

## **CORRELATE OF AGE INFLUENCE ON STUDENT'S LOCUS OF CONTROL AND ATTITUDE TOWARDS ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS NAIROBI COUNTY, KENYA**

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## **ABSTRACT**

Young people are considered as the cogwheels of development in any society. Therefore, educators and parents wish that students, who will ultimately be the future leaders and professionals, prosper academically. Nationally there has been a decline in academic achievement in secondary schools as indicated by the available statistics and Nairobi City County has not been left behind. Research indicates that attitude is considered as an important determinant of student's achievement in an education setting. It is therefore necessary that learning institutions establish and clarify the cause of good academic achievement. This study sought to examine whether variation in age influences locus of control and attitude towards academic achievement in public secondary school Nairobi County Kenya. The study was grounded on the functionalist theory by Katz (1960). The study employed correlational research design. The target population was 6460 form three secondary school's students from Nairobi City County. Stratified random sampling was used to divide the schools into three strata namely boys boarding, girls boarding and mixed day schools. Simple random sampling was used to select 7 public schools; 2 boys boarding, 3 girls boarding and 2 mixed day schools. Simple random sampling was used to select 385 form three students (208 boys and 167 girls) through proportionate allocation. The research instruments comprised of Rotter's locus of control

scale -internal versus external (I-E) scale control, and academic attitude scale. The tools were administered after piloting to establish their suitability. Data was analyzed using both descriptive (percentages and mean) and inferential statistics (Kruskal-Wallis one-way analysis of variance and t-test). The findings showed that age negatively correlates with both attitude and locus of control scale scores, but these relationships were very weak and not significant at 0.05 level of significant. Policy recommendations were made with regard to creation of awareness and sensitization on the relationship between locus of control and attitudes towards academic achievement in learners. Further research was made in relation to inclusion of other variables such as culture, social economic status so that it is clear whether disparity in these variables affect the locus of control and attitudes towards academic achievement in learners.

**Key Words: Locus of control and attitude, Academic achievement, Variation in age.**

## **INTRODUCTION**

Globally, great attention has focused on students' academic achievement. Many studies have sought to establish the underlying factors that propagate or hinder the learners' achievement. Findings from some of these studies have established that, students' academic achievement is dependent on various intrinsic and extrinsic factors within the environment in which the learners live (Bosorgi, 2009). Studies indicate that academic achievement which can be looked at both short and long term is a product of student's attitude in education. Achievement though may include the student's results in this study it will importantly look at the process of acquiring the results. Students with poor academic achievement have more negative attitude towards learning and believe that school and learning would not help them become successful in the future (Oliveira, 2011). Various psychologists and theorists in the field of education put emphasis on the factors that led to positive attitude which led to high academic achievement (Hulzing, 2015). An investigation carried out to establish the influence of students' attitude on their academic achievement in education in Malaysian educational centers (Awang, 2013) established that students had a negative attitude towards the Malaysian Language studies which in turn, negatively affected their academic achievement in this subject.

Since academic achievement has been linked to attitude, the researcher was interested in investigating the correlates of attitude and locus of control towards academic achievement. Academic achievement may be influenced by myriad factors where many researchers are interested in the end results of good grades. This study focuses on age as a correlate of attitude and locus of control towards academic achievement. In Kenya the main age of form three students is between 15-18years. The age happens to coincide with the developmental stage when adolescence in high school are generally over sensitive about how they appear to others and particularly attentive to their peers (Somerville, 2013).

Attitudes are psychological predispositions that are articulated by evaluating a specific entity. They emanate from people's viewpoints, intensions or conducts (1966). Academic attitudes are complex mental states involving beliefs, feelings, values and dispositions to act in certain ways in response to a demand (Lewis, 2007). An attitude involves students learning to own critical abilities and being assessed on their own achievement. According to Lewis (2007), a student who possesses an open liberalized mind and takes responsibility of his/her academic progress has a good attitude. A student who has positive or negative feelings towards certain aspects of their academic work in secondary school and the sum total of these feelings may produce positive or negative attitude towards their academic work which determines the achievement of that particular student. A positive attitude reflects a positive emotional disposition in relation to subject and similarly, a negative attitude is related to a negative emotional disposition (Zan & Di Martino, 2008).

Locus of control is individual beliefs on whether one has the power to control his/her own destiny and determine his/her own direction in life (Rotter, 1966). Locus of control is described as an individual's belief system regarding the cause of their experiences and the

factors to which that person's attributes lead to success or failure. This concept is mainly divided into two categories; internal and external dispositions. Education locus of control typically refers to how students perceive the causes of their academic success or failure in school. Khir (2015) argued that locus of control referred to the extent to which students felt that they had control over the events that influenced their achievement in school. In schools, locus of control of students influences not only how they responded to their studies, but also their attitude towards education.

Shide (2011) in his study argued that locus of control and attitude had correlates which finally affected academic achievement of students. In this study, the researcher was interested in finding out how age correlates to locus of control and attitude towards academic achievement in Nairobi City County, Kenya. Zam (2008) argued that students with internal locus of control had positive attitude towards learning since they knew that their hard work would be rewarded. Such students tended to motivate themselves and by doing so, they developed a positive attitude to what they were studying. However, students with external locus of control tended to exhibit a negative attitude towards their learning process mainly because they ascribed their academic achievement to external forces that they deemed to be beyond their control. Recent studies have pointed to the possibility that locus of control could moderate attitude. In particular, research studies by Silvestre (1983) and Wickman and Ball (1983) present insights that individual with either internals and or externals locus of control exhibit behavior consistent with their attitudes. More often than not, this attitude is influenced by how the students perceived the environment and what happened around them (Bosorgi, 2009). The current research would be interested to find out how age correlates to locus of control and attitude because these could be the factors which are responsible of academic achievement of students in secondary schools.

