International Journal of Innovative Research and Advanced Studies (IJIRAS)
Volume 7 Issue 5, May 2020

ISSN: 2394-4404

Influence Of Parental Income And Siblings On Students' Academic Performance In Public Day Secondary Schools

Korir Walter

Moi Universiy, School of Education, Kenya

Abstract: ***Over the past several decades, scholars have been concerned with the poor academic performance of children. Kipkelion Sub-county academic performance has been dismal for the last five years (2007 - 2012). Study investigated the influence of home environment on students' academic performance on the influence of parental income and number of siblings on students' academic performance in public day secondary schools, based on Ecology System Theory by Bronfenbrenner. The sample was 210 form four students selected using stratified and simple random sampling based on the causal-comparative research design, since manifestations of independent variables on dependent variable had already occurred. A questionnaire was used to solicit information on students' home environment. Whereas, document analysis was used to collect information about the students' academic performance based on Mock Examination. Data was analysed using descriptive and inferential statistics such as: t-test, (ANOVA), the results revealed that parental income significantly influenced students' academic performance. However, number of siblings had no effect on students' academic performance. Study recommends investing in their education by provision adequate learning materials for example: text books, furniture, lighting, and ample study space at home.***

Keywords: influence, home environment, parental income, number of siblings, academic performance.

I. INTRODUCTION

Studies have revealed that various factors are responsible for scholastic failure of students, such as low socio-economic background, student's cognitive abilities, school related factors, environment of the home, or the support given by the parents, and other family members (Fan, 2001). Generally, schools are considered as places which provide appropriate learning environment for a child, but the importance of parents and community cannot be ignored. Parents, adult family members, and siblings contribute significantly to various components of personality of the child particularly, and in improving his/her academic performance.

According to Etelej (2011), the statistics summary of results from KCSE 2010 to 2013, are not encouraging. In 2010 KCSE results had 260,966 (73%) candidates scoring C, and below, whereas the examination was sat by 357,488 candidates, only 96,522 (27%) obtained mean grade of C+, and above, which is considered the minimum university entry benchmark. Likewise in 2011KCSE results, out of 411,783 candidates, 119,658 (29.1%) scored C+, and above, whereas C, and below are 292,125 (70.9%).

According to Kipkelion Annual Report (2012) the performance of Kipkelion Sub-County in KCSE has been dismal for the last five years (2007 - 2012), in which out of 7238 candidates for the period of (2008-2011), those who scored C+, and above constituted 1731 (23.92%) while those scored C (plain), and below are 5507 (76.08%). Thus, out of this statistics it showed that the overall performance was very low with the whole Sub-County producing only 1731(23.92%) out of 7238, in which boarding schools produced a significant number of 724(38.82%) out of 1865 candidates enrolled in KCSE examinations compared with 1007(18.74%) out of 5373 candidates from day secondary schools who did the same examination.

Further, from the same statistics, students who attained B+, and above for direct entry to university in the whole district were 221(3.05%) out of 7238, in which boarding schools produced a significant number of 106(5.68%) out of 1865 candidates enrolled in KCSE examination compared

with 115(2.14%) out of 5373 candidates from day secondary schools who did the same examination. From this statistics, one could falsely conclude that day secondary schools were leading in producing students to university having a number of 115 students, whereas boarding school with a number of 106 students. This was also more worrying that 3.05% students joined university through direct entry, and the larger percentage of 96.95% did not join direct university for higher education.

These statistics bore a serious implication on students' academic performance in the sub-County. In that, day-scholars who form the majority of Sub-County secondary school students, face more challenges which affected their performance, other than those faced by boarders. This study intended to determine how parental income and number of siblings influence academic performance of day-scholars in public secondary schools.

The objectives of the study were:

- ✓ The influence of parental income on students' academic performance.
- ✓ The influence of number of siblings on students' academic performance.
- ✓ The study was designed to answer the following questions:
- ✓ Does parental income influence students' academic performance?
- ✓ Does number of siblings influence students' academic performance?

The research hypotheses:

Ho_1: There is no significant influence of parental income on students' academic performance.

HO_2: There is no significant influence of number of siblings on the students' academic performance.

In Kenya, performance in national examinations determines the type of training, work, and future opportunities for further education of the student. However there are many factors that might hinder the academic performance of a student. This study sought to determine the influence of parental income and number of siblings on performance in public day secondary schools, because majority (85%) of schools in Kipkelion Sub-County are public mixed day secondary schools, in which both boys and girls learn in same environment and commute daily from their homes to school and more so they registered low academic performance.

It was assumed that all secondary schools were adequately equipped. Most of them were public mixed day secondary schools (36 out of 42). The students' population in these public mixed day schools were 5373, whereas, 1865 were from boarding schools. Out of these students who had sat KCSE for the last four years, only 1731 (23.92%) attained C+, and above, while majority 5507 (76.08%) attained C (plain), and below. Hence, the study aimed at determining the extent to which home environment influence the student's academic performance as majority of students were day scholars. (Kipkelion, SCDEO Annual Report, 2012).

