INFLUENCE OF SOCIO-ECONOMIC STATUS ON ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL BIOLOGY STUDENTS IN MINNA METROPOLIS, NIGER STATE.

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ABSTRACT

This study investigated the influence of socioeconomic status on the academic achievement of senior secondary school students. The population for the Study comprised of 276 respondents, and a sample of 161 S.S.1 students in Minna metropolis were used for the study. The students were randomly selected. Descriptive survey design was adopted in the study. The instrument used for Data collection was questionnaire which was developed by the researcher and validated by lecturers of Science Education Department, Federal University of Technology, Minna. For data analysis Mean, Standard Deviation and t-test were employed. The result of this study showed the difference between high and low socioeconomic status groups. The study carried out to examine the influence of socioeconomic status on academic achievement of students in Minna metropolis in Niger State, in order to achieve this purpose, three specific objectives were set for the study among which include; to determine the academic achievement among students from wealthy and poor family background at senior secondary School level. This study further reveals that gender does not affect the academic achievement at Secondary School. It is also found that the academic achievement was influenced by the socioeconomic status and those who belonged to wealthy socioeconomic status shows better achievement. The following recommendations were made: students of poor background should be encouraged to participate in different activities so that they can compensate their feelings of inferiority with education and co-curricular achievement. Such activities should also be organized for students of lower class to enable them compete with the students belonging to higher status families.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study.

Education is one of the imperative aspects that not only inculcates the skills, abilities and knowledge among the individuals but also leads to overall growth and progress of the individuals, community and nation as a whole. An educated person is not only able to accomplish his desired goals and objectives but is also able to render an efficient contribution towards the well-being of the community. The inculcation of academic knowledge, skills, abilities and proficiency among the individuals is enhanced through socioeconomic status and Academic achievement of students.

Academic Achievement of students is a key feature in education (Reno, 2013). It is considered to be the center around which the whole education system revolves. The education of a student is monitored on the basis of his academic achievement. The importance of academic achievement in one's life cannot be overemphasized. Sound academic records are the pillars on which the entire future disposition stands. Academic achievement has always been the centre of educational research and despite varied definitions about the aims of education, the academic development of the student continues to be the primary and most important goal of education. Additionally, Farooq et al, (2011) emphasized that the top most priority of all educators is academic Achievement of students. Factors contributing to improvement in students' academic Achievement have received much attention from educators and researchers (Signh, Malik and Sign, 2016; Ali et al. (2013)

The quality of parents and socioeconomic status of student goes a long way to predict the academic performances of students. A child from poor home may suffer because

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there might be insufficient funds to pay His/Her fees, purchase books, Uniforms and other school materials, such child might play truant and the child`s self esteem can be tampered with causing emotional trauma which is wrong for the child`s psychology, thus His performance in school may be adversely affected (Shittu, 2014). Similarly, good parenting supported by strong socioeconomic background could enhance strong academic performance of the child. According to Mahmud (2010), cultural heritage and values are transmitted from one generation to another through education. The responsibility of training a child always lies in the hands of the parents. This is congruent with the common assertion by sociologist that education can be an instrument of cultural change which is being taught from home. It is then generally believed that socioeconomic status of the parent has direct impact on the academic performance of the students.

Socio-economic status (SES) is often measured as a combination of Education, income and occupation. It is commonly conceptualized as the social status or class of an individual or group. Low socioeconomic status and its correlates, such as lower education, poverty and poor health, ultimately affects our society as a whole. Research indicates that children from low social economic status, households and communities develop academic skills slowly compared to children from higher socioeconomic status group system. Aiken and Barbain (2008) noted that the school system in low socioeconomic status communities are less likely to have the financial resource or time available to provide children with academic support.

It is generally believed that students from high and middle socioeconomic status and background are better exposed to a learning environment at home because of the provision and availability of extra learning facilities. This idea is supported by Becker and Tomes (2010) who asserted that it has become well recognized that affluent and

well educated parents ensure their children's future earnings by providing them a favourable learning environment, better education and good jobs. In contrast to this belief, students from low socioeconomic background do not have access to extra learning facilities; hence, the opportunity to get to the top of their educational height may not be very easy. Parents play an important role leading to operative growth and development of their children (Kudari, 2016). It can be concluded that parents educational level not only affect student achievement but also their academic self-esteem which also leads to higher academic achievement.

Wrong considerations in making choices is a factor affecting educational performance. Academic Achievement determines the future goals and objectives of students, this is because every student at some point in their educational career has to pursue a particular discipline. The choice of area of specialization are mostly made in Tertiary institutions (colleges and universities). A student not too sound in science desiring to study a science related course in tertiary institution forgetting the fact that their academic performance would have to be the major determinant to that.

Another factor affecting educational performance, is the educational institutions students will get enrolled into, the career opportunities they would take up. Their performance to a large extent determines the kind of institution to be enrolled into using JAMB as a benchmark, those who falls below standards of stipulated marks goes either to a university, polytechnic or a college of education and so forth.

