

The Malady of Boys' Performance: What are the Effects of Institutional Variables on students' performance at Kenya Certificate of Secondary Education in Subukia Sub-District, Nakuru County, Kenya?

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Abstract

This study examined institutional variables affecting the performance boys at Kenya Certificate of Secondary Education (KSCE) examinations in Subukia District, Nakuru County. The study adopted a descriptive survey research design. The target population was 7,943 consisting of 7,886 boy students and 57 principals. The study drew a sample of 429 consisting of 366 students and 6 principals. Questionnaires were used to collect data from the students while the interview schedules were used to collect qualitative data from the principals. The main findings were that truancy and coupling especially in mixed schools as well as inability to pay school levies on time were the main institutional variables that negatively affected students' academic performance in national examinations. The study concluded that as boys progress within the school system their performance declined due to the interference of the intertwined institutional and home based variables. It was recommended that secondary schools should consider having a fully operational guidance and counseling departments to mitigate on the effects of institutional factors affecting the performance of boys in KCSE in Subukia District, Nakuru County, Kenya.

Key Words: Malady, Boys' Performance, Kenya Certificate of Secondary Education, Institutional Variables, Subukia Sub-District, Nakuru County, Kenya.

Introduction

Background Information

Literature is prolific which indicates that various factors such as lack of personal confidence, a feeling of competence in learning; hopeful but realistic projection into the future occupational roles and social roles; emotional stability; temperamental tendency towards introversion; relative independence from teachers and a tacit acceptance of the of the curricular and work demands arising within the structure of tuition have an impact on school outcomes (Wankowski, 1991; Orodho, 2014). Self-efficacy has been identified as a positive predictor of academic performance (Lee & Bobko, 1994). Achievement is affected by students' personal characteristics, attitudes, activities and most of all students' interest and engagement. Students with low academic self-esteem and the students that are not interested and actively engaged are at a significantly higher risk of low achievement. (Linnakyl, Malin, & Taube, 2004; Orodho, Waweru, Getange & Miriti, 2014). Students' attitude towards a particular subject has a positive relationship with achievement (Bos & Kuiper, 1999). Cognitive aspects, motivational factors, teaching methodology and classroom-contextual factors exercise a significant influence. Cognitive factors including cognitive capabilities, previous knowledge, and, to some extent, subject-specific self-concept are important for achievement (Von et. al, 1998).

The educational institute has the key importance in this regard. Social climate of the institute indicated by characteristics such as the teachers' inclination towards improving educational achievement, and their expectations for pupil achievement are crucial for student achievement (Brookover & Lezotte, 1979). Teaching directly affects attitudes toward a particular school subject (Patanastasio, 2002; Orodho, 2014) and achievement is directly related to attitude. Conducive environment and other facilities provided by the institute that positively affect students' learning outcomes (Schneider, 2002). Along with physical facilities, guidance services provided by the institute play a significant role in achievement. Guidance services have significantly positive effect on student's study attitudes, study habits and academic achievement (Chaudhary, 2006).

There are social environmental variables, such as home and classroom factors that matters in academic development. Some authors (Newkirk, 2002) argued that boys fell behind girls academically in school, because classrooms were feminized environments, in which teacher attitudes, classroom rules, and learning tasks favored girls. Boys failed to invest in reading and writing because they perceived these as feminine activities. Factors that may lead boys to view literacy as a feminine activity included the prevalence of women in elementary

teaching and as primary caregivers of children. In addition, boys' preferences in reading materials were not reflected in the types of reading materials available in classrooms and libraries.

In Subukia District the performance of KCSE has been declining over time. According to the Ministry of Education (2012), the district's mean score was B in 2009, B- in 2010 and C+ in 2011. Though boys were reported to have more quality grades than girls (B+ and above), the average grade for boys was generally lower than for girls. While 35% of girls scored C+ and above, 23% of boys scored similar grades. It was against this background that this study sought to determine the factors constraining the academic performance of the boy child.

