PEER GROUP INFLUENCE ON GEOMETRIC ACHIEVEMENT AMONG SOME SELECTED SENIOR SECONDARY SCHOOLS' IN BOSSO LOCAL GOVERNMENT AREA OF NIGER STATE.

BY

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TABLE OF CONTENT

Content	**page**
Title Page	i
Declaration	ii
Certification	iii
Dedication	iv
Acknowledgement	v
Table of content	vi
List of tables	ix
Abstract	x
CHAPTER ONE	
1.0 Background of the study	1
1.1 Statement of the problem	4
1.2 Objectives of the study	5
1.3 Research questions	5
1.4 Research hypothesis	5
1.5 Significance of the study	6
1.6 Scope of the study	6
1.7 Limitation of the study	7
1.8 Operational definition of terms	7
CHAPTER TWO: LITERATURE REVIEW	
2.1 Conceptual framework	8
2.1.1 Concept of peer	8
2.1.2 Concept of peer pressure	8
2.1.3 Concept of academic performance	9
2.1.4 Concept of geometric achievement	12
2.2 Theoretical framework	13
2.2.1 The social learning theory	13
2.2.2 Social control theory of Hirchi	14
2.2.3 Pickle jar theory	16
2.2.4 Van hiele's theory	17
2.3 Empirical studies	19
2.4 Summary	23
CHAPTER THREE	
3.1 Research design	26
3.2 Population of the study	26
3.3 Sample and sampling techniques	27
3.4 Research instruments	28
3.5 Validation of research instruments	28
3.6 Reliability of research instruments	29
3.7 Administration of instrument	29

3.8 Method of data analysis 29
CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA
4.1 Analysis of research questions 30
4.1.1 Demographic description 30
4.1.2 Research question 1 30
4.1.3 Research question 2 32
4.1.4 Research question 3 33
4.2 Analysis of Null hypothesis 34
4.2.1 Analysis of Null hypothesis 1 34
4.2.2 Analysis of Null hypothesis 2 34
4.3 Discussion of findings 35

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION
5.1 Summary 37
5.2 Conclusion 37
5.3 Recommendations 38
5.4 Contribution to existing knowledge 38
5.5 Suggestions for further research 39
REFERENCES 40
APPENDICES 44

LIST OF TABLES

Table		Page
3.1	Students Population by School and Gender	26
3.2	Showing students' population by schools selected	27
4.1	Distribution of the respondents (students) by their gender	30
4.2	Positive influence of peer group on geometric achievement	30
4.3	Negative influence of peer group on geometric achievement	32
4.4	Showing relationship between peer groups	33
4.5	Independent t-test showing differences on the positive influence of peer group in geometric achievement based on gender Testing null hypothesis 1	34
4.6	Independent t-test showing differences on the negative influence of peer group in geometric achievement based on gender Testing null hypothesis 2	35

ABSTRACT

The study investigated, peer group influence on geometric achievement among some selected senior secondary schools in Bosso Local Government Area, Niger State. The study was guided by three objectives, three corresponding research questions and two research hypothesis were stated and tested at 0.05 level of significance respectively. The purpose of the study were to determine if peer group has positive influence on geometric achievements and also to examine if peer group has negative influence on geometric achievements. The study adopted a survey research design, the target population consisted of 568 senior secondary school students (SSII) (314 male and 254 female). A reliability index of 0.75 was obtained. The findings of the study revealed that peer group has positive influence on geometric achievement among senior secondary students while peer group does not have a negative influence on students' geometric achievements in senior secondary schools which clearly showed that there was a positive relationship between peer group influence and geometric achievement among senior secondary school students. The study concluded that peer group have a positive influence and relationship on geometric achievements among senior secondary school students. The study recommended that parents should have effective supervision and should not allow other home environmental factors to distract their children and also trained counsellors should be posted to all the secondary schools so as to help counsel few adolescents on positive and negative influence.

CHAPTER ONE

1.0 Background of the Study

Mathematics is defined as the scientific study of quantities, including their relationship, operations and measurements expressed by numbers and symbols as defined by James & James (2017). Traditionally it is defined as the scientific study of quantities, including their relationship, operations and measurements expressed by numbers and symbols. Mathematics is a compulsory subject that cuts across every other field. According to Ayinla, (2011), mathematics is the pillar of all knowledge showing its relevance to all disciplines. Educational activities are geared towards ensuring that students achieve mastery of educational objectives. In school, the extent to which these objectives have been achieved is determined by their level of time management as students' success is reflected in their academic performance. Their influence begins at an early age and increases through the teenage years, it is natural, healthy and important for adolescent to have and rely on friends as they grow and mature. On the other hand, the term "pressure" implies the process that influence people to do something that they might not otherwise choose to do.

According to Hartney, (2011) peer pressure refers to the influences that peers can have on each other. Peer pressure is emotional or mental forces from people belonging to the same social group (such as age, grade or status) to act or behave in a manner similar to themselves (Weinfied 2010). Jones, (2010) defined peer pressure as the ability of people from the same social rank or age to influence another of same age, bracket peer pressure is usually associated with teens although its influence is not confined to teenagers alone.

Mature adults, teens, young adults and children can be seen doing things in order to be accepted by their peers. Peer pressure is commonly associated with episodes of adolescent risk taking (such as delinquency, drug abuse, sexual behaviours), because these behaviour commonly occur in the company of peers. It can also have positive effects when youth are pressured by the peer toward positive behaviour, such as excelling in academics (Kellie, 2013). However, peers can also have a negative influence. They can encourage each other to skip classes, steal, cheat, use of drugs or alcohol, or become involve in other risky behaviours. Majority of adolescents with substance abuse problems began using drug or alcohol as a result of peer pressure. Negative peer pressure may influence in various ways like joining group who drink alcohol, smoke cigarette and Indian hemp among others. It may also lead to the decision to have a boy friend/girl friend; Peer pressure indulges youth into loitering about in the streets, watching films and attending parties during school hours, taping as alternative to stealing which may eventually graduate into armed robbery. (Arief, 2011), Peer pressure may be present in the workplace, at school or within the society; it can affect people of all ages. It may affect people in different ways but here, the focus is on peer pressure as it influences academic performance of school adolescents. Peer pressure may have a positive influence and help to challenge or motivate one to do best. Peer pressure may also result in one doing thing that may not fit with ones sense of what is right or wrong. In other words, when peer pressure makes one do things that people frown at, it is a negative peer pressure. Operationally peer pressure is a force exert by people that is influenced by ideas, values and behaviour either positively or negatively and always

associated with adolescents.