The study findings would be significant to education stakeholders and policy makers in formulating policies that are geared toward enhancing education for day-scholar students, in which Parents would be made aware of requirements and the roles they need to play in providing conducive home environment for example shelter, pay school fees for student. This would benefit Teachers by making teaching and learning process more effective and early syllabus coverage, since students would have enough time, learning resources at home, parental assistance. Lastly, students would appreciate the value of education beyond classroom and thus do extra assignments at home, because learning occurs anywhere provided the conditions are favourable.

The study was conducted in Kipkelion Sub-County on public day secondary schools, since the students commute from their home to school daily. It focused on parental income and number of siblings, and learning resources at home in order to determine the influence students' academic performance. The study comprised of 210 participants in form four from 10 public mixed day secondary schools within the study area that presented 2132 candidates for the 2013 National Examinations under the 8-4-4 syllabuses. The findings of the study would be generalized to schools in the districts, and the whole country with the same characteristics of being public mixed day secondary schools.

Due to inaccessibility of those students who have sat for KCSE examination in the previous years, the study focused on 2013 form four candidates using their mock results from 10 public mixed day secondary schools in Kipkelion sub-County to solicit the responses on home factors, since they have been in day schools for more than three years. Also, the use of questionnaires might cause anxiety, due to examination related phobia. However, the researcher explained to the respondents the significance of the study and that their responses should be treated with confidentiality and used for the study only.

The assumptions were that, the respondents would cooperate during the study, give the required information, sample came from the various environmental/home settings and responses would be true and reliable concerning factors affecting students' academic performance and the records of the sampled schools would be true and accurate.

The Bronfenbrenner (1979) Ecology system theory on environmental interconnectedness and its impact on human development and growth was utilised in this study. Which suggests that individual's ecological environment can be described as having different structures that are nested together, resulting in the total environment. The inner level consists of the individual and his or her immediate setting, with subsequent levels following in an interconnected manner. This inner level is referred to as the micro-system, which is followed by the mesosystem, exosystem, and macrosystem. The microsystem includes all the activities, roles, and personal experiences of an individual within a particular setting with certain characteristics. A setting can be any place where an individual interacts daily with other humans. The events that take place within that setting can be recorded as being similar for many different people. However, students' microsystem level is the individual meaning or interpretation assigned to each event that makes environmental factors relevant in the study of human ecology.

The second level is referred to as the mesosystem, which combines the activities of two or more settings for the individual. Settings such as work, and school would be included in this category. When a person moves in to a new realm in society he or she is operating within the mesosystem.

Thirdly, the exosystem includes settings that do not necessarily involve the developing individual, but may still manage to affect that person from more distant channels. Examples of this would include events in the lives of relatives or peers that do not affect the individual directly, but influence a person who has a close relationship with the individual. The effects will generally trickle through to the center individual. The educational implication of this theory was that a public day secondary school students operate within the two systems (microsystem and mesosystem).

During the school hours, a student interacted with teachers, students, and other school staff this constituted a micro-system. In the student's home environment, interactions involved that of the parents, relatives, and neighbours, these were the features of a mesosystem. If the two interactions were healthy, there would were be good performance, and vice versa. Bronfenbrenner's ecological systems model was suitable because it focused heavily on environmental, and external factors, Bronfenbrenner admitted that, while a person ecological environment had a great effect on individual development, it was the individual perception of the environment that really matter and not how the environment actually existed in reality.

Lastly, ecological systems theory had one demerit in which it did not address individuals who developed within extremely difficult environmental circumstances, such as severe poverty or abuse and still go on to became a well-adjusted, successful members of the larger society. These individuals would appear to be anomalies within the system. How can ecological systems theory explain these individuals' immunity to harsh external influences, while the majority of humans are irreversibly influenced, if not altered, by negative environments? Even with its unanswered questions, ecological systems theory provided a solid, common-sense approach to the study of human development. Researchers in the field of education can apply Bronfenbrenner's work to a variety of topics, such as the effects of a student's external environment on his or her academic performance.

A conceptual Framework in this study, is that the independent variables were home factors which included parental income and number of siblings at home which predicted the students' academic performance in mean points (12 - 1) and grades(A - E) attained, which was the dependent variable, which were categorised into four as follows: Excellent(A to A-); Good(B+ to B-); Average(C+ to C), and Below average(C- to E). The extraneous/intervening variables included; student's aptitude, school administration, school facilities, and class size. These variables were controlled through randomization, in order to create representative samples that were similar in all the aspects that could influence the dependent variable.

This conceptual framework forms the various concepts that are related with theoretical framework in that home environment under investigation was within micro system included: number of siblings the student interacts with, influenced him in one way or another, parental income operated both within micro system, since the student had close interaction with parents provision of needed studying/learning materials which need money

Family background is the foundation for children's development, as such family background in terms of family structure, size, socio-economic status, and educational background play important role in family background is the foundation for children's development. This is because providing a supportive learning environment at home requires parents' time as much as financial resources, students' educational attainment, and social integration (Osunloye, 2008). In the view of Ajila and Olutola, (2000) the state of the home affects the individual since the parents are the first socializing agents in an individual's life.

Omoraka (2001) noted that children with rich parents have certain needs, physical, and sociological which when met contribute positively to their academic performance. These needs may include a conducive reading atmosphere, good food, playing grounds, provision of books, and other essential materials. Devi and Kiran (2002) reported that large family size, low educational status of parents, low parental involvement, and low parental encouragement were found to be the major family factors associated with scholastic backwardness on a study on family factors associated with scholastic backwardness of secondary school children in Hyderabad city.