According to Carden (2004), age and gender determines locus of control and academic attitude which reflect to students' academic achievement. Locus of control related to student's attitudes, emotions, health and motivation as well as behavior in organization and education institutions (Spector, 2005). A student who had a positive or negative feeling towards certain aspects of their academic work in secondary school produced a positive or negative attitude towards their academic work which correlated to their achievement. If students felt in control of their academic outcome, they developed a positive attitude which impacted their discipline to achieve more in school life. Negative academic attitude was characterized by failures, retake and malpractices which led to very poor results and possibly dropping out of school. Many studies have shown that students who were identified as internals had positive attitude and obtained significantly high grades above average (Gifford, 2006). According to Spector and Fox (2005), locus of control related to student's attitude, emotions health and motivation as well as behavior in organizations and educational institutions. They argued that students felt in control of their outcome. The current researcher is interested in finding out how age as a correlate of locus of control and attitude affect students' achievement in secondary schools.

In Nigeria, Adebisi (2010) posited that attitude are generally regarded as enduring though modifiable by experience and persuasion and are learned rather than innate. In their study in Nigeria they found out that achievement of any learner is dependent on his/her attitude towards learning materials. This was based on the general belief that a positive attitude more often led to successful learning. Further, Alarape and Onakoyo (2003) examined the cheating behavior and personality variables including locus of control of Nigerian college students. They reported that students with external locus of control reported more cheating behavior and had a negative attitude.

According to Juma (2011), they never believed their grades were determined by the effort they put in their studies leading to formation of a negative attitude towards academic. According to studies by (Majzub, 2009), the relationship between locus of control and academic attitude was of great importance in the student's achievement. The researcher argued that if the students' locus of control was altered from external to internal, the students would likely have a positive attitude. However, the current study done in Nairobi Kenya is interested in correlates of attitude and locus of control which may affect the end result academic achievement. This research will help improve the students' achievement at the end of their study in secondary schools.

In Kenya, Mutwelili (2004) explored the main interaction effect between type of school, academic motivation and self-regulated learning as a factor in predicting students' academic achievement in public secondary school. Ileri (2015) explored the interaction of school type and achievement goal orientation among form three students in Embu County. In another local study, Mwangi, Oketch and Ileri (2015) using boys and girls boarding and mixed day public secondary schools in Kiambu County Kenya investigated the relationship between academic resilience and academic achievement. Kariuki (2017) correlation study in Nairobi County on achievement and motivation had a significant relationship with school category (public and private). Going by the data of fore mentioned type of school and student's personal factors there is need for further investigations to find out how age affect academic achievement. It is on the strength of this gap that the current study would want to find out how the above correlates affect education achievement public secondary schools in Nairobi county Kenya.

From the above research findings, it is hypothesized that age is one of the correlates of locus of control and attitude which may affect academic performance. Students' belief in the cause of their success or failure played a very important role according to earlier studies influencing their attitude (El-anzi, 2005) henceforth, influencing their academic achievement. However, most of these studies have been carried out in populations without considering what correlates to the type of locus of control and attitude the students acquire. Moreover, the local studies have studied the two variables either separately or with other variables ignoring the determinants to their formation. This elicited great interest to the current researcher who sought to find out if age as a correlate of locus of control and attitude determine the academic achievement of students in secondary school in Nairobi City County Secondary schools in Kenya where the national results have been quiet low.

## **Statement of the Problem**

In its quest to turn Kenya into a middle-income economy, the government came up with vision 2030. It became apparent that education would play a pivotal role in achieving this vision. Education was therefore incorporated as one of the three pillars for this vision (MOE, 2012). Given that education is predicated on academic performance the stakeholders are worried because of the persistent decline in the students' academic performance as shown by KCSE results mean score of Nairobi County. It may become an impediment to the achievement of the vision 2030. Since the year 2018 the KCSE performance has not been satisfactory as previously envisioned to produce students with high skills. In 2014, the percentage of students who attained grade C+ and above was 30.78%; in 2016, 32.93%; in 2017, 15.48%, and in 2018, 14.23% (KNEC, 2018). The number of students who obtained the minimum entry requirement points for university was low. This poor trend has also been reported in Nairobi City County. From the available data, we note the mean score per county from 2018 to 2020 is very low. Where improvement has been noted like Langata sb-county in 2019 the mean score was 5.5 then 2020 the mean score went up to 6.03. This is very minimal improvement noting that this is the sub-county with the best results in Nairobi City County. Worse is the fact that some counties have even dropped in their mean score, Njiru sub-county mean score was at 2.83 in 2019 while 2020 the mean score dropped to 2.72, Kasarani sub-county 2019 the mean score was at 3.24, 2020 it dropped to 3.05. Nairobi being the city county is endowed with the best infrastructure and ratio of teacher to pupil in the country and so it is expected to be producing much better results.

Several studies have been carried out in and outside Nairobi to ascertain the determinants of academic performance such as academic self-concept, academic motivation, resilience and causal attributions (Mutweleli, 2014; Mwangi, 2015; Ngunu, 2019). Correlates of Examination Anxiety (Mukolwe 2015) is another study which added knowledge on low academic performance but the problem has persisted. The researcher has presumed that there could be other factors that may be attributed to the continuous low academic performance. Several studies are not conclusive on locus of control as one of the cognitive variables associated with attitude. The researcher therefore presumed that age is a determinant of locus of control and attitude which may affect academic achievement. It is against this premise therefore, that this research study was carried out in Nairobi City County, Kenya.

## **Hypothesis of the Study**

**H<sub>01</sub>:** There is no statistically significant variation in age influence on student's locus of control and attitude towards academic achievement in public secondary schools Nairobi County.

