**INFLUENCE OF AFTER-SCHOOL LESSONS AND STAKEHOLDERS’ FACTORS ON PUPIL ACHIEVEMENT IN MATHEMATICS IN OYO STATE, NIGERIA**

**Osiesi, Prince Mensah**

*Department of Educational Management and Business Studies,*

*Faculty of Education,*

*Federal University of Oye-Ekiti, Ekiti State, Nigeria.*

*E-mail:* [*princeosiesi@yahoo.com*](mailto:princeosiesi@yahoo.com)

**Ekundayo, Kayode Felix**

*International Center for Educational Evaluation,*

*University of Ibadan, Ibadan, Nigeria*

*E-mail:Kayode.ekundayo@gmail.com*

**Abstract**

*The study investigated the influence of after school lessons and stakeholders’ factors (Pupil, Teacher and Parents) on pupils’ achievement in Mathematics in Oyo State, Nigeria. It study adopted the multistage sampling technique which was used in selecting the study population and sample. A total of fifteen (15) private and thirteen (13) public primary schools in Ibadan South East Local Government area of Oyo State was selected for the study. The population of the study comprised of all primary five and six pupils in the primary schools. Sample consisted of two hundred and nineteen (219) pupils, two hundred and nineteen (219) Parents of the pupils’ and forty eight (48) teachers. Data was collected with the use of questionnaires (TAASLS, PUAALS and PAASLS), attitude scale and achievement test; that were all developed and validated by the researchers. The data were collected from March to May, 2018. Data obtained were analyzed using descriptive statistics, correlation coefficient and Multiple Regression at p<0.05. The predictor variables that are most influential in predicting pupils’ achievement in Mathematics are: pupil parents’ attitude to after school lessons (β=0.57, t=3.60, P<0.05), parents’ academic qualification (β= -0.06, t= 0.95, P<0.05), peer group Influence (β=0.42, t=2.62, P<0.05) respectively. In order to improve Mathematics achievement among learners’ especially at the primary level of education, after school lessons should be reinforced; the stakeholders’ factors’ that predicted learners’ achievement in mathematics should be put into perspective.*

**Keyword:** *After School Lessons, Mathematics Achievement, Parent Factors, Teacher Factors, Pupil Factors.*

**Introduction**

Mathematics can be considered as the mother of all learning in the sciences, as it is a major prerequisite in pursuing a career in these disciplines. This perspective on mathematics may have gained more attention with the rapid advances in information communication and technology. Mathematics seems to involve not only computation but also is a tool for understanding structures, relationships and patterns to produce solutions for complex real life problems and thereby depicting its necessity for people of all ages to be successful in life. The subject also has rich potentialities of affording true enjoyment to its students. It is an important subject in the school curriculum.

Fazio and Roskes (1994), said, “attitudes are important to educational psychology because they strongly influence social thoughts, the way an individual thinks about and processes social information”. Learners are likely to learn in more effective ways if they display a positive attitude to what they learn. In other words, attitudes of learners towards Mathematics are rather important for learning and education both in and out of the classroom settings (Royster, Haris, and Schoeps, (1999). Teachers have a great influence on learners as to their display of either positive or negative attitude in the teaching-learning processes (Başer and Yavuz, 2003). According to Eggan and Kauchak (2001), positive teachers’ attitudes are fundamental to effective teaching. A teacher should be interesting and work his students into such a state of interest in what he is going to teach them such that every other object of distraction vanishes from their minds.

Teachers play crucial roles in educational attainment of learners because the teacher is responsible for the translation and implementation of educational policies, curriculum contents, instructional materials as well as assessment of pupils’ learning outcomes (Afe, 2003). The teacher also exerts a lot of influence on the process of socialization and character formation of the learners within the learning environment. Adeniji (2001) noted that teachers are highly instrumental to the success of any educational programme because apart from being at the implementation level of any educational policy, the realization of educational objectives depends largely on teachers’ dedication and commitment to work. Obadara (2011) reiterated that the classroom teacher is one of the chief determinants of educational achievement, whose academic qualifications, relevant professional training, working experience, lesson preparation, instructional delivery technique, mastery of the subject matter among others are the most significant determinants of teaching effectiveness.

Teacher qualification includes a range of variables affecting teacher quality among which are the type of teaching certification, undergraduate major or minor, undergraduate institution, advanced degree(s), type of preparation programme and years of teaching experience, to mention but a few. Abe and Adu (2013) and Wiki (2013) opined that, a teaching qualification or teacher qualification is one of a number of academic and professional degree that enables a person to become a registered teacher in primary or secondary school. According to Usman (2012), a qualified teacher can be defined as one who holds a teaching certificate and/or licensed by the state, owns at least a Bachelor’s degree from a recognized institution of learning and well qualified in his/her area of specialization.