In study on the effects of poverty on academic achievement indicated that the number of Americans living in poverty is continually increasing. Poverty directly affected academic achievement due to the lack of resources available for student success. Low achievement was closely correlated with lack of resources. Poverty significantly affected the resources available to students. Due to this lack of resources, many students struggled to reach the same academic achievement levels of students not living in poverty. The factors that affected students' achievement include income and source of income. Although many poor students scored below average on assessment measures, instructional techniques, and strategies implemented at the classroom, school, district, and government levels could help close the achievement gap by providing students with necessary assistance in order to achieve high performance in academics (Lacour, & Tissington, 2011).

In a study between SES and Academic achievement revealed a significant difference between high SES, and average SES category students. Students belonging to high SES category had higher academic achievement as compared to average SES students. The High SES students had better exposure, and environment, and attended schools with excellent infrastructure, and facilities (Chandra, & Azimuddin, 2013).

Ushie, Emeka, Ononga, and Owolabi, (2012) found that parental socioeconomic background significantly influenced students' academic performance ($p < 0.05$). The study revealed that students whose parents had better jobs and higher levels of income tend to have higher levels of literacy performance. In order to improve students' academic performance and reactions to life situations irrespective of their family structure, government and counsellors were advised to provide the necessary psychological support for students from different family structure so as to overcome their emotional problems, and improve academic performance.

A study in Kenya found that parents who were economically stable were in a position to provide resources, and materials, and enroll students to the schools of their choice. The study recommended the Ministry of Education, school administrators, and the local authorities need to come up with frequent community based forums that are specifically structured towards enhancing parental participation in their children's education, and on the importance of education not only in the child development, but also community growth. Also need for policy formulation, and implementation that encourage parents who have never attained any formal education to get the Opportunity to enroll (Ntitika, 2014).

Awuor, (2012) findings revealed that academic performance of pupils VI in Lari division was adversely affected by contextual factors such as: inadequate support by parents and low income of parents and were deemed to contribute to poor academic performance.

Other studies conducted by Altschul, (2012) in Mexico showed that there was a strong relationship between parental income and children's academic performance, whereas, Suleman, et al (2012) revealed that parental income level affect the academic achievement of secondary school students. Egunsola, (2014) in a study conducted in Nigeria revealed that parental economic (income and affluence) to have moderate correlation with students' performances in agricultural sciences at the secondary schools, whereas, Zhang, (2011) in a study in China established that parental income had effect on children's academic results, also Baliyan, et al (2012) in Bostwana found that parental income level to have significant influence on the performance of students' in mathematics.

Ogweno, et al (2014) in a study conducted in Kenya found that parental income had no significant on students' academic performance in agriculture in secondary school students. Finally, Sukor, et al (2012) in a study in Malaysia established students from high socioeconomic status scored higher compared to students from low socioeconomic status.

A study in Bucharest on impact of socioeconomic status on school performance. A sample of 100 young students age between 18 and 24 years old (M = 20.19; S.D = 1.54), all of them aged over 18, being in their fourth year of high school were used. Questionnaire was used to collect data on several financial factors such as family, parents' academic level, lifestyle, family influence, the number of people in the house, the average grades of the students were used. The results indicated that students' performance were influenced by the hours spent learning, free time, the presence of siblings in the family and the family home place, (in the rural or urban area), all of which are metrics for the socioeconomic status (Teodor, 2012).

In Nigeria, a study on the influence of family size showed that family size has no influence on students' academic performance (Tenibiaje, 2009). Makewa, Role, and Otewa, (2012) the findings revealed that socio-economic status family size,and family type affect the academic performance of pupils.

A study in Kenya that investigated the relationship between academic achievement motivation and home environment among standard eight pupils, found positive relationship was found in family size (r = 0.26). The study recommended that parents need to be aware of the importance of their role in their children's academic achievement motivation so that they can provide the necessary facilities at home (Muola, 2010).

The studies on related home factors under the study revealed that some contradict, whereas others concur to each other. Hence the present study will attempt to determine whether home factors concur or contradict with the past studies. However the study has departed from already conducted studies. First, it revealed that the past studies were not based on home settings, in that the studies were carried from school setting perspective, thus the present study attempts to determine how home factors influence students' academic performance based on home setting perspective. Secondly, students academic performance was based on few selected subjects, whereas the present study was based on all subjects, students' registered for in the national examination, so as to reflect the general academic performance. Thirdly, most studies were conducted in boarding schools, as this did not reflect the of home setting where students come from, as students commute daily from home to school and back to home, whereas this study focused only day schools, so as to determine how home factors under the study influence students' academic performance.

II. METHOD

PARTICIPANTS

The study had, 2132 form four students selected as the accessible population, as they had been in the system for the last three years and were therefore considered able to provide appropriate responses. Furthermore, they were preparing for KCSE examination which would reflect how they had been studying in various home environments, they were also considered mature enough in terms of age and education, to understand their family background. Kipkelion Sub-County had 42 public secondary schools, out of these, 9 (21.45%) were girls' schools, 3 (7.13%) were boys' schools, while 30 (71.42%) were mixed schools. Out of these, 11 (26.19%) were boarding schools and 31 (73.81%) were day schools with 2132 form four students attending public mixed day secondary schools.