1.2 Statement of the problem

Most students in Nigeria secondary schools are in greater risk of poor academic achievement in both internal and external examinations (WAEC and NECO). According to the Guardian newspaper, 17 May 2018, Mass failure in exams across the nation is not new and reactions of Nigerians and government officials, teachers and parents have always been the same. The Government and parents blame teachers for lack of dedication to duties. The teachers blame government for poor salaries hence they are poorly motivated, parents also accuse the government for not equipping the schools with learning materials, The Government and teachers blame parents for not doing good homework and the students are blamed for lack of discipline and dedication to their studies. Mass failure was recorded in the 2017 WAEC exams with only 34,664 out of 131,485 having five credits including English and Mathematics. This situation has continued over the years.

In light of the above issues, the outstanding and relevant question is: What is the influence of family status on academic achievement of secondary school students? Therefore, the study intends to investigate the influence of socio-economic status on Academic Achievement of Biology Students in Minna Metropolis, Niger State.

1.3 Aim and Objectives of the Study

The study is aimed at investigating the influence of socioeconomic status on Academic achievement of secondary School Biology students in Minna Metropolis Niger State. Specifically, the study is designed to achieve the following objectives;

1. To determine the difference between the academic achievement of students with low and high Socio-economic status

2. To investigate the difference between the academic achievements of students based on gender.

3. To find out the relationship between the socioeconomic background and the academic achievement of students in Biology.

1.4 Research Questions

The study sought to answer the following research Questions;

1. What is the difference between the academic achievements of students with low and high Socio-economic status?
2. What is the difference between the academic achievements of students based on gender?
3. What is the relationship between the socioeconomic background and the academic achievements of students in Biology?

1.5 Research Hypotheses

The following research hypotheses were formulated and were tested in the study

HO_1: There is no significant difference between the academic achievements of students with low and high socioeconomic status.

HO_2: There is no significant difference between the academic achievements of students based on gender.

HO_3: There is no relationship between the Socio-economic status and the academic achievements of students in Biology.

1.6 Scope of the Study

The study is limited to secondary schools in Minna metropolis in Niger state. The content scope of this study is limited to finding the influence of socio-economic background on academic achievement among S.S I Biology senior secondary students in Minna metropolis.

1.7 Significance of the Study

The result of this study will be useful to the following;

The Students, Teachers, Parents, School guidance/Counsellors, Educational Administrators and upcoming researchers.

The finding of the study will be of great benefit to teachers because they will realize the necessity of individualizing their teaching by structuring their teaching aids and instructional resources to take care of the divergent parental socioeconomic backgrounds of the students and their different ability.

The findings will be of immense importance to students, by making them realize that their poor performance might not necessarily be their fault alone, especially those from low status families. Such knowledge will go a long way to reduce frustration in the students and also reduce drop-outs which occur as a result of frustration. Rather, the students should be made to adjust and help themselves by studying hard at home and also make proper use of the books and materials that are provided for them at the school library.

Through the findings of this study, parents will realize the importance of improving their educational standard so as to influence their children's academic performance. Parents will also understand the need for them to improve their socio-economic status so as to be able to provide the necessary motivation in form of learning materials and

other performance. They will equally acknowledge the importance of positive motivations and encouragement and provide some, by making the family environment more conducive for their children.

School guidance and Counsellors could benefit from findings because they will be enlightened on the extent at which socioeconomic Background, Educational level and occupational type of parents affect students' academic achievements as well as identify the appropriate tools/measure specific to a particular child.

The Result of the Research will benefit educational Administrators as they can provide appropriate direction and day to day management of schools by ensuring Teachers and Head of schools are able to understand that students possess different psychology/mindset due to different socioeconomic backgrounds of the students. This can be effective through organization of seminars, workshops and conferences.

Finally, results of this research could be helpful as a reference point to upcoming researchers who wants to embark on related study in the future.

1.8 Operational Definition of Terms.

- ❖ **Socioeconomic Status:** Is the combination of an individuals' income, occupation and family background. It's a key determinant of success and future life chances.
- ❖ **Academic Achievement:** Academic achievement has to do with what a learner is able to accomplish by execution of class work in the school also Academic achievement refers to something a learner do or achieve at school, college or university, in class, in a laboratory or field work.

❖ **Influence:** The capacity to have an effect on the character, development or behavior of someone or something or the effect itself.

❖ **Biology:** A systematic and scientific study of living organisms. The term is derived from two Greek words 'bio' meaning life and logos meaning study.

❖ **Student:** A person who studies or learns about a particular academic subject. Student is used for anyone who is learning.

CHAPTER TWO

LITERATURE REVIEW

2.1 Review of Related variables in the study

2.1.1 Influence

Influence is the power to have an effect on someone or something. If someone influences someone else, they are changing a person or thing in an indirect but important way, sometimes a person who influences another doesn't intend to have any effect (Webster dictionary).

2.1.2. Socioeconomic Status (SES)

Socioeconomic background (socioeconomic status) is an important variable in determining the academic achievement of students. Increasingly, researchers examined educational processes, including academic achievement, in relation to socioeconomic background. (Bornstein and Bradley 2003). SES is perceived as a "critical consideration" in education research, educators still do not have a consensus on its use or definition (Charles, 2013). The Socioeconomic status of a child is most commonly determined by combining status and income level (Jeynes 2012). Research on SES and academic achievement has revealed a consistent relationship between socioeconomic status and academic achievement (Jeynes 2012).

