

**SCHOOL ENVIRONMENT AND ACADEMIC PERFORMANCE
OF PUPILS IN SELECTED PUBLIC PRIMARY
SCHOOLS IN BUTULA DIVISION,
BUTULA DISTRICT,
KENYA**

A Thesis

Presented to the School of
Postgraduate Studies and Research
Kampala International University
Kampala, Uganda

In Partial Fulfillment of the Requirements for the Degree
Master of Educational Management and Administration

By

Canuti Onyango Meta

August, 2011



DECLARATION A

"This Thesis is my original work and has not been presented for a Degree or any other academic award in any university or institution of learning."

Gnani Onyango Mutsaers

Name and Signature of Candidate

31/8/2011

Date

DECLARATION B

"I/We confirm that the work reported in this thesis was carried out by the candidate under my/our supervision."

Isekajugo Derrick

Name and signature of supervisor

Name and signature of supervisor

31/08/2011

Date

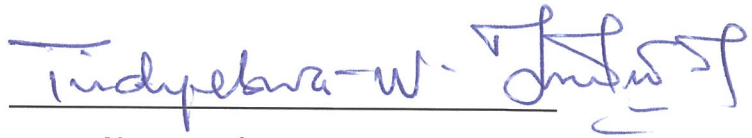
Date

APPROVAL SHEET

This thesis entitled "School environment and Academic performance of pupils in selected public primary schools in Butula Division, Butula District" being prepared and submitted by Canuti Onyango Meta in partial fulfillment of the requirements for the degree of Masters in Educational Administration and Management has been examined and approved by the panel with a grade of _____ .

Name and signature of Chairman


Name and signature of Supervisor


Name and signature of Panelist

Name and signature of Panelist

Date of Comprehensive Examination _____

Grade _____

Name and signature of Director
SPGSR

Name and signature of DVC, SPGSR

DEDICATION

I dedicate this thesis to my beloved wife, Anne Maria and the entire family for their tireless and sacrificial efforts in support of my studies.

ACKNOWLEDGEMENTS

On the foremost, I thank God who enabled me with both the mental and physical capabilities to complete this thesis task.

Secondly I sincerely extend my gratitude to my first supervisor Doctor Derrick Sekajugo for his industry, commitment, patience, assistance and advice throughout this work.

Thirdly, I too appreciate the efforts made by my research lecturer Dr. Kibuuka Muhammad who provided the dynamic ingredients needed in facilitating this research writing.

In the same vein, I wish to thank the DVC Dr. Sumil N. for her wisdom and skillful guidance in research work.

Gratitude also goes to the entire management of Kampala International University in general for effective and efficient planning for timely lecturers that made me “explore the heights” of academic pursuits.

Finally, I owe my appreciation to the Head of IODL Dr. Owoeye Joseph, Coordinator of Post Graduate Studies Dr. Fred .S. and my former lecturers Dr. Sarah Kyolaba and Dr. Tindyebwa for their counsel and guidance.

ABSTRACT

This study explored the school environment and academic performance of pupils In Selected Public Primary Schools in Butula Division, Butula district, Kenya. The central research questions were "i) what is the profile of the pupils as to; age, gender, rank in the family and level of learning? ii) What is the level of school environment of the pupils? iii) What is the level of academic performance of the pupils? iv) Is there a significant relationship between the level of school environment and academic performance of pupils in Butula division". To answer these questions, data were collected from teachers in 10 government primary schools in Butula division. A total number of 550 questionnaires were sent out and successfully responded to. The study employed a descriptive correlation survey design and expo facto whereby both the Qualitative and quantitative paradigms were used for research design. Simple statistical methods like frequency analysis, percentages were used for data analysis. The findings of this study are imperative for educational planning and management that environment had a negative impact on the student performance and this opinion was found to be true by the teachers' perceptions about school environment and academic performance of pupils. The study recommended; Environmental considerations should be embedded in teacher education and in school management training, so that these important elements are not relegated to the 'background noise' of educational discourse and Environmental improvement in schools should be locally driven, user-led and embedded in pedagogy.