The researcher used 10 (32.25%) schools out of 31 public mixed day secondary schools. These represent thirty 30% of the 31 district public mixed day secondary schools which concurs with Kombo, & Delno (2006) that says that a sample of 30% is a representative of a population to be studied. Stratified random technique was used to identify sample size of respondents, where respondents were divided into two strata on the basis of gender (boys and girls), from each stratum of (804 girls and 1328 boys) which presented a ratio of 2:3.

This ratio was used to calculate a proportionate number of students from each gender to participate in study. Hence, from the accessible population of 2132, approximately 210(10.33%) students were sampled, which concurred with Mugenda, & Mugenda (2003) that sample size of 10% is appropriate for the study. Then, using the ratio of 2 girls to 3 boys, the number of students from each gender that were selected to participate in

ISSN: 2394-4404

the study was calculated, which were 84 girls and 126 boys, which was then divided by 10 to get representatives from each gender. Remarkably, in every school, 8 girls and 13 boys participated in the research. Hence, a sample size of 210 respondents were selected from form four 2013 KCSE candidates.

MATERIALS

Data was collected from students in the 10 selected secondary schools using questionnaire and a document analysis guide. Questionnaire was suitable because a lot of information was collected over short period of time and population was literate. Both closed and open-ended questions were used in the questionnaire. Closed – ended questions required the respondent to respond to items either by ticking [√] or choosing alternatives provided. Open – ended questions had no alternatives to choose from and the answers had to be written in full in order to support and check the alternative choice responses given by the respondent.

Document analysis was used to determine the student's academic performance, which was obtained from Mock analysed results sheets. The information on dependent variable helped to compare the academic performance between students from different home environment. This was a reflection of final KCSE Examination. The scoring method used in the questionnaire required the participants to write either YES, NO or a tick [√] against the box with the suitable response in the item. The scores evaluated the extent to which the variables of factors under study relate to the respondent.

RESEARCH DESIGN

This study employed causal comparative design, because home environment (factors) which served as the independent variable could not be directly controlled by the researcher because their manifestations had already occurred and were not manipulatable (Kerlinger,2000; Mugenda & Mugenda, 2003).

PROCEDURE

The researcher employed multistage sampling technique, as follows: purposive sampling technique to select only all public mixed day secondary schools from a list of secondary schools in Kipkelion Sub-County, Simple random sampling method was employed to select 10 public mixed day secondary schools by writing all names of public mixed day secondary schools in small pieces of papers, fold and put in a box, then pick at random 10 schools, this gave each school equal and independent chance of being selected to participate in the study.

From 10 schools, the researcher also used purposive sampling method to select form four students. In each sampled school the researcher employed stratified random sampling method by dividing population of respondents to sub-groups of boys and girls, then from each sub-group the researcher used simple random sampling method to select students who participated in the study by picking the first 8 girls' and 13 boys' names in class list with odd serial numbers from both boys' and girls' class list.

Questionnaires were pre-tested before the commencement of the real study to establish the reliability of the instruments. The piloting involved trying out the designed instruments on a few students bearing similar characteristics to those of the large group of the respondents. The researcher carried out pre-testing of the instruments in three of the identified public mixed day secondary schools and these schools were excluded real research study.

The researcher visited the schools to sought permission from either school principal, or class teacher, and briefed them about the purpose of the pilot. The school authority either introduced researcher to students, or they administered questionnaires by explaining to students on how to answer the questionnaire. After which students were divided into sub-groups of boys and girls, and from each sub-group, 8 girls and 13 boys were randomly selected by picking the first 8 girls and 13 boys from the class list having odd serial numbers to participate in the pilot study. The questionnaires data were analysed in which a reliability coefficient of 0.78 was obtained and then revised accordingly upon receiving the pilot study feedback. Hence, pilot study was thus undertaken to ascertain the reliability of main research instrument and also do corrections.

Test - retest technique was used to test the reliability of the research instrument. In which questionnaire were administered twice to the same group after two weeks interval period. Data obtained from pilot study were used to determine the reliability of the researcher instrument by using Pearson product moment correlation to measure the reliability of the items in the questionnaire. In which the results yielded a reliability coefficient of $r = 0.78$, which concurred with Coolican, (2007) that test - retest with a range between .75 and .80 was reliable, thus was considered to be good and be relied upon in carrying out the study.

The content validity of the instrument was determined by the researcher, by discussing the items in the instrument with the supervisors, colleagues and other lecturers in the Department of Psychology. For the research instrument to be considered valid, the content selected and included in the questionnaire must also be relevant to the variables being investigated. Construct validity was assimilated to the research tools by thematically arranging related items in the questionnaire with reference to already used and related questions.

The researcher sought introductory Permission letter to carry out the study from the Dean, school of education and Department of Education Psychology of Moi University after clearance from the supervisors. This was used to process an official permit from the Ministry of Education, under National Commission for Science, Technology and Innovation-NACOSTI. On acquiring the permit the researcher reported to the County Commissioner, and County Director of Education. An introductory letter by the researcher explaining the nature and the purpose of the research was availed to the SCDEO, and principals of the sampled schools.