In line with this, Qaiser, *et al (*2014), opined that high SES is associated with greater academic achievement. Furthermore, the educational literature has provided evidence that SES is one of the strongest predictors of academic achievement and educational attainment (Shahzad, 2011).

Socioeconomic status is an economic & sociological combined total measure of a person's work experience and of an individual's or family's economic and social position relative to others, based on Income, education and occupation (Machebe *et al,* 2014).

The American Psychological Association (APA) as indicated by James (2019), defines socioeconomic status as the social standing or class of an individual or group. SES according to James (2019), has been commonly used as a latent construct for measuring family background. Diego (2020) defined socioeconomic status as the categorization of people according to their economic, education and occupational characteristics. SES is also seen as access to financial, Social, cultural and human capital resources. The variable socioeconomic status is based on a weighted combination of parent's educational level, occupation of parents, income of parents as well as the area of settlement.

The socioeconomic status according to Diego (2020), is measured using three (3) factors namely; Income, Education and Occupation and they are considered as the 3 big factors.

i. Parental Education

The term education evolved from two Latin words; Educare and Educatum. Educare means training or print while education implies meaningful action to teach (Aleed, 2016). To educate means to bring out of the child that spirit of learning and wonder, the desire to know and that thirst for knowledge (Ansari *et al, 2016*). To a large extent education plays a role in income. Earnings increase with each level of education. The highest degrees, professional and doctoral degrees, make the highest monthly earnings while those without a national diploma earn less. Education plays a key role as it

stratifies people with higher socioeconomic status from lower socioeconomic status. Lareau (2013) speaks on the idea of concerted cultivation, where middle class parents take an active role in their children's education and development by using controlled organization activities and fostering a sense of entitled through encouraged discussion. Lower income families can have children who have a greater sense of entitlement, be more argumentative or be better prepared for adult life, (Lareau, 2013).

ii. Parental Income

Income refers to profits, wages, salaries, income and any flow of earnings received. Income can also come in the form of employment or workers compensation, pensions, royalties or other governmental, public or family financial assistance. Income is the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However for households and individuals, income is the sum of all the wages, salaries, profits, interest payments, rents and other forms of earnings received in a given period of time (Barr, 2014). Income is a commonly used measure of socioeconomic status because it is a major determinant of every monetary activity in the family. Low income families focus on meeting immediate needs and do not accumulate wealth that could be passed on to future generations, thus increasing inequality. Family's expendable income can accumulate wealth and focus on meeting immediate needs while being able to consume and enjoy luxuries and weather crises (Mayer, 2014).

iii. Parental Occupation

Occupation is one of the vital factors that determine socioeconomic status. Occupational status mirrors the educational attainment required to obtain the job and

income level that vary with different jobs and within ranks of occupations. Occupational status measures social position by describing job characteristics, decision making ability and control. Some of the prestigious occupations are Doctors, Lawyers, Engineers, lecturing and communication analysts. These jobs, considered to be grouped in high socioeconomic status classification, provides more challenging work and greater control over working conditions but require more ability. The jobs with lower rankings include food preparation workers, counter attendants, helpers, dishwashers, maids and housekeepers, vehicle cleaners, laborers, gardeners and parking lot attendants. The jobs that are less valued also offer significantly lower wages and often are more laborious, very hazardous and provide less autonomy (Mayer, 2014). Parent's occupation influences the child Academic achievement as more tasking and demanding jobs tends to keep parents away from their children debarring them (parents) from evaluating and assessing their children, unlike occupations with less demand and high autonomy which allows parents gain access to their children.

iv. Home Education Environment

The home environment plays an important part in the development of a student's intelligence which leads to the student's academic achievement in school. The child constantly interacts with the family and is invariably influenced by the entire environment that surrounds him. Children needs a pleasant environment, an environment characterized by human care, particularly by the mother and at the same time providing various experiences and stimulations, (Mcloyd, 2012).

Home itself is a complex unit. The Socioeconomic Status of it's psycho-social environment is not an easy matter. This is due to the complexity of the phenomenon

under investigation. Home environment has been conceptualized as the quality of human interactions, from the point of view of the child. It includes those aspects which foster growth and development, such as family, trust, and confidence, sharing of ideas, making decisions, parental approval, parental encouragement, support, guidance, affection and approval of peer activities. Home environment includes language stimulation, physical environment, encouragement of social maturity, variety of stimulation and disciplinary practices (Mcloyd, 2012).

Better home environment is where parents provides more opportunities to understand things and situations and act according to their desires. Children receive maximum support and encouragement from parents, children rarely receive punishment and have restriction. This kind of environment helps the students for better performance in various tasks. Rich environment and stimulation in the family is essential for each child for positivity, especially in the areas of intellectual development.

The children are rich resources of a Nation, and they need to be so designed and developed; through careful socialization process at home and cautiously planned social learning experience in educational institutions; so as to match with the emerging demands of the "worlds of competition and Excellence". In order to achieve these aims it is necessary to study, in details the influence of home environment on the academic achievement of students.

Zhand (2011) maintained that children living in poor environment cannot develop their potentials and skills to the maximum extent that have a positive effect on their performance in schools and achievement in social life. The environment created at home accelerates or retards the development of the child and influences the achievement and aspiration of the child. Biology students, to be well adjusted to

parental care, needs to feel loved and emotionally secured. A stimulating home environment may influence academic achievement of secondary school students.