State of the Art Review

Academic Performance

Rodriguez (1986), points out that academic performance is a situation where the learner attains or fails to attain expected achievement according to his or her abilities which in turn affects all other aspects of life. Brostrom (2000) argues that while most educational system perceives that student performance is gauged on whether he or she pass the examinations, it is most appropriate to determine a student's performance based on his or her potential. The potential of a student can be looked into in terms of Parents, teachers and student factors. Crosnoe, Johnson & Elder, (2004) supports this by observing that variables that affect students' quality of academic achievement are inside and outside school which include student factors, family factors, school factors and peer factors. These elements can be broadly categorized into social- economic and institutional factors.

While for the past several decades, educators worried about girls' performance in science and math, recently boys' lagging literacy skills and academic performance became more pressing concerns (Ongeri, 2009). Comparing the performance of girls and boys in Kenya a trend, though the number of boys attaining a mean grade of C+ is still higher than that of girls the trend shows an upward trend for girls performance. However the performance of boys has been decreasing (Murithi 2010). The trend of performance country wide of the students who have attained a mean grade of C+ between the year 2008 and 2010 is shown in figure 1.

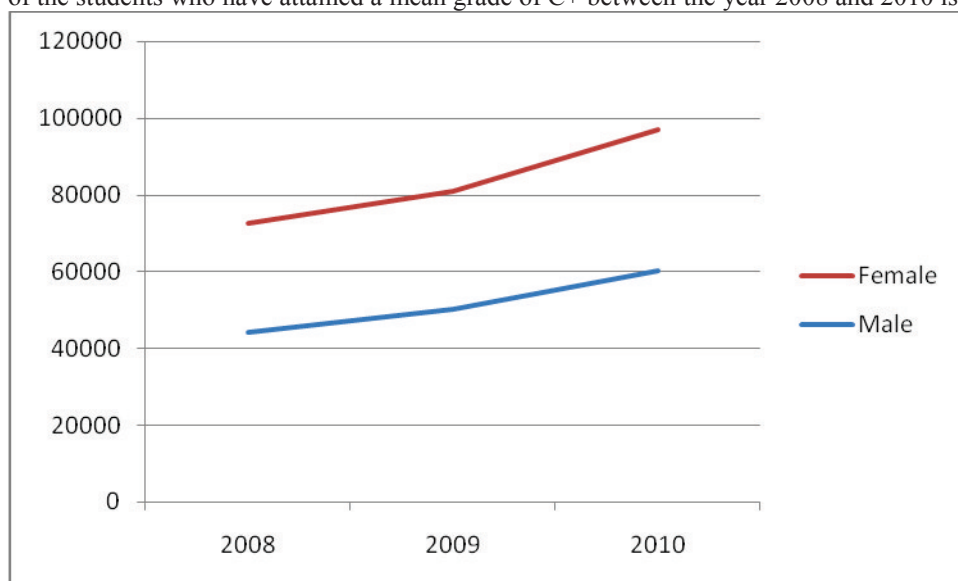


Figure 1 Trend of Students Attaining C+ and Above by Gender between 2008 and 2010

Source: (Kenya National Examination Council, 2011)

Factor Affecting Performance

Students' performance can be affected by social-economic and institutional factors. The parental education and income are among the social-economic factors that affect the student performance while school environment and availability of resources are among the critical institutional factors that affect the student performance.

Institutional Factors

Karemera (2003) observes that students' performance is significantly correlated with satisfaction with academic environment and service received. The most outstanding factor has to do with the organizational management of schools. For instance, Rutter et al. (1979) and Wekesa (1993) note that to improve students' performance principals are required first to improve the management of the schools. This can be done by setting a clear vision for the schools and communicate this vision to students, support its achievement by giving instructional leadership (curriculum implementation), provision of resources and being visible in every part of the institution.

The school leadership ought to address many various factors due to their influence on students' behavior and scholastic achievement. Such factors include: Amount of teaching and degree of academic emphasis; the extent and nature of ability groupings; teacher expectation; styles of teaching and classroom management; size of the school; patterns of discipline and characteristics of school climate (Rutter et al., 1979).

