

A Nexus Between School's Examination Performance Status And Students' Academic Determination In Secondary Schools, Laikipia County, Kenya.

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ABSTRACT

Education is arguably the most effective medium through which a country can achieve its endeavours in socio-economic as well as political realms of human development. Education is therefore a pedestal for enhancement of workers' productivity, social mobility and equitable distribution of resources. It is worth mentioning that for a society to attain higher levels of development in all spheres of life its education system must of necessity be capable of furnishing its learners with superior literacy levels which is largely determined by students' level of academic determination. However, the acquisition of higher literacy levels by students in Laikipia county the study's locale may turn out to be a mirage given low percentage of students qualifying for direct university admission. Data based on students' performance in the Kenya Certificate of Secondary Education Examination (KCSE) exit examination for the period running 2009 to 2013 shows that on average only 28% of the candidates secured direct entry to university to pursue degree based careers. Background to the study indicates that one of the core correlates of learners' progression to advanced literacy levels is their level of academic determination. In this regard, it can be argued that students' academic determination is largely dependent on the degree to which school's examination performance status is favourable to students' desire to achieve. However, the extent to which school's examination performance status could be influencing students' academic determination negatively in Laikipia County is not yet known and it is the lacuna that this study sought to fill. The study was based on McClelland's Achievement Motivation Theory. Using ex post facto research design, data were collected through a self-administered questionnaire from 375 students in 106 public secondary schools in the County who were randomly selected from a targeted population of 11,580 students. Nominal scale data were analyzed through percentages and frequency counts while ordinal scale data were analyzed by use of χ^2 statistic at .05 alpha level of confidence using the Statistical Package for the Social Sciences (SPSS) version 22. The study found out that students' academic determination increased with increase in school's examination performance status. This finding has an important lesson on enhancement of students' academic determination, which includes the need for schools to come up with students' based aspiration programmes which should pay more attention to students from unfavourable school backgrounds put differently, those from schools with low examination performance status.

Key words: student, academic determination, schools and school's examination performance status.

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I. Introduction

World over, education has arguably emerged as one of the most effective pedestal upon which enhancement of workers' productivity, social mobility and equitable distribution of resources is grounded on. It is therefore, worth mentioning that for a society to attain higher levels of development in all realms of life its education system must of necessity be capable of furnishing learners exiting various levels of education with superior literacy skills. Such superior literacy skills are largely determined by students' level of academic determination (Psacharopoulos, 2013). In the same line of exploration Association of International Education Administrators (2016) avers that retention and transition of students from one level to the next level of education is not only perceived as a human right but it is also seen as a powerful tool for human development.

It worth highlighting that Kenya in the 21st century is faced with new challenges of meeting greater public demand for quality education and training both as a human right and as an essential area of investment (Republic of Kenya, 2015). This has the implication that formal education is the most reliable predictor of economic growth in a nation. In the same line of observation, there is a need to mention that formal education in Kenya needs to address both access and transition challenges as well as low academic achievement challenges

for the country to attain the projected middle level economic status as stipulated in her Vision 2030 growth agenda (Republic of Kenya, 2015).

Evidence alluding from the Republic of Kenya (2015) the possibility of Kenya realizing the projected middle level economic status may turn out to be a mirage due to students' low academic achievement in the Kenya Certificate of Secondary Examination (KCSE) exit examination (KNEC, 2015). This reality is not a far-fetched if one take cognizance of the fact that the proportion of candidates in Laikipia County who attained minimum university entry point (Grade C+) averaged at 28% for the period running between 2009 and 2013. This implies that nearly 72% of candidates could not directly transit to university to pursue university based careers in the period spanning 2009 to 2013. This scenario is aptly captured in Table 1

Table 1: KCSE Examination Performance in Laikipia County (2009-2013)

Year	Grades	
	C+ and above %	C and below %
2009	27.21	72.79
2010	26.85	73.15
2011	29.12	70.83
2012	28.36	71.64
2013	27.47	72.53
<u>Average</u>	<u>27.80</u>	<u>72.18</u>

Source: KNEC, 2015

The data captured in Table 1 appears to point to a possibility that there could be some causal factors that may be impacting students' performance negatively in KCSE examination in the County. According to Alfaro et al. (2006) academic performance largely depends on the level of students' academic determination. In the same vein of interrogation, it can be posited that the causal link between students' determination to excel and their performance is grounded in the fact that the former (determination) sparks motivation to excel in school so as to clinch the targeted academic goal or ambition for that matter.