2.1.3 Family Background

Family has been described as the smallest, most personal and most intimate of social groups. It is the most important primary group and the smallest social unit in the society. Odo et al (2010) defined family as a social group sharing a common residence and cooperating economically. The family is one of the most important social institution and agent charged with the responsibility for among other things determining ones attitude towards religion, intellectual training, character training, love for others and vocational training. (Mcloyd, 2012). Family also play a major role in determining ones future career through socializing the young ones into vocation or trade for self-reliance, by exposing the child to either vocation of the family or any desirable trade before the child becomes adult. Family socialization differs. Family has a greater role or influence on every individual's life, despite the influence of the peers and other agents of socialization. Family can be classified into nuclear and extended form. Nuclear family is basic is basic form of family organization. It is made up of father (husband), mother (wife) and children. The children may be the biological offspring of the couple or the adopted members of the family. Extended family is the type of family that comprises of the father, his wife, the husbands and the wife relations etc. The extended family system is commonly a characteristics of most African society.

Family background plays a very important role on a child's life. Family background refers to all the objects, forces and conditions in the family which influence the child physically, intellectually and emotionally (Muola 2010). Children from different

family background are affected due to variations and that is the reason some children have good family background while the family background of others are poor. Parents are responsible for the type of family background that exists. This means that parental attitudes are very important in promoting healthy family background, and a healthy family background is possible when parents adapt to the culturally defined roles of parents to the needs of the changing young generation.

2.1.4 Achievement

Achievement could be seen as something which was carried out successfully. It's a product of effort or several efforts. Achievement is usually good but in most cases difficult. Eze (2011) described achievement as something which has been accomplished successfully, especially by means of exertion, continuous practice/perseverance. She sees achievement as a test for the measurement and comparison of skills in various fields of academic study. Nwagu (1992:71) cited in Eze (2011) defined achievement as a systematic and purposeful quantification of learning outcomes. He explained that achievement involves the determination of the degree of attainment on individuals in tasks, courses or programs of which the individuals were sufficiently exposed.

Academic achievement is the extent to which a student, teacher or institution has attained their short or long term educational goals. According to Narad and Abdullah (2016), academic performance is the knowledge gained which is assessed by marks by a teacher and /or educational goals set by students and teachers to be achieved over a specific period of time. Ali (2013) found daily study hours, social economic status of parents/guardians and age as factors that significantly affects academic performance. Proper guidance from parents and teachers, communication skills and

learning facilities have also been found as a significant determinant to academic performance (Signh, Malik and Signh, 2016)

2.1.5 Students' Academic Achievement

Academic Achievement of students is a key feature in education (Reno 2013). It is considered to be the center around which the whole educational system revolves. Similarly, Farooq et al (2011) asserted that students' academic performance serves as a bedrock for knowledge acquisition and the development of skills. Additionally, Farooq et al (2011) emphasized that the top most priority of all educators is academic performance of students. Similarly, Aremu (2016) opined that academic performance is a measurable and observable behavior of a student within a specific period. He added that it consists of scores obtained by a student in assessment such as class exercise, class test, mid semester mock examination and end of semester examination. Again Maghra (2019), emphasized that academic performance of students is defined by a student's performance in an education, tests and in a course work. The definitions given by the author shows that the definition of academic performance is based on measurable outcomes such as class exercise, test and examination results. Based on this, the operational definition of academic performance used in this study is the results obtained by a student at the end of a specific term in all subject. Per this study, a student who obtains a total of aggregate 60 in six of his/her subjects is considered to be academically good, and the percentage pass is 50% and above. Academic achievement of students especially at the secondary school level is not only a pointer to the effectiveness of schools but a major determinant of the future of youths in particular and the nation at large.

2.1.6. Socio-economic Status and student's Readiness for School

Status and Student's Readiness for School is another important factor that can enhance academic Achievement and this can be imparted by the Socioeconomic Status of parents. Patrick et Al (2014), discussing the impact of Socio-economic status on student's Readiness for school indicate that the segregating nature of social class may well reduce the variety of enriching experiences thought to be prerequisite for creating readiness to learn among students Social class dictate neighborhood, housing and access to resources that affect enrichment or deprivation as well as the acquisition of specific value system. Families with high socioeconomic status often have more success in preparing their young children for school because they typically have access to a wide range of resources to promote and support young student's development. They are able to provide their young students with high quality child care books and toys to encourage students in various learning activities at home. On the other hand, families with low socioeconomic status lack the financial, social and educational supports that characterize families with high socioeconomic status. Parents may have inadequate skills for such activities as reading to and with their students, and they may lack information about childhood immunization and nutrition.

2.1.7 Biology as a Science Subject

Biology is a natural science which is concerned with the study of life. It is a derivative of the Greek words 'bio' meaning 'life' and 'logos' meaning 'study'. Biology is a prerequisite to studying other disciplines such as Medicine, Microbiology, Agriculture, Pharmacy, Biochemistry, Molecular Biology, Marine Biology, Biotechnology, Biomedicine, Biophysics, Bioengineering, Evolutionary Biology, Biofeedback Phenomenon and Developmental Biology. This makes Biology a core

Science subject in secondary schools to prepare the students who might consider studying any of the above courses in higher institution of learning. The teaching and learning of Biology require both theoretical and practical approach. Learners are expected or given the chance to observe, handle, dissect, identify describe, count, measure, and draw living organisms, structures, related models, diagrams and pictures as well as manipulate apparatus in the teaching and learning process.