According to Olalekan (2016), it is generally observed that peer group has a lot of influence on students. This is seen from the role played by the peer group in the life and learning of a child, evidence abound that students feel more comfortable and relaxed among fellow students. A child who is brilliant and surrounded by dull friends would lose interest in learning. On the other hand, a peer group which is prone to study would have positive effect on a dull member towards learning and stimulate his/her interest on learning. Katz in Olalekan (2016) wrote that the nature of a peer group determines the impact on the motivation of and achievements of its member. He further suggests that one group may have a negative impact on its members while the other may have a positive impact on its members as well.

Geometry is one of the oldest branches of mathematics. The word geometry in the Greek language translates the words for”Earth” and”Measure”. The Egyptians were one of the first civilizations to use geometry. The Egyptians used right triangles to measure and survey land. In our modern times, geometry is used to in fields such as engineering, architecture, medicine, drafting, astronomy, and geology. Geometry as a basic and important branch of mathematics is the study of size, shape and position of 2-dimentional shapes and 3-dimentional figures. There are many interesting and sometimes surprising results in geometry that can stimulate students. Presenting it in a way that stimulates curiosity encourages exploration that can support learners' intuition; thus enhancing communication, students’ learning and interest in mathematics. This would further encourage students to discuss problems in geometry, articulate their ideas and develop

clearly structured arguments, skills and recognition of the importance of proofs in mathematics (Tsoho, 2011). As important as this aspect of mathematics is however, students' achievement in this area has not been encouraging.

1.1 Statement of the Problem:

Parents, teachers, Curriculum experts have expressed considerable concern about students' poor geometry performance in external examination such as West African Examination Council. So also are teachers and school counselor. These groups of individuals tend to point accusing fingers on influence of negative peer pressure and poor attitude of students as being responsible for poor geometric achievement among senior secondary school students. These factors are suspected for the luring of adolescents into engagement in negative habits such as excessive drinking of alcohol, smoking, of Indian hemp, engagement in unhealthy sexual behaviour, cultist activities and other maladjustive behaviours that distract them from academic pursuit. These unhealthy behaviours of adolescents which in turn impacts geometric achievement make the researcher to ask "why are Nigerian adolescent not very concern about the current trend on their geometric achievement in mathematics examinations? Could it be that they are insensitive to the possible negative influence of peer pressure and poor students' attitude on their geometric achievements. It is in view of these concerns that this study was carried out to determine peer group influence on geometric achievements among some selected senior secondary school students in Bosso Local Government Area of Niger State.

1.2 Objective of the Study:

The general purpose of this study is aimed at finding whether or not peer group have influence on geometric achievement among some selected senior secondary school students following the specific objectives.

1. To determine the influence of peer group on geometric achievement in senior secondary school students.
2. To determine if peer group has positive influence on geometric achievements.
3. To examine if peer group has negative influence on geometric achievements.

1.3 Research Questions:

The following research questions were raised to guide the study in order to know the factors and strategies to be used in the teaching and learning of geometry in secondary schools.

1. Does peer group have a positive influence on geometric achievement among senior secondary school students?
2. Does peer group have a negative influence on geometric achievement among senior secondary school students?
3. Is there a relationship between peer group influence and geometric achievements?

1.4 Research Hypotheses:

The following null hypotheses were formulated to guide the study.

Ho_1: There is no significant difference on the positive influence of peer group in geometric achievement based on gender.

Ho_2: There is no significant difference on the negative influence of peer group in

geometric achievement based on gender.

1.5 Significance of the study:

The current study aims to examine the link between Peer Group Influence and Geometric Achievement among some selected Senior Secondary School Students.

The findings of this study would benefit teachers, parents, students, educational policy makers and researchers. The outcome of the study would provide useful information to teachers on what to consider before advising students on choice of peer groups in secondary schools. This would go a long way in reducing wrong advice among peers in secondary schools. Through this research work, students will understand parameters to be considered before making choice of peer group. Students would use the outcome of the study to determine how peer group influence affects their geometric achievements. The result of the study would enable the educational policy makers to acknowledge the importance of counseling services in secondary schools, this would motivate them to post specialist that will counsel students on the influence of peer group influence on geometric achievements among some selected senior secondary school students. Finally, the findings of this study could serve as a point of reference for further research on similar topics

1.6 Scope of the Study:

The study focused on the influence of peer group and how it affects geometric achievement among some selected senior secondary School students. The study was carried out in some selected senior secondary schools in Bosso Local Government Area of Niger state. The scope was limited to five (5) secondary schools in the area and the respondents used were senior secondary school students (SS II).

1.7 Limitations of the Study:

This study however depends on the responds given by the respondents. As postulated by Abirl (2006), the procedure of questionnaire method tends to be unreliable for it depends entirely on the cooperation of the respondents who may just endorse opinions which they consider generally accepted in the society.

1.8 Operational Definition of Terms:

Aristotle said that intelligent discussions must begin with definition of terms. Thus the researcher deems it fit to give operational definition to the following concerned terms in the study.

Peers: This refers to children of same sex and usually within the same age range.

Peer Group: This is the association of close friends of the same sex, which are bound together by common emotional attachment and have a complex social system of which they posses certain code of conduct such as dressing codes.

Academic Achievement: This is the level of achievement attained through efforts or skills during the learning processes (theoretical and practical) and has effect on the standard of education.

Influence: This refers to the effect which an element has on another specific element.

CHAPTER TWO

Literature Review

2.1 Conceptual Framework

2. 1.1 Concept of Peer

According to Salvador (2011) a peer is someone who is same to another in capacity, qualification, and age, historical past and social popularity. Peer is someone who belongs to the equal age group or social group.

2.1.2 Concept of Peer Pressure

Peer pressure is influence that a peer group, observers or people exert to inspire others to exchange their attitudes, values or behaviours and agree to the group norms. Peer pressure is the influence of a social group on an individual. Bobbies and Elhaney, (2012) indicate that peer pressure refers back to the manner people of the same identical social group act or trust so as to persuade one another, frequently in bad approaches. Peer pressure is something every person has to cope with at sometime in one's existence. How successful one handles peer pressure relies upon to a notable individual's self idea and function in the world (Hardcastle, 2012). Peer pressure is described as when human beings of one's age encourages or urges him to do something or to hold off from doing something else, irrespective of the person's choice to or not to Uche, (2010). Peer pressure contains a set of group dynamics where by a group in which one feels comfortable may also override private habits, individual ethical inhibitions or idiosyncratic wants to impose a group norm of attitudes or behaviour. Peer pressure is emotional or intellectual pressure from human

beings belonging to the same social group (which includes same age grade or reputation) to act or behave in a way just like themselves. Peer pressure has an excellent effect on adolescent conduct and reflects young people's choice to fit in and be well-known with the aid of using others (Bern, 2010). Peer pressure can also additionally have a superb effect and help to or inspire us to do our best. Peer pressure might also bring about people doing things that might not fit with their experience of what's right and wrong (Black, 2011). Peer pressure may be influence in a number of ways: style preference, alcohol and smoking and different drugs use, decision to have a boy friend/girl friend, preference of who are our friends, organizing and increasing events. Peer pressure can be pressure in the work place, at school or within the general community. It can have an effect on humans of every age and backgrounds. Peer pressure can result in experimentation with drugs, alcohol, intercourse, Skipping school and diverse excessive-hazard behaviour. If there's a surprising change in a child's appearance, clothing and attitude, in particular if followed through secretive conduct, he or she may be succumbing to the influences of peers (Kirk, 2010) Parents have to be specifically alert to unexpected changes in the friends that make up their core peer group.