Teacher attitude towards the teaching of a subject matter or any other educational issue (e.g. the conduct of afterschool lessons in their schools) is a potent factor that could make or mar the teaching and learning process especially as it concerns Mathematics as a subject as they appear to be the key to improving mathematics education/learning. For instance, Yara (2009) averred that teachers with positive attitude towards Mathematics were inclined to stimulate favourable attitudes in their pupils. This immediately puts the teacher in the spotlight as one whose attitude, expressed in their behaviour, has a telling effect on students. As such, for a positively balanced educational atmosphere to be regularised in the school system, teachers should possess and reflect positive attitude over any issue that surround the educational/school environment. The teacher should also fill the students with devouring curiosity to know what the next steps in connection with the subject are as this could affect their attitude to learning.

Pupil attitude to afterschool lessons is their dispositions towards the conduct or non-conduct of the programme in their schools, as pupils’ opinions/interests to their schools conducting afterschool lessons could differ over a wide range. In essence, for these pupils to actively participate and perform better in their various subjects; especially in Mathematics, their attitude towards the conduct of afterschool lessons should not be overlooked, as this could hamper their motivation to learn or achieve better in their learning endeavour. In most cases, pupils are being forced against their will by the school authority and their parents to enlist into these afterschool programmes. Thus, parents’ attitude to these afterschool programmes organized by the school authorities seems to be paramount to pupils’ level of achievement and motivation to learning.

Parents’ attitude towards the conduct of afterschool lessons seems to differ across board. It seems that many parents prefer to keep their children back in the school so as to allow them time to complete their official daily routine, especially the working class parents. Parents are no less caring or committed to their children’s success today than they were in bygone eras, but a lack of time and money makes it increasingly difficult to secure it. To this category of parents, the school is seen as a ‘saviour’, helping in alleviating the parental stress amongst others. On the other hand, some parents do not want their children to spend longer time than is required of them, their reasons stem from the cost of the afterschool lessons, boredom and excess mental stress on the child and the need for the children to return home from school and participate in home chores, as these are ‘lessons’ parents should teach their children since they are barely taught in schools. Developing positive attitudes toward school and learning seems to be an important precursor to academic success.

Learners’ attitudes towards science oriented subjects like Mathematics vary among learners especially when study habits, peer group influence and gender are taken into consideration. Study habit of pupils is the pattern of behaviour adopted by the pupils in the pursuit of their studies that serves as the vehicle of learning. It is the degree to which the pupil engages in regular acts of studying that are characterized by appropriate studying routines (e.g. reviews of material, frequency of studying sessions, and so on occurring in an environment that is conducive to studying. Study attitudes on the other hand, refers to a student’s positive attitude toward the specific act of studying and the student’s acceptance and approval of the broader goals of college education (Crede and Kuncel, 2008). In short, study habits and attitudes of students are determined through their time management ability, work methods, attitudes toward teachers and acceptance of education. It may also be as a result of peer group influence.

Peer group influence in education is a factor of importance. Different theories attempted to explain this and according to some of them, the average ability of classmates has detrimental effect on one’s schooling outcomes while others imply that it enhances one’s achievements (Marsh, 2005). Peer pressure refers to the influence exerted by a peer group in encouraging a person to change his/her attitudes, values in order to conform to group norms (Kirk, 2000). While most educators believed that peer pressure has an influence on children’s academic performance while Kirk (2000) observed that few studies have been done to prove this belief. Peer groups are very vital agent of socialization. The influence of peer group can enhance or negate a pupil’s motivation to learn as well as his/her overall academic achievement.

Motivation involves a constellation of closely related beliefs, perceptions, values, interests, and actions. Motivation within individuals tends to vary across subject areas, and this domain specifically increases with age. Motivation in children predicts motivation later in life, and the stability of this relationship strengthens with age. Traditionally, educators consider intrinsic motivation to be more desirable and to result in better learning outcomes than extrinsic motivation. In general, children appear to enter school with high levels of intrinsic motivation, although motivation tends to decline as children progress through school. Research suggests that motivation can be manipulated through certain instructional practices, although, studies demonstrate both positive and negative effects. The use of rewards may either encourage or diminish motivation, depending on the type of rewards and the context in which they are given. Motivated students study mathematics voluntarily. In the same vein, Aktan (2013) have restated that the most important motivational structure affecting fifth grade students’ motivation levels towards mathematics subject comes from extrinsic motivation. Moreover, a learner who is highly motivated in the learning and study of mathematics could eventually achieve better in the subject.