According to Ahmad et al (2018), Biology remains one of the basic science subjects whose teaching and learning is universally known to be efficient and successful if only undertaken simultaneously with the help of adequate instructional resources and facilities. Biology provides a range of balanced learning experiences through which students develop the necessary scientific knowledge and understanding, skills and processes, values and attitudes embedded in the life and living strands of science education for personal development and contributing towards a scientific and technological world.

According to Adegboye et al (2017), Biology is a unique branch of natural science however like other natural sciences, it is concerned with the search for in-depth understanding of natural phenomena and events. It is composed of two major fields: Functional Biology and Historical Biology which is also known as evolutionary biology the functional processes of biology deal with physiological processes in living things and it can be explained with the natural laws of physical sciences especially at the cellular molecular level. The most frequent questions asked in Functional Biology field is 'how?' In the field of Historical Biology a sound knowledge of history is needed for the explanation of all aspects of the living world that has to do with the dimension of historical time. Experiments are sometimes inappropriate to provide

answers to the 'why' and 'how' questions that are frequently and occasionally ask respectively in this field of Biology.

Despite efforts being made to improve teaching and learning of Biology, high records of poor achievement of students in Biology is on the increase (WAEC, 2010). Studies have shown that the reasons for low academic achievement in Biology is due to poor understanding of the basic concept, lack of adequate instructional materials and textbooks that reflect the students' environmental needs, low level and low quality of cognitive interactions with teachers, and language problems. All these compel students to memorize and regurgitate facts and principles (Okebukola, 2005).

2.2 Theoretical Framework

For the research work to be intellectually sound, it must include a scientifically based theoretical framework with which a systematic analysis will be carried out. Therefore the following theories are adapted for the study; parental attachment theory, Maslow's motivational theory and self-determination theory.

2.2.1 Parental Attachment Theory

Parental attachment theory was proposed by Bowlby in 1980. The theory states that the child forms a strong emotional bond with another person (caregiver) during childhood with lifelong consequences. According to the theorist, sensitive and emotionally available parenting helps the child to form a secure attachment style which foster a child's socio-emotional development and well-being. Less sensitive and emotionally available parenting or neglect of the child's needs may result in insecure forms of attachment style, which is a risk factor for many mental health problems. The theory is relevant in this study in view of the fact that the proponent

provides clues in emotional development of children. He also made reasonable suggestions for parents and guardians. Parents and guardians can now see the necessity of forming secure attachment bond with their children. Such bonds will enable the children to end up with secure attachment and secure state of mind later in life. Parents will learn to understand the biological and psychological needs of the children and to avoid unrealistic expectations of the child behavior. In this way, parents may seek to avoid frustration that occurs when they expect things beyond the child's capacity.

2.2.2 Maslow's-Motivational-Theory

This is another relevant theory. The theory was developed by Abraham Maslow in 1970 and popularized by many researchers in which Onyi (2007) is inclusive. According to Maslow, motivation is constant and never ending, fluctuating and complex. He asserted that man always has needs to satisfy. These needs, according to him are arranged in order of hierarchy starting from the basic or lower order to senior order needs. According to Maslow, these needs can create internal pressures that can influence a person's behavior. The hierarchy is categorized into two; namely Deficit needs (physiological, safety, belonging and self-esteem) and growth needs (self-actualization). Maslow explained that once a particular need is satisfied, it ceases to be a motivator of behavior and another need emerges. The above theory relates to this study because motivation cannot be removed from learning. It is important but at home and in school. One of the major problems confronting teachers and parents is that of motivating learners to perform assigned tasks to meet or even excel predetermined standards. A Learner under motivated condition, exhibits purposeful behavior aimed at achieving the set goals. The students are motivated to learn by their satisfaction of needs like physiological; shelter, food, water, rest etc. Safety; personal

security, good health, love etc. social needs; also called love and belonging, refer to the need to feel a sense of belonging and acceptance. The satisfaction of these needs leads to the quest to satisfy senior ones which are self-esteem and self-actualization needs.

2.2.3 Self Determination Theory

This theory was propounded by Deci and Ryan in 1985. The proponents stated that people are active organisms, with the growing tendencies geared towards mastering ambient challenges and integrating new experiences into a coherent sense of self. They stressed that these natural development tendencies do no not operate automatically, but rather requires on-going social nutriments and supports. According to them, the social context can either support thwart the natural tendencies towards active engagement and psychological growth. Furthermore, the social context can catalyze to lack of integration, defense, and fulfillment of need substitutes. Self-determination theory is applicable to this study, based on the fact that individuals or groups need to be self-determined to achieve a set goal. The habit of determination can help children in their academic achievement.