TABLE OF CONTENTS

Cover Page	i
Declaration A	ii
Declaration B	iii
Approval Sheet	iv
Dedication	v
Acknowledgements	vi
Abstract	vii
Table of Contents	viii
List of Tables	xi

Chapter		Page
One	THE PROBLEM AND ITS SCOPE	1
	Background of the Study	1
	Statement of the Problem	2
	Purpose of the Study	2
	Research Objectives	3
	Research Questions	3
	Hypothesis	4
	Scope	4
	Significance of the Study	4
	Operational Definitions of Key Terms	5
Two	LITERATURE REVIEW	7
	Concepts, ideas and opinions from other experts /authors	7
	Theoretical Perspectives	8
	Related Studies	11

Three	METHODOLOGY	14
	Research Design	14
	Research Population	14
	Sample Size and Sampling Procedure	14
	Research Instrument	15
	Validity and Reliability of the Instrument	15
	Data Gathering Procedures	17
	Data Analysis	17
	Ethical Considerations	18
	Limitations of the Study	18
Four	PRESENTATION AND ANALYSIS AND INTERPRETATION OF DATA	19
Five	FINDINGS, CONCLUSIONS, RECOMMENDATIONS	24
	Findings	24
	Conclusions	28
	Recommendations	29
	References	31
	Appendices	
	Appendix I Research Questionnaire	34
	Appendix II Clearance from Ethics Committee	40
	Appendix III Transmittal Letter	41
	Appendix IV Informed Consent	42
	Appendix V Researcher's Curriculum Vitae	43

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the study

There were two categories of primary schools in Kenya, namely public and private schools. The public primary schools were funded by the government or communities and were managed through parents and teachers associations. The private schools on the other hand were established and managed by private individuals or organizations. Before 2003, primary schooling was a big burden to many parents. Actually, many children of school going age were out of school. This was part of the reason why President Kibaki's NARC party swept into power by promising to make primary education free. True to this promise primary education was made free.

However no other infrastructure was put in place to facilitate the implementation. This gave rise to many problems that the government had not anticipated. First, over 2 million children joined the primary schools. The schools were overwhelmed by the numbers since the classrooms were not expanded or added (Too, 2004). Teachers were few and there were no desks or chairs for the newly enrolled pupils. Some classes still were over 100 pupils by then yet average number expected in a class was 40. The teacher - student ratio was too big hence it did not make sense. The problems had not been solved by then. After realizing that the quality offered in the public schools was low, some parents transferred their children to private schools. As of then the private schools had more children than they did before the free education. This was where people could find uncompromised quality education for their children.

In the public schools, pupils still sat on the floor or learnt under trees. In other schools the children could not master all their faces due to their great numbers.

May be the situation would come to improve when the government expanded the facilities and employed more teachers, though as to when it was highly debatable (Aduda, 2005).

Statement of the Problem

Many studies had attempted to estimate the impact of school and teacher characteristics on learners' academic performance yet, most had serious estimation problems that casted doubt on their results (Glewwe 2002) Glewwe and Kremer, 2006). Almost all existing studies had "retrospective" that was based on data collected from schools as they existed by then in contrast to data collected from a randomized trial).

Yet even the best retrospective studies offered only limited guidance due to their estimated problems , the most serious being omitted variable bias (unobserved schools, household and child characteristics that were correlated with observed school variables) and measurements error in school data that had led to wide variation in the estimated impacts of key variables . It was against such a background that the researcher was inspired to conduct a study on the impact of school environment on academic performance of pupils in selected school subjects of pupils in Butula division, Butula district, Kenya.

Purpose of the Study

The study intended to investigate the correlation between school environment and academic performance of pupils in Butula division, Butula district, Kenya.

Research Objectives

General: To investigate on the correlation between school environment and academic performance of pupils.

The study was guided by the following specific objectives

- i) To determine the profile of the pupils as to age, gender, rank in the family and level of learning.
- ii) To determine the level of school environment of the pupils in Butula Division.
- iii) To determine the level of academic performance of the pupils in Butula division.
- iv) To determine if there was a significant relationship between the level of school environment and academic performance of pupils in Butula division.

Research Questions

The study attempted to answer the following questions

- i) What is the profile of the pupils as to; age, gender, rank in the family and level of learning?
- ii) What is the level of school environment of the pupils in Butula division?
- iii) What is the level of academic performance of the pupils in Butula division?
- iv) Is there a significant relationship between the level of school environment and academic performance of pupils in Butula division?

Null Hypothesis

The study sought to test for the following hypothesis

Ho₁ There was no significant relationship between the level of school environment and academic performance of pupils in Butula Division

Scope

Content scope; The study focused on establishing the correlation between the school environment and selected school subjects such as mathematics, social studies and religion in selected public primary schools

Theoretical scope; The study was supported Skinner's (1969) Environmentalist Theory. Environmentalists believe the child's environment shapes learning and behavior; in fact, human behavior, development, and learning are thought of as reactions to the environment.