Academic achievement of a learner is the ability of such learner to study, remember facts and being able to communicate their knowledge orally or in written form even in an examination condition. It is the extent to which pupils’ apply what they have been taught or learnt at any point in time, most especially when they are assessed, in which case, they could be termed low, moderate or high academic achievers. Academic achievement is therefore a yard stick for ascertaining the capabilities of a pupil from which his overt, covert and inherent or unrevealed abilities could be inferred. Thus, students’ academic achievement cannot be completely accounted for by only one or two variables but a number of them. Since learners’ academic achievement depends on a number of variables, performance could be enhanced through identifying and manipulating each of such variables (After school lessons as one of such).

Gender is another variable that could predict learners’ achievement. Gender involves the psychological and socio-cultural dimensions of being male or female. There is need therefore to give boys and girls exactly the same opportunities and challenges. In Nigeria, gender-achievement studies include Abiam and Odok (2006) who found no significant relationship between gender and achievement in number and numeration, algebraic processes and statistics. They however found the existence of a weak significant relationship between boys and girls achievement in Geometry and Trigonometry. The academic achievement of a learner may not depend wholly on gender differences but may manifest in other areas such as socio-economic status, family size among others.

The relationship between socio-economic status (SES) and academic performance of children is well established in sociological research works (Aikens and Barbarin, 2008; Hamid 2011; Palardy, 2008; Shittu, 2004). According to American Psychological Association (APA), socioeconomic status is commonly conceptualized as the social standing or class of an individual or group, and it is often measured as a combination of education, income and occupation to mention but a few. Parent’s educational qualification and occupations are the socio-economic factors considered in the study. While there is disagreement over how best to measure SES, most studies indicated that children from low SES families do not perform well as they potentially could have performed at school when compared to children from high SES families (Considine and Zappala, 2002).

The size of the family plays a significant role as regard discipline and provision of necessary materials and emotional support needed by the pupils for effective learning. Increase in family size would alter the availability of time and material resources for the children of such families. The family size may contribute positively or negatively to pupil’s academic performance. Family size in this context refers to the total number of children in the child’s family in addition to the child himself. However, the family type that a child comes from which can either be monogamous or polygamous family may impact on the child’s academic achievement. It is important to note that either of the family type (monogamous or polygamous) family dictates the size of the family. Polygamous family is peculiar to Africa in general, Nigeria inclusive. Parental attention declines as the number of siblings’ increases and younger children perform less well than their older siblings. The parental attention lavished on children gradually wanes and causes younger children to perform below the standard of their older siblings. These factors are likely to affect pupils’ performance in Mathematics.

According to Hanushek and Kain (2005), research has been consistent in finding positive correlations between years of teaching experience and higher learners’ achievement. Teachers with more than five years in the classroom seem to be more effective. Conversely, inexperience is shown to have a strong negative effect on students’ performance. Researchers and analysts argued that assigning experienced and qualified teachers to low performing schools and learners’ is likely to pay off in better performance gaps (Adegbile and Adeyemi, 2008). The above strongly shows that subject matter knowledge (Teacher qualification, teacher teaching experience, teacher teaching methods), classroom behaviour (Teachers’ Attitude, Teaching skills and Teacher-Student relationship) are strong variables affecting learners’ general achievement.

After school lessons programmes take place after normal school hours and other out-of-school time (during evenings, weekends, and holidays). They expand learning and recreational opportunities for children, youth, and communities. Extra-murals can enhance a balanced curriculum, lead to an enhanced school experience, and personal, social, and community development. They include a wide range of activities and provide safe and healthy spaces, improve academic achievement, and trigger positive change in young lives and in the whole-school community. Learners’ who regularly engages in after school lessons seem to derive greater academic benefits than those who do not. After school programmes can’t change students’ school experiences, but they can offer a substitute environment that may be more in tune with young people’s interests, motivations and needs.

**Objective of the study**

The study objective is to ascertain the extent to which Stakeholders’ factors: Pupils (attitude to after school lesson, socio economic status, gender, study habit, peer group influence and family size); Parents (attitude to after school lesson, gender and qualification); Teachers (attitude to after school lesson, qualification, gender and years of teaching experience) influence Pupil achievement in Mathematics in Oyo State, Nigeria.

