SCHOOL LOCATION, SCHOOL TYPE AND STUDENTS' ACADEMIC ASPIRATION: THE CASE OF PUBLIC SECONDARY SCHOOLS IN LAIKIPIA COUNTY- KENYA.

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Abstract

Formal education is one of the key forms of investment in relation to the development process in a nation. The role of education in a nation's endevour to realize its development agenda, however is dependent on the rate of positive learning gains among learners which is largely influenced by their level of academic aspiration. Evidence adduced from data on students' performance in the Kenya Certificate of Secondary Education (KCSE) exit examination from 2009 to 2013 in Laikipia County shows that only 28% of candidates attained the minimum grade for university admission in the county. Although many variables are linked to students' academic performance, studies outside Laikipia County have consistently shown that students' academic is one of the key determinants of academic achievement. In this regard, the study sought to determine level of students' academic aspiration in public secondary schools in Laikipia County and the extent to which level of academic aspiration could be linked to school location (urban vis a vis rural) and school type (in terms of whether the school is day, boarding or partly day and boarding). Using *expost facto* research design, data were collected from 375 randomly selected students in 106 public secondary schools in the County. The data was analysed using χ^2 statistic at 0.05 alpha level of confidence. Evidence adduced from the analysed data showed that level of academic aspiration was higher in urban schools compared with rural schools. The noted differential levels of academic aspiration was also statistically significant ($\chi^2 = 13.42$; df=2; p<.05). The association between academic aspiration and school location was also strong (Cramer's V=.338). The data analysis further revealed that level of students' academic aspiration increased towards school in which all students were boarders. This finding suggested that boarding factor had a positive impact on academic aspiration. However, the association between school type was weak (Cramer's V=.085) and statistically insignificant (χ^2 =4.79; df=6; p<.05). The study has offered insights into the relationship between students' academic aspiration, and school characteristics including ways in which schools can enhance students' desire to achieve.

Key words: students' academic aspiration, school location and school type.

Background to the Study

Formal education is the most effective means through which a nation can attain its aspirations in the socio-economic and political realms of development. This observation rests on the fact that formal schooling enhances workers productivity, social mobility, and an individual capacity to effectively participate in the political affairs of a nation (Kiumi & Bosire, 2012). That being the case, the government of Kenya consistently increased investment in formal education which had reached 40% of the country's social spending in 2012 (World Bank, 2012).

Increased formal education expenditure was attested to by the introduction of free secondary education (FSE) in the country in 2008 (Republic of Kenya, 2007). The FSE initiative was a twopronged strategy. On the one hand, it aimed at forestalling financial demand on parents, a factor that the government envisaged would improve enhance access to and retention in secondary schools (Kipkechi, Andala, Kisebe & Simiyu, 2012). On the other hand, the strategy was predicated on the conviction that it would enable the country to produce human resources for supporting its development endevours (Republic of Kenya, 2010).

In spite of the noble goals envisaged in the FSE initiative, available evidence indicates that students have been underperforming in the KCSE exit examination. For instance the proportion of students who met university admission cut-off point (grade C^+) nationally averaged at 35% while the percentage of students who attained this grade during the same period in Laikipia County stood at 28% (KNEC, 2015). This implies that nationally, 65% of the KCSE candidates were unable to secure university admission between 2009 and 2013. The situation was worse in Laikipia County since 72% of the KCSE examination candidates were unable to secure direct entry to universities in the country.

Several studies (for example, Alfaro, Umana-Tylor & Bamaca, 2006; Gutman & Schoon 2012; Yala & Wanjohi, 2011) have consistently indicated that one critical correlates of students' academic achievement is their level of academic aspiration, this link is rooted in the fact that aspiration triggers the motivation to excel in school so as to attain the targeted academic accomplishment in life. Studies have further demonstrated that academic aspiration is related to school location in terms of whether the school is in an urban or rural setting (Barcinas & McCracken, 1991; Bajema, Miller & Williams, 2002; Park, Behrman & Choi, 2017), and school type with regard to whether the

school is boarding, day or partly day and boarding (Adetunde & Asare, 2017; Bahdar, Mahnaz, Jadoon & Sofia; Yatanga & Nduozo, 2015).

Drawing on the foregoing research findings, the study undertook to find out level of students' academic aspiration in Laikipia County and the extent to which students' desire to achieve may be linked to school location and school type. It was reasoned that this line of investigation will hopefully help to answer the question relating to why students in the county have been under-achieving in the KCSE examination.