Geographical scope; The study was carried out in Butula division, Butula district which was located in western province of Kenya.

Time scope; The study was conducted between the months of January 2011 and July 2011, which was the expected time of having completed all the research requirements.

Significance of the study

Policy Makers /MOE: The researcher was hopeful that the study findings would help to awaken policy makers to formulate suitable objectives that would cater for the needs of learners so as to create conducive school environment which was of strong benefit to the academic performance of pupils in primary schools.

School; is an institution designed for the teaching of students (or "pupils") under the direction of teachers. Most countries have systems of formal education, which is commonly compulsory. In these systems, students progress through a series of schools. The names for these schools vary by country (discussed in the Regional section below), but generally include primary school for young children and secondary school for teenagers who have completed primary education. An institution where higher education is taught is commonly called a university college or university.

CHAPTER TWO

LITERATURE REVIEW

Concepts, ideas and opinions from other experts /authors

School environment; Gonder and Hymes (1994) considered school environment as a reflection of the physical and psychological aspects of the schools that were more susceptible to change and that provided the preconditions necessary for teaching and learning to take place. They further added that such a useful term for the intangibles that could affect learning. As such, it deserved serious attention in the effort to improve performance. Comprehensive models that had been developed for school reform had invariably included school environment.

Psychologist Rudolf Moos (1970) as cited in senge (1994), observed that learning environment was a term used in connection with arrange of quite specific areas of education, as well as to convey some broad ideas about leaning. He therefore defined learning environment as being comprised of four factors, physical relationships, structures and expectations; language and communication which interacted to make learning meaningful.

Academic performance; Amalaha (1975) just like Moen and Doyle (1977) considered academic performance as being the pupils drive towards the achievement of success in academic work. He further added that people differed in their drive to achieve in some; the need for achievement was very high while for others it was very low.

Academic excellence, according to him was learnt through the socialization process. Those who had high achievers as their role models in their early life experience

would develop a high need for achievement while those who had low achievers as their role models would hardly develop the need for academic success.

School and academic performance; Sarison (1996) discussed how certain school characteristics , including organizational climate and leadership, influenced change within a school , Sarison used the term "street level implementation " as the way in which implementation at the local level could sometimes be a purposive fuel or accidental misinterpretation of guidelines promulgated at some system level. Although both levels of social level factors (direct and aggregated) had been used, their separate effects had not been considered.

Further, the school effects found by those studies had been small. Some researchers suggested that school level variables that had not been sufficiently sensitive to certain direct school attributes such as climate, emotional tone and relationships among students. The researcher was therefore interested in finding out how school and academic performance was attributable to school characteristic mentioned above.

Theoretical Perspective

The study was supported by Skinner's (1969) Environmentalist Theory. Environmentalists believe the child's environment shapes learning and behavior; in fact, human behavior, development, and learning are thought of as reactions to the environment. This perspective leads many families, schools, and educators to assume that young children develop and acquire new knowledge by reacting to their surroundings. Kindergarten readiness, according to the environmentalists, is the age or stage when young children can respond appropriately to the environment of the school and the classroom (e.g., rules and regulations, curriculum activities, positive behavior in group settings, and directions and instructions from teachers and other adults in the

school). The ability to respond appropriately to this environment is necessary for young children to participate in teacher-initiated learning activities. Success is dependent on the child following instructions from the teacher or the adult in the classroom. Many environmentalist-influenced educators and parents believe that young children learn best by rote activities, such as reciting the alphabet over and over, copying letters, and tracing numbers. This viewpoint is evident in kindergarten classrooms where young children are expected to sit at desks arranged in rows and listens attentively to their teachers. At home, parents may provide their young children with workbooks containing such activities as coloring or tracing letters and numbers--activities that require little interaction between parent and child. When young children are unable to respond appropriately to the classroom and school environment, they often are labeled as having some form of learning disabilities and are tracked in classrooms with curriculum designed to control their behaviors and responses.

Level of school environment

Direct non aggregated measures that had been raised to describe school characteristics fell into three categories; building and physical environment principal leadership and social structure.

Building and physical environment and academic performance of pupils

Rutter, Maughan, Mortimore and Ouston (1979) found that the school environment which included good conditions , responsiveness to pupils needs and good care and decoration of buildings was associated with better outcomes for students.