**Statement of the Problem**

For long, low academic achievement of pupils in school based and external examinations especially in Mathematics has become an issue for urgent attention in Nigeria. Strategies and programmes designed to arrest this ugly phenomenon abound, one of which includes the ‘After school lessons’ organized by schools. There seems to be a disconnection on the extent to which after school lessons and stakeholders’ factors could affect a pupils’ achievement in Mathematics as a subject. Hence, these educational stakeholders’ factors in relation to after school lessons seem to be at variance.

**Research Questions**

1. To what extent would Stakeholders’ factors: Pupils (attitude to after school lesson, socio economic status, gender, study habit, peer group influence and family size); Parents (attitude to after school lesson, gender and qualification); Teachers (attitude to after school lesson, qualification, gender and years of teaching experience) influence Pupil achievement in Mathematics?

2. Which of the set of predictor variables is most influential in predicting pupils’ achievement in Mathematics?

**Research Methodology**

**Research Design**

The study adopted the exposit facto design of the survey research type. The research type was employed because the researcher had no direct control of the dependent and the independent variables as they had already occurred.

**Population, Sampling Technique and Sample**

The population comprised all primary 5 and 6 Pupils in both private and public schools in Ibadan Metropolis, Oyo state. The study adopted the multistage sampling technique in selecting the study sample. Simple random sampling technique was used in selecting an educational zone in Oyo state; the Ibadan metropolis. A local government area from the zone was purposely selected from the educational zone. Simple random sampling was also used to select 15 private and 13 public schools in the LGAS that conduct afterschool lessons for their pupils’. Also, purposive sampling was used to select 219 primary 5 and 6 pupils along with their parents. Purposive sampling was used in selecting 48 teachers used for the study as only a few of the teachers gave the researchers access and consent in responding to the research instruments, as most teachers overly told the researchers that they had no time and interest in attending to their instruments.

**Instrumentation**

Six instruments were developed, pilot tested and validated by the researchers and were adopted in collecting data for the study: The Teacher Attitude to After School Lessons Scale (TAASLS) consisted of two sections A and B. Section A consisted of three items dealing with personal data such as gender, qualification and years of teaching experience of the teachers. Section B consisted of nineteen items. The contents of TAASLS consisted of fourteen statements for the teachers to answer. This was placed beside 4 point Likert Scale of: Very true of me (4), much true of me (3), fairly true of me (2), not true of me (1). The Pupils’ Attitude to After School Lessons Scale (PUAASLS) consisted of a section. The Section consisted of ten items. The contents of PAASLS consisted of statements for the pupils to respond to. This was placed on a dichotomous Likert Scale of: Agree (1) or Disagree (2) to enhance clarity of items for the pupils’. The Parents’ Attitude to After School Lessons Scale (PAASLS) consisted of a section which consists of thirteen items. The contents of PAASLS consisted of statements for the parents to answer. This was placed beside 4 point Likert Scale of: Very true of me (4), much true of me (3), fairly true of me (2), not true of me (1). The Mathematics Achievement Test (MAT) consisted of questions, designed to test the cognitive level of achievement of the learners’ in Mathematics. It consisted of 15 multiple choice test items with four options lettered A to D. Correct response to each of the items attracts a score of 5 while an incorrect response attracts a score of 0. The Mathematics Achievement Test (MAT) was administered to a sample of about 30 pupils in primary five who were not part of the sample for the study so as to pilot test the instrument. The scores obtained from the pilot testing were subjected to Kudar Richardsn K-R 20 to obtain the reliability coefficient of the items. The pupil study habit inventory (PSHI) consisted of fourteen items. The contents of PSHI consisted of statements for the pupils to answer in respect to their study habit. This was placed on a dichotomous Likert Scale of: True or False. The peer group influence questionnaire (PGIQ) consisted of nine items. The contents of PGIQ consist of statements for the pupils to answer. This is placed beside a 4-pointLikert Scale of: Strongly agree (4), Agree (3), Disagree (2) and Strongly Disagree (1).

In summary, the reliability of the instruments was obtained using Cronbach alpha which produced the following values: Teacher Attitude to After school lessons Scale (r = 0.68), Pupils Attitude to After school lessons Scale (r = 0.73), Parents Attitude to After school lessons Scale (r = 0.81), Mathematics Achievement Test (r = 0.76), Pupil study habit inventory (r = 0.85), Peer group influence questionnaire (r = 0.77) respectively.

**Data Collection and Analysis**

The researchers along with the research assistants administered, supervised and proffered guidelines and solutions whenever the respondents had difficulty in responding to an item or an instrument. The administered instruments were retrieved by the researchers and the research assistants. The data collected for the study was analyzed using multiple linear regressions and correlation analysis at a significant level of 0.05.