According to a study carried out by Robert et al. (2014) in Albany State University, New York academic performance is a multidimensional process implying that there is no single factor that can singly influence an individual's level of academic determination. However, different scholars have identified different factors that contribute to low academic achievement in schools and one such factor is students' level of academic determination. A study done by Bushmann et al. (2005) revealed that academic determination is a very essential element in the educational process since it is a critical correlate of both human motivation and achievement needs. In light of this position a learner's level of determination may either hamper or enhance his/her progression up the education ladder. The study similarly pointed out that academic determination forms the baseline upon which learners' abilities both in early schooling and in later advanced levels of schooling is grounded on.

Statement of the Problem

From the foregoing background to the study, it is clear that the desired learning outcomes in Kenya's secondary education may not be achieved in Laikipia County as attested to by low level of students' performance in KCSE examination. It has also emerged from the background information that the school examination performance status may be critical antecedent in regard to the students' level of educational determination and ultimately, his/her academic performance in KCSE exit examination. However, the extent to which this variable could be at play in Laikipia County is not yet established. This is the knowledge gap that this study sought to fill with a view to generating insights that could offer guidelines to the relevant stakeholders on how to address the problem.

Purpose of the Study

The purpose of the study was to investigate whether school examination performance status has any nexus to students' level of academic determination in secondary schools in Laikipia County, Kenya.

Research Objective

The study sought to achieve the following objective:

To establish whether school's examination performance status has any nexus on students' academic determination in public secondary schools in Laikipia County, Kenya.

Research Hypothesis

This study tested the following null hypothesis at .05 alpha level.

HO₁: Schools' examination performance status has no statistically significant nexus on students' academic determination in public secondary schools in Laikipia County, Kenya.

Significance of the Study

This study has generated a useful insight that may be of great assistance to a number of stakeholders in the Ministry of Education (MoE) in their effort to enhance students' academic determination and hence performance in public secondary schools. This insight would not only be ultimately beneficial to students in the study area but also in other parts of the country in the sense that secondary schools' principals might gain useful knowledge in respect to ways in which schools' guidance and counselling departments can be revamped with a view to enhancing their capacity to initiate intervention strategies for enhancing students' desire to succeed in school and hence academic performance in Laikipia County.

Scope of the Study

The study confined itself to an investigation of the extent to which school's examination performance status relate to students' level of academic determination in secondary schools in Laikipia County.

II. Literature Review

Scholars have been attracted by the link between a school's examination performance status and learners' educational determination. Schools' academic status is premised on the percentage of students who successfully graduate to subsequent level or cycle of education (Carter, 2000). In Kenya for example, a secondary school is perceived as either high performing or low performing based on its average performance in the Kenya Certificate of Secondary Education (KCSE) examination. At this juncture the question that lingers severally in the minds of educational researchers is whether there is any academic benefit that a student gains by schooling in a high performing school. Allensworth et al. (2008) have however pointed out that much is unknown about the benefits or drawbacks to students of attending schools that have higher or lower overall achievement level respectively.

The debate surrounding the potential link between a school's examination performance status and students' learning outcomes is rooted in the social capital concept. Social capital in a school setting denotes the beneficial effects that accrue to students through interaction with peers and teachers. For instance, there is a popular belief that students' level of aspiration to achieve is largely influenced by the characteristics of peers in relation to their attitude towards learning and educational aspiration (Dronkers & Roberts, 2003). This view is grounded in the reasoning that students learn vicariously from their peers by watching and modeling or put differently by acting out their behaviour (Bandura, 2001). This implies that if a student interacts with peers with high achievement motivation there are high chances that the student will emulate this behaviour and consequently set high achievement goals. The contrary would be the case in a situation whereby a student is schooled with colleagues who do not convey positive attitude towards learning and the need to be determined to achieve higher goals.