During data collection period, researcher visited sampled schools to administer the questionnaire and explained the purpose of the study and clarified where necessary. The

researcher ensured the sampled respondents were the ones supplying data. Before the questionnaire was administered to students in each school, either the School Head or the Deputy Head introduced the researcher to the respondents in their respective classrooms. Then the researcher explained to the students the purpose the study and thanked the students in advance for accepting to fill in the questionnaire.

The respondents were asked to give consent before participating in the study. They were assured of confidentiality and anonymity was observed by the researcher by exercising respect for individuals' rights so as to safeguard their personal integrity. No names or personal identification numbers were reflected on the questionnaires except the numbering for questionnaires, which is for purposes of coding and thus, data editing and analysis. The researcher tried to avoid any psychological threats by reassuring respondents of availability of results of the study for their own consumption. Consequently, a copy of the findings was to be given to Kipkelion Education Office and any educational stakeholders interested in the results of the study.

The questionnaire was self administered type where it was presented to the students and responded to it by reading through the questionnaire. Any inquiry was explained and then left to the respondents alone to complete the questionnaire. Since the questionnaire had both open and closed-ended items, the way of answering varied. The closed – ended items required the student to check from alternatives and put a tick [√], or write YES, or NO where applicable to the student. The researcher asked the students to use permanent ink pens. The researcher collected the questionnaire after one hour, when all respondents had answered all questions.

The data collected was coded and keyed in into the computer using the statistical package for social sciences (SPSS) as follows: students' bio-data was used to compile the of the students in which male and female were coded 1 and 2 respectively, whereas age was coded 1 for below 15 years, 2 for 16-17 years, 3 for 18-19 years, and 4 for above 20 years, and home environment was coded 1,2, and 3 for rural, peri-urban, and urban respectively. Students' academic performance was based on Kipkelion Sub-County Mock Examination which was categorised on mean grade points range from 1 to 12 points (E to A grades) as follows: 1-5(E to C-) below average, 6 - 7(C to C+) average, 8 - 10(B- to B+) good, 11 - 12(A- to A) excellent which were coded 4, 3, 2, and 1 respectively, in order to understand the students' academic performance in mock examination.

In parental income (in Kenya shillings) was categorised into four groups: very low(less than 5000) coded 1, low (5001-10000) coded 2, medium (10001-20000) coded 3 and high (above 20001) coded 4 and main source of income was grouped into three as follows: employment, coded 1, business, coded 2, and farming, coded 3 and compared against the students' academic performance. In responses on number of siblings were categorised into four as follows: 0-3(small) coded 1, 4-7(medium) coded 2, 8-11(large) coded 3, and above 12(very large) coded 4 and compared against the students' academic performance.

Descriptive statistics and inferential statistics was calculated and summarized for presentation and analysis of the data. A 0.05 significance level (95% confidence) was used in the study. The responses from the samples were summarised using of descriptive statistics; frequency, percentages and means. Inferential statistics used were, t-test and ANOVA, so as to compare how independent variables influence dependent variable.

III. RESULTS

The rate of return of completed and usable questionnaires and document analysis was 210(100%). The students' data on gender, age, and home environment of their residence revealed that 130(61.9%) males and 80(38.1%) females, were sampled. Males performed better, (M = 5.03) than females (M = 4.20). Majority of students 151(71.9%) were aged between 18-19 years, followed by 40(19%) students aged 16-17years, those above 20 years were 18(8.6%), whereas those below 15 years was 1(0.5%), and students above 20 years performed better (M = 4.97) compared to other age categories. In terms of residence, majority of students 186(88.6%) were from rural settings, whereas a small proportion was from both peri-urban 16(7.6%) and urban 8(3.8%), in which students from peri-urban performed better academically, with a (M = 4.92) than students from other home environment.

The majority of students 148(70.5%) performed below average (M = 3.62, SD = 1.174), followed by average students 38(18.1%), (M = 6.46, SD = 0.502) and small proportion of students 23(11%) attained good grades of (M = 8.55, SD = 0.798), and only 1(0.5%) student attained highest grade of excellent, (M = 11) an indication that the general students' academic performance was below average (M = 4.71).

To address objective one of the study, which stated: to find out the influence of parental income on student's academic performance, revealed that majority of students 181(86.7%) who stated that their parental main source of income estimates come from farming, had (M = 4.72, SD = 2.000), whereas 15(7.7%) of students who indicated that parental main source of income come from business, had a (M = 4.51, SD = 2.495) which were low mean scores, compared to 14(6.7%) of students who stated that parental income come from employment with a (M = 4.86, SD = 2.545) performed better,

In parental monthly income estimates, majority 168(79.2%) of students stated that their parental monthly income estimates were very low, had a (M = 4.68, SD = 2.116), whereas, 29(13.7%) of students who stated that parental monthly income was low, had a (M = 5.13, SD = 1.968), whereas 6(2.8%) of students who stated that parental monthly income was medium, had a (M = 4.94, SD = 1.706), and 7(3.3%) of students who stated parental monthly income was high had a (M = 4.62, SD = 1.615).