In order to achieve the primary aim of the study the following two null hypotheses were developed and tested through χ^2 statistic at 0.05 alpha level.

- H0₁: School location has no statistically significant influence on students' academic aspiration in public secondary schools in Laikipia County- Kenya.
- HO₂: School type has no statistically significant influence on students' academic aspiration in public secondary schools in Laikipia County- Kenya.

Theoretical and Conceptual Frameworks

The study was anchored in McClelland's (1961) Achievement Motivation Theory (AMT) and Festinger's (1954) Social Comparison Theory (SCT). The AMT theory avers that the need to achieve success is one of the major motivation needs among human beings. The theory further posits that this category of motivator is acquired and shaped over time through our experiences in life and that this dimension of our needs helps to sustain individual's efforts towards the targeted goal (s). Additionally, AMT theory postulates that individuals motivated by achievement need are characterized by the tendency to set moderately difficult goals which they will consistently work to achieve particularly if their efforts are recognized (through positive feedback) by significant others. Inferring from the AMT theory, it is reasonable to conclude that students' are likely to be academically inspired in a scenario where they are consistently motivated both at home and in school through for example praising their effort and helping students to connect their learning to the real world by showing them ways in which it fits into their future plans.

Social Comparison Theory (SCT), on the other hand advances the view that individuals use other people as their prime locus of comparison. The theory further argues that in a group context there is

always pressure to reach uniformity of opinions or beliefs. This has the implication that an individual behaviour, including the motivation to achieve has to be anchored around the standards set by the group. Since violation of the group norms attracts penalties by way of social isolation (Collier, 1994) group members are typically compelled to use the group norms as a benchmark for their behaviour. In a school context for instance, a student according to the SCT is more likely to benchmark with his or her colleagues which implies that he or she may aspire for higher academic accomplishment if this is the norm upheld by his or her colleagues. The converse will be the case if academic aspiration is accorded a low premium by the group.

Conceptual Framework

The study was premised on the reasoning that students' academic aspiration is contingent upon school location and school type. Put differently, the study held that if school location and school type are favourable (independent variables) there is a high likelihood that students' academic aspiration (dependent variable) will be high and *vice versa*. The study similarly postulated that the influence of the independent variables on the dependent variables focused by the study may be moderated either positively or negatively by three extraneous variables namely, prevalent attitude towards formal education in the community, level of educated unemployment in the community, and level of an individual student's mastery experience. The conceptualized relationship between the independent, dependent and extraneous variables subsumed in the study is presented in Figure 1.

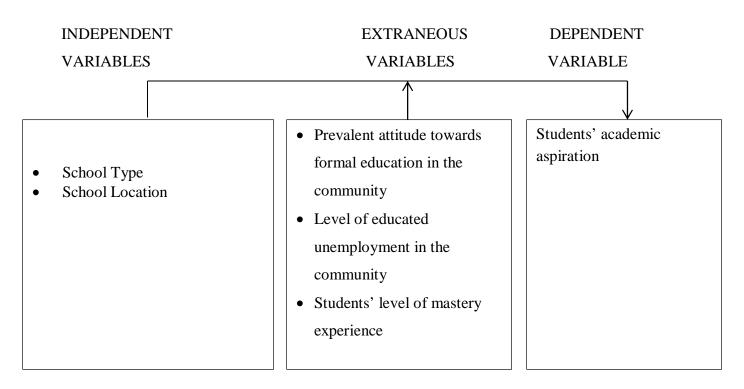


Figure 1: Relationship between variables subsumed in the study.

The basic idea in the conceptual framework model depicted in Figure 1 is that even in a situation where school type and school location (independent variables) are unfavourable, students' academic aspirations are likely to be high if the extraneous variables are favourable and vice versa.

Literature Review

One of the variables that attract debate in education circles is whether there are rural and urban differentials in students' academic outcomes. On one side of the debate are those who advance the view that urban schools are better in the sense that they are more resourced (Young, 1998), and closer to occupational opportunities such as industries and business enterprises (Barcinas & McCracken, 1991) which have the potential to trigger students' desire to achieve so as to take advantage of the potentially promising career opportunities. Furthermore, Gemici and Tham (2014) have opined that students in urban areas are not only closer to institutions of higher learning such as universities and colleges but they are also more exposed to a richer curriculum and a wide range of co-curricular activities. These advantages, according to the two authors tend to motivate students to aspire to greater levels of success.