## **Theoretical Framework**

The study was hinged on social learning theory. The theory offers a conceptual basis for understanding the variable, locus of control. It was advanced by a psychologist named Julian

Rotter (1954). He built his idea around the social learning theory concept which suggests that people's expectations regulate their actions. Rotter argued that individuals differ in the degree of their perception of things happening to them as being under their internal influence or under the influence of the outside force referred to as external locus of control. Rotter's (1954) theory posited that our behaviors are influenced by rewards and punishments and that these outcomes regulate learners' belief about the fundamental causes of their behaviors. The theory expounds further that an individual's belief on what instigates their good performance then influences their behavior and attitude. While applying this theory Boone (2003) observed that adolescents with an internal locus of control were more likely to take charge of their outcomes, exhibited a high sense of self-efficacy, were not easily swayed by the outlooks of others and often performed better when given an opportunity to perform tasks. Such students were inclined towards working hard to attain what they had set to achieve. They portrayed characteristics that included resilience in the face of challenges, exhibited of good physical health, and were happier, had greater control of their lives and finally often achieved greater results. Boone (2003) also demonstrated that students with internal locus of control were in charge of their academic attitude. Research linked internal locus of control to high self-esteem, great self-efficacy and high educational aspiration (Flower & Milner, 2003). On the other hand, students with an external locus of control blamed external influences for their situations and often ascribe their success to mere chance or luck. External locus of control has been linked with elevated levels of stress, recurrent illnesses, psychological disturbances and failed relationships Morry (2003). Rotter (1954) posited that learners exhibiting external locus of control normally held the notion that their success or failure came from external influences beyond their control such as luck, fate, circumstances, injustices, biasness or unfair teachers, discrimination or the fact that they were unskilled.

In the academic setting, positive academic attitude had been linked to the acquisition of internal locus of control (Groinic & Ryan, 1989). Learners with internal locus of control ascribed results of incidents to their own control and believe that the consequences of their activities were a result of their own abilities. Learners with internal locus of control held the belief that their exemplary work would determine their positive outcome. Such learners also believed that every deed had its results which led them to accept the fact that events took place and it all relied on their ability to control them or not.

Whether a learner had an internal or external locus of control it was supposed to have a strong influence on academic motivation, determination and performance in school. In education, "internals" were considered as more likely to put more effort in order to learn more, develop and prosper while "externals" were inclined to think that working hard is futile since someone or something else is handling them unjustly or curtailing their progress. Learners with an external locus of control thought that their achievements were not recognized or their efforts did not succeed giving them a negative attitude to academic achievement. When an individual or something else was the cause, the learners needed not to take more responsibility over their achievement at school. Locus of control was linked to a variety of psychological theories and their findings included students' feeling helpless which was when an individual developed a habit of behaving as if they were helpless even when

they were actually in control of their situation or hold the power to alter a situation or outcome. Some psychologists thought “externals” were more likely to foster this learner’s helplessness than internals.

This theory guided the current researcher in hypothesizing that locus of control influences the student’s academic attitude. It is presumed that it is possible to stimulate a particular type of locus of control and that if the learners develop an appropriate and favourable locus of control this would allow them to hold more optimistic attitudes hence improve in their academic performance. This was based on the premise that learners who thought that their low attitudes and achievements were induced by factors beyond their control, were unlikely to put extra in effort to improve their performance. On the contrary, if learners ascribed their poor scores to lack of appropriate skills or due to poor study habits, were more likely to persist in their studies in the future.

### **Empirical Review**

Personal beliefs involving internal versus external control of reinforcement bear an important relation to many human behaviors including achievement, adjustment and reaction to success and failure. Most of the time all this is determined by age. Mali (2013) argued that studies of age related differences versus locus of control have been confirmed to children for whom increases in internality would be expected due to both improved cognitive ability and experience.

A study by Akhtar (2011) in USA aimed at examining relationship between age and academic performance, academic attitude and effective study habits in college students previous research has shown that individual with a strong internal locus of control are likely to have greater academic achievement than individuals with a strong external locus of control. In the study effective study habits and high academic attitude also have been found to be positively correlated with higher academic achievement. 100 participants completed a tool of locus of control, Academic attitude and effective study habits. Scores from these measures were analyzed in relation to age academic year and GPA. The results were that aged third year and fourth year students had a higher internal locus of control, positive academic attitude and more effective study habits than aged first year students. This study was done in a developed country unlike the present study which will be in a developing country Kenya. Also a sample size of 100 was used unlike the current study which will use a bigger population of 400 students.

Developmental changes in locus of control in students attending integrated and non-integrated classes during early adolescence in Poland is a survey that was done by Katarzyna (2020). The longitudinal study on the development of context. Specific locus of control related to situation of success and failure in Polish adolescence. The participants included 90 primary school students including 30 who learned in integrated classroom and 60 who went to non-integrated classes. The students were surveyed during a three year schooling period when they were in sixth, seventh and eighth grade. At seventh grade students of non-



integrated class were more external in situations related to their peers from integrated classroom. With age and growing experience in distinguishing events that are causally related to one's action from those that are not to external locus of control which is characteristic of childhood changes to a more internal locus of control which increase with internality in adolescence. As people grow up their completeness improve and so does their ability to influence events in their daily lives. Katarzyna (2020) found that most four and five-year-old showed an external locus of control for both experiences of success and failure. With increasing age people develop more internal locus of control. In situation of success most children aged 7 showed an internal locus of control but it was only at the age of 11 that the young students started to attribute both success and failure to internal causes. In this study age has been found to affect locus of control and educational performance. In the present study in a different environment and with a bigger population the researcher would be interested to find out whether age will affect locus of control and student's attitude in secondary school giving better achievement. This gives justification of the current study.

A study on the relationship of age and locus of control among college students of Culbarg city by ANaik (2015) focused on the effects of age and the difference among demographic variables such as course the students were taking and locality among the college students. Age of these college students is the age of development in their personality and is critical content in studying personality. The study was conducted on 171 college students of Gulbarga city and had been selected by a random sampling method (lottery method). The questionnaire consisted of personal data sheet and Rotter's locus of skill scale. Descriptive statistics and non-parametric statistics a Mann-witney test(u) were used to analyze the data. The results found out that age affects locus of control. As the students grew older they were able to associate their success with hard work so the locus of control changed from external to internal. In the current research the researcher is interested in finding out how age correlates with locus of control and attitude of students towards academic achievement. The study is done on the form three students who are found to be of different ages. This study has been done on a larger population than the latter and in a developing country Kenya unlike the other which was done in a developed country USA.