2.1.3 Concept of Academic Performance

Academic performance of a child could be described as the learning outcomes of the child. This consists of the information, abilities and ideas, received and acquired via their course of study within and outside the classroom situation (Epunam, 2014). It is the final results of determination, hard work, of student in academic pursuit. Pandney, (2010) defined academic achievement as the overall performance of the students in the subject they study

in the school. This determines the students' status in the class. This offers children an opportunity to develop their talents, enhance their grades and prepare for future academic challenges. Academic performance refers to someone's performance in a given academic area (e.g. reading or language arts, arithmetic, science and other areas of human learning. Academic performance relates to academic subjects a child studies in school and the skills the child is expected to grasp in each (Kathryn, 2010). Academic performance refers to excellence in all academic discipline, in a class as well as extracurricular activities. It consists of excellence in sporting behaviour, confidence, communication skills, and others. Steinberger (2011) posit that academic performance encompasses students' ability and performance; it's far multidimensional; it's far intricately associated with human growth and cognitive, emotional and social physical development; it reflects the entire child; it is not always associated with single instance, however occurs across time and level, through a student's existence in public school and into post secondary years and working life. Academic performance refers to how nicely a student is accomplishing his responsibilities and studies.

According to Uche (2010) parental socio-economic status of the children of literate and high income parents perform better in school than the ones from poor and uneducated parents. Children from high socio economic homes eat balanced diet, enjoy good health and facilities that stimulates their intellectual activity and make them perform better academically than their counterparts who take pleasure in smoking cigarette, India hemp which have scattered their brain which might also additionally end result to poor performance. He asserts that adolescent who come from homes regarded as having proper

or high socio-economic status may also generally tend to do higher than the ones who have bad homes. Most fundamental problems of life are taught to children by their parents in particular mothers who spend longer hours with the children. The extents to which parents encourage their children in their academic works have an effect on the level of performance of the children. Parental educational history has also been diagnosed to have a great impact on the education and academic performance of a child.

(Uche, 2010) observe that parents with high academic history generally tend to gear their children closer to reading courses that they're proficient in, gazing them to ensure that they do their assignment, stick to their time table through studying always with a view to assist their children to perform better academically. When parents are inquisitive about their children's education, the children generally tend to perform better. On the other hand, children from parents that are businessmen and women in a bid for materialism, generally tend to leave the house as early as and come back late in the night. They left the training and supervision of their children in the hands of house help. The children come back from school, spend maximum of their time playing, doing all kinds of inappropriate things at the expense of their studies. At the end of the day it will have an effect on their academic performance. Lack of parental supervision offers the growing child freedom that could be dangerous. The adolescent engage in activities along with delinquent acts without knowing the consequences. Location of a home is another variable that affect the academic performance of a child. Children from houses located in urban regions may also have a tendency to perform better academically than children from houses in rural regions.

Uche (2010) pointed out that location is an important variable that influence academic

performance of a child. Schools in city vicinity have a tendency to be nicely equipped with material resources needed to enhance learning. The kind of accommodation provided to a child also affects his ability to learn and his subsequent academic performance. Pleasant and conducive environment when provided give rise to pure thought, better concentration and understanding and enhance performance. Noisy overcrowded and busy domestic surroundings have a tendency to affect the rate of concentration of adolescents and lower their academic performance.

2.1.4 Concept of Geometry Achievement

Geometry is one of the most essential branches of mathematics education, due to the fact that the goal of the geometry teaching is to offer students with the ability of critical thinking, problem solving, and a better understanding of the other topics in mathematics by making the students have a high level of geometric thinking skills (Şahin, 2015). Difficulties arise from the need to understand mathematical language in the field of geometry, while integrating it with prior knowledge, in parallel to the students' level of intellectual development. Teaching geometry is a difficult task for teachers. The problems require excellent teachers with adequate training and abilities in order to perform the task of mediation between material and learner. To assist students conquer learning difficulties in geometry, a program was devised that combines use of teaching strategies. This program integrates focused teaching strategies obtained by students through classroom teaching that gives students tools to deal with fixing different problems. Using this approach is suitable for every student, does not require repetition or oral memorization by students, which have not proven to be tools for fixing problems in geometry. Using these strategies allow

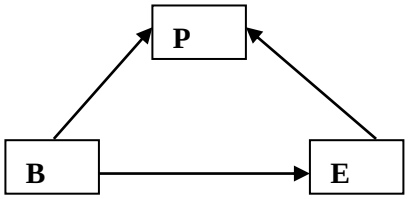
students to develop talents to remedy problems at any level. Teaching these strategies could be applied through mediated teaching in class by teachers in parallel with teaching the contents of the curriculum.

Different research (Shalev, 2010; Pelach-Borowitz, 2014) have dealt with the link between using teaching strategies and students' achievements. Practice strategies based on computers, the use of drawings in geometry and Van Hiele's levels of thinking model (Idris, 2010; Kutluca, 2013) to solve problem in geometry in addition to different strategies used by mathematics teachers in teaching computational geometry, trigonometry (Aydoğdu, 2014). There are those that dealt with various factors and thinks between them and the ability to solve problems in geometry, such as: motivation, feelings, drawing skills (Bailey, Taasoobsshirazi & Carr 2014).

2.2 Theoretical Framework

2.2.1 The Social Learning Theory

This theory was propounded by Albert Bandura in 1997.He was born on 4th December, 1925 in the small town of Mundare in Northern Alberta Canada. The theory is based on the major premise that behaviour is learned and can be unlearn. Behaviour is in general, a characteristic of one’s personality and the environment. Man is born with some innate potential with the environment conditions. Similarly, one can affect his or her environment using the personality qualities. Consequently, as one interacts in the environment, the adolescents consciously or unconsciously observes and imitates and displays behaviour of models. Hence, Bandura posits that there is interrelationship between man’s personality, the behaviour and environmental factors.