Both theoretical and empirical literature has further demonstrated that compared with teachers in low performing schools, teachers in high performing schools tend to not only connect well with students but also set expectations about behaviour and academic accomplishment (Rutledge et al., 2015; Cylan & Akerson, 2014). Such teachers' characteristics have the potential to imbue the motivation to focus on higher educational goals among learners. Akey (2006) lends support to this view by noting that when students perceive teachers as supportive and also as capable of setting high expectations, they are highly likely to be in control and confident about their capacity to succeed in future educational undertakings.

The supposed benefits of interacting with high achieving peers has, however been disputed by some scholars. For example, Hoxby and Weingarth (2006) are of the opinion that low achievers in high performing schools may in the long run experience low achievement motivation. This, as the two authors have averred is primarily due to the negative effects of individual comparison with their higher achieving peers. Dobbie and Fryer (2014) have also observed that high achieving peers are less likely to impact on their low achieving colleagues if other endogenous variables which are central to academic determination are not favourable. This may be the case in a situation whereby parents of the high achievers invest less in their children's education in terms of monitoring their schooling and connecting with teachers.

Positive attitudes towards study are strong influencers on intentions to progress up the education ladder (Bradley et al., 2008). In agreement with this suggestion Thomson et al. (2011) posit that positive attitudes may also include supportive relationships with teachers, interest in learning, and valuing the opportunities to apply learning outside the school. In tandem with this position Khoo and Ainley (2005) report reveals that attitudes towards school and background characteristics are relatively independent, suggesting that focusing on attitudes early in secondary schooling may impact on educational intentions. This may be a precursor to the revelation that students studying in highly performing schools display high levels of behavioural engagement with school for they believe that they have high quality teachers, effective discipline, high levels of students' learning and a

positive school spirit. This may explain why they may display high levels of academic determination unlike their counterparts studying in low performing schools who may harbour negative beliefs (for example, their teachers are of low quality, their school lacks high discipline and absence of a positive school spirit) which may lead to low levels of behavioural engagement and a low regard for their school. The outcome of such a scenario is low levels of self-esteem and by extension low determination to achieve.

Theoretical framework

This study was rooted in achievement motivation theory which was developed by McClelland following his extensive research on human motivation in Harvard University (McClelland, 1961). The theory postulates that human beings have three types of basic motivational needs: the need for achievement (success), the need for affiliation (for example, rewarding relationships), and the need for power (e.g., wealth, ability to influence others and so on). The theory further points out that the three basic motivators are acquired and shaped over time through one's experience in life. Put differently, the three motivating drivers are products of our culture and life experiences (Brunstein & Maier, 2005). However, the study specifically confined itself to the need for achievement (academic success) for as has been explained by Quaglia and Cobb (1996), it has a high impact on students' academic determination.

The need for achievement denotes the urge to realize one's goals and also be recognized for attaining the goals. This is the need that drives an individual to sustain his/her efforts in order to achieve the objectives that he/she wants to achieve. People in general and students in particular who are motivated by achievement need, the theory holds are characterized by the tendency to set moderately difficult goals. In short, their core interest is to excel, and be recognized (through positive feedback) by others, particularly significant others by avoiding low reward, low risk tasks and difficult to achieve high risk undertakings (Stahl, 1986).

III. Research Methodology

The study employed the *ex post facto* research approach which is a research approach which is utilized in a situation whereby the independent and dependent variable have already interacted. In this regard, the investigator cannot manipulate the independent variable so as to determine its/their effects on the dependent variable. Consequently, the effect of interaction between the independent and dependent variables is determined retrospectively (Miles et al., 2014). The *ex post facto* research approach was viewed as appropriate for this study owing to the fact that besides describing and generating conclusions from nominal scale data, the study also undertook to determine retrospectively the extent to which school's examination performance status contextual factors could be impacting to students' academic determination in the study locale.

