (JAMB) charged with the responsibility of development and administration of Universities Matriculation Examinations in conjunction with the State and Federal Ministries of Education should work out modalities and ensure that continuous assessment scores are incorporated in the UME final scores.

Lack of adequate guidance and counseling in schools has been identified as one of the general factors responsible for the poor performance in the Universities Matriculation Examination. A career guidance programme is a necessary effort which involves not only the school counsellors but also the Ministry of Education, the Directorate of Education (guidance services), the Principals, the School, Teachers, Nurses and other school personnel, parents and students. It is recommended that the government should fund this programme by providing the physical facilities and ensure that every school has a career counsellor or coordinator who must be aware of the need to fashion the programme in such a way that it is consistent and in line with the objectives and philosophy of the school.

Absenteeism, inadequate preparation by teachers before teaching as well as non-coverage of UME syllabus by students were discovered as causative factors of poor performance in the Universities Matriculation Examination. Be that as it may, it boils down to lack of motivation for teachers in schools. Government should therefore, provide a conducive environment for an effective teaching-learning process in schools. This will ensure that the 6-3-3-4 system becomes a reality and not a programme which has merely "started" but not "taken off".

Government should approve the unified salary structure demanded by the national union of teachers so as to step down further mass exodus of teachers from the classroom for other greener pastures. Teachers should be given enough motivation. The teachers should be made to have sense of belonging. Above all, teaching profession should be made more lucrative to entice the young generation of teachers. If possible, part time teaching programme should be introduced to enable schools that are deficient in some subject areas.

In-service programmes for teachers in schools are vital and quite necessary. In this respect, the state governments should make adequate provision in their budgetary allocations to the Ministries of Education to encourage teachers to attend in-service training with full pay. This should be the case for the National Certificate of Education teachers who now form the bulk of the teaching staff.

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APPENDIX I

DEPARTMENT OF EDUCATION
AHMADU BELLO UNIVERSITY, ZARIA

Ref: DE/S.25 Date:.....

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Education, Ahmadu Bello University, Zaria requires each student working for a Masters Degree to complete a Research Project. Our students entering the final phase of their studies will be collecting data during the year.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have please give assistance as much as possible.

"TEACHERS' AND STUDENT'S PERCEPTION OF THE CAUSES OF POOR PERFORMANCE IN UNIVERSITIES MATRICULATION EXAMINATION" IN SCIENCE.

Thank you for your continuing cooperation.

Yours sincerely,

RESEARCH COORDINATOR

cc: Advisor.

APPENDIX II

QUESTIONNAIRE

Questionnaire on Teachers' and Students' Perception of Causes of Poor Performance in Universities Matriculation Examination

INTRODUCTION

The performance of many candidates in Universities Matriculation Examination in science over the years has been disappointing.

This questionnaire is therefore, designed to seek opinions relating to teachers' and students' perception of causes of poor performance among UME candidates. The result obtained will be used to offer relevant suggestions and recommendations to Joint Admissions and Matriculation Board (JAMB).

PART ONE

Please indicate as appropriate by a tick ( ):

i. Teacher [ ] Male [ ] Female [ ]

ii. Student [ ] Male [ ] Female [ ]

iii. My home state is Tick [ ]

1.	Ogun	9.	Benue
2.	Anambra	10.	Delta
3.	Adamawa	11.	Kaduna
4.	Kogi	12.	Yobe
5.	Kano	13.	Oyo
6.	Cross River	14.	Imo
7.	Bauchi	15.	Rivers
8.	Sokoto	16.	Others

Specify:.....

iv. Name of your School .....

v. Have you sat for UME before? (students only) [a] YES [b] NO

vi. If yes, how many times? Please specify.
[a] Once [b] Twice [c] Thrice [d] More than thrice

vii. Which of the following are you offering? (students only) [a] Arts [b] Science

viii. Please tick ( ) against the option that agrees with your opinion thus:

CTION A:

Item Nos	INSTRUCTIONAL MATERIALS (Teachers and Students)	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Teaching aids such as textbooks are not adequately made available in my school					
	Chemicals are sufficiently adequate for practical lessons in my school					
	Maps, charts as study aids are available in my school					
	My school laboratory has adequate science equipments					
	The available teaching aids are not maximally being used in my school					

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CTION B:

Item Nos	MOTIVATION (Teachers only)	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Regular promotion are given to teachers in my school					
	Teachers in my school are provided with comfortable accommodation					
	Salaries are regularly paid to teachers in my school					
	Teaching profession is given due recognition by government					
	Teachers in my school go on study leave with pay					
	Teachers in my school often attend seminars and workshops					

SECTION C:

Item Nos	TEACHERS INFLUENCE (Students only)	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
12	Government provides free medical services to teachers in my school					
13	Science teachers in my school are well qualified to teach the subjects					
14	Teachers in my school are not always present to teach the subjects					
15	My teachers are frequently going on strike					
16	I do not always understand the method my teachers employ to teach					
17	My teachers lessons are uninteresting					

SECTION D:

Item Nos	ATTITUDE (Students only)	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
18	I have no interest in my teachers' lesson because they are not well taught					
19	My teachers are always assisting me in my studies					
20	Science subjects are very difficult for me to pass them					
21	Science subjects are not interesting to me					
22	I hate reading always because I do not understand what I read					
23	Knowledge of science does not help me in any way to understand the world around me					
24	My parents do not encourage me to read science subjects					
25	I enjoy having discussion on science subjects but still fail them					
27	My parents are not interested in science subjects					
28	I am ignorant of the level of standard JAMB expect in the examination					
29	I am familiar with UME past questions before I write the examination					

SECTION E:

Item Nos	PEER GROUP INFLUENCE (Students only)	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	My friends encourage me to choose science subjects					
	I always enjoy reading with my friends/classmates					
	I am not interested in my choice of science subjects					
	My friends have little interest in science subjects					
	My friends always stay away from school during school hours (truancy)					

PART TWO: GENERAL FACTORS

Based on the knowledge of your school, please indicate YES or NO against any or some of the underlisted factors you consider most important in influencing performance in Universities Matriculation Examination (Science).

1	Students low mental ability (inability to understand what is taught)	[ ]	[ ]
2	Students poor reading habit	[ ]	[ ]
3	Absenteeism from class by students	[ ]	[ ]
4	Absenteeism by teachers	[ ]	[ ]
5	Parents inability to provide required study aids	[ ]	[ ]
6	Parents lack of interest in the child's education	[ ]	[ ]
7	Lack of adequate guidance/counselling in schools	[ ]	[ ]
8	Inadequate preparation by teachers before teaching	[ ]	[ ]
9	Number of students is too large to cope with by teachers	[ ]	[ ]
10	Teachers irregular attendance in class	[ ]	[ ]
11	Non-coverage of syllabus before the examination	[ ]	[ ]
12	Non-inclusion of C/A in UME final scores	[ ]	[ ]
13	Wrong choice of subjects by students	[ ]	[ ]
14	Students failure to obey examination instruction	[ ]	[ ]
15	Students inability to answer all questions due to enough time	[ ]	[ ]
16	Students anticipated questions do not always come	[ ]	[ ]
17	Most questions asked are not from the UME syllabus	[ ]	[ ]

APPENDIX III
VALIDATION CHECKLIST

After you have completed the questionnaire, please answer these questions concerning the format and the content of the questionnaire. Your responses will be used to improve the final draft of the instrument which will be sent to the participants/target population.

Did you understand the purpose of the questionnaire from reading the cover letter? Just tick ( ) that which appeals to you.

Yes [ ] No [ ]

Was the length of time taken acceptable to you?

Yes [ ] No [ ]

How long did it take you to complete filling the questionnaire? Please specify the time taken:

.....

Were the instructions clear to you concerning where to place your response?

Yes [ ] No [ ]

Did you find any question(s) or item(s) ambiguous to respond to?

Yes [ ] No [ ]

If yes, please identify such question(s) or item(s): .....

Did you question the relevance of any question(s) item(s)?

Yes [ ] No [ ]

If yes, please identify/indicate such item(s) or question(s) below:

.....

.....

Thank you for your assistance.

APPENDIX IV

ANALYSIS OF THE VALIDATION CHECK LIST BY PERCENTAGE

No	ITEMS	n = 10				n =			
		TEACHERS' RESPONSES				STUDENTS' RESPONSES			
		YES		NO		YES		NO	
		NO	%	NO	%	NO	%	NO	%
	Understanding the purpose of the questionnaire	10	100	0	0	34	85	6	15
	Time taken to fill in the questionnaire	0 7	20 70	21 3	40 30	0 35	20 87.5	21 5	40 12.5
	Acceptability of duration of time taken	8	80	2	20	34	85	6	15
	Clarity of directives	9	90	1	10	32	80	8	20
	Abllity of the items	2	20	8	80	10	25	30	75
	Number of ambiguous	7 26	14 29	17,33 30,35		2 18	11 27	15	
	Questioning the relevance of any item/ question	1	10	9	90	13	32.5	27	67.5
	Identification of irrelevant items/ questions	7, 29 35	14, 30	17,26 33		5, 15	2, 18	11, 27	