Effect of age, grade level, subjects and family income on locus of control of secondary school students by Siddiquah (2019) was a study to help identify the effect of different variables on locus of control of secondary school students, about 120 students participated in the study. Brown locus of control scale (Blocs) was used to assess the internal and external locus of control of students T-test and Anova were applied to find out the difference in locus of control of students of different Age, grade level, subjects and family income. The results indicated that the external locus of control of younger age group (12-14 years) and lower grade level (9<sup>th</sup>) students was significantly higher than the students of older age group 16-17 and 18-19 years old and higher grade level (10<sup>th</sup>) students. The current study would be interested to find out the results of a similar study in different locality and with a larger sampled which justifies the current study being done in Kenya and with a sample of 375 students.

Several studies indicated that there was a correlation between students' external locus of control and academic attitude. In Malaysia a study was carried out to find out the influence of LOC on the performance of secondary school students (Khir, 2015). The study involved a sample of 402 students selected from ten secondary school' student. The results showed that majority of the students exhibited external locus of control. In reference to age the study established that early adolescents had high levels of external locus of control unlike late adolescents who were revealed to have internal locus of control. These results were attributed to influence by parents thus attributing their achievements and experiences to chance, fate and luck. Such students were also found to be less persistence in what they were doing, especially academically, and also they had very low and negative academic expectations. The current study however sought to explore age versus locus of control and attitude towards academic performance in secondary school form three students in Nairobi Kenya.

In Turkey, Korkamaz (2018) carried out a study to investigate the influence of self-efficacy, procrastination, and locus of control on the academic attitude of gifted and non-gifted learners. The sample was selected from learners from grades 6 to 8. The data was analyzed using Pearson product-moment correlation coefficient and multiple linear regression. The results indicated that gifted learners had positive attitude and were less influenced by locus of control. However, there was strong link between external locus of control and academic among non-gifted learners. Additionally, it was unearthed that students with external locus of control had moderately lower academic achievements. Therefore, the researchers concluded that external locus of control had a negative influence on the attitude of students. This study was however carried out on young children in primary school. At times when students are young, locus of control and academic attitude may not have fully developed meaning it may change as they mature. This made the current study necessary because it comprised of form three students whom the researcher assumed that their locus of control and academic attitude were more developed and could be studied.

Wood (2009) carried out a study in the United States of America to establish the relationship between age locus of control and academic attitude among nursing students. The researcher used a descriptive research design and employed both qualitative and quantitative methods using a sample of 106 students (Wood, 2009). The researchers sought to find out the link between age locus of control and academic attitude. The results of the study revealed that there was a strong negative correlation between older students of 18years and above, external locus of control and academic attitude. This indicated that the higher the age, the higher the external locus of control, and the lower their academic attitude which consequently led to low performance in the nursing examinations. Therefore, the study concluded that age, external locus of control was a barrier to academic attitude leading to poor performance. It was therefore recommended that teachers should come up with strategies of motivating students with higher age external locus of control to be persistent in their studies and to take a personal responsibility for the success of their studies. The current study dealt with a bigger population of 400 form three students unlike the latter which had 106 students. The current study was dealing with secondary school students whose age is hypothesized to affect locus of control and attitude hence their academic performance. The latter study was in a nurse

training college where the students had already chosen a career so nothing much can be changed. The age differences is what prompted the current study so as to find out whether the previous findings could be generalized to the population of study and the Kenyan situation. In Uganda a study was conducted to establish the prediction effect of age on locus of control on academic attitude among secondary school science teachers' trainees at a public university (Aizen, 2000). The main aim of the study was to find out whether the locus of control in students of college going age and their social economic status has any effect on their academic performance. The researcher gathered a response from 60 subjects between the age 18 to 21. The students were chosen randomly within the Pandit Deendayal Petroleum University. The research instrument used were locus of control inventory (which reflect the way students feel about what happened in their academic institution) and life experience inventory (which reflects the experience of life). A cross-sectional survey design was employed and data was collected using a structured questionnaire from a sample of 60 students. Analysis was carried out using SPSS and the results revealed that locus of control and attitude were significantly determined by age. Additionally, the results indicated that there was a significant difference in academic attitude among students coming from the rural areas in comparison to those from the urban areas. The current study is different variables like gender, type of school and age. Another cross-sectional survey design was employed by Aizen (2000) in Uganda to establish the prediction effect of locus of control on academic attitudes among secondary school. The data indicated that locus of control significantly predicted academic attitudes. The study actually revealed that the use of external locus of control shifted responsibility of academic issues from students to other external causes which likely resulted in counter production view in science subjects and hence negative academic attitudes among students. Since the study was carried out on university students whose ages differ from the current population this made the current study necessary to find out whether there would be consistencies or inconsistencies in the findings.

## **RESEARCH METHODOLOGY**

### **Research Design**

This study employed a correlational research design. This design involves the measurement of relationship between or among variables (Strangeor, 2011). This design looks at the association between the variables and allow the researcher to infer on whether there is presence or absence of the relationship between variables of the study and establish the direction of the relationship. The choice of the design was based on its ability to explore co-relationship among variables that cannot be manipulated.

### **Target Population and Sampling**

The target population for this study was 6460 form three students from all 85 secondary schools in Nairobi County. The selected sample of the study was 375 students from 7selected public schools using stratified random sampling. This study adopted both probability and non-probability sample techniques. Purposive sampling was used to select Nairobi City

County. Probability sampling guaranteed that each element in the population had an equal probability of being included in the sample. More specifically, stratified sampling was employed to identify schools from boys boarding, girls boarding and mixed day schools strata. This enabled the researcher to obtain estimates that were more accurate from every stratum since each stratum is more homogeneous than the total population. Therefore, the information collected from different strata was more reliable and heterogeneous information. Simple random sampling was used to select the 375 students from the sampled schools. This ensured that every subject had an equal chance of being selected thus resulting in a truly representative sample.