According to Bandura indeed, the entire three factors: the person, the behaviour and the environmental situation are highly interrelated variables each being capable of influencing the other, this can be illustrated using the diagram. The social learning theory emphasizes the significance of observing and imitating the behaviour, attitudes and emotional response of others. Thus it focuses on learning through observing and imitation. Imitation and modeling of influential persons or models rely on reinforcement. This reinforcement can either be direct or vicarious in direct reinforcement, the individual imitating the model gets reinforcement directly. When a child, for instance is praised for displaying a behaviour, he has obtained direct reinforcement. In vicarious reinforcement, the person imitating the model does not get reinforced directly. It is rather the model that is strengthened. When one watch a model being strengthened, he is likewise strengthened indirectly. This is vicarious reinforcement. The motivation to identify with a particular model stems for the fact that this model possesses an exceptional quality which the individual would really like to possess. Identification with a model involves the person taking on observed behaviours, values, beliefs and attitudes of the individual with whom he is identifying. Relating it to the present study, adolescents can model their behaviour after their friends who have fine attitudes and behavior towards education; in order to beautify their academic performance.

2.2.2 Social Control Theory of Hirchi

Social control theory was propounded by Hirchi (1960).Social control theory refers to the

societal and political mechanism or method regulates individuals and group behaviours, leading to conformity and compliance to the guidelines of a given society, state or social group. According to the theorist he believes that exploiting the strategies of socialization and social learning builds self control and decreases the inclination to take pleasure in any horrific behaviour. The theory stipulated that ties or bonds which lead adolescents in conformity to family, school and different factors of societal beliefs serve to diminish adolescents propensity for deviant behaviour. The theorist believes that anti-social behaviour takes place only when such bonds are weakened or are not mounted. Thus, if ethical codes are internalized and individuals are tied to and have a stake in their wider community they will voluntarily restrict their propensity to commit deviant acts.

In socialization, this formation of bond between individual and the society comprises of four elements which are attachment, commitment, involvement and beliefs. Attachment refers to the effective ties which the adolescents form with significant others like parents, teachers among others who have a tendency to present among others optimal conformity to socially accepted behaviour. Commitment refers to the aspiration or desires which an individual set for self. Adolescents with well defined goals have a tendency to reduce propensity for antisocial behaviour due to the fact that they consider in mind that they have much to lose as opposed from their counterparts who engage in drinking, smoking, relationship and criminal act. Beliefs are the extent to which an individual accepts the ethical values of the society. And the extent to which an individual accepts this ethical values decide the individual's propensity for antisocial behaviours. The theory says that trends in increased crime rates are associated with a greater dispersion of everyday

activities with peers, away from parental supervision and supplying the opportunity for delinquency. Study findings have been largely consistent with these theoretical perspectives.

In line with this study, adolescents that conform to the rules set up by the significant others like, parents, teachers, peers and the likes which make them to be acceptable in the society will lessen his propensity to deviant behaviour which eventually enhances his or her academic performance. However, an adolescent could experience rejection from his or her peers and additionally forced by them to conform in opposition to his or her wish. This form of treatment could make him or her to lose his or her identification as a completely unique individual. This might also have an effect on the adolescent time management and performance in school. This theory relates to the present study in terms that adolescent family time is a protective factor against problem behaviours while time spent with peers is a risk for problem behaviours.

2.2.3 Pickle Jar Theory

The Pickle Jar theory was propounded by Wright (2012). He used the analogy of an empty jar to think about how adolescents make use of available fix amount of time on everyday basis. Pickle jar' theory believes in scale of preference. This implies planning for all activities and arranging them to the most pressing ones. If we plan our agenda we can get essential work executed while leaving time for the small things that make life fun. The theorist is of the view that if adolescents must plan and make appropriate use of their time schedule, they can get important works carried out while still leaving time for extra-curricular activities.

According to the theorist, this method will make adolescents better and discover ways to manage their time and use it correctly in useful activities. It is of paramount importance to note that this method prepares one to engage in a specific task at a scheduled time while still having more time for the activities to revel in. Pickle Jar theory emphasized that no time management should be without stability. He is of the view that time management balances all activities one engages himself with. He is of the view that adolescents ought to make sure that time should first be allocated to their most essential needs before the less essential ones. The theory stresses that if adolescents must make time, for everything, and the whole thing virtually sits nicely in which it is speculated to be, there could be stability in time management. The theory is consequently used to provide clarification on how in-school adolescent manage their time beginning from the more vital matters including attending classes, reading and doing class assignment, while the less critical matters like, watching home movies, playing football, attending parties and the likes have to be minimized. Furthermore, time management is like keeping diary that schedules the persons time in terms of keeping track of everyday plans and activities. In line with the present study, any time completely controlled leaded to productivity. For in school adolescents any time properly managed might do better in academic performance. On the other hand, when adolescents fail to plan and manage their time nicely, it could lead to unproductivity and negative performance in school.

2.2.4 Van Hiele's Theory

Van Hiele's Theory (1959) is the main theory engaging in the development of geometrical thinking. The theory discusses the various stages of intellectual development of geometry

learners. Acquisition of skills is essential to the learning of geometry, however it is important for students to attain a level of intellectual development required for understanding geometry. Geometry learners' intellectual development can be hierarchically organized on five levels. Sarfaty and Patkin (2010) listed the levels of geometric thinking**:** **Recognition, Analysis, Ordering, Deduction, Rigor.**

Piaget (1960) has emphasized the covert cognitive approaches taking place in the learner, which means the learner's individual development. In contrast, Vygotsky (2011) emphasized social-cultural processes as the source of intrinsic cognitive change. Vygotsky (2011) argued that developmental strategies and learning processes aren't equal. The developmental process follows gaining knowledge. The latter takes place in the area of proximal development and the learning process becomes a developmental process (Miller, 2011). According to Vygotsky (2011), what exists within the child as Zone of Proximal Development will appear in the future as real development.

Teaching geometry is a tough mission for teachers. Geometry teachers need to develop expertise in the formal a part of the subject and its combination with verbal explanations that have unique wording geometry. These problems require teachers with high discourse capacity, which are certified and capable so that they can fulfill the task of mediating the material to the learner in a heterogeneous group of learners at the same time while using varied tools and skills and growing solution strategies so as to represent a huge and significant mediation tool. Teaching strategies are defined as methods that the teacher takes to perform the goals of the lesson (Schroeder, Scott, Tolson, Huang & Lee, 2010). Learning strategies are ways to enhance teaching and learning. In addition, they are a series

of cognitive process that affects information processing with a view to offer students with tools that will help them learn, solve problems, and complete tasks independently. Strategies of teaching formal geometry are based totally on the traits of the approaches which permit for quality teaching-learning-evaluation processes as described in Director General Circulars (2012) in Israel.

The proposed program is based on Feuerstein's approach (2015). Feuerstein believed the student is capable to accumulate not only knowledge and skills however additionally new cognitive structures and this realization requires an investment of effort and resources. This capacity is imparted to students through mediated learning in which he or she has direct interaction with the environment through direct exposure. This direct interaction and exposure provides the learner not only knowledge or skill, but also methods of observation, approaches and ways of locating the link between them.