Principal leadership and academic performance of pupils

The way in which the principal worked with teachers had a demonstrable effect on student's outcomes. Mortimore et al (1998) included purposeful leadership by the principal and assistant principal and the principal's role in hiring and firing teachers.

The study found that outcomes were more favourable when there was a combination of firm leadership together with a decision making process in which all teachers felt their views were represented. Example of the school effect variables used to describe principal leadership included such principal strategies as the type of classroom monitoring and feedback and the type of support for individual teacher's improvement. Teddlie and Stringfield (1993) studied other principal leadership characteristics such as shared academic leadership versus non shared academic leadership relationship to the district or central office and uniform procedures for discipline.

School social structure and academic performance

Brooker's measure of school social structure included teacher's satisfaction with school structure, parental involvement, differentiation in student programs, principal report of time devoted to instruction and open versus closed classroom.

Level of school environment and academic performance

Brooker's measure of school social climate used 14 variables derived from student, teachers and principal reports of the norms, expectations and feelings about the school; Reynolds (1982) examined student's attitudes towards school, teacher's perceptions of students within school organizational factors and school resources levels. His research revealed a number of factors within the school that were associated with

more effective regimes. Among the social and psychological variables associated with effective schools were such characteristics as high proportions of pupils in authority positions, positive academic expectations, low levels of coercive punishment and high levels of students involvement.

In research on the parental involvement aspect of school social climate, Hawley and Rosenholtz (1984) identified parent involvement as one of four factors in effective schools that were expected to improve student achievement. Epstein (1987) discussed the various methods a principal could employ in establishing and monitoring effective parent involvement programs. Sarason (1996) discussed how certain school characteristics including organizational climate and leadership, influenced change within a school, Sarason used the term "street level implementation" as the way in which implementation at the local level could sometimes be a purposeful or accidental.

Misinterpretation of guidelines promulgated at some system level. Although both levels of school level factors (direct and aggregated) had been used their separate effects had not been considered. Further the school effects founded by those studies had not been sufficiently sensitive to certain direct school attributes such as climate, emotional /tone and relationships among students.

Related Studies

Reynolds (1994) suggested that the proportion of variables explained by school level variables could be improved by tapping school variables such as climate emotional tone and relationships. Few studies had used the culture of schooling in terms of attitudes, perceptions, goals and the psychological relationships among individuals such as students within classrooms, classroom within schools and parents within a school

community. Though Randerbush and Williams (1991) referred to the inadequacy of statistical models at the time their book was written they prefaced their book on multilevel analysis of schools, by saying that: An irony in the history of quantitative studies of schooling had been the failure of researcher's analytical models to reflect adequately the social organisation of life in classroom and schools. The experiences that children shared within school settings and the effects of those experiences on their development could be seen as the basic material of educational research, yet of recent, few studies had explicitly taken account of the effects of particular classrooms and schools in which students and teachers shared membership.

The issues emphasized by Renolds and by Randerbush and Willis were critically important to the study of school effects. The research described exploited the transition database in a n effort o develop as many testable variable as possible. It was important to note that the transitions database was not constructed to study effective school or school climate. Consequently, a secondary analysis of the topic was inherently limited. Many critical and direct measures of important school functioning were not available , although attempts were made in the study to develop some surnogate measures.

Sifuna (2003) noted that free primary education in public primary schools had stretched teaching and learning facilities as a result of high number of influx of new pupils. In Tanzania, the experience was quite instructive because the government had constructed additional new classrooms country wide so as to cater for the new enrolment. Lack of physical facilities in public schools remained the major impending factor to the achievement of overall effectiveness in public schools, private school continued to administer periodic continuous assessment tests and regular examinations to achieve good academic results. Since the introduction of free primary education in

public schools student assessment especially continuous assessment tests had stopped. That could clearly explain why those schools continued to perform poorly.

Large classes made it impossible for teachers to administer and grade their work and provide feedback on performance. Teachers working morale had remained low in public schools in Kenya due to low compensation. In Kenya, corporal punishments in schools were widely practiced by teachers (Mnito & Kakonge 2002) despite the fact that in 2001, the convention on the rights of the child was demonstrated and enacted by act of parliament leading to children's Act. The Act clearly specified the rights of all children with respect to survival development and protection. Other issues of concern related to lack of basic information and knowledge among teachers concerning the education for all (EFA) which was benchmark for countries to respond following the Jomtein in 1990, Amman in 1996 and expanded vision of EFA at Dakar in 2000.