The reports on the problem of indiscipline and unrests in schools have been a common feature in the media for a long time. According to Muchemi (2001), the issue of unrests and indiscipline in schools is of great concern evolving from simple protests to the destruction of property thus negatively affecting academic performance. Ovell (2001) suggests that discipline in schools is essential for effective learning, good teacher relationship and peer adjustment. A democratic form of discipline leads to a healthy classroom environment that in turn promotes respect for education and a desire for knowledge. Rwamba (2004) argued that lack of democratic leadership together with communication breakdown is a major cause of indiscipline in schools. In fact there have been suggestions that there would be need for training of teachers in conflict management as opposed to use of force, which brings anger and resentment. Further, drug abuse especially by boy's students has also been blamed, where use of cannabis for instance was identified as a cause of indiscipline in many schools in Kenya (Republic of Kenya, 2001). Chang'ach (2012) also observes that school related factors have an effect on transition and performance where insensitive school environment affects boy's transition. This concurs with Brostrom (2000) who suggested that negative experience of transition is often due to problems associated with the school rather than the child. The study further revealed that majority of the teachers agreed that lack of effective guidance and counseling affects boys' transition rates.

Statement of the Problem

There is a range of factors that affect the quality of performance of students (Waters & Marzano, 2006). The environment and the personal characteristics of learners play an important role in their academic success. The school personnel, members of the community provide help and support to students for the quality of their academic performance. This social assistance has a crucial role for the accomplishment of performance goals of students at school (Goddard, 2003). The relationship between gender and the academic achievement of students has been discussed for decades (Eitle, 2005). A gap between the achievement of boys and girls has been found, with girls showing better performance than boys in certain instances (Chambers & Schreiber, 2004). For instance when the 2009 Kenya Certificate of Primary Education (KCPE) results were released, the girls were reported to have performed better than the boys particularly in the languages. The trend is that the girls are catching up with the boys and sooner than later, they may be doing better than the boys even in the sciences (Ongeri, 2010). Thus there must be certain institutional factors that may be increasingly disadvantaging the boys resulting to the deteriorating performance.

Purpose and Objectives of the Study

The purpose of this study was to examine the malady of boys' performance in Kenya Certificate of Secondary Education by focusing on the effects of institutional variables in Subukia Sub-District, Nakuru County, Kenya. The study was guided by two objectives, namely:

1. Examine institutional factors affecting performance of boys in secondary schools in Subukia District.
2. Establish the mechanisms adopted by secondary schools in Subukia District to help boys improve their performance

Theoretical Framework

Theory of Educational Productivity by Walberg (1981) determined three groups of eight factors based on affective, cognitive and behavioral skills for optimization of learning that affect the quality of academic performance: Aptitude (ability, development and motivation); instruction (amount and quality); environment (home, classroom and peers) (Roberts, 2007). Aptitude in this theory includes ability, development and motivation. In the context of the study the motivation that a student receives from teachers and parents affects his ability and thus performance. The instruction in the theory includes amount and quality of instruction delivered in school. In the context of the study curriculum implementation is one way of measuring the quality and quantity of instructions delivered in school. Lastly the environment includes home, classroom and peers. In the study environment can be looked at in terms of the school discipline issues, resources such as teachers and classes.

Research Design and Methodology

Research Design

The study adopted a descriptive survey research design to investigate the effect of institutional factors on performance by boys in secondary schools. Orodho (2009a) observes that a survey design involves obtaining information by interview or by administering questionnaire. Both qualitative and quantitative research

approaches were used. The survey was conducted using a questionnaire that was composed of closed-ended questions and semi-structured interview. However, to capture previous performance of boy's, secondary data was obtained from the school records. According to McMillan and Schumacher (1993), qualitative research is concerned with understanding the social phenomenon from the participants' perspective. On the other hand, quantitative research is an inquiry into an identified problem, based on testing a theory, measured with numbers, and analyzed using statistical techniques.

Target Population and Sampling

The target population of the study consists of the 6 principals in mixed secondary school in Subukia District and 7,886 boys enrolled in all the mixed secondary schools. The principals provided an insight on the school resources, discipline and resources available while the students provided information on social economic status.