2.3 Review of Empirical Studies:

2.3.1 Studies on Peer Pressure and Academic Achievement

Omotere (2011) conducted a research on the influence of peer group on adolescents, selected schools in Ogun State. The study investigated the effect of peer group on adolescent's performance. Descriptive research methodology was used. Random sampling techniques were also adopted in selecting one hundred fifty (150) in-school adolescents from four (4) secondary schools in two Local Government Areas of Ogun State. Questionnaire was developed to acquire records. The data collected was analyzed using t-test and Pearson. The findings of the study revealed that peer group ought to undoubtedly impact the academic performance of in-school adolescents. In line with present study

parents and teachers need to offer good guidance to adolescents to assist them recognize how the friends they keep can both positively or negatively affect their academic performance in school. Also, in-adolescent have to relate with students that will influence them academically.

Akpobia and Nidah (2012), carried out a study on incidence and factors associated to the drop out among secondary school students in Ogoja Local Government of Cross River State. A descriptive survey design was used for the study. The population of the study was 240 drop outs identify in the school record for the study area. There was no sample due to the fact that all of the population was used. The instrument used for the study where questionnaire and oral interview, the study were questionnaire and oral interview on the cause and magnitude to the school dropout in vache clan. Based on the analyzed data, the following are the main findings. Majority of pupils/students dropped from school in 1995/96 is 11.2% followed by 1996/97 is 8.8%, while few dropped out in 1997/98 is 7.0%. This situation is however not encouraging, on account that more youths are expected to be literate due to the want for educational advancement in science and technology. The above research study related to the present because, it reveals the factors related to drop out among secondary school students is negative peer pressure influence which make them not to concentrate on their educational pursuit which result to poor performance. Hence, they cannot cope with academic advancement they now decided to drop out of the school.

Ikwuji (2011) carried out a study on influence of age, gender, and value orientation on adolescent students' ethical judgments in conflict situations. The researcher discovered out that majority of the adolescents based totally their ethical judgment in conflict situations on

peer-approved values shows that the peer-group has enormous influence on how the adolescents think and act. The researcher also discovered that there was no gender difference between adolescent male and female of their ethical judgments in conflict situations. This indicates that during organizing a moral instruction class the teacher ought to make it a factor of responsibility to peer that each sexes blend freely in order that they could share moral experiences in discussing conflicting moral problems. Hence, parents, teachers and other significant adults must keep away from conduct which can without problems be imitated through adolescent students such as drunkenness, telling lies and smoking relate. Relating the study to the present study, in-school adolescent must be imitators of suitable behaviour.

Okoye (2013) carried out study on the effect of socioeconomic status of parents on academic achievement of students in selected secondary schools in Orlu Division of Imo state. Destructive sources were used in carrying out the study. The data were analyzed with the use of mean, standard deviation and t-test. Research questions three and five were answered using Pearson product moment correlation co-efficient. The level of statistical significance taken into consideration for accepting the hypothesis as tenable was 0.05. Structured questionnaire and oral interview were used in the study. A sample of twenty families was used. He came to the conclusion via his findings that two variables, socio-economic status of parents and students achievement were not related. He found out that there is no tremendous distinction among the performance of students of high socio-economic status and other students from low socio-economic status. Adolescent from low class families, work hard with little facilities in the school and at home still perform

nicely in school. The above research study is related to the present study, stating that academic achievement relies on hard work and determination to make it.

Aryana (2010) carried out a research on the effect of self-esteem on academic achievement in the pre-university students. It aimed at figuring out whether or not there are differences in academic achievement of boys and girls. The goals of this study were accomplished by using the coppersmith questionnaire and the students' grade in their current and previous semesters. The random sampling was used for collecting the data and as a consequence 50 males and 50 females were selected randomly. The questionnaires were allotted among 100 students in Qaemshaho schools. The data were analyzed using mean and standard deviation. There sult demonstrated that there was significant ($p < 0.01$) positive relationship between self-esteem and educational success. Moreover, there was significant difference in academic achievement of boys and girls. However, no significant difference was discovered in self-esteem of males and females. The results recommended that high self-esteem is an important factor and it strengthens the prediction of academic achievement in students. The study reviewed above investigated the relationship between self-esteem and academic achievement in the pre-university students, while the existing study investigated the relationship among peer group influence and geometric achievement among senior secondary school students.

Keith (2010) carried out a study on the effect of school libraries on academic achievement. The study was carried out in Okigwe senatorial zone. Eight library schools were used and a hundred and twenty students were used as sample. Questionnaires were administered he found out that schools with well equipped library, perform better than schools in which

libraries are not well equipped he similarly stated that libraries offer academic materials to enhance the curriculum and give limitless opportunities for students learning. The quality of school library services makes difference in academic achievement, (library research service, 2000). It promotes the growth of knowledge. Relating this study to the present study one can examine that any adolescent who utilized the library thoroughly will do well in his/her academics.

Izundu (2011), carried out a study on the effect of home Environmental factors on academic achievement of secondary school students in Onitsha L.G.A. A correlation design was employed in carrying out the study. The study was carried out in Onitsha Local Government Area of Anambra State. The sample for the study was four hundred and fifty (450) students. Stratified random sampling technique was employed in choosing ten (10) secondary schools in Onitsha Local Government Area. The schools were stratified according to location and gender. The instrument used for the study was questionnaire titled: Relationship between home environmental factor and academic achievement of secondary school students". The instrument was used to elicit desired facts from the respondents. The instrument was analyzed by the use of mean and standard deviation, whilst the null hypotheses were examined by the use of 'Regressional Analysis'. The level of statistical significance taken into consideration for accepting the hypotheses as tenable was 0.05. The researcher found out that most students in secondary schools in Anambra State that comes from low socio-economic families however it does not have an effect on their academic performance adversely. Again, it became proven that most of the families in Anambra State are unstable. But this does not have an effect on the students' academic

achievement. The researcher also discovered out that there is significant relationship between socio-economic status and academic performance of students' relationship.

2.4 Summary of Literature Review

The conceptual review of literature in this study focused on peer pressure, time management and academic performance of secondary school students. The review confirmed that peer pressure is the ability of people from the same social rank or age to influence another. It can be positive or negative pressure. Peer pressure has a much greater impact on adolescent behaviour than some other factor. It can result in experimentation with drugs, alcohol, skipping school and cultism etc. Time management has to do with making plans and scheduling activities, organizing task in a prioritized order, and allocating time according to their order of significance and helping one achieve objective. Time management is the ability to control and manipulate time. Adolescence is a transition period from dependent childhood to self sustaining adulthood. Based on this perspective adolescence are therefore a process and not just simply a specific period of social changes. Adolescence is seen as a time of transformation in many areas of one's existence. It is likewise a time for individuals to make essential decisions about their commitment to family and possibly academics. Academic performance is the learning outcomes of the child. This consists of the knowledge, skills and ideas, acquired and obtained through their course of study inside and outside the study room situation.