**Results**

**Research Question 1.** To what extent would Stakeholders’ factors: Pupils (attitude to after school lesson, socio economic status, gender, study habit, peer group influence and family size); Parents (attitude to after school lesson, gender and qualification); Teachers (attitude to after school lesson, qualification, gender and years of teaching experience) influences Pupil achievement in mathematics?

**Table 1: Model Summary and ANOVA for Pupils’ Mathematics Achievement.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **R = 0.77**  **R Square = 0.60**  **Adjusted R Square = 0.42**  **Std. Error of the Estimate = 20.19**  **ANOVA** | | | | | | |
| **Model** | **Sum of Squares** | **DF** | **Mean Square** | **F** | **P** | **Remark** |
| **Regression**  **Residual**  **Total** | **19243.55**  **13042.20**  **32285.76** | **14**  **32**  **46** | **1374.54**  **407.57** | **3.37** | **.00** | **Sig.\*** |

**\* Significant at p < 0.05**

Table 1 showed the combination of the independent variables (Parents’ occupation, pupil family size, pupil gender, Teacher gender, Parents Gender, Pupil Study Habit, Teacher Attitude to after school lessons, Teacher Academic qualification, Peer Group Influence, Parents attitude to Afterschool Lessons, Parents academic qualification, Pupil attitude to Afterschool Lessons, Teachers years of teaching experience) is jointly related to Pupils Achievement in Mathematics with R = 0.77, multiple R square of 0.56 and adjusted R square of 0.42. The multiple correlation of 0.77 indicates a high relationship among the independent variables. These predictor variables explain 42% of the variance observed in the dependent variable (Pupil’s Achievement in Mathematics). The observed variance was statistically significant. The significance of the composite contribution or the prediction was tested at P<0.05 using the F ratio at the degree of freedom DF 14, 32.

Furthermore, the table showed that the analysis of variance yielded F-ratio of 3.37 (Significant at P<0.05 level). Therefore, the combined contribution of the independent variables to the dependent variable was significant and that other variables not included in the model may have accounted for the remaining variance in the dependent variable. Hence, the predictor variables when combined jointly, explained about 42% of the variance in Pupils Achievement in Mathematics.

**Table 2: Summary of Relative Contribution of the Independent Variables on Pupils Achievement in Mathematics**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables**  **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **P** | **Remark** |
| **B** | **Std. Error** | **Beta** |
| 1 | (Constant) | 5.33 | 41.95 |  | 0.13 | 0.90 |  |
| Parents Attitude | 0.42 | 0.43 | 0.14 | 0.96 | 0.34 | NS |
| Pupil study habit | 1.39 | 2.46 | 0.31 | 0.57 | 0.57 | NS |
| Pupil Attitude | -.66 | 2.17 | -.18 | -.30 | 0.76 | NS |
| Peer Group Influence | 2.04 | 0.78 | 0.42 | 2.62 | **0.01\*** | Sig. |
| Teacher Attitude | -.99 | 0.65 | -.21 | -1.52 | 0.14 | NS |
| Teacher Academic qualification | -1.11 | 6.06 | -.03 | -.18 | 0.86 | NS |
| Teacher gender | -1.36 | 9.50 | -.02 | -.14 | 0.89 | NS |
| Teachers years of teaching experience | -6.30 | 4.24 | -.20 | -1.48 | 0.15 | NS |
| parents academic qualification | 7.85 | 4.73 | 0.21 | 1.66 | **0.01\*** | Sig. |
| Parents Gender | 3.46 | 6.62 | 0.07 | 0.52 | 0.61 | NS |
| pupil gender | 2.40 | 8.12 | 0.05 | 0.29 | 0.77 | NS |
| pupil family size | -2.90 | 2.49 | -.16 | -1.16 | 0.25 | NS |
| Pupil parents occupation | 5.18 | 3.67 | 0.21 | 1.41 | 0.18 | NS |

**\* Significant at p < 0.05**

Table 2 showed the extent to which the predictor variables do influence the dependent variable. Two of the thirteen predictor variables had a significant influence on Pupils’ Achievement in Mathematics. The variables are Peer group influence and Parent academic qualification (F (14, 32) = 3.37; p<0.05) while the other independent variable: Pupil Parents attitude to After school lessons, Teacher Academic qualification, Parents’ pupil occupation, Teachers Attitude to After school lessons, Pupil Attitude to After school lessons, Pupil Gender, Pupil study Habit, Teacher Gender, Teachers’ years of teaching experience and Pupil Family size, had no significant influence on Pupils’ Achievement in Mathematics (F (14, 32) = 3.37; p >0.05).