**Table 1: Sample Size of Schools and Students**

School Category	Sampled schools (30%)	Students per school
1. BB	3	169
2. GB	2	138
3. MD	2	68
<b>TOTAL</b>	<b>7</b>	<b>375</b>

The sample size was attained using Slovin’s formulae (1967) cited in Israel (1992) that was  $n = \frac{N}{1 + N \cdot e^2}$ . Where “n” was the desired sample “N” is total population and “e” was the margin of error which was rated at 0.05. Using this formula, 400 study subjects were selected as the base sample. In each class a table of random numbers was used to get suitable respondents. Proportionate stratified sampling was used to allocate study subjects in the boys boarding, girls boarding and mixed day schools to ensure that the size of the sample drawn from each stratum was equivalent to the relative size of the stratum in the population as espoused by Strangor (2011). This was computed based on the total number of students per strata relative to the total number of students in public secondary schools in Nairobi City County and the sample size. The number of students per strata was arrived at by using the formulae  $\frac{n}{N} \cdot n$  where “n”, was the population size of the particular strata, “N” was the total population and “n\*” was the sample size.

### **Data Collection And analysis**

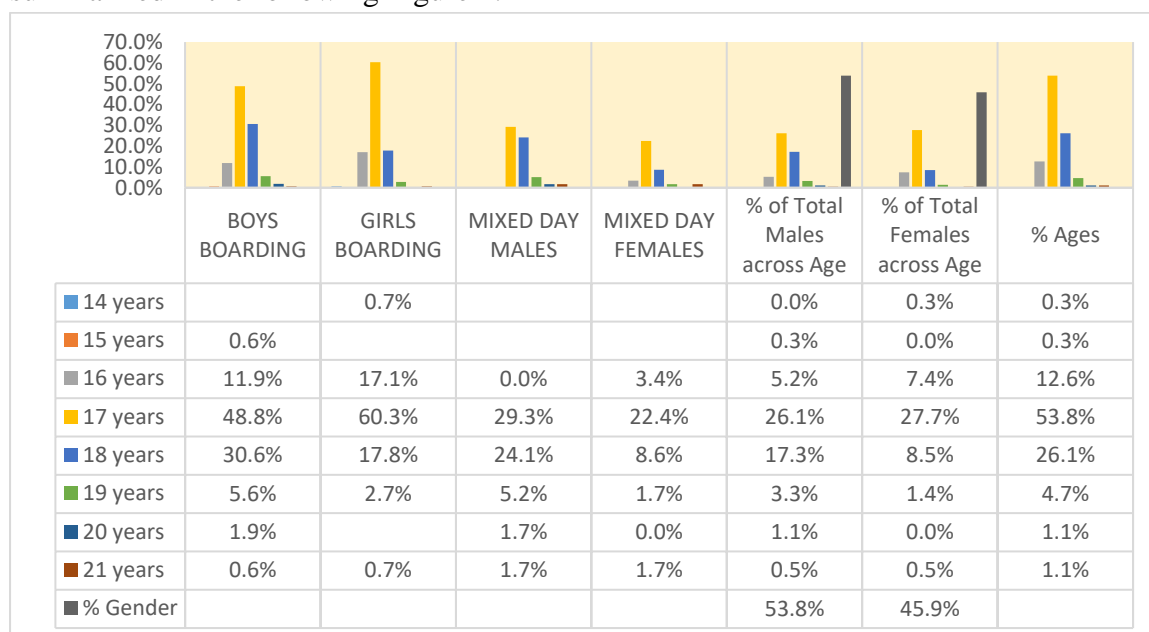
The researcher employed questionnaires for primary data collection. After data collection, the research instruments were coded and the data was fed into a computer for analysis using SPSS version 25. Both descriptive and inferential statistics were used to analyze the data. Quantitative data results were analyzed and then presented using frequencies, means, and percentages, tabulated in tables, charts and polygons. Data was organized into related themes and then summarized in report form. The research hypothesis was analyzed as follows:

**H<sub>01</sub>:** There is no statistically significant variation in age influence on locus of control and attitude towards academic achievement in public schools of Nairobi county secondary schools. This hypothesis was analyzed using t-test. The significance level at 0.05.

### **RESEARCH FINDINGS AND DISCUSSION**

Percentages were used to describe and summarize data in reference to demographic characteristics of respondents. The demographic variables were analyzed in relation locus of

control and attitude towards academic achievement skills scores. These results are summarized in the following Figure 1.

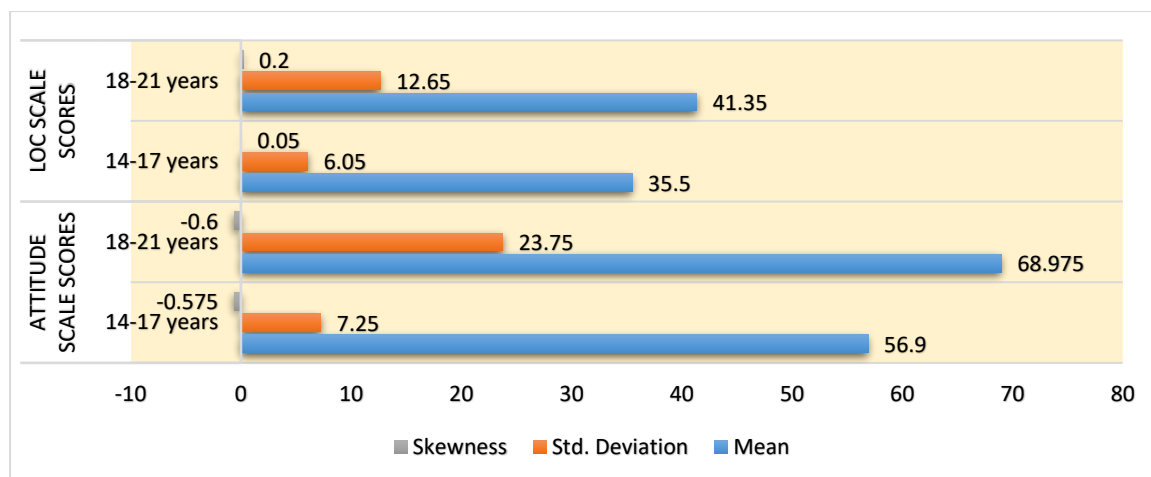


**Figure 1: Distribution of Respondents across Gender, Age and School Type**

The sample shown in Figure 1 comprised of girls boarding, boys boarding and mixed day schools. From figure 1 above 53.8% of the respondents represented the boys while girls were represented by 45.0% of the total sample. This depicts slight differences in enrollment between boys and girls where the enrollments of boys is slightly more (Global Gender cap Report, 2020). Apart from the fact that girls are enrolled more the retention by form three is lower hence the boys becoming more. Retention could be hampered by factors such as social cultural, finance (school fee) and accessibility to education opportunities (Abungu, 2015).