Theoretical framework dealt with Bandura social learning theory, Hirchi's social control theory, Wright's pickle jar theory and Van Hiele's Theory were reviewed. According to Social learning theory, it is assumed that adolescent behaviour is in general, a function of

their personality and the surroundings. This is to portray that the environmental situations existing in the life of an adolescent can influence the behaviour and notion of the adolescent and environmental circumstances also can be changed by the means of behaviour. Adolescents may develop and experience maladjusted behaviour certainly by watching peer and imitating them. Social learning theory of Bandura and social control has direct relationship with the existing study, because the theories emphasizes the importance of reinforcement and placing of bond in classroom learning. The pickle jar theory talks of the technique that will make one manage his time as a way to make him do well in his academic performance.

According to Van Hiele's Theory, Formal geometry is the trickiest subject in middle school and high school math studies. The difficulty stems from the need to understand the language of mathematics in the field of geometry at the same time integrating it with prior knowledge, parallel to the level of the student's intellectual development. To assist students conquer the difficulties in learning geometry a program was developed based on a tool combining use of teaching strategies, through mediation, such as proper use of mathematical and geometric language in particular, including visual marking and identifying memory supports to prior knowledge and using it in the process of finding an answer.

The review revealed misuse and other antisocial behaviours in adolescents. Also, the influence of parents, peers and other environmental factors around the adolescents influence their attitude. In addition the literature also showed that peer pressure is a global phenomenon prevalent in all human societies. It is however worth stating that of all

of the studies available to the researcher none appeared to focus on peer group influence on geometric achievement among senior secondary school students in Bosso Local Government Area, Niger State. It is therefore the need to fill this gap that this study was carried out.

CHAPTER THREE

Research Method.

3.1Design of the Study

The study used a survey research design where questionnaire were used to get relevant data and information about peer group influence on geometric achievements among some selected senior secondary schools in Bosso Local Government Area of Niger State.

3.2 Population of the Study

The population of this study consists of all SS II students in some selected senior secondary schools in Bosso LGA, Niger State. Available statistics show that there are 5,671 (source: Niger State Secondary Education Management Board, 2021).

Table 3.1: Students Population by School and Gender

S/N	Name of school	Male	Female	Total
1	Abdullahi Dada Secondary School Maikunkele	63	59	122
2	Bosso Secondary School	211	199	140
3	Day Secondary School Gbada Gidan Mongoro	115	94	209

4	Day Secondary School Chanchaga Minna “B”	144	161	305
5	Day Secondary School Garatu	74	47	121
6	Day Secondary School Maikunkele “A”	68	55	123
7	Day Secondary School Maitumbi Minna	184	200	384
8	Day Secondary School Pyata	59	66	125
9	Day Secondary School Shatta	50	27	77
10	Federal Government College Minna	172	140	312
11	Government Army Day Secondary School	360	362	722
12	Government Day Secondary School Beji	79	87	166
13	Government Science College Chanchaga	220	251	471
14	Government Senior Secondary School Kampala	58	80	138
15	Government Technical College Minna	458	66	524
16	Hilltop Model Secondary School	188	292	480
17	Maryam Babangida Secondary School	0	372	372
18	Model Science College Tudun Fulani	82	96	178
19	Niger State School for Special Education Minna	25	13	38
20	Sheikh Muhammad Sanbo College of Arts and Islamic Studies Tudun Fulani	345	49	394
Total		**2955**	**2716**	**5671**

3.3 Sample and Sampling Technique

This sample size was selected using Purposive sampling method so as to capture the entire population used for the study. A sample size of 568 SS II students were selected for this study which includes 314 male and 254 female students.

Table 3.2: showing students' population by schools selected

S/N	Name of school	Male	Female	Total
1	Abdullahi Dada Secondary School Maikunkele	63	59	122
2	Day Secondary School Garatu	74	47	121
3	Day Secondary School Maikunkele "A"	68	55	123
4	Day Secondary School Pyata	59	66	125
5	Day Secondary School Shatta	50	27	77
Total		**314**	**254**	**568**

3.4 Research Instrument

The research instrument for data collection that was used for this study was questionnaire, with the modified likert scales below

1. Strongly Agreed
2. Agreed
3. Unsure
4. Disagreed
5. Strongly Disagreed.

The questionnaire was divided into two sections. The first section consists of the biographical data of the respondents; it contains three items which include: gender, age, and class.

The second section of the questionnaire contains seven items each which respondents are expected to respond using five (5) likert scales above.

3.5 Validation of the Instrument

The instrument was validated (checked) before being tested (used) by two (2) lecturers from Federal University of Technology Minna, two (2) experienced senior secondary school mathematics teachers and one (1) researcher from mathematics and education option.

3.6 Reliability of Research Instrument.

The reliability of the instrument was done at Ahmadu Bahago Secondary School Minna, Niger State which is not among the sampled schools used for the study but part of the population. The reliability of the result was obtained through test-retest application and Pearson-product moment correlation coefficient to obtain the reliability index within the interval of two (2) weeks.

3.7 Administration of instrument

The researcher collected a letter of introduction from the department that guided him through carrying out his research work in the study population. Also five hundred and sixty eight (568) copies of questionnaires were personally handed to five hundred and sixty eight (568) respondents (students) randomly in the study area.

3.8 Method of Data Analysis

The research questions were answered using mean and standard deviation to answer research questions and the level of difficulty was determined by the value of mean response, the mean response below 3.0 were rejected while the mean response of 3.0 and above were accepted.

CHAPTER FOUR

Results and Discussion

4.1 Analysis of Research Questions

4.1.1 Demographic Description

A total of five hundred and sixty eight (568) questionnaires were retrieved out of the five hundred and sixty (568) questionnaires distributed. This constitutes 100% of the total sample size and therefore found to be valid according to Adam (2007) for any analysis.

Table 4.1: Distribution of the respondents (students) by their gender

Gender of respondent	Frequency	Percent (%)
Male	314	55.3%
Female	254	44.7%
Total	**568**	**100%**

In Table 4.1, the respondents are classified by gender. The table shows the respondents by their gender. The male respondents are greater than that of the female respondents.

4.1.2 Research Question 1: Does peer group have a positive influence on geometric achievement among senior secondary school students? The answer is shown below on table 4.2.