**Research question 2:** Which of the set of predictor variables is most influential in predicting pupils’ achievement in mathematics?

As indicated on table 2, the predictor variable that is most influential in predicting pupils’ achievement in Mathematics, the set of predictor variables that is most influential in predicting pupils’ Mathematics achievement are: Parents academic qualification (β= -0.06, t= 0.95, P<0.05) and Peer Group Influence (β=0.42, t=2.62, P<0.05).

**Discussion of the findings**

The result of the findings revealed that pupil achievement in mathematics is greatly influenced by peer group influence and pupil parents’ academic qualification. This finding is in consonance with the findings of Ammermueller and Pischke (2009), Graham (2008), Groux and Maurin (2006), Hoxby (2000), Hoxby and Weingarth (2006), McEwan (2003), Sacerdote (2001), Zimmerman (2003), that peer group influence do affect achievement. It also re-emphasizes the findings of Israel et al. (2001), Osiesi. M.P (2016) and Phillips (1998) that found that parental education and social economic status have an impact on pupils’ achievement. Moreover, the finding also supports that of Rivkin et al (2005) who established that teachers’ teaching experience and educational qualifications were not significantly related to students’ achievement.

Furthermore, the finding reechoes the findings of Osiesi (2016) who reported that pupil gender, Parents occupation, family size has no significant influence on pupils Mathematics achievement; Ergene (2011) who opined that study habits were positively associated with academic achievement; Okpala and Onocha 1995 and Udousoro 1999; which reaffirmed that gender of teachers failed to have significant effects on students’ performance. In the same vein, the finding of the study is in tandem with the findings of Grissmer (2003) who submitted that Parents’ level of education is the most important factor affecting students’ academic achievement and that of Taiwo (1993) who also submitted that parents’ educational background influences the academic achievement of students.

On the other hand, the finding contradicts the findings of Abu and Fabunmi (2005), Adeyemi (2010), Akinsolu (2010), Adeyemi (2008), Chhinh and Tabata (2003), Ewetan and Ewetan (2015), Fehintola (2014), Kosgei *et al* (2013) and Yala and Wanjohi (2011) who found that teachers’ experience is a prime predictor of students’ academic achievement; Kirk (2000), that peer group does not affect achievement; Kasiisa and Bakaluba (2013) which concluded that there is significant relationship between teachers’ qualifications and pupils’ academic performance in the primary schools; Akiri and Ugborugbo (2008) which found that there was a significant relationship between teachers’ gender and students’ academic achievement; Osokoya and Adegoke (2014) which reported that there is a high positive correlation between socio-economic background (Parents Occupation) and students’ achievement in Agricultural Science.

Moreover, the findings of the study also supported the findings of AkkusIspir et al (2011), which established that students’ motivation towards mathematics was not extrinsic but rather intrinsic. This negates the findings of Aktan (2013) who posited that students’ motivation levels towards mathematics subject come from extrinsic motivation. Moreover, it reaffirms the findings of Israel et al. (2001), Osiesi. (2016) and Phillips (1998) and who found that parental education and social economic status have an impact on Pupil achievement. Moreover, the finding also support that of Rivkin et al (2005) who established that teachers’ teaching experience and educational qualifications were not significantly related to students’ achievement.

**Conclusion and Recommendations**

The study investigated the influence of after school lessons and stakeholders’ factors (pupil, teacher and parents) on pupils’ achievement in mathematics in Oyo State, Nigeria. The study also investigated the extent to which stakeholders’ factors (pupil, teacher and parents) influenced pupils’ achievement in Mathematics. Based on the findings of the study, it could be concluded that parents’ academic qualification and peer group factor do significantly influence pupils’ achievement in the subject. Thus, efforts geared at improving Mathematics achievement: especially at the basic level of education should entwine the interplay of the above mentioned stakeholders’ variables into such efforts; so as to better the level of pupils’ achievement in the subject. It is recommended therefore that positive peer group interactions should be encouraged among pupils.

**References**

Abe, T.O. & Adu, E.I. (2013). Influence of Qualification on Development and Assessment of Computer Programmed Instructional Package on Energy Concept in Upper Basic Technology, Ekiti State, *April J. Sci. Technol*., 3 (6): 611-618.

Abiam, P. O. & Odok, J. K. (2006). Factors in Students’ achievement in different branches of secondary school Mathematics. *Journal of Education and Technology.*1(1), 161 – 168.

Abu, P.B., & Fabunmi, M. (2005). The relationship among teacher variables and adult learners ‟academic performance. *International Journal of African American Studies*, IV (1), 12-20.