2.3. Empirical Studies

This section reviews some empirical works that have been done on areas related to the study. Akanle in 2007 carried out a study on Socio-economic factors influencing student's academic performance in Nigeria. The study was aimed at finding out the relationship between the indices of Socio-economic factors and students' academic performance in a local survey in Oyo state. The time frame the study covered was the period from 2004 - 2007. The participants consists of 60 males and 60 females. The major instrument used in collecting data for the study was a self-developed instrument

tagged Socioeconomic and academic performance rating scale of students. He used t-test at 0.05 alpha level to analyze the data collected. The analysis shows that the first hypothesis that there is no difference in the level of parental income and the provision of the basic needs of male and female students to promote high academic performance was not supported. From the scores of the respondents, it is evident that the home/family contributed a lot to the academic performance of the students. The present study is in line with this study as it intends to find out if parental Socio-economic status influences students' academic performance.

Eke in 2008, conducted a study on the relationship between home environment factors and academic performance of secondary school students in Gboko local government are of Niger state. The purpose of the study specifically was to examine how home environmental factors affect students' academic performance. The study design was correlation coefficient to determine the extent to which home environment mental factors relate with academic performance of students in schools. A sample of 200 students was used for the study. The analysis the data by using the person's product moment correlation method. It was revealed from the study that the Socio-economic status of parents is not significantly related to the academic performance of students in Gboko local government area of Niger State. Another finding of that study was that parental occupation does not significantly affect academic performance of students. The study is related to this present study because it discussed some of the home related variables that influence student's academic achievement. Akanle in 2007, carried out a study on socioeconomic factors influencing students' academic performance in Nigeria. The study was aimed at finding out the relationship between the indices of socioeconomic factors and students' academic; performance in a local survey in Oyo state. The time frame the study covered was the period from 2004 -

2007. A t-test was administered. From the scores of the respondents, it is evidence that the home/family contributed a lot to the academic performance of the students. The present study is in line with this study as it intends to find out if parental socioeconomic status influences students' academic performance.

Agu in 2010, also carried out a study titled relationship between motivational patterns and students' academic achievement schools in Enugu. Test questions were administered to 459 students. The results of the study revealed that motivational patterns relate to students' academic achievement. The above study relates with the present study since it embarks on examining motivational factors that enhance students' academic achievement.

A study conducted by Ogunsola and Adewale in 2012 on effects of parental socioeconomic status on Academic performance of students examined parental socioeconomic background, parental educational qualification and students' health status. T-test was administered to 180 students. The results of the study suggest that parental socioeconomic status and parental educational background did not have significant effect on the academic performance of the students. However the parental educational qualification and health status of the students are significant factors that affect academic performance of students.

Finally, Okioga in 2013, conducted a study on the impact of students' socioeconomic background on academic performance in universities examined the factors that influence students' academic performance and the relationship between the students' socio-economic background and academic performance. 186 students were administered questioners. Findings revealed that students' socioeconomic background influenced students' academic performance.

2.4 Summary of Literature Review

Family has been described as the smallest, personal and intimate of social groups. It is the smallest social unit in the society as well as the most important primary group. It is usually based on the union of two or more couples. It is clear that socioeconomic background impacts every aspect of a child's life from diapers to diploma. It connotes all the objects, forces and conditions in the family which influence the child physically, intellectually and emotionally. Education is seen as the sum total of the experiences, whether formal or informal which as man comes across in his journey through life, to make individuals knowledgeable and contributing members of the society.

Achievement is described as something which has been accomplished successfully, especially by means of exertion, skill, practice or perseverance. Influence is the capacity or power of persons or things to be a compelling force on or produce effects on the actions, behavior, opinions of others. Parental attachment theory, self-determination theory and Maslow's motivational theory were reviewed. Parental attachment theory argues that a child has a tendency to bond with another person (care-giver) and feel secured when that person is present. Self-determination theory emphasizes on the fact that individuals needs to be self-determined to achieve a set goal. Maslow's motivational theory emphasizes that man always has needs to satisfy and these needs are arranged in a hierarchical order starting from the basic or lower order needs to senior order needs, when one need is met another will emerge. Some empirical studies which is concerned with motivational patterns which is related to student's academic performance, parental educational background in relation to students' academic achievements as well as socioeconomic background effect on student's academic performance, were all taken into consideration.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The Research Design adopted for this study is descriptive survey research design. It is a quantitative design with a survey method of design which is used to determine the relationship that exists between two or more variables. Survey is applicable to the assessment of awareness attitudes, influence of people at a particular time. The design was chosen because the study sought to investigate the perception on the influence of socioeconomic background on academic performance of secondary school Biology students within Minna metropolis and also this study does not involve controlled observation.

3.2 Population of the Study

The population of this research was 276 students of SSS1 class from selected secondary schools in Bosso Local Government of Minna. There are 20 Government Schools in Bosso L.G.A with the population of 5671 students.

SSS1 Students were chosen because it is a class with no examination anxiety, a class with full attention and they all offer biology as part of their subjects unlike the SSS3 and SSS2 who will be busy with WASSCE, NECO and State Mock Examinations, as well as being divided into Science and Arts classes. The SSS1 students will produce valid information and answer to the items in the question.