Purposive sampling to draw a sample of the principals, and simple random sampling technique selecting boys' who participated in the study were used. The number of boys who participated in the study was calculated as follows; when the population is more than 10,000 individuals, 384 of them are recommended as the desired sample size (Mugenda & Mugenda, 1999). The accessible population in this case was 7,886 boys.

$$nf = n / (1 + \frac{n}{N})$$

According to the above formula:

nf= desired sample size when the population is less than 10,000,

n= desired sample when the population is more than 10,000,

N= estimate of the population size.

Using the above formula sample size is:

$$nf = \frac{384}{1 + \frac{384}{7886}} = 366.1697$$

Table 1 Sample Distribution

Category	Population	Sample size
Principals	57	6
Students	7,886	366
Total	7,943	372

In total the sample size was 372 constituting of six principals and 366 boys. The participating boys were distributed equally in the six schools that were purposively drawn.

Research Instruments

According to Orodho (2009a, 2012), questionnaires and interview schedule are the most common instruments used in education and social research. In this study interviews and questionnaires were used. Interview technique was preferred since it allows for in-depth probing, leading to more information and also clear expression of feelings, opinions and attitudes from tone of response and facial expression. The interview set-up was an open and informal so as to understand all the personal feelings of the respondents without limiting their opinion. Interview was used in this study to allow individual principal to give their opinion on institutional factors that affects the boy's performance. As Maxwell (2005) point out, qualitative research focuses on processes rather than variance. During the interview, specific questions were asked revolving around given themes. This allows the interviewee a leeway to express his or her own interpretation and permits an extensive discussion of the theme (Hirsjärvi and Hurme, 2008). In addition, the respondent is able to bring out new or unexpected information.

Orodho (2009a) further points out that a questionnaire can be used to collect a huge amount of data in relatively shorter time. Further a questionnaire reduces bias inherent in interviews leading to honest answers since no identification was needed and respondents gave answers without fear. Questionnaires with open-ended and closed-ended questions were issued to the boys.

Data Analysis

The data collected from the students through a questionnaire was analyzed and presented by generating frequency tables, percentages, and pie charts. This involved presentation of information on the demographic characteristics of the respondents. Qualitative data analysis is concerned with the process of organizing data into themes that emerge from the data (McMillan & Schumacher, 1993:479). Orodho (2009b) suggests that the

researcher searches for natural divisions or themes in the data, making use of areas of significance as they are reflected in the collection of data. Arriving at these can be achieved by formal analysis of interview text as well as from what was observed during data collection. In this study the researcher searched for themes by reading through the interview text, while noting down probable themes. Thereafter these notes were grouped into themes and interpreted. The quantitative data was analyzed using SPSS where mean scores, percentages and frequencies were generated. Parsons' correlation coefficient was computed to establish the relationship between institutional factors and performance of boys in KCSE.

Findings and Discussion

General and demographic Information

The respondents consisted of 317 boys' student in their final year in high schools presenting 87% response rate. The students were randomly picked from 57 secondary schools in Subukia District. The respondents of the study also included 6 principals from the district.

As shown in Figure 2, more than three quarters of the students participating were between the ages of 17 to 19 years. This is the typical age group of students in the final years in high schools.

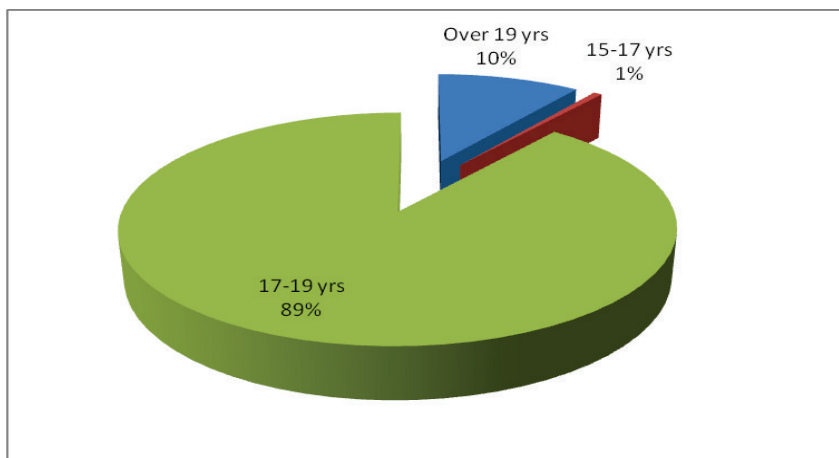


Figure 2: The Students' Age

Figure 3 exhibits the academic performance profile of a cohort of students from Form one to Form Two. A critical examination of the line trend in Figure 3 indicates that the performance of the students declined sharply as they moved on to higher classes.