To test the null hypothesis, HO_1 which stated: there is no significant influence of parental income on the student's academic performance using ANOVA, revealed that parental income has a significant influence on students' academic performance F (3, 206) = 3.370 significant at $0.019 < p = .05$. Thus, null hypothesis was rejected; and alternative hypothesis was accepted, which stated: there is significant influence of parental income on the student's academic performance; this

ISSN: 2394-4404

implied that parental income had significant influence on the student's academic performance.

To address objective two of the study which stated: to find out the influence of number of siblings on student's academic performance, revealed that 71(33.8%) of students were from households with small number of siblings, with the a highest (M = 4.93, SD = 2.270) whereas, 98(46.7%) of students were from medium number of siblings, with a (M = 4.76, SD = 2.071), and 37(17.6%) of students were from household with large number of siblings, with a (M = 4.25, SD = 1.640) and 4(1.9%) of students were from very large number of siblings, with a (M = 3.96, SD = 1.402).

To test the null hypothesis, HO_2 which stated: there is no significant influence of number of siblings on the student's academic performance. The students' responses on number of siblings were analysed using ANOVA, revealed that number of siblings has no significant influence on students' academic performance F (3, 206) =1.071 significant at $0.362 > p = .05$. Thus, the null hypothesis was accepted which stated: there is no significant influence of number of siblings on the student's academic performance. This implied that the number of siblings in the home had no influence on a students' academic performance.

IV. DISCUSSION

This research focused on influence of home environment on home factors which included parental income and number of siblings at home on academic performance in public mixed day secondary schools in Kipkelion Sub-County on 10 sampled schools, each with 21 students from 2013 form four candidates. Generally, students' academic performance was below average (M = 4.70, C-), an indication that kipkelion sub-county students' academic performance was worrying. This observation concurred with Kipkelion, SCDEO Annual Report (2012) that the performance of Kipkelion Sub-County in KCSE had not been very encouraging for the last over four years (2007 - 2012). Thus, the study was aimed at determining the root causes of low students' academic performance among public day secondary schools in Kipkelion Sub-County, which agreed with Oloo (2003) that a major problem affecting the students' academic performance in Kenya was a home environment of the day school students that was not conducive to reading.

From the study, majority of the students indicated that main parental income was from farming, whereas a small proportion of students indicated that parental income was from employment and business. Though academic performance of students who stated that parental income were from farming and business was low compared to students who stated that parental income was from employment. An indication that farming and business could not address students' educational needs as reflected in low mean scores as compared to employment which had highest mean scores and this could be linked to constant and consistent income unlike parental income from farming and business which fluctuates.

On parental monthly income estimates, majority of students stated that parental monthly income estimates were low, and had low academic performance compared to students who indicated that parental monthly income estimates were high, and had better academic performance. An indication that parents with high monthly income estimates were able to adequately meet students' educational needs as reflected in better mean scores.

On testing null hypothesis, ANOVA results were significant, hence null hypothesis was rejected, and alternative hypothesis was accepted. An indication, that the parental income had significant influence on the students' academic performance. This agreed with studies by Lacour, and Tissington, (2011) in a study conducted in United States that found that parental income and source of income affect students' academic performance, Altschul, (2012) in a study in Mexico found that family income contributed to youth's poor academic performance. Sukor, et al. (2012) in a study in Pakistan revealed that students from high socioeconomic states scored higher as compared to students from low socioeconomic status, and Zhang, (2012) in a study conducted in china revealed that family affect children's academic performance.

Furthermore, it agreed with Chandra, and Azimuddin, (2013) a study in India found that students belonging to high socioeconomic status category had higher academic performance, as compared to average socioeconomic status students. In studies conducted in Nigeria, revealed that there was a strong correlation (r = 0.60) between parental economic status(income and affluence) and students' academic performance in agricultural science, whereas Ushie, et al. (2012) showed that students whose parents had better jobs and higher levels of income tend to have higher levels of literacy performance. Likewise, studies conducted in Kenya, indicated parents who were economically stable were in a position to provide resources and materials and enroll their students to the schools of their choice, thus influencing their academic performance (Ntitika, 2014).

Similarly, Awuor, (2012) found that low parental income adversely contributed to poor academic performance, so to Onderi, et al. (2014) which revealed that the level of income of parents contributed to poor students' academic performance. However, a study by Ogweno, et al. (2014) contradicted these findings, which found that there was no significant influence of family income on students' academic performance, this deviation could be attributed to use of one subject (agriculture) to predict on students' entire academic performance.

The Study found that households with small number of siblings performed better than other categories, an indication that households with small number of siblings can afford to provide sufficiently the needed educational materials, and enough space to utilise during studying, which reduced overcrowding, thus better academic performance. On testing the null hypothesis, ANOVA results were not significant, thus null hypothesis was accepted. This implied that there was no significant influence of number of siblings on student's academic performance. This concurred with Tenibeaje, (2009) in a study conducted in Nigeria that revealed that family size had no influence on students' academic performance of pre-degree students.

But, Teodor, (2012) in a study in Romania, disagreed with these findings, in that there was influence of the presence of

the siblings in the family on students' academic performance. Whereas, studies conducted in Kenya by Ogweno, (2014) agreed with the study findings that the family size had no significant influence on students' academic performance, but Makewa, (2012) disagreed with the study findings, in that there was a positive correlation (r = 0.26) between family size and students' academic performance.