Adegbile, J.A. & Adeyemi, B.A. (2008). Enhancing quality assurance through teachers’ effectiveness. Ile-Ife, *Nigeria. Academic Journals*, Volume 3 (2): 61-63.

Adeniji , A. (*2001*). “*Job Satisfaction among Secondary School Teachers* in. *Abeokuta Metropolis*.” *African Journal* of *Educational Management*. 9(1),32-34.

Adeyemi, T. O. (2008). The Influence of Class-Size on the Quality of Output in Secondary Schools in Ekiti State, Nigeria. *American-Eurasian Journal of Scientific Research, 3*(1), 7-14.

Adeyemi, B. (2010). Teacher Related Factors as Correlates of Pupils Achievement in Social Studies in South West Nigeria. *Electronic Journal of Research in Educational psychology*, *8* (1), 313-332.

Afe, J.O. (2003). Reflections on becoming a teacher and the challenges of teacher education. Retrieved from: <http://www.uniben.edu/lecture/Afe64.html>

Aikens, N. L. & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology, 100,* 235-251.

Akinsolu, A. O. (2010). Teachers and student’s Academic Performance in Nigeria Secondary Schools: Implication for Planning. *Florida Journal of Educational Administration & Policy. Summer, 3(2),86-103.*

Akiri,A.A. & Ugborugbo, N.M. (2008). An Examination of Genders Influence on Teachers productivity in Secondary Schools. *J. Soc. Sci*,17(3), 185-191.

AkkusIspir, O., Ay Z. S., & Saygı, E. (2011). High achiever students’ self regulated learning strategies, motivation towards mathematics, and their thinking styles. *Education and Science, 36*, 235-246.

Aktan, S. (2013). *Relationship between the academic success, self-regulating learning skills, and motivations of 5th grade students and teaching styles of teachers.* Unpublished Doctoral Dissertation, Balıkesir University, Institute of Social Sciences, Balıkesir.

Ammermueller, Andreas and Jrn-Steffen Pischke. (2009). “Peer effects in European primary schools. *Journal of Innovative Education Research*,1 (3), 69-75.

Başer, N. & Yavuz, G. (2003). Pre-service teachers’ attitudes towards mathematics lesson. Retrieved from [www.matder.org.tr](http://www.matder.org.tr).

Chhinh, S., & Tabata, Y. (2003). Teacher factors and mathematics achievement of Cambodian Urban primary school pupils. *Journal of International Development and Cooperation,* 9 (2), 29-41.

Chima, O. 2002.The effects of three methods of remedial teaching on students’ achievement in selected topics in college Algebra. *Journal of Education,* 8(6), 16-18.

Considine, G. and G. Zappala (2002). Factors influencing the educational performance of students from disadvantaged backgrounds, in T. Eardley and B. Bradbury, eds, Competing Visions: Refereed Proceedings of the National Social Policy Conference 2001, SPRC Report 1/02, Social Policy Research Centre, University of New South Wales, Sydney, 91-107.

Crede, M. & Kuncel, N. (2008). Study habits meta-analysis, Perspectives on Psychological Science in Press, 3 (6), 425-453.

Ergene, T. (2011). The relationship among test anxiety, study habits, achievement motivation and academic performance among Turkish High school students, *Education and Science*, 36(160),321-330..

Ewetan, O. O. (2015). Teachers’ teaching experience and academic performance in Mathematics and English Languages in Public Secondary Schools in Ogun State, Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE).*2 (2), 123 – 134.

Fazio R.H & Roskes D (1994). Acting as we feel: When and how attitudes guide. Behaviour. In S. Shavitt& T.C. Brck (Eds.) Persuasion*.* Boston: Allyn& Bacon.

Fehintola, J. O. (2014). Teachers’ characteristics as correlates of students’ academic performance among Secondary School Students in Saki-west Local Government Area of Oyo State. *Journal of Educational and Social Research,* 4(6), 459 – 468.

Goux, D. & Eric M. (2006). “Close Neighbors Matter: neighbourhood effects on early performance at school. *The Economic Journal,* 117 (523), 1193-1215.

Graham, B. (2008). “Identifying social interactions through conditional variance restrictions. Econometrica 76 (3), 643-660.

Grissmer, R. H. (2003). Beyond Helping with Homework: Parents and Children Doing Mathematics at Home. Teaching Children Mathematics, 14, 120 – 131.

Hamid, M. O. (2011). Socio-economic characteristics and English language achievement in Rural Bangladesh. *Bangladesh e-Journal of Sociology, 8 (2),* 31-51.