Table 4.2 Positive influence of peer group on geometric achievement

Items	N	Mean	Std. Deviation	Decision Mean
My friends motivate me to study.	568	3.33	1.006	Agree
I learn better when I socialize with my friends.	568	3.35	0.857	Agree
My grades are always higher when I engage in group discussions.	568	3.31	0.884	Agree
I engage in group study with my friends.	568	3.21	0.766	Agree
Associating with intelligent people in my class improves my grades.	568	3.49	0.631	Agree
I learn new geometric concepts from my friends.	568	3.15	0.625	Agree
My friends teach me geometry	568	3.52	0.517	Agree

after school.		
Grand mean	**3.34**	**Agree**

Decision mean 3.0

Table 4.2 above reveals that peer group have a positive influence on geometric achievement among senior secondary school students; item one has a mean of 3.33 and a standard deviation of 1.006, item two has a mean of 3.35 and a standard deviation of 0.857, item three has a mean of 3.31 and a standard deviation of 0.884, item four has a mean of 3.21 and a standard deviation of 0.766, item five has a mean of 3.49 and a standard deviation of 0.631, item six has a mean of 3.15 and a standard deviation of 0.625 and item seven has a mean of 3.52 and a standard deviation of 0.517. The table revealed further that, the grand mean score of responses to the seven items was 3.34 which was greater than the decision mean score of 3.0. This implies that peer group has a positive influence on geometric achievement among senior secondary school students.

4.1.3 Research Question 2: Does peer group have a negative influence on geometric achievement among senior secondary school students? The answer is shown below on table 4.3

Table 4.3 Negative influence of peer group on geometric achievement

Items	**N**	**Mean**	**Std. Deviation**	**Decision Mean**
My grade in geometry is low when I associate with friends.	568	2.30	0.482	Disagree
My friends distract me from studying my books.	568	2.44	0.497	Disagree

I am not comfortable when studying geometry with my friends.	568	2.37	0.482	Disagree
I lose interest in mathematics class because of my friends.	568	2.84	0.650	Disagree
I do not learn new geometric concepts from my friends.	568	2.88	0.737	Disagree
My friends do not motivate me to learn.	568	2.91	0.707	Disagree
My friends do not assist me in doing my assignments in geometry.	568	2.41	0.492	Disagree
Grand mean		**2.59**		**Disagree**

Decision mean 3.0

Table 4.3 above reveals that peer group have no negative influence on geometric achievement among senior secondary school students; item one has a mean of 2.30 and a standard deviation of 0.482, item two has a mean of 2.44 and a standard deviation of 0.497, item three has a mean of 2.37 and a standard deviation of 0.482, item four has a mean of 2.84 and a standard deviation of 0.650, item five has a mean of 2.88 and a standard deviation of 0.737, item six has a mean of 2.91 and a standard deviation of 0.707 and item seven has a mean of 2.41 and a standard deviation of 0.492. The table revealed further that, the grand mean score of responses to the seven items was 2.59 which was lesser than the decision mean score of 3.0. This implies that peer group has no negative influence on geometric achievement among senior secondary school students.

4.1.4 Research Question 3: Is there a relationship between peer group influence and geometric achievements?

Table 4.4 showing relationship between peer groups

Question	Mean	Remark
Positive influence	3.34	Agree
Negative influence	2.59	Disagree

From Table 4.2 and Table 4.3 which forms Table 4.4. It is clear that there is a relationship between peer group influence and geometric achievement seeing that peer group pressure affects geometric performance positively and not negatively looking at the mean, seeing that the first mean 3.34 agrees that there is positive influence while the second mean 2.59 disagrees that there is no negative influence. Therefore, it suffices to say that there is a positive relationship between peer group influence and geometric achievement among senior secondary school students.

4.2 Research Hypotheses

4.2.1 Research Hypothesis One: There is no significant difference on the positive influence of peer group in geometric achievement based on gender.

Table 4.5 independent t-test showing differences on the positive influence of peer group in geometric achievements based on gender.

Gender	N	Mean	Std. D	DF	t-value	p-value
Male	314	23.29	1.748	566	0.932	0.352
Female	254	23.43	1.687			

From Table 4.5, it is revealed that there are no significant differences on the positive

influence of peer group in geometric achievement based on gender as male have the mean score of 23.29 and a standard deviation of 1.748 while female have the mean score of 23.43 and a standard deviation of 1.687, with t-value of 0.932, Degree of Freedom (DF) of 566 and p-value of 0.352 which was above the significant value p>0.05. Hence Ho_1 was retained. Therefore there was no significant difference.

4.2.2 Research Hypothesis Two: There is no significant difference on the negative influence of peer group in geometric achievement based on gender.

Table 4.6 independent t-test showing differences on the negative influence of peer group in geometric achievement based on gender.

Gender	N	Mean	Std. D	DF	t-value	p-value
Male	314	18.01	0.595	566	0.367	0.713
Female	254	18.15	1.679			

From Table 4.6, it is revealed that there are no significant differences on the negative influence of peer group in geometric achievement based on gender as male have the mean score of 18.01 and a standard deviation of 0.595 while female have the mean score of 18.15 and a standard deviation of 1.679, with t-value of 0.367, Degree of Freedom (DF) of 566 and p-value of 0.713 which was above the significant value p>0.05. Hence Ho_2 was retained. Therefore there was no significant difference.

4.3 Discussion of Findings

Findings revealed that variables investigated by the researcher on peer group influence on geometric achievement among senior secondary school students were significant as the results from research questions were proven to be true on the peer group influence leading to geometric achievements. The first hypothesis was tested and it revealed that males and females views on the Positive influence of peer group on geometric achievement were similar as the results from the testing showed there were no significant differences in the view of the positive influence of peer group on geometric achievement based on gender. The second hypothesis was also tested and it revealed that males and females views on the negative influence of peer group on geometric achievement were similar as the results from the testing showed there were no significant differences on the view of the negative influence of peer group on geometric achievement based on gender.

The findings of this study revealed that peer group has a positive influence on geometric achievement among senior secondary school students. The second findings of this study revealed that peer group has no negative influence on geometric achievement among senior secondary School students. The third findings revealed that there are no differences on the positive influence of peer group on geometric achievement based on gender. The fourth findings revealed that there are no differences on the negative influence of peer group on geometric achievement based on gender.

CHAPTER FIVE

Summary, Conclusion and Recommendations

5.1 Summary

This study looked at peer group influence on geometric achievement among some selected senior secondary school students', it aimed at finding out whether or not peer group has a positive or negative influence on geometric achievement among senior secondary school students. This study found out that peer group has a positive influence on geometric achievement. The results from the study is in agreement with the view of Omotere (2011) who's study revealed that peer group ought to undoubtedly impact the academic performance of in-school adolescent. Peer group play a very vital role in students' achievement especially when a student has the right set of peers.

5.2 Conclusion

From the results of the study, the following conclusions were drawn:

1. Peer group have a positive influence on geometric achievement among senior secondary school students. Hence productive.
2. Peer group have no negative influence on geometric achievement among senior secondary school students.
3. Peer group influence has a positive relationship on geometric achievement among senior secondary school students.
4. There is no significant difference on the positive and negative influence of peer group in geometric achievement based on gender.

From the results obtained in this study, peer group pressure have the capacity to assist students in overcoming perceived difficulties in geometry, which makes it looks dreadful. It can be clearly seen from this study that peer group can influence students' interest, participation in class, study habit and academic performance.