Individuals favouring rural schools advance several reasons to support their position. For instance, rural schools are perceived to be better than urban schools since they are less likely to experience student unrest (Dunne, 1997; Oostadam, 2009) in addition to offering a conducive learning environment to students pursuing agriculture and environment related sciences such as environmental science. Added to this, is the argument that since teachers in rural schools are more likely to live in the community served by their schools ineffective teachers are less likely to escape censure from parents while their effective counterparts may be reinforced continually (Ballau & Podgursky, 1995). This situation, according to the two authors may have an additive effect on students' desire to excel in the academics.

Another variable that has equally attracted discourse in students schooling matters is whether boarding schools are better than day schools and *vice versa*. Some of the scholars supporting boarding schools (for example, Faisal, Shinwari & Izzat, 2016) have argued that these institutions offer conducive learning conditions (e.g., additional independent study time during weekends and higher rate of contact with teachers) that may not be available at home. Moreover, Coardy and Parker (2002) have averred that unlike their day school counterparts students in boarding schools are affected by the daily challenge of travelling daily to and from school. For this reason, students in boarding schools according to the two authors have higher chances of succeeding in school and by implication aspiring to progress to higher levels of education and training.

Proponents of day schools have on their part argued that these institutions strengthen the bond between children and their parents, a factor that makes children to be emotionally stable, confident and more motivated to aspire to achieve (Polloac & Reken, 2001; Perveen & Kazmi, 2011; Schaverien, 2004). The other view in support of day schools is that learning in day schools is less likely to be disrupted by students' unrest over issues relating to diet and entertainment facilities (Booth & Nolen, 2006; Bray, 2006). Moreover, students in schools, it has been argued are less likely to experience the problem of hostel ragging and homesickness (Faisal, Shinwari & Hateen, 2016). For this reason, day school students are more likely to be more engaged in their studies and thus be motivated to set higher achievement goals.

Methodology

The study applied *ex post facto* research design. This category of research is deemed appropriate in a situation whereby the independent and dependent variables have already interacted. For this

reason, it is not possible to manipulate the independent variable (s) with a view to determining its effect on the dependent variable (s). Consequently, the effect of the independent variable (s) on the dependent variable (s) is determined retrospectively (Kerlinger, 1986). This design was therefore selected in light of the fact that the study sought to determine retrospectively the effect of school location and school type on students' academic aspiration.

Instrumentation

Targeted data was collected through a personally delivered questionnaire (with the assistance of teachers) from 375 randomly selected students. The questionnaire had 21 five point Likert scale items which measured students' level of academic aspiration. The response options in the instrument ranged from strongly agree, agree, somewhat agree, disagree and strongly disagree which were allocated 5, 4, 3, 2, and 1 scores respectively. A high score represented a high level of academic aspiration and vice versa. The expected maximum and minimum scores accruing from responses to the items was expected to be 5 and 1 respectively. Based on the expected mean scores, students' Level of Academic Aspiration (LAA) index was formulated which was expected to act as a guide for interpreting students' level of academic aspiration. The formulation grouped the expected means into four quotas representing very low, low, high and very high level of academic aspiration respectively as shown in table 1.

Table 1

Mean Score	LAA
1- 1.99	Very Low
2- 2.99	Low
3- 3.99	High
4- 5.00	Very High

Expected Mean Score Ranges by LAA

Source: Field Data

Validity and Reliability of the Instruments

The instrument was validated by five experts in the Department of Psychology, Counselling, and Educational Foundations in Laikipia University who were knowledgeable in matters relating to psychology of learning and career aspiration in basic levels of education. The experts were asked to make comments including suggestions which in their opinion would enhance the instrument's efficacy in gathering the targeted data. Based on suggestions and comments by the experts, changes which were deemed necessary were effected in the instrument prior to execution of the main study. Two aspects of the instrument's reliability were estimated: internal and external reliability. Internal reliability which is a measure of the extent to which an instrument will measure a single idea (or construct for that matter, for instance, students' academic aspiration in this context) was estimated through Cronbach's alpha. The alpha obtained was .81 (or 81%) which implied that the 21 items were measuring students' academic aspiration 81% of the time and that error may have occurred only 19% of the time. External reliability - that the extent to which an instrument is capable of generating similar results when used more than once to gather data from a given sample under consistent conditions - was estimated through test- retest technique. This involved administration of the revised instrument to students (n = 61) in two schools in the neighbouring Nyandarua County. The instrument was in turn administered to the same subjects after one week. Scores from the two instrument administration phases were correlated in which a correlation coefficient of r = .80 was realized. The two estimates of reliability indicated that the instrument's level of reliability was high (Marczk, DeMatteo & Festinger, 2005).