CHAPTER THREE

METHODOLOGY

Research Design

The study employed a descriptive correlation survey design and expo facto whereby both the Qualitative and quantitative paradigms were used since the variables entailed in the study was thoroughly explained and some measured with numerical and analyzed with statistical procedures. Given the fact that quite a number of factors constituted school environment and all such factors had influence on the academic performance of pupils, it was vivid evidence that the study adopted correlation and cross sectional survey methods. It was correlation since it involved each of the environmental factors in the school with the academic performance of learners. The study was cross sectional in a sense that the data was collected from the selected respondents' once and for all in interest of time and it was survey study since large number respondents were used.

Research population

The population for that particular study constituted 150 teachers and 1800 pupils of selected upper primary classes of pubic schools of Butula division, Butula district, Kenya.

Sample Size and Sampling Procedure

The sample size constituted 300 pupils of both primary seven and eight and 120 teachers chosen from the 10 public primary schools entailed in the division. By using

purposive sampling such as a sample of 120 teachers was used from the would be 124 recommended sample size and the sample size of 300 pupils was used from the would be 520 as held by social science researchers. Such a sample met the minimum sample size requirements as established by statisticians (Krejcie & Morgan, 1970) as cited in Amin 2005. Employing Slovene's formula made the generation of that sample size Of 550 and that was given from

$$n = \frac{N}{1 + Ne^2}$$

Where n = Sample size

e = is the confidence interval which could be 0.05 or 5%?

Research Instruments

School environment face sheet and demographic chart of respondents composed the main tools of data collection in selected public primary schools. Researcher made questionnaires on level of school environment and the level of academic performance of learners (i.e. the dependent and independent variables) was used to solicit data from the pupils of upper primary classes in the selected public primary schools.

Validity and Reliability of the Instrument

Validity and reliability of the research instrument was ensured as follows:

Validity

After constructing the questionnaire, the researcher contacted the supervisor and three other authorities for expert knowledge. Hence, the researcher established the validity of the instrument by the use of expert judgment. This method is hailed by Gay and Airasian (2003) for being effective for survey tools. Some of the items that were recommended to be removed from the instrument were removed. Then the researcher made appropriate adjustments until the instrument was declared valid. The formula that was used to calculate the validity of the instrument was:

$$\text{Content Validity Index (CVI)} = \frac{\text{No. of items declared valid}}{\text{Total number of items}}$$

Accordingly, all variables yielded a CVI above 0.70 acceptable by Social Scientist and inference was made that the instrument was relevant.

Reliability

The reliability of a questionnaire is the consistency with which respondents interpret and respond to all the questions (Amin, 2005). There are two common methods of assessing questionnaire reliability. The method selected for this study was internal consistency method. This method involved a single pre-test group and indicated the degree to which the items in the questionnaire are inter-correlated. In this study, the split half reliability or sub divided test was calculated to further ascertain the coefficient of internal consistency. The test scores were split into two subsets, placing odd numbered items in one sub set and the even items in the other sub set. The scores were then computed using the Pearson product moment formula. Following the calculations, the results revealed a product moment which meant that the instrument was 80% reliable. This rendered the instrument appropriate for use.

Ethical Considerations

The study primarily engaged all respondents viewed relevant to study. Accordingly, the researcher provided respondents with the necessary information regarding the main purpose of the study and also promised extreme confidentiality to information provided.

Limitations of the Study

The threats to validity in this study were as follows:

1. Intervening or confounding variables which were beyond the researchers control such as honesty of the respondents and personal biases. To minimize such conditions, the researcher requested the respondents to be as honest as possible and to be impartial/unbiased when answering the questionnaires.
2. The research environments are classified as uncontrolled settings where extraneous variables may have influenced on the data gathered such as comments from other respondents, anxiety, stress, motivation on the part of the respondents while on the process of answering the questionnaires. Although these are beyond the researcher's control, efforts were made to request the respondents to be as objective as possible in answering the questionnaires.
3. Testing: The use of research assistants may have rendered inconsistencies such as differences in conditions and time when the data was obtained from respondents. This was minimized by orienting and briefing the research assistants on the data gathering procedures.
4. Instrumentation: The research tools were non standardized hence a validity and reliability test was done to arrive at a reasonable measuring tool.

and 40 – 49 as age interval for teachers this implied that the system had clearly youthful and energetic teachers in the system. The female teachers emerged with the highest percentage (55%) this can be attributed women are not aggressive as men so they prefer low profile jobs therefore primary teaching could be a best alternative for them. Having youthful and energetic teachers, table 2 clearly shows that the highest percentage of them was married (80%). Since it is part of seeking respect from the community it is always advised for teachers to get married not to act out of their professional conduct of conduct.