Population of the Study

Population is conceived differently by different researcher for instance Parahoo (2014) viewed it as the total number of units from which data can be collected such as individuals, events or organizations for the purpose of making informed conclusions about the population. By the time of data collection, records in Laikipia County Education Office (2016) showed that there were 106 public secondary schools (6 boys only, 7 girls only and 93 coeducational) in the study area. The records further showed that the enrolment in Form Three and Form Four stood at 5,840 and 5,740 respectively. The study's target population was 11,580 students. It is necessary to highlight that the Form Three and Form Four students were targeted for they had been in secondary school for a longer period as opposed to their Form One and Form Two colleagues. Therefore, the impact of school's examination performance status on students' determination was presumed to be higher on Form Three and Form Four students in comparison with their counterparts in lower classes.

Sampling Procedure and Sample Size

Two probability sampling designs were utilized for this study. These were stratified random sampling and simple random sampling. Stratified random sampling on one hand involves dividing the population into its constituent subgroups (strata) and then selecting subjects from each stratum using simple random sampling as averred by Mendoza and Dustin (2016) while simple random sampling on the other hand involves allocating a letter (or a number) to every subject in the accessible population (Patel et al., 2011). The written letters are placed in a container and the researcher picks the subjects randomly until the required sample size is achieved.

The first step in selection of students to participate in the study involved random stratification of schools from which to sample the students on the basis of whether a school was uni-sex or mixed-sex. From the 106 schools in the study locale, 6 were boys' only; 7 were girls' only while 93 were coeducational. Based on Krejcie and Morgan's (1970) table for determining sample size (n) from a given population (N), the ideal sample size in a population of 106 subjects is 86 cases. This represents 81% of the total number of cases in the entire population. In this regard, 81% of schools in each school's category were selected through simple random sampling. This entailed writing names of school in a given category on small pieces of paper. The papers were put in a container

and 81% cases selected at random. This sampling procedure generated a total of 84 (4 boys only, 5 girls only and 75 co-educational) secondary schools.

At the same time respondents in each selected school in the three school categories were selected through simple random sampling using the 81% sampling fraction. This was accomplished through writing names of students on small pieces of paper. The papers were put in a basket and 81% cases drawn randomly. Based on the Krejcie and Morgan's (1970) table the ideal sample size (n) from 11,580 is 375 and as such the total number of respondents who were expected to take part in the study was 375.

IV. Results and Findings

The core aim of the study was to establish whether school's examination performance status had any link to students' academic determination. The study presumed that the independent variable had a link to students' academic determination and to this end an attempt was made to refute or confirm this supposition.

Respondents' distribution by schools' examination performance status (2009-2013).

Data on respondents' school examination performance status (2009-2013) was generated and subsequently summarized in Table 2.

Table 2: Respondents' Distribution by Schools' Examination Performance Status (2009-2013)

KCSE Mean Score	Number of Schools	Number of Respondents	Percentage of Total Number of Students
1. 4	44	159	47
1. 7	28	131	39
8- 10	12	47	14
11- 12	0	0	0
Total	84	337	100

A cursory look at the data shown on Table 3 reveals that a slightly less than half (47%) of respondents were attending schools that were in the 1- 4 examination performance status mean score bracket followed by 131 (39%) who were schooling in schools which lay in the 5- 7 examination performance status mean score range. Only 47 (14%) of respondents were enrolled in schools which were in the 8-10 examination performance status mean score category. However, none of the respondents was attending a school which was in the 11- 12 examination performance status mean score range.

The objective of the study was to establish whether school's examination performance status has any nexus on students' academic determination in public secondary schools in Laikipia County, Kenya. To accomplish this objective, the following null hypothesis (Ho₁) was developed and tested using χ^2 test at .05 alpha level of significance.