From Figure 1, the highest age of respondents was between 16years and 18years. (16yrs-12.6%, 17yrs 53.8% and 18, 26.1%. Majority of girls sampled had 60.3% of age 17 compared to boys at 48.8%. Never the less these age ranges are most likely to be found in form three students in secondary schools in Kenya. However we had extremes of ages 14 and 21 represented in the sample by less than 1% as shown in the Figure 1 above.

Statistical descriptors were also carried out on age in reference to locus of control scale scores and attitude, towards academic achievement scale score. The findings are presented in the Figure 2 below.



**Figure 2: Descriptive Statistics for Age, LOC and Attitudes towards Academic Achievement Scores**

In figure 2 above the age categories of 18-21 years old obtained high mean score of 41.35 on locus of control scale score than age categories of 14-17 years old who obtained 35.5. Nevertheless those differences in mean score are insignificant as the skewness values in each case are positive 0.2 and +0.05 respectively. Furthermore as evident in figure 2 above the comparisons between age and locus of control did indicate that across age differences majority of respondents were of external locus of control. This finding concedes with Wood (2009) study findings in which with the higher age the external locus of control.

Figure 2 also shows comparison in mean of attitude found academic achievement scale score across age. In this case, the 18-21 year old had a high mean score of 68.96 than the 14-17 old who had a mean of 56.9 on the attitude towards academic achievement scale score. Similarly with negative skewness in each case -0.6 and -0.575 respectively the differences are insignificant. This implies that majority of respondents across age had positive attitude towards academic achievement as shown on figure 2 above. Aktar 2011 in which higher ages were found to embrace positive academic attitude found similar finding.

The study sought to examine whether variation in age influence student’s locus of control and attitude towards academic achievement in public secondary school of Nairobi County. Therefore Pearson Correlation test at 0.05 level of significance was used to analyze the null hypotheses that there is no statistically significant variation in age influence on locus of control and attitude towards academic achievement among students in public secondary school in Nairobi County. The summary of the findings on the analyses are presented in table 2 below.

**Table 2: Age Influence on Locus of Control and Attitude towards Academic Achievement in Public Secondary Schools Nairobi County**

Variables		Attitude Scale Scores	Loc Scale Scores
<b>AGE</b>	Pearson Correlation	-0.099	-0.021
	Sig. (2-tailed)	0.056	0.680
	N	374	374
	R <sup>2</sup>	0.009801	0.000441

From the table above the results shows that age negatively correlates with both attitude and locus of control scale scores, but these relationships were very weak (-0.099 and -0.021 respectively). Furthermore, both relationships were not significant at 0.05 level of significant (i.e 0.056 and 0.680 respectively). In addition, their co-efficient of determinant Rs were quite negligible that is (0.009801 and 0.000441 respectively). Hence, the null hypothesis which stated that there is no statistical difference variance in age influence on locus of control and attitude towards academic achievement among students in public secondary school in Nairobi County was not rejected.

This implies that the difference in ages did not influence both locus of control and attitudinal dispositions of respondents to bring about a significant relationship. Indeed reflecting upon the spread of percentage across locus of control and attitudes on respondents as shown on figure 2 above it is realized that there were high percentage of respondents with external locus of control and positive attitude despite the differences in mean scores of the same variables across age as shown in figure 3 above. Thus, regardless of variation there was no significant influence of age on locus of control and attitude in the despondences. Such findings are not isolated when compared to a number of previous studies on the same variables. Julian (2019) studied young people's educational outcome linked to their sense of control. The study analyzed the link between young people's sense of locus of control over their age and investment in education. We find that young students with more internal, locus of control have a higher probability of finishing secondary school and conditional on completion meeting the requirement to obtain university entrance rank. Moreover, age of adolescence was found to have no much influence in academic achievement.

Factors affecting the academic performance of student's nurses Lawrence (2015) was a study aimed to determine the factors affecting the academic performance of fourth year students' nurses. A quantitative descriptive design was utilized self-reporting questionnaire was the main method used to gather data. On teacher related factors, it was found to have some relationship. Personal factors like feeling sleepy in class was rated to be high, home related aspects that is living far from school was most important factor and the time schedule was determined to have the greatest effect among the school related items. Age had no impact at all on the academic performance. It was concluded that teacher-related factors topped the list of academic performance then study habits and school related factors.

Academic stress, age, motivation and its relationships on academic performance of the senior high school students Jhoselle Tus (2020) was a study to establish whether academic performance is dependent on multiple factors three of which are age, stress and motivation. It is an essential aspect for senior high school students as they are nearing college life and because having better academic performance yields better opportunities in life. The study used a descriptive correlational approach to examine the students stress age and motivation and their relationship with academic performance. The data was gathered through the perceived stress scale (PSS) and the academic motivation scale (AMS). The study finding revealed that students stress and motivation were average and above average respectively.

Age was found to have no influence on the nurse's academic performance. Moreover, the academic performance of the students was very satisfactory.

Relationship between parental involvement, Age, and Academic performance of senior high school students. The case study of Ashanti Mampong Municipality of Ghana (Inkum, 2015) is a study, which explored the relationship between parental involvement in education and age of students and academic performance of senior high school students in the Ashanti Mampong Municipality of Ghana. The descriptive correlational research design was used to conduct the study. Stratified random sampling procedure was employed to select 471 respondents made up of 186 males and 285 females. Questionnaire and test items on mathematical and English language were the research instruments used to collect data for the study. Data analysis was conducted by employing descriptive statistical tool (mean and standard deviation scores) to examine students perceived parental academic ambition and involvement in their education and academic performance. The results of the study show a significant positive relationship between parental involvement in education and students' academic performance. Age had no any significant influence. It is recommended from the study that parents should play a leading role in supporting their children education since they are the fairest to expose children to the social and academic world.