Data Analysis

Data was analysed using χ^2 statistic. The objective was to find out whether the distribution of respondents in different subpopulations (that is those in urban and rural schools; and those in boarding, day and partly day and boarding schools) would be distributed equally or not in the four mean score ranges (see table 1), and if they latter was case, whether the difference was statistically significant Cramer's V test (post-test) was also carried out to determine the strength of the association between school characteristics (that is school location and school type) and students' academic aspiration. The results of χ^2 test are presented below.

School Location and Students' Academic Aspiration

The outcome of data analysis with respect to the relationship between school location and students' academic aspiration is presented in table 2.

Table 2

Respondents' distribution by School Location and LAA					N=337	
School Location			LAA Score			
	1-1.99	2-2.99	3- 3.99	4-5	Total	
Urban	12(13)	8(9)	49(54)	21(23)	90(27)	
Rural	38(15)	50(20)	52(21)	107(43)	247(73)	
Total	50(15)	58(17)	101(30)	128(38)	3337(100)	

(Figure in parenthesis represents percentages)

 χ^2 =13.42; df= 2; p< .05; Cramer's V= .338

A look at the data presented in table 2 shows that out of the 108 respondents from urban and rural schools who scored less than a mean score of 3.00, 35% came from rural schools while 22% were schooling in urban schools. The data further reveals that the proportion of respondents in urban schools who were in the upper range of points (that is 3-5) was 77% while the corresponding proportion in rural schools was 64%. These findings indicate that the students' level of academic aspiration was higher in urban schools compared to rural schools. The influence of school location, the table further reveals was relatively strong (Cramers' V=.338) and statistically significant (χ^2 =13.42; df= 2; p< .05). Based on these findings, HO₁ was rejected and conclusion made that school location and students' academic aspiration were not statistically independent.

School Type and Students' Academic Aspiration

The results of χ^2 test with respect to the relationship between school type and students' level of academic aspiration are summarized in table 3.

N= 337

Table 3

<u>School Tyr</u>	<u>be</u>	Respondents' LAA Scores				
	1- 1.99	2- 2.99	3- 3.99	4-5	Total	
Day	43(22)	88(45)	36(19)	27(14)	192(57)	
Boarding	12(13)	13(14)	20(22)	47(51)	91(27)	
Day and Boarding	9(17)	12(22)	20(37)	13(24)	54(16)	
Total	62(18)	111(33)	76(23)	87(26)	337(100)	

<u>Respondents' Distribution by School Type and LAA Mean Scores</u>

(Figures in parenthesis represent percentages)

 χ^2 = 4.79; df= 6; p> .05; Cramer's V= .085

A closer analysis of the data captured in the table 3 indicates that the highest proportion of respondents who scored less than a mean score of 3.00 came from day schools (67%) followed by day and boarding schools (39%) and lastly boarding schools (27%). The data also reveals that while 73% of respondents in boarding schools scored more than a mean score of 2.99, the corresponding proportion of respondents in day and boarding school, and day schools was 61% and 33% respectively. The emerging pattern in regard to respondents' distribution in the four mean score ranges indicates that level of academic aspiration increased towards schools in which all students were boarders. This seems to suggest that the boarding factor had a positive effect on students' desire to excel. Nonetheless, the link between school type and students' academic was weak (Cramers' V=.085) and statistically insignificant (χ^2 = 4.79; df= 6; p> .05). Consequently, HO₂ was retained and conclusion made that schools type and students' academic aspiration was statistically independent.

Conclusions and Recommendations

The findings generated by the study have important implications and lessons with regard to enhancing students' academic aspiration. A key observation from the findings is that academic aspiration was lower in rural schools compared with urban schools. The same was the case in day schools whose students demonstrated a higher level of aspiration compared with their counterparts in boarding schools and schools that had boarders and day scholars. On the basis of these observations, there is a need for rural schools and day schools to create conditions which can help to build students' academic aspiration. For they need to make students to see value in what they are doing in school including efforts to enhance students' sense of belonging in their schools. Added to this is the need to instil growth mindsets in students, by enhancing perceptions of themselves as learners. Another equally significant strategy is the need for schools to connect with parents. Through such linkages, schools will have an opportunity to educate parents on strategies to enhance home level cultural and social capital relating to students' progression in school and aspiration to succeed in life. Furthermore, schools should create conditions in which students feel cared about, safe and supported. This can be realized through nurturing a humanistic school environment where teachers relate well with learners whose additive effect on students' academic aspiration is immeasurable.

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