5.3 Recommendations

Base on the findings of the study, the researcher recommends that:

1. Trained counsellor should be posted to all the secondary schools so as to help counsel few adolescents on positive and negative influences.
2. Parents should have effective supervision and should not allow other home environmental factors to distract their children. There is a need for teacher to have greater supervision and regulations on

in-school adolescents to enhance effectiveness of their poor students attitude towards geometry.

3. Curriculum planners and mathematic teachers should make efforts at providing texts books on geometry and also to encourage group discussions among peer groups. These will simplify and pave ways for learning geometry in mathematics.

5.4 Contribution to Existing Knowledge.

The Educational implications of the findings of this study include,

1. Parents, guidance and teachers should not discourage students from associating with good peer groups because it influences their performances positively.
2. Parents, guidance and teachers should monitor their children so as not to join bad peer groups because it will influence them negatively.
3. Curriculum planners and school owners should not neglect the place of peer group influence on students' achievement in geometry.

5.5 Suggestions for further research.

Based on the findings of this study the following suggestions are for further studies.

1. Further study should be carried out using larger population.
2. This same study can be carried out in another region
3. A study can be carried out to find out problems associated with peer group pressure
4. A study can be carried out using Junior Secondary School Students.

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QUESTIONNAIRE

The purpose of this questionnaire is to carry out a search on "**Peer Group Influence on Geometric Achievement among some selected Senior Secondary School Students in Bosso Local Government Area of Niger State**". Your responses are basically for research purposes. You are requested to participate in this study and information you provide will be treated with strict confidence.

You are therefore kindly requested to honestly provide the required information to the best of your ability. Thank you.

Section A: Bio Data

Please tick (✓) the appropriate column.

1. Gender: (a) Male [ ] (b) Female [ ]
2. Age: (a) 13 – 17years [ ] (b) 18 -22years [ ] (c) 23years and above [ ]
3. Class: (a) SS I [ ] (b) SS II [ ] (c) SS III [ ]

Section B

Please tick (✓) appropriately in the column that correspond with your view

Strongly Agreed (S.A), Agreed (A), Unsure (U), Disagreed (D), Strongly Disagreed (SD)

Research Question 1: Does peer group have a positive influence on geometric achievement among senior secondary school students?

S/N	Items statement	SA	A	U	D	SD
1	My friends motivate me to study.					
2	I learn better when I socialise with my friends.					
3	My grades are always higher when I engage in group discussions.					
4	I engage in group study with my friends.					
5	Associating with intelligent people in my class improves my grades.					
6	I learn new geometric concepts from my friends.					
7	My friends teach me geometry after school.					

Research Question 2: Does peer group have a negative influence on geometric achievement among senior secondary school students?

S/N	Items statement	SA	A	U	D	SD
1	My grades in geometry is low when I associate with friends.					
2	My friends distract me from studying my books.					

3	I am not comfortable when studying geometry with my friends.					
4	I lose interest in mathematics class because of my friends					
5	I do not learn new geometric concepts from my friends.					
6	My friends do not motivate me to learn.					
7	My friends do not assist me in doing my assignments in geometry.					

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION

DEPARTMENT SCIENCE EDUCATION

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Matriculation No: 2017/3/69289BE

TO WHOM IT MAY CONCERN

The student/ Candidate whose particulars appear on the form is carrying out his/her final year project work.

Please, kindly assist him/her in whatever way possible towards completing this research work.

Thank you in anticipation of your full cooperation.

Head of Department
Science Education
Fed University of Technology,
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DATE

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RESEARCH INSTRUMENT VALIDATION FORM

Sir/Ma,

The candidate JAMES F. KACHI with Admission Number 2017/3/69289BE is a student of the department. You are requested to make amends or inputs that will improve the quality of the instrument. Your professional expertise is expected to assist the researcher towards the award of the degree.

Thank you.

27 JUL 2021

Dr. Rabiu M. Bello

HOD (Signature, Date & Official stamp)

Title of the Research Instrument: PEER GROUP INFLUENCE ON GEOMETRIC ACHIEVEMENTS AMONG SENIOR SECONDARY SCHOOL STUDENTS IN BOSSO LOCAL GOVERNMENT AREA, NIGER STATE.

SECTION A

1. Appropriateness of the Research Instrument title: Appropriate
2. Suggest amendment if not appropriate: —
3. Completeness of Bio-data Information: —
4. Suggest inputs if incomplete —
5. Suitability of items generated Suitable
6. Structure of the questionnaire/ test items generated Okay
7. Structure of the instrument in line with the objectives of the study. Okay
8. Items coverage and distribution across constructs and domains measured Okay
9. Appropriateness of the instrument in relation to the type of data to be collected Appropriate
10. What is the general overview and outlook of the instrument? Simple and clear
11. Rate the Instrument between 1-10 8

SECTION B

Name of the validator: Mrs Saratu Bawa

Designation/Rank: Ass. Lecturer

Name of institution: F.U.T Minna

Department/ School: Science Education

Telephone No/GSM No: 07056590755

E-Mail Address: _____

SB. 28/7/2021

Signature, Date and stamp (if available)

RESEARCH INSTRUMENT VALIDATION FORM

Sir/Ma,

The candidate JAMES F. KACHI with Admission Number 2017/3/69289BE is a student of the department. You are requested to make amends or inputs that will improve the quality of the instrument. Your professional expertise is expected to assist the researcher towards the award of the degree.

Thank you.

Head of Dept. Science Education
27 JUL 2021
Federal University of Tech. Minna

Dr. Rabiu M. Bello

HOD (Signature, Date & Official stamp)

Title of the Research Instrument: [illegible] PEER GROUP INFLUENCE ON GEOMETRIC ACHIEVMENT AMONG SENIOR SECONDARY SCHOOL STUDENTS IN BOSSO LOCAL GOVERNMENT AREA, NIGER STATE.

SECTION A

1. Appropriateness of the Research Instrument title: The title is appropriate
2. Suggest amendment if not appropriate: Not applicable
3. Completeness of Bio-data Information: Include PhD
4. Suggest inputs if incomplete As above
5. Suitability of items generated Suitable
6. Structure of the questionnaire/ test items generated Its Okay
7. Structure of the instrument in line with the objectives of the study. Okay
8. Items coverage and distribution across constructs and domains measured Okay
9. Appropriateness of the instrument in relation to the type of data to be collected Okay
10. What is the general overview and outlook of the instrument? It should be made clearer enough for a lame man
11. Rate the Instrument between 1-10 5

SECTION B

Name of the validator: Cole A. T

Designation/Rank: Associate Professor

Name of institution: FUT, Minna

Department/ School: Mathematics ISPS

Telephone No/GSM No: 07038960556

E-Mail Address: cole.temilade@futminna.edu.ng

27/07/2021

Signature, Date and stamp (if available)