As a prerequisite for primary teachers is a certificate of education 94% of the teacher were hold the document and only 5% and 1% were diploma and Bachelor holders respectively and would have been the level of administrators since they earn slightly higher than the other teachers hence they can be able to sponsor themselves for higher education such as degrees and diplomas.

Table 2: Level of School Environment

Indicators of School Environment	Mean	Interpretation	Rank
Principal leadership in form of conduct of teachers	3.72	Agree	1
Ample time is being devoted to instructing/guiding of learners	3.70	Agree	2
Programs of learners are consistent	3.61	Agree	3
School buildings and physical environment	3.25	Neutral	4
Parental environment in running of school activities	3.17	Neutral	5
There is teacher satisfaction with the school	2.96	Neutral	6
Average Mean	3.40	Neutral	

As clearly seen from the rankings by the researcher in table 2 in the last column the respondents views and opinions about the indicators of school environment just

presents the level of pupils' academic performance in terms of marks scored in mathematics, Social studies and Religious Education.

Table 4: Level of Pupils' Academic Performance2

		Very high 81-100	High 61-80	Moderate 41-60	Low 21-40	Very low 0-20	Total
Mathematics	Count	24	88	247	179	12	550
	%	04	16	045	33	02	100
Social studies	Count	12	101	310	103	24	550
	%	02	18	056	19	04	100
Religious Education	Count	13	62	277	120	78	550
	%	02	11	50	22	14	100

Marks scored by students in Social studies were normally distributed as seen from table 4 where the highest percentage rated moderately (41 – 60). However those of Religious Education and mathematics were skewed with more students scoring low marks even though their high percentages were also moderately ranked. This indicated general poor performance in all subjects as the difference in the number of pupils that score with the ranges of high and very high and low and very low was significantly big. Thus some component variables of school environment do contribute significantly to the performance of pupils. Three factors contribute significantly to the academic performance of the pupils and they are caring and support factor (a combination of three environment variables: esprit, intimacy, and student-centeredness), the formalization factor, and the pupil control factor (pupil control ideology minus organizational ideology). Table 5 presents the verification of the research hypothesis.

Table 5: Summary of the Pearson correlation of the research hypothesis about the relationship between Level of School Environment and Academic Performance

Variables Correlated	r-value	Sig.	Interpretation	Decision on Ho
Environment Vs Performance1	0.212	0.018	Positive and significant	Rejected
Environment Vs Performance2	0.042	0.325	Positive and insignificant	Accepted

Performance1: Performance ratings by teachers

Performance2: Performance ratings by pupils

Table 5 indicates the performance ratings by the teachers about school environment and academic performance were correlated. It was found out that at a five level of significance the r – value is greater than 0.05 hence rejected the hypothesis. Having correlated the opinions of the pupils about environment and their academic performance it was found when r – value 0.042 less than 0.05 hence accepting the hypothesis that there was no significant relationship between the level of school environment and academic performance of pupils. Thus Pupils' learning efficacy is found to interact with school environment and the effect contributes significantly to their academic performance.

discussion in the study were location of a school categorized as urban and rural, owner of the school categorized as government owned and grant aided school and trained teacher pupil ratio of a school categorized as schools with teacher pupil ratios below 50, schools with teacher - pupil ratios between 50 and 70 and schools with teacher pupil ratios above 70.

In Standard seven the location of the schools consistently showed more variation in performance in all the subjects followed by trained teacher pupil ratios. These results showed that as far as the upper levels of basic education is concerned there were no opportunities for pupils to perform in all the three subjects. Schools with teacher pupil ratios that are below 50 will obvious consistently perform better than schools with higher teacher pupil ratios. Therefore, according to the results it appears that performance in the school was likely to depend on where the school was located and on favorable teacher – pupil ratios. School location and school owner can also play a significant role in impacting on academic performance of pupils mostly especially for private owned schools.