Ho₁: School's examination performance status has no statistically significant nexus to students' academic determination in secondary schools in Laikipia County, Kenya.

A priori, Ho₁ assumed that distribution of respondents from schools with different levels of examination performance status would be homogeneous across the four LAA mean scores. The result of the chi square test that was run to ascertain this assumption is presented in Table 3.

Table 3: Respondents' Distribution by School Examination Performance Mean Scores

KCSE examination points	LAA Scores					Total
	1. 1.99	2. 2.99	3. 3.99	4. 5		
1. 4	32(13)	42(18)	52(22)	110(47)		236(70)
1. 7	6(9)	6(9)	14(21)	44(67)		66(20)
8- 10	1(3)	4(11)	7(20)	23(66)		35(10)
11- 12	-	-	-	-		-
Total	39(12)	52(15)	73(22)	173(51)		337(100)

(Figures in parenthesis are in percentages)
 $\chi^2= 12.78$; $df= 15$; $p> .05$; Cramer's V= .811

A look at the data outlined in Table 5 indicates that none of the schools in the study area had registered an average of 11 points and above in the KCSE examination during the period under focus, that is 2009-2013. The data further reveals that the proportion of respondents in schools that had posted an average KCSE examination means score (2009-2013) of 1-4, 5-7, and 8-10 increased towards the upper range of LAA mean score. It is also evident that the highest proportion of respondents who scored less than a mean score of 3.00 was in schools that had registered a KCSE examination mean score of 1-4 (31%) followed by schools that had registered a KCSE examination mean score of 5-7 (18%), and lastly schools that had posted a KCSE examination mean score of 8-10 (14%). It can further be learnt from the table that the highest number of respondents who

scored more than a mean score of 3.00 in regard to academic determination came from schools that had a cumulative score of between 8-10 in KCSE examination between 2009-2013 (86%) followed by respondents in schools with a cumulative mean score of 5-7 (88%), and lastly schools whose KCSE examination mean score ranged between 1-4 mean score (69%).

The emerging picture in regard to respondents' distribution in the four LAA score ranges indicates that level of students' academic determination increased with increase in schools' level of examination performance status. This appears to demonstrate that students who are enrolled in schools whose examination performance status points are high are likely to have a higher desire for academic achievement than their counterparts in schools whose examination performance status points are low. The influence of a school's examination performance status on respondents' academic determination, the data in table 25 further reveals was very strong (Cramer's $V = .811$) and statistically significant ($\chi^2 = 12.78$; $df = 15$; $p < .05$).

This finding concurs with the findings of previous studies (for example, Kalil, 2014; Joan, 2009) which demonstrated that students who secure admission in high performing school display high levels of academic determination unlike their counterparts who join lowly performing schools. Their studies observed that, students from low performing schools express more negative attitudes about their schools which may consequently lead to poor school attendance and low motivation to learn than their colleagues from well performing schools who typically display special liking for their school which greatly motivate them to excel. Therefore, the eighth hypothesis was rejected and conclusion made that students' academic determination and schools' examination performance status were not statistically independent.

V. Conclusion of the Study

The study sought to explore whether school's examination performance status has any nexus to students' academic determination. The study hypothesized that students' level of academic determination was contingent upon school's examination performance status and the conclusion drawn from this investigation is discussed herein: The study revealed that academic determination was highest among respondents schooling in schools which had a class interval of 8- 10 scores in examination performance status followed by respondents studying in schools with a class interval of 5- 7 and it was lowest among respondents schooling in schools with a performance range of 1- 4. This finding implies that students in well performing schools may aspire higher in school as compared to those in poorly performing schools.

VI. Recommendation

Based on the fact that respondents from schools which had higher examination performance status had a higher level of academic determination in comparison to their counterparts from schools whose examination performance status was low the study makes the following recommendation. School managers and the department of guidance and counselling should embrace and programme open fora where students are given motivational talk with an aim to motivate them to aspire to achieve in school.

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