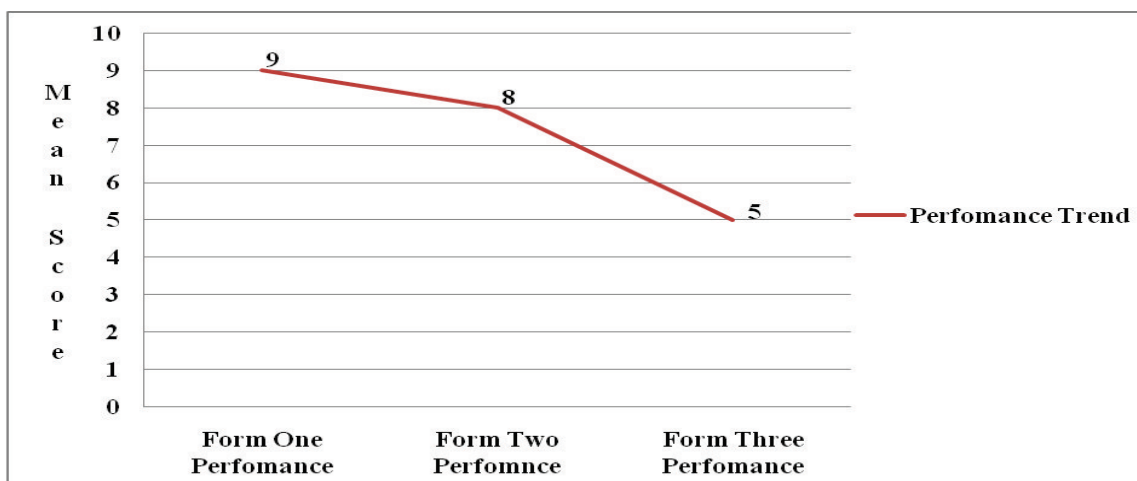


Figure 3 : Performance of a cohort of students

The performance trend indicates that as boys enter secondary schools their performance is high, but as they progress within the system and get affected by various institutional factors their performance declines.

Influence of Institutional Factors on Boys performance

The main task of this study was to determine the main institutional factors responsible for the observed downward trend of the performance of boys in the study locale. The institutional factors considered in this study

included learning materials, syllabus coverage, teachers motivation and peer pressure. The respondents were required to rate each factor in respect to their influence on performance. Table 2 indicates the correlation coefficients of some factors deemed to be related in some way to students' academic performance.

As shown in table 2 , syllabus coverage was the leading institutional factor that influences the performance of boys in secondary school. The factor had a correlation coefficient of 0.555 and significant at .000 level of statistical confidence. Therefore syllabus coverage was statistically significant such that failure to cover the syllabus may negatively affect performance. This means, by extension that timely coverage of syllabus is positively correlated with high academic performance. This is because performance was based on the examination results posted by the students, which also depended on syllabus coverage.

Table 2: Correlations of Institutional Factors on Performance

Correlations

		Performance
Syllabus coverage	Pearson Correlation	.555**
	Sig. (2-tailed)	.000
	N	317
Availability of resources	Pearson Correlation	.140*
	Sig. (2-tailed)	.013
	N	317
Peer influence	Pearson Correlation	.113*
	Sig. (2-tailed)	.044
	N	317
Motivation from teachers	Pearson Correlation	.226**
	Sig. (2-tailed)	.000
	N	317
Performance	Pearson Correlation	1
	Sig. (2-tailed)	.
	N	317

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Motivation by teachers was the second most important institutional factor in respect to performance. With a correlation coefficient of .226 ($p = .001$) indicated that teacher motivation was positively related to the academic performance of boys in national examinations. The finding is in tandem with earlier findings by Papanastasiou (2002) who explains that teachers' motivation such as inclination towards improving educational achievement, and their expectations for pupil achievement are crucial for student achievement. Further, Brookover and Lezotte (1979) emphasizes that teachers' motivation directly affects attitudes toward a particular school subject which in turn affects performance.