Classroom level factors are influential in determining the academic performance of pupils. These factors are trained teacher pupil ratios and textbook pupil ratios. In this case, teacher pupil ratio at classroom level not whole school teacher – pupil ratio. Textbook-pupil ratios are considered from 1:1 to 1:3, above 1:3 and where there were no textbooks. Therefore the presence of a trained teacher in a classroom is considered to have some little influence in academic achievement in all subjects at all levels of basic education but it is not very conclusive as to which teacher-pupil ratio the teachers functioned optimally.

At the pupil level the study analyzed the relationship of level of academic performance of pupils. At the upper basic education level age and sex of pupils are a matter considered in all the subjects. Pupils at an appropriate age performed

consistently much better than those who are underage or overage. Boys consistently perform better than girls. These results have implications on the enforcement of appropriate ages as well as the teaching strategies organized for girls. If the system still allows children to enter school at advanced ages the levels of performance cannot be expected to improve. It appears the cognitive growth of over-age pupils does not match the cognitive demands of a school curriculum. This is in line with the findings by Kadzamira (2001).

Ferreira, (1995) holds that; pupils attitudes are shaped to some extent by the structures (facilities) through which they are mediated. In fact, school environment can directly affect the attitudes of pupils or the attitudes of teachers and parents which in turn affect pupil attitudes. Proshansky (1970) referred to physical settings and attitudes as follows: Physical settings-simple or complex-evoke complex human responses in the form of feelings, attitudes, values, expectancies, and desires, and it is in this sense as well as their known physical properties that their relationships to human experience and behavior must be understood.

There is a body of research in the area of school environment and their relationship to pupil and teacher attitudes. Stockard and Mayberry (1992) found that the quality of a physical plant or environment is related to non-cognitive outcomes, such as better attitudes toward school. These outcomes may eventually relate to higher academic achievement. Christopher (1988) concluded that human nature makes people feel better about them when their surroundings are pleasant. Pupils who have better attitudes usually learn more and work harder. McGuffey (1972) conducted a study investigating pupil attitudes toward their school buildings in the elementary level. He found that students housed in newer school buildings which were fully carpeted and air-conditioned showed more positive attitudes than students housed in older buildings.

Chan (1982) compared pupils' attitudes toward the physical environment of a school opened in 1980 and that of two older schools: one built in 1923 and the other in

1936. The main finding of this study indicated that pupils housed in a modern school building had a significantly more positive attitude toward school than do pupils housed in a much older building. Likewise, Cramer (1976) studied selected Junior High Schools in the Bibb County School District of Georgia. He contended that pupils housed in newly renovated school facilities showed more positive attitudes. Teachers' attitudes are also directly related to the school facility. Several studies have been conducted in the area of open-space classrooms and their effect on teacher attitudes. Lewis (1976) examined the influence of open-space classrooms and closed-space classrooms on the attitudes of teachers toward the school building. It was found that teachers housed in open-space classrooms showed more positive attitudes. Likewise, Hones (1974) concluded that teachers' attitudes toward their students in open-space classrooms improved significantly. Mills (1972) agreed with Jones' findings when he concluded that teachers in open-space areas exhibited behaviors that allowed greater pupil freedom and self-direction. These teachers displayed behaviors which were more permissive, supportive, warm and sympathetic toward students. As one can see, not only does the physical environment of a school affect children, teachers are also affected by the design of a school building. And so, school architects, educators and facility planners must take into consideration the impact that the designs of school buildings have on student and teacher attitudes.

Pupils' perceptions of school environments influence their academic achievement. A match between a Pupils' preferred school environment and the actual class environment may be as important to academic achievement as the actual nature of the school environment. Meeting the individual needs of Pupils in a structured climate, with organization of pupil roles in the classroom, clear role expectations, and shared group-sanctioned norms have been shown to be effective factors contributing to pupil academic performance. An educational climate that is orderly, but not rigid with a consistent set of rules and values while still allowing for pleasure in learning is an effective environment. Establishing learning teams and changing them often and

allowing pupils to participate in decision-making can lead to higher student morale, and thus, impact their academic performance. Thematic of interdisciplinary approaches, cross-age tutoring, opportunities for self regulating, and grouping by topic, interest, and pupil choice are also conducive to their academic performance. Perhaps most important to students' perception that they can achieve is an environment that provides challenging, complex work while encouraging academic risks and viewing mistakes as a part of learning. In an effective learning environment and in a supportive relationship with a concerned teacher, Pupils who are under performing may choose to learn to help themselves reverse the pattern and start Performing.