From the findings of the study, it was concluded that, student's academic performance was influenced by parental income, and number of siblings. All these factors pointed on one common denominator: income. Parents should be sensitised on how generate income so as to afford to pay school fees, and this would have a direct, and positive bearing on student's academic performance, as shown that the socioeconomic factors affect access to education, and to worsen the problem was coupled by parent's education level being too low to understand issues related to the importance of education.

From the findings, home environment have significant influence on student's academic performance. As suggested by Hammer (2003) who observed that home environment was as important as what goes on in the school, also distant students travel to and from school is long; therefore making them fatigued and cannot do extra learning at home. This can be addressed through concerted cooperation among all stakeholders: government, ministry of education, leaders, religious sects, parents, and nongovernmental organisations to build more school in villages to increase physical accessible of schools. This move will address the problem of low parental income which makes parents unable to adequately meet academic needs of the student. With number of siblings, given adequate learning resources, students can still achieve academically regardless of the number of siblings in the family.

This study recommends that government, local leaders, religious sects, MOE, teachers, and parents need to cooperate and strive to bring about change in creating a conducive home learning environment, where students can study at home, just as in school, as most parents were from low income category, and which had a significant influence on students' academic performance, therefore, government should further subsidise school fees in day secondary schools and/or extend free education to all day secondary schools to cater for students from parents of low income. The study suggested further research on the extent of the influence of the home environment on academic performance on boarding secondary schools.

REFERENCES

[1] Alokan, B. F, Osakinle, E. O, & Onijingin, E.O. (2013).The Influence of Parents EducationalBackground and Study Facilities on Academic Performance Among Secondary School Students. Ozean Journal of Social Sciences 6(2), 2013.

[2] Ajila, C, and Olutola, A. (2000).Impact of Parents' Socio-Economic Status on University Students' Academic Performance. Ife Journal of Educational Studies, 7 (1), 31-39.

[3] Altschul, I. (2012). Linking Socioeconomic Status to the Academic Achievement of Mexican American Youth through Parent Involvement in Education. Journal of the Society for Social Work and Research February 2012 Volume 3, Issue 1, 13-30.

[4] Ambeken, L. U, Ukwayi, J. K, and Ogodo, A. F. (2012). Parental Socioeconomic Background as a Determinant of Student's Academic Performance in Selected Public Secondary Schools in Calabar Municipal Local Government Area, Cross River State, Nigeria Journal of Education and Practice .Vol 3, No 16, 2012.

[5] Awuor, O. P. (2012).Effects of Economic Activities on Pupils' Academic Performance at Kenya Certificate of Primary Education in Lari Division, Kiambu County, Kenya. Unpublished M.Phil. Thesis, University of Nairobi.

[6] Chandra, R, and Azimuddin, S. (2013).Influence of Socio Economic Status on Academic Achievement of Secondary School Students of Lucknow City. International Journal of Scientific & Engineering Research. Volume 4, Issue 12, December- 2013.

[7] Coolican, H. (2007). Research Methods and Statistics in Psychology.4th edn. Hodder Arnold, India.

[8] Devi, M.S, and Kiran, K. (2002). Family factors associated with scholastic backwardness of secondary school children. Journal of Community Guidance and Research, 19 (2):167-172.

[9] Egunsola, A. O. E. (2014). Influence of Home Environment on Academic Performance of Secondary School Students in Agricultural Science in Adamawa State Nigeria Journal of Research & Method In Education (Iosr- Jrme) E-Issn: 2320–7388,P- Issn: 2320–737x Volume 4, Issue 4 Ver. Ii (Jul-Aug. 2014), Pp 46-53.

[10] Epstein, J. (2008). School, family, and community partnerships: Preparing educators and improving schools. Boulder, CO: Westview Press.

[11] Etelej, P. (2011). KCSE 2010 results poor performance. Retrieved from kcsekcseresults Analysiskenyan exams knec.

[12] Farooq, M. S, Chaudhry, A. H., Shafiq, M., and Berhanu, G, (2011). Factors Affecting Students' Quality of Academic Performance: A case of Secondary School Level. Journal of Quality and Technology Management Volume VII Issue II, December, 2011.

[13] Fan, X.T, & Chen, M. (2007).Parental Involvement and Students' Academic Achievement: A Meta Analysis. Educational Psychology Review, 13, 1-22.

[14] Fan, X. (2001). Parental Involvement and Students' Academic Achievement: A Growth Modeling Analysis. The Journal of Experimental Education, 70(1), pp. 27-61.

[15] Greene, P, and Tichenor, M. (2007). Parents and schools: No stopping the involvement! Parents Particularly. Eric Journal No. EJ673577.

[16] Kaimenyi, J. (2014). Kcse 2013 Results Release Speech, 3rd march, 2014 KNEC Mithiani House: Nairobi.

[17] Kiburi, M. J. (1996).The Influence of Birth Order, Family Size, and Sibling Intervals on Academics Achievement of Secondary School Students in Nyeri, Kenya. Unpublished M. Phil. Thesis. Moi University.