With regards to school resources, it was evident that availability of resources was the third most important institutional factor with correlation coefficient of 0.140. The findings correspond with Verspoor (2008) who argues that adequate resources and their efficient use generate increases in education attainment and learning achievement. The overall tone of this paper echoes the sentiments of Orodho (2014) who averred that the responsibility of the school leadership to ensure that there is adequate classroom space to enable the teaching-learning process to take place without any hitches. Similarly, with respect to peer influence, it was noted that this was the least important among the institutional factors considered with a correlation coefficient of 0.113. The findings are in line with Hanushek (1992) whose finding had revealed that there are no significant effects of influence on academic achievement. Jencks and Mayer (1990) further explains where peer pressure may exist it is significantly reduced by family background. It therefore follows that the findings of this study upholds earlier studies that peer pressure is a weak factor in influencing the students' performance.

The Coping Mechanism Adopted by School Principals

Having established the social economic and institutional factors affecting the performance of boys in secondary schools, the study sought to find out how schools institute coping mechanism. The study sought to understand the coping mechanism by conducting interviews to six principals within Subukia district. According to the principals:

The performance of boys is average but slowly declining over time. However, the boys' transitional rate remains high at 90% (Principal 1). The specific problems affecting boys in schools are truancy, absenteeism and in case of mixed schools boys' performance is affected by coupling (Principal 2).

To help boys cope with issues affecting them and hence their study, the principals observes that:

The schools invite motivational speakers to inspire boys especially on successes in life through education. Further, regular evaluation of performance is conducted, where those who have performed exemplary are awarded a budge. This also acts as a motivator for other boys to strive to perform better (Principal 3).

According to the principals,

The schools organize class meetings regularly to allow students ventilate on their grievances, offer solution and set own rules on how to conduct activities in schools". Further, suggestion boxes are provided to allow students secretly offer their views (Principal 1).

These measures are supported by earlier findings that democratic form of discipline leads to a healthy classroom environment that in turn promotes respect for education and a desire for knowledge (Rwamba, 2004; Orodho, Waweru, Getange 7 Miriti, 2014). Further, guidance and motivational services have significantly positive effect on student's study attitudes, study habits and academic achievement (Chaudhary, 2006).

Conclusion and Recommendations

The major concern of this study was to examine the malady of boys' performance in Kenya Certificate of Secondary Education in Subukia sub-district, Nakuru County, Kenya. Given the findings it follows that the boys' performance declines as they progress within the school system such that at the entry level the performance is high but declines towards the final years. The decline results mostly from institutional variables. The institutional factors affecting boys' performance include peer influence, indiscipline, and poor coverage of syllabus and lack of learning materials needed at higher classes. Truancy and coupling among students also affects the performance of boys as they progress in the education system. The negative effects of these factors have been mitigated through counseling, motivation and creating forums for discussions. Class meetings and suggestion boxes are some of the forums used to enable boys ventilate on the problems affecting them in school. The coping mechanism employed by school management to ensure boys in school perform as expected include, counseling, motivation and forums to allow students ventilate their issues. Specifically the schools invite motivational speakers for the purpose of counseling and motivation. Class meetings are used as forums for governing the students democratically while suggestion boxes allow boys to discreetly communicate their grievances.

From the findings and discussions, it was recommended that:

1. Secondary schools should consider improving the existing counseling services and establish fully operational counseling departments. Such departments will offer counseling services to students on regular basis to mitigate on the effect of institutional factors on the boys performance. Given that boys perform poorly as they progress to higher classes, the intensity of guidance and counseling should equally increase.
2. Formulation of policies that would target boys' education. This will ensure that problems which are specific to boys are adequately addressed. Currently policies on access to education are biased towards enhancing girl children education and those targeting boys are non-existent.
3. Further research should be conducted to establish the extent to which institutional factors affect boys' performance nationwide.

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