3.3 Sample and sampling Technique

Simple random sampling technique was used to select the school from the population. Because each school had equal chance of been selected. From the actual population of 276 students, 161 were sampled out using Yaro yamane formular. The following Schools were selected;

Table 3.1 Sample of the study

S/N	Names	M	F	Total
1	FUT Minna Model School	50	35	85
2	Model Science College, Tudun Fulani	87	104	191
	Total			**276**

3.4 Research Instrument

The Instrument used for the research was a Questionnaire titled "Questionnaire on influence of socioeconomic background on academic performance of students in Biology". It was used to collect data. The questionnaire consists of 2 parts; A and B. Part A involved the description of the respondents' personal data indicating school, class and gender. Part B consisted o f socioeconomic status of student questionnaire (SESQ) which was divided into sections; Social Economic Status of the family questionnaire (SESFQ), Social Economic status of Finance questionnaire (SESFQ) and Social Economic status of Occupation questionnaire (SESOQ). Each of the questionnaire was a 4 Likert scale which included; Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD). i.e. 4, 3, 2, 1. Respondents were asked

to tick box spaces provided that reflected their degree of agreement or disagreement with that statement.

3.5 Validity of Research Instrument

The instrument was validated by two science Educators from Federal University of Technology Minna, Niger State, for face validity and content validity of the items. The face validity focused on the logical arrangement of the items while the content validity focused on the subject matter content of the title. Questionnaire was given to two (2) experts in science Education department to validate the instruments after which corrections were made and effected correctly on the clarity and simplicity of the language used for the level of targeted audience.

3.6 Reliability of the Research Instrument

A pilot study was conducted in another school and questionnaire was given out. A permission was taken to the school to carry out pilot study in order for the researcher to get her reliability Coefficient. (r. Coefficient). Cronbach Alpha was used to determine the reliability of the instrument, with a reliability index of 0.877 which proves that the instrument is reliable. The researcher retrieved the results by herself.

3.7 Method of Data Collection

The researcher visited the two schools to obtain permission through an introductory letter from the Head of Department. The school authorities granted the permission to use the schools. The researcher distributed the questionnaire to the students in selected secondary schools, to obtain the student's socioeconomic status and a just concluded test to obtain their Academic performance. The researcher waited to retrieve the questionnaire back as soon as they were done.

3.8 Method of Data Analysis.

The pre-test and post-test scores collected were analyzed using data was analyzed using; Mean, Standard deviation were computed with the help of a computer software called Statistical Package for Social Sciences (SPSS) 20.0 version.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Analysis of Research Question

1. What is the difference between the academic achievements of students with low and high socio-economic background?

Table 4.1.1: Table Showing the Mean Scores of Students with High and Low Socio-Economic Status

Variable	N	Mean	SD
High Socio/economic Background	120	22.50	6.12
Low Socio/economic Background	41	18.26	8.05

*- Significant at p<0.05level

From Table 4.1.1, mean value of students with high and low socio/economic background are 22.50 and 18.26. We can conclude that the students with high socio/economic background perform better academically than students with low socio-economic background.

2. What is the difference between the performances of students based on gender?

Table 4.1.2: Table Showing Average Scores of Students Achievements Based on Gender

Variable	N	Mean	SD
Male	77	21.24	7.16
Female	84	21.58	6.66

*- Significant at p>0.05level

From Table 4.1.2, the mean performance of male and female students are 21.24, SD 7.16 and 21.58, SD 6.66 respectively with a level of significance 0.758 which is greater than 0.05. Hence, we can conclude that there is no difference between the performances of students based on gender.

3. What is the relationship between the socio-economic background and the academic achievements of students in Biology?

Table 4.1.3: Table Showing Pearson Correlation Coefficient between Academic Achievements and socio-economic Status

Variable	N	r	P
Socio/Economic Status	161	0.140^{*}	0.07
Academic Achievement			

*- Significant at p>0.05level

From Table 4.1.3, the coefficient of Pearson correlation is 0.140. This means that there is a weak relationship between socioeconomic background and the academic performance of students in Biology.

4.2 Analysis of Null Hypothesis

The data analysis of the study and result obtained were presented according to the research hypothesis which in turn were used to answer the research questions of the study accordingly

H0$_1$ There is no significant difference between the performance of students with low and high socio-economic status.

In order to test the hypothesis, the mean scores of students with low and high socio-economic backgrounds were computed and compared using t-test analysis, the result of the analysis is presented in table 4.2.1

The result in table 4.2.1 shows that t$_{cal}$ (3.512) is significant at $P<0.05$ level of significance. This means that there is a significant difference between the performance of students with high and low Socio/economic Background at 0.05 level of significance therefore hypothesis 2 was rejected. There is a significant difference in the performance of students with high and low socio/economic Background. The mean value of students with high and low socio/economic background are 22.50 and 18.26. This shows that the students with high socio/economic background perform better academically than students with low socio-economic background.

Table 4.2.1 t-test Comparison of the Mean Scores of Students with High and Low Socio-economic Status

Variable	N	df	Mean	SD	T_{cal}	P
High Socio/economic Status	120		22.50	6.12		
		159			3.513*	0.01
Low Socio/economic Status	41		18.26	8.05		

HO$_2$ There is no significant difference between the performances of students based on gender

In order to test this hypothesis, the mean academic scores of male and female students were computed and compared using t-test analysis, the result of the analysis is presented in table 4.2.2

The result in table 4.2.2 shows that T_{cal} (-0.309) is significant at P>0.05 level of significance. This means that there is no significant difference between the academic performance of students based on gender at 0.05 level of significance therefore hypothesis 1 was accepted.