Hanushek, E.A. Rivkin, S.G. & Kain, I.F. (2005). Teachers Schools and Academic achievement. *Econometrica.* 73(2), 417-458.

Hoxby, C. (2000). “Peer Effects in the Classroom: Learning from Gender and Race Variation. NBER Working Paper 7867.

Hoxby, C. & Weingarth. G.(2006). “Taking Race Out of the Equation: School Reassignment and the Structure of Peer Effects.

Israel, G.D.; Beaulieu, L.J. & Hartless, G. (2001). The Influence of Family and Community Social Capital on Educational Achievement. *Rural Sociology, 66 (1)*, 43-68.

Kasiisa, F.& Tamale, B. (2013). Effect of Teacher’s Qualification on The Pupils Performance in Primary School Social Studies: Implication on Teacher Quality in Uganda. International Journal of Innovative Education Research,1 (3), 69-75.

Kirk, A.M. (2000). “Riding the Bull: Reform in Washington, Kentucky, and Massachusetts,” *Journal of Health Politics, Policy and Law, 25*(1), 133-173.

Kosgei, T.; Kirwa, M, Odhiambo, O. & Ayugi, M. (2013). Influence of teacher characteristics on students' academic achievement among secondary schools. *Journal of Education and Practice,* 4 (3), 76-82.

Marsh, H. W. (2005). “Big Fish Little Pond Effect on Academic Self-concept: Cross cultural and Cross-Disciplinary Generalizability. Paper presented at the AARE Conference.

McEwan, P. J. (2003). “Peer effects on student achievement: Evidence from Chile. *Economics of Education Review*, 22, 131-41.

Obadara, O.E. (2005). Perceived full-range Leadership, Teacher factors and the Academic Performance of Secondary Schools in Ogun state, Nigeria. A Ph.D Thesis, Department of Educational Management, University of Ibadan, Ibadan, Nigeria.

Okpala, N.P & Onocha, C.O. (1995). The effect of systematic procedures on students’ achievement in Mathematics and science subjects. UNESCO-AFRICA. (A six month Journal of UNESCO, Darkar Regional office in Africa) No 10 55-61.

Osiesi, P.M. (2016). Evaluation of the knowledge of Statistics, teacher and pupil factors on pupils attitude and achievement in Mathematics in Osun State. An unpublished M.Ed Dissertation submitted to the International Center for Educational Evaluation, Institute of Education, University of Ibadan, Nigeria.

Osokoya, M.M. & Adegoke, S.P. (2014). Impact of socio-economic among secondary school students in Ibadan metropolis. M.Ed project submitted to the University of Ibadan.

Palardy, G. J. (2008). Differential school effects among low, middle, and high social class composition schools: A multiple group, multilevel latent growth curve analysis. *School Effectiveness and School Improvement, 19,* 21-49.

Phillips, M. (1998). Family background, parenting practices, and the black-white test score gap. The black-white test score gab. Pages 523.

Rivkin, S. G., Hanushek, E. A, & Kain, J. F. (2005). *Teachers, schools, and academic achievement.*[Online]Available:http://www.utdallas.edu/research/tsp/pulications.htm.

Royster, D. C., Haris, M. K. & Schoeps, N. (1999). Dispositions of college mathematics students. *International Journal of Mathematical Education in Science and Technology,* 30(3), 317-333.

Sacerdote, B. (2001). “Peer Effects with Random Assignment: Results for Dartmouth schools: Roommates. Quarterly Journal of Economics 116(2), 681-704.22

Taiwo, H.G. (1993). Family Environment and Educational Attainment of Some School Children in Western Nigeria. *Journal of the Science Teachers Association of Nigeria*, 46 (2), 107-116.

Udousoro,U.J. (1999). Effect of computer –Assisted cooperative and individualistic instruction learning on students’ performance in mathematics problem-solving, *International Journal of Educational Development,* 22(1)163-171.

Usman, S. (2012). Factors Influencing Students' Academic Performance at Higher Secondary Level: Teachers' Perception. Language in India. Journal of Education and Practice. 7, (28), 2016

Yala, P.O., & Wanjohi, W.C. (2011). Performance determinants of KCSE in Mathematics in secondary schools in Nyamira Division, Kenya. *Asian Social Science, 7* (20), 107-112.

Yara, P. O. (2009). Relationship between teachers’ attitude and students’ academic achievement in Mathematics in some selected Senior Secondary Schools in South-western Nigeria. *European Journal of Social Sciences,* 11 (3), 364-369.

Zimmerman, D. J. (2003). “Peer Effects in Academic Outcomes: Evidence from a Natural Experiment. Review of Economics and Statistics, 85(1), 9-23.