However, some other finding show contradiction to the current study results which include; Development changes in the locus of control in students attending integrated and non-integrated classes during early adolescence in Poland a survey that was done by Katarzyna (2020). The longitudinal study on the development of context specific locus of control related to situations of success and failure in Polish adolescents. The participants included 90 primary school students including 30 who learned in integrated classrooms and 60 who learned in non-integrated classes. The students were surveyed during a three-year schooling period when they were in sixth, seventh and eighth grade. Questionnaire by Krasowicz-Kupis and Kuezup Wojnarska measured locus of control. At first stage of study, students in non-integrated classroom in schools were characterized by a more internal locus of control both generalized and in situation of failure, compared to students of non-integrated classroom in schools with an inclusive curriculum. As the age advanced at seventh grade students of non-integrated classes were more external in situations related to their peers from non-integrated classroom. There was observation of developmental changes in age, which had a relationship with locus of control and attitude of students from non-integrated classes but only those who attended schools with an integrated curriculum, and it improved their academic performance. With age and growing experience in distinguishing events that are causally related to one's actions from those that are not an external locus of control, which is characteristic of childhood changes to amore internal locus of control which increases in internally in adolescence. As people grow up their competences improve and so does their ability to influence events in their daily lives. At this time, their locus of control undergoes intense changes under the influence of the educational environment of the family and school in which the young person learns to take responsibility for their actions. In this situation of success most children aged 6 and 7 showed an internal locus of control but it was only at the age of



10-11 that the young people started to attribute both successes and failure to internal causes and shown improvement in their academic achievement.

Another study with a contradictory results is that of Locus of control and academic performance among Orang Asli students in Malaysia (Azlina, 2015). The study presented to identify the locus of control and its links to academic performance of Orang Asli students. It was also to determine the differences of locus of control according to age and gender. A total of 402 Orang Asli students (n male =39.05%, female 60.95% age 14=57.1% n age 42.20%). The study was from ten secondary schools in the state of Perak and Pahang. Respondents were selected through multi-stage sampling technique and data collected using questionnaires. The study found majority of the respondents tend to have external locus of control. Locus of control showed significant difference in age. Late adolescence tended to have internal locus of control, which showed significant difference according to various level of academic performance. Those students with mature age showed higher level of academic achievement compared to those of a younger age.

Another study, which showed contrary opinion, is by Siddiquah (2019). The purpose of the study was to identify the effects of different variable on the locus of control of secondary school students and how it affected their academic achievement. 520 students participated. Browns locus of control scale was used to assess the internal and external locus of control on students. T-test and Anova were applied to find the difference in locus of control of students of different gender, age, grade level, subjects and family income. External locus of control and attitude of students of younger grade level was significantly higher than those of the higher-grade level. These results support the finding of Sagon and De caroli (2014) that locus of control and attitude is influenced by age. Nevertheless, locus of control and attitudinal disposition may equally manifest themselves in a common environmental influence as witnessed in Nairobi County cases bringing about less difference across ages.

## **Conclusions**

Based on the main findings of this study, the results indicated that age negatively correlates with both attitude and locus of control scale scores, but these relationships were very weak and not significant at 0.05 level of significant. Furthermore, the findings on attitudes towards academic achievement agreed with Katz's functionalist theory due to the fact that instrumental or rather adjustment function attitude help students to adjust to their work environment because when students were well-trained, they are likely to develop a positive attitude towards management in their learning institutions. When students are intimidated and negatively criticized, they develop a negative attitude towards education. The adjustment function directs students towards pleasurable or rewarding object thus keeping them away from unpleasant and undesirable ones. It served the utilitarian concept of maximizing reward and minimizing punishment. Students' attitude was dependent on their perception of what was needed in satisfying and punishing.

## **Recommendations**

Based on the findings of the study that academic success will be determined by how attitudes towards academic achievement relates to locus of control the study recommends that the students should be created awareness and sensitized on the relationship between locus of control and attitudes towards academic achievement. There is need to design interventions that will focus on the negative attitudes and external locus of control among students. These interventions should help the students from diverse backgrounds, with complex personal experiences, to improve academic performance as well as future employability.

It is also recommended that teachers stay abreast of current research and trends in the field of locus of control and attitudes towards academic achievement. This will help them in identifying external locus of control in students and may inject some intervention measures such as reinforcing their students when they demonstrate an internal locus of control and incorporating techniques that enhance internal locus of control.

This study comprised of form three students from Nairobi City County. This means that the findings of the study may not be generalized beyond this population of study. The study can therefore be replicated in other counties because of the cultural or geographical differences that may affect the results.

## **BIBLIOGRAPHY**

- Adebiyi, A. D. (2005). Parental involvement, interest in schooling and school environment as predictors of academic self-efficacy among fresh secondary school students in Oyo State. *Electronic Journal of research in Educational Psychology*, 3(1), 163-180. Retrieved March, 2017.
- Akhtar, Z. (2011). *The effects of parenting styles of parents on attachment styles of undergraduate students. Conference Paper presented in International Conference of Education, Research and Innovation, Madrid; Spain.*
- ANaik, A. (2015). *Relationship among emotional intelligence, parental involvement and academic achievement of secondary school students in Ibadan.* Nigeria: University of Ibadan.
- Awang, H.B. (2013). Parenting style and black adolescents' academic achievement. *Journal of Black Psychology*, 30(2), 229-247. Retrieved March, 2017.
- Azlina, K. (2015). Education. Development, social and clinical consideration. *In handbook of self-concept.* Newyork. John Wiley and sons.
- Boone, C. & Van Witteloostuijn, A. (2005). Team locus-of-control composition, leadership structure information acquisition, and financial performance: A business simulation study. *Academy of Management Journal*, 48(5), 889-909.
- Bosorgi, D. J. (2009). Feeling is believing. In *Self-esteem and self-evaluation* (Vol. 4, pp. 27-58). Hillsdale: NJ Erlbaum.