Table 4.2.2: Summary of Independent t-test of the Mean Scores of Male and Female Academic Achievement

Variable	N	Df	Mean	SD	T_{cal}	P
Male	77		21.24	7.16		
		159			-0.309*	0.758
Female	84		21.58	6.66		

H0₃ There is no relationship between the socioeconomic background and the academic achievement of students in Biology

In order to test the hypothesis, a Pearson Correlation was carried out on the socio-economic backgrounds and academic performance of students. The results of the analysis are presented in table 4.2.3**.**

The result in table 4.2.3 shows that the r-value which is the coefficient of Pearson correlation is 0.140. This means that there is a weak relationship between academic achievements and socio/economic background. Students from a high socio-economic background are likely to perform better academically. The hypothesis was rejected.

Table 4.2.3: Pearson Correlation on the Socio-economic Status and Academic Achievement of Students

Variable	N	r	P
Socio/Economic Background	161	0.140[*]	
			0.07
Academic Achievement	161	0.140*	

4.3 Discussion of the Findings

Findings of this study revealed that students with high socio/economic background perform better academically than students with low socio-economic background. This is in line with the findings of Qaiser, *et al (*2014) who observed that high SES is associated with greater academic achievement.

Furthermore, the findings of this study is in line with the study of Mayer (2014), who propounded that students' socio economic status is usually found to be positively correlated with students' achievement.

Moreover, the findings of this study shows that there is a weak relationship between socioeconomic background and the academic performance of students in biology. This is in disagreement with the findings of Onyi, (2017), who found in her studies that socio economic status is the most important contextual factor that affects students' performance.

4.4 Summary of the findings

i. There is no difference between the performance of students based on gender

ii. Students with high socio/economic background perform better academically than students with low socio-economic background

iii. There is a weak relationship between socioeconomic background and the academic performance of students in Biology.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION.

5.1 Summary

The study was carried out to examine the Influence of Socio-economic background on Academic Achievement of Secondary School Biology Students within Minna metropolis in Niger State. In order to achieve this purpose, three specific objectives were set for the study among which include; To determine if there's any difference between the performance of students based on gender; To investigate if there is any difference between the achievement of students with low and high socioeconomic background and To find out if there's any relationship between the socioeconomic background and the academic achievement of students in biology. Hypothesis was also raised which were; There is no significant difference between the performance of students based on gender; There is no significant difference between the performance of students with low and high socioeconomic Background and There is no relationship between the socioeconomic background and the academic performance of students in Biology.

The research design adopted for this study is descriptive survey research design. The population of this study was biology students from two selected senior secondary schools within Minna metropolis. The sample size of the study was 163 students made up of SS 1 senior secondary school students were randomly sampled. Simple random sampling technique was used as the sampling technique. The instrument used for the research is a Questionnaire titled "Questionnaire on the influence of socioeconomic background on Academic Performance of Secondary School Biology Students". It

was used to measure the socioeconomic status of Biology students from school record.

5.2. Conclusion

Any research work can be considered effective only when the fund of knowledge generated through it can be applied to improve the existing practices of education. This study throws adequate light on the influence of Socioeconomic Background on academic achievement. The results of the study establish that biology students having highly (wealthy) socioeconomic background have better academic achievement than Biology students having low (poor) socio-economic background.

5.3. Recommendations

Based on the finding the following recommendation was made:

1. The students belonging to poor socio-economic background should be financially helped and adequate scholarship should be given to them as a support.
2. The students of poor background should be encouraged to participate in different activities so that they can compensate their feelings of inferiority with education and co-curricular achievement (e.g Chess games). Such activities should be organized for students of lower class which enable them to compete with the students belonging to higher status families.
3. The Government should play a role in providing resources like textbooks, school bags, writing materials, uniforms, foot wears as well as note books. Summer coaching classes during the summer vacations to supplement regular programme of the schools will go a long way.

4. Teacher's treatment should be judicious towards high and poor socioeconomic background students. So that student belonging to poor socioeconomic status may not realize that they discriminate on the basis of socioeconomic status.

5. Parents belonging to poor socioeconomic background should help their children psychologically by reducing their chores and responsibility of supporting the family.

6. The policies should be made for the parents belonging to poor socioeconomic background to enable their children have equal educational opportunities in the educational institutions.

5.4. Contribution of Study to Existing Knowledge

It was discovered in this study that Students with high socio/economic background perform better academically than students with low socio-economic background. This is however, contradictory to the study conducted by Ogunsola and Adewale in 2012 on effects of parental socioeconomic status on Academic performance of students examined parental socioeconomic background, parental educational qualification and students' health status. The results of their study suggested that parental socioeconomic status and parental educational background did not have significant effect on the academic performance of students.

5.5. Limitation of the Study

Some of the limitations encountered during this study include;

i. Time Constraints; Inability to cover a wider population due to limited time for the study.

ii.   Convincing the students on the importance and confidentiality of the study was difficult. Therefore there is no guarantee that the information given by them is the truth.

iii.   Collection of data from the ministry of education was stressful.

5.6. Suggestions for further Research

For further research work, the following suggestions are made

i.   There is need to investigate this study in other subjects, if the similarity persists the results will be factual.

ii.   There is need to also investigate the relationship between other temperament e.g self-esteem, emotional intelligence etc. and academic performance.

iii.   Similar studies should be carried out using other methods of data collection.

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