[18] Kombo, D. K. (2006) Sociology of Education. Nairobi: Ad Print Company.
[19] Kothari, G. R. (2004). Research Methodology Method and techniques. New Delhi: New Age International Publishers.
[20] Lacour, M, and Tissington, L.D. (2011).The Effects of Poverty on Academic Achievement. Educational Research and Reviews Vol. 6 (7), Pp. 522-527, July 2011.
[21] Karue, N., and Amukowa, W. (2013). Analysis of Factors that lead to Poor Performance In Kenya Certificate of Secondary Examination in Embu District in Kenya International Journal of Social Sciences.30th June, 2013. NO. 1.
[22] Makewa, L. N, Role, E, and Otewa, F. (2012). Parental Factors Affecting Academic Achievement of Grade Six Pupils in Kisumu City, Kenya. International Journal of Asian Social Science 2(11):1984-1997.
[23] McIntosh, J. (2008). Family Background, Parental Involvement, and Academic Achievement In Canadian Schools, Economics Department Concordia University1455 DeMaisonneuve Blvd. W.Montreal Quebec, H3G 1M8, Canada.
[24] Mugenda, M.O, and Mugenda, A.G. (2003). Research Methods: Quantitative and Qualitative Approach. Nairobi: Acts Press.
[25] Muola, J.M. (2010).A Study of The Relationship between Academic Achievement Motivation and Home Environment among Standard Eight Pupils. Educational Research and Reviews Vol. 5 (5), pp. 213-217, May, 2010.
[26] Mwituria, S. M. (2012). Qualitative and Quantitative Research Methods. Simplified. Nairobi. Frajopa Printers Mall.
[27] Muruwei, M. (2011). Parents' Level of Education and Senior Secondary Students' Academic Performance in English Language. In Bayelsa State, Nigeria.
[28] Ntitika, J. L. (2014).Parental Characteristics Influencing Students' Academic Performance in Public Secondary Schools, In Isinya District, Kenya. Unpublished M. Phil. University of Nairobi.
[29] Ogunshola, F. (2012).The Effects of Parental Socio-Economic Status on Academic Performance of Students in Selected Schools in Edu Lga of Kwara State Nigeria International Journal of Academic Research in Business and Social Sciences July 2012,Vol. 2,No 7.
[30] Omoraka, S. (2001).The effect of gender, socio-economic status and school Retrieved From http/www/undartictle.comp/p/articles retrieve on August 2011.
[31] Oloo, M. A. (2003). Gender Disparity in Student Performance in day secondary schools. Migori; Unpublished Master of Education Thesis, Maseno University.
[32] Osunloye, A. (2008). Family Background and Student Academic Performance. Retrieved from; http://socyberty.com/education/family-background-StudentAcademicPerformance.
[33] Oso, Y, and Onen, D. (2008). A General Guide to Writing Research Proposal and Report. Kampala, Makerere University printer.
[34] Osuafor, A, and Okonkwo, I. (2013). Influence of Family Background on Academic Achievement of Secondary School Biology Students in Anambra State, An International Multidisciplinary Journal, Ethiopia Vol. 7 (3), Serial No. 30, July, 2013:156-167.
[35] Ruth, C; Jonatan, R; Palma, C; David, J; Ligia, D.E; Moreno, L.A, and Ortega, B.F.(2011) Associations between Parental Educational/Occupational Levels and Cognitive Performance in Spanish Adolescents: The AVENA study Psicothema 2011.Vol. 23. pp. 349-355.
[36] Suleman, Q; Aslam, H. D; Hussain, I; Shakir, M; Khan, F, U; and Nisa, Z. (2012).Effects of Parental Socioeconomic Status on the Academic Achievement of Secondary School Students in Karak District, Pakistan International Journal of Human Resource Studies ISSN 2162-3058 2012, Vol. 2, No. 4
[37] Sukor, N.S, Osman, K, and Soh, M.T.T. (2012).Family Income and Home Environment on children's Chemistry Achievement. Available at http://www.ssrn.com/link/ OIDA-Intl-Journal- Sustainable-Dev.html
[38] Sunitha N. H., and Khadi, P. B, (2007). Academic Learning Environment of Students from English and Kannada Medium High Schools. University of Agricultural Sciences, Dharwad - 580 005, India.
[39] Tenibiaje, D.J. (2009). Influence of Family Size and Family Birth Order on Academic Performance of Adolescents in Higher Institution Pakistan Journal of Social Sciences Year: 2009 | Volume: 6 | Issue: 3 | Page No.: 110-114.
[40] Teodor, M. (2012).The Influence of Socio-economic Status on School Performance. Romanian Journal of Experimental Applied Psychology. Vol.3 issue2- 2012.
[41] Ushie, M. A; Emeka, J. O; Ononga, G. I., and Owolabi, E.O. (2012). Influence of Family Structure on Students' Academic Performance in Agege Local Government Area, Lagos State, Nigeria. European Journal of Educational Studies. 4 (2), 2012.
[42] Witt, S.D. (2008). Urie Bronfenbrenner. Developmental Parent and A child Interaction Online Retrieve from http//gozips.uakron.edu/~/susan8/devparch/theorists.htm.
[43] World Bank Report. (2004). International capital and economic development world development indicators. Washington D.C: Oxford University Press.
[44] Zhang, C. (2011).Parental Education, Family Income, and Peer Group on Children's Academic Performance in China. Bachelor of Social Sciences - Senior Theses. Paper 1.