- Carden, M. (2004). The relationship between job satisfaction and locus of control in a South African call center environment. *South African Journal of Labor Relations*, 30(2), 66-81.
- El-anzi, O.K. (2005). Factors influencing students' mathematics performance in some selected colleges of education in Ghana. *International Journal of Education Learning and Development*, 3(3).3, pp.68-74
- Gifford, K. (2006). Maternal and dual-earner employment status and parenting. *Handbook of Parenting Volume 2 Biology and Ecology of Parenting*, 206.
- Groinic, P. W. & Ryan, T. W. (1989). Grades-who's to blame? Student evaluation of teaching and locus of control. *The Journal of Economic Education*, 35(2), 129-147.
- Huizing, R. (2015). Who's controlling locus of cross-cultural LOC usage. *International Journal of Leadership Studies* 9(1) 76-88.
- Israel, S. (1992). Research-based classroom practices and student achievement. *Middle School Journal*, 35(1), 52-57.
- Jhoselle Tus, S. M. (2020). *Personality adjustment: an approach through the study of healthy personality*. New York. Macmillan.
- Juma, F. (2011). *The relationship between mode of teacher motivation and students' academic performance in public secondary school in Bugoma North District*. Unpublished Project.
- Kariuki, M. (2017). *A comparative study of the occupational aspirations of physically handicapped secondary students and actual job placement*. Unpublished M. ED. Thesis, Nairobi. Kenyatta University.
- Kenya. Ministry of Education, (1987). *Educational handbook*. Nairobi. Government Printers.
- Khair, H. B. (2015). Survey research. *Foundations of Behavioral Research*, 599-619.
- Korkamaz, R. (2018). Parenting attitude and style and its effect on children's school achievements. *International Journal of Psychological studies*, 2(2) 217-222.
- Kuczynski, L. (Ed.). (2002). *Handbook of dynamics in parent-child relations*. Sage Publications.
- Lawrence, K. (2015). Impact of locus of control expectancy on level of well-being. *Review of European Studies*, 4(2)1-114.
- Lewis, E. (2007). The indicators of locus of control in the small business context. *Journal of Enterprising Culture*, 8(04), 343-360.
- Lowenfeld, B., (1973). *Ed. The visually handicapped child in school*. New York: John Day Company.

- Mali, Y. (2013). A study on locus of control and its impact on employees' performance. *International Journal of Science and Research*, 2(12)149-151.
- Morry, D. (2003). Untangling the links among athletic involvement, gender, race, and adolescent academic outcomes. *Sociology of Sport Journal*, 22(2), 178.
- Mukolwe, E. W. (2015). *Influence of parenting styles on academic performance of adolescents in secondary schools: a case of Manyatta constituency, Embu County*. Doctoral dissertation, University of Nairobi.
- Muriithi, M. (1996). *Expectations of handicapped students and their teachers in the learning and teaching of science subjects in Kenyan secondary schools for the physically handicapped*. Unpublished M. Ed Thesis. Nairobi: Kenyatta University.
- Mutweleli, J. M. (2014). A study of the relationship between academic achievement motivation and home environment among standard eight pupils. *Educational Research and Reviews*, 5(5), 213.
- Mwangi, M. (2015). The relationship between *self-concept and academic achievement in secondary schools in Kenya*. Unpublished Ph. D Thesis, CA. Stanford University.
- Mwangi, T., Oketch, R. & Ileri, B., (1998). *Relationship between self-concept and academic aspirations among disabled persons*. Unpublished M. Ed Thesis, Nairobi: Kenyatta University
- Naik, A.R. (2005). A study on Locus of Control among College Students of Gulbarga City. *The International Journal of Indian Psychology*, 2(4) dipboo324v2142015.47-54.
- Ngunu, M. M. (2019). *Exceptional children: Developmental consequences and intervention*. Nairobi, Kenya. Longman ltd.
- Oliveira, A. (2011). *A cross-cultural study of the Adolescent self-concept*. Ph. D Dissertation, England: University of Bradford.
- Oliwa, B. N. (1998). *A study on the relationship between achievement motivation, locus of control and academic performance of class eight in Banda District*. Unpublished M. ED. Thesis, Nairobi: Kenyatta University.
- Republic of Kenya (1995). *Draft Report on cost and Financing of Education in Kenya*. Government Printers Nairobi.
- Republic of Kenya (2005). *Education Sector Support Programme*. Government Printers Nairobi.
- Republic of Kenya (2007). *Kenya Vision 2030*. Government Printers.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1.
- Shapiro, D. H. Schwartz, C.E. & Austin, J.A. (1996). Controlling ourselves. Controlling our world. *American Psychologist*, 51, 1213-1230.

- Shide, M. (2011). Relationship between self-esteem and locus of control in Iranian University students. *Procedia-Social and Behavioral Sciences*, 31, 530-535
- Siddiquah, S. O. (2019). Roles of personality, vocational interests, academic achievement and socio-cultural factors in educational aspirations of secondary school adolescents in southwestern Nigeria. *Career Development International*, 13(7), 630-647.
- Silvestre, J. (1983). Locus of Control and Academic Achievement in High School Students. *Psychological Reports*, 98, 318-322.
- Somerville, R.L. (2013). School dissatisfaction-Africa growing Problem. *International Journal on School Disaffection*, 1(1); 7-12.
- Spector, C. (2005). Procrastination, personality, Performance and Mood. *Personality, and Individual Difference*, 30,95-106.
- Spector, R. & Fox, G. (2005). *Impact of IGAS on Students Retention Rates in Public Secondary Schools in Vihiga District*. Unpublished Project.
- Strangeor, O. (2011).Locus of Control, Interest in Schooling, Self-efficacy and Academic Achievement. *Cypriot journal of Education Science* 4,168-184.
- Wickman, D. & Ball, B., (1990) History of motivation research in education. *Journal of Educational Psychology*, 4, 616-622.
- Wood, R. W. (2009). The influence of parenting styles, achievement motivation, and self-efficacy on academic performance in college students. *Journal of College Student Development*, 50(3), 337-346.
- Word Bank (2005). *Expanding opportunities and building Competencies for young people: Anew Agenda for secondary Education* Wshington DC: World Bank.
- Zam, B. A., (2008). *Physical disability: A psychosocial approach*. New York. Harper & Row Publisher.
- Zan, M. & Di Martino, M. (2008). A social cognitive perspective. *Handbook of self-regulation*, 13.