CONCLUSION

Our perceptions affect our emotions and behaviors and our emotional and behavioral reactions also help shape our environments and skew our beliefs of those environments. A fundamental position of attribution theory is that we behave according to our perception and understandings. Attribution is part of our cognition of the environment, and is often used to feel a sense of control. We make attributions to make our world more manageable and predictable. One of our most important attributes is ability. Much of our performance is evaluated, by ourselves and by others, by assessing performance ability or competence. The attribution of high ability can be limiting, as it carries the obligation to perform at increasingly higher levels. Pupils who are underperforming may be exerting control over their own actions and environment by using self-serving attributions. By attributing lack of school success to external factors, for example, a pupil may not have to accept personal responsibility for his lack of success, and thus the negative quality of poor performance is reduced. A student who believes a lack of success is caused by external and presumably uncontrollable sources preserves herself image. If a gifted pupil is feeling too much pressure to succeed, he may purposefully underperform to prove he "isn't so smart after all." Pupils' perceptions of their educational experiences influence their academic performance. One way to

preserve one's own perception of high ability, especially if poor performance is perceived to be likely, is to reduce the level of effort and not try. One obvious limitation of this study is that it used only a small sample of prospective primary teachers' drawn from one division of the district. In order to further understand and document the nature and prevalence of these conceptions, additional studies using more qualitative measurement methods and larger representative samples need to be conducted that look at both conceptions of the environment. Data obtained from teachers or pre-service teachers belonging to different divisions should also be compared.

RECOMMENDATIONS

The following recommendations are hereby proffered based on the study findings;

- Environmental considerations should be embedded in teacher education and in school management training, so that these important elements are not relegated to the 'background noise' of educational discourse
- Further empirical investigation should be carried out into key elements which are insufficiently covered in the research literature
- The design process must be the focus of environmental change in schools, so that teachers and learners might experience motivational and perspective-changing benefits beyond the specific problem-solving
- Environmental improvement in schools should be locally driven, user-led and embedded in pedagogy
- Investment in change should be seen as an iterative process, rather than a five-year programme to cover the needs of a subsequent generation. Building Schools for the Future pre-supposes a commonly held view of what the future will look like: unless this is generated collaboratively and implemented flexibly, there is a significant risk of expensive failure.

Recommendations for Future Research

- This study should be replicated, using a different population to determine whether school environment affects the academic performance of pupils.
- More research also might help to demonstrate a strong relationship that, in turn, allows findings to be generalized. Because of the limitations of the questionnaire instrument to assess some of the environmental conditions that were alike among all Kenyan public schools, such as the thermal and visual environments, extensive research is needed to examine the influence of these factors on pupils Performance.
- This can be done by examining whether minimum standards for acoustics, lighting, heating and air conditioning as requirements for a quality school building are met in Kenya. If this study is replicated, the researcher might want to add more responses to each question used in the questionnaire instrument to better examine the school environmental condition.
- Kenyan teachers' attitudes toward the conditions of the public school buildings and subsequent influence on pupil attitudes are fodder for another important study that should be conducted. Such study would examine whether or not the working conditions have direct positive and negative effects on teacher morale, feelings of effectiveness in the classroom, and the general learning environment.
- Teacher satisfaction or dissatisfaction and the school buildings should be explored because the conditions of the school buildings might cause the teacher dissatisfaction if a teacher feels that he or she cannot utilize the classroom for a better teaching style because of a small classroom space filled with more pupils than expected. In addition, a teacher might feel dissatisfied when the classroom or the school building is in poor or even sub-standard condition.

REFERENCES

- Abagi (1999). Kenya 's Strategic Policies for the 21g. Centuty: Macro and Sectoral Choices, Nairobi, Institute of Policy Analysis & Research, 1999.
- Abag I, O. (1993). Household Factors as Determinants of School PartIciatIon of Girls in Kenya: The Case of Nairobi and Siaya District. Nairobi, African Academy of Sciences.
- Aduda D. (2005). New Report Spells out the Future of Education. The Daily Nation Monday April, 2005 Nation Media Group Nairobi
- Amalaha BM (1975) Academic achievement motivation of Ibo fifth formers. Dissertational Abstracts Tnt. 36(1): 123-A.
- Bentely T. (1991). The Business of Training; Achieving Success in the World Markets, England McGraw Hill Books Ltd
- Boy J. (2006). Free Primary Education and its Effects on Student Performance in Bungoma District An unpublished research thesis, Moi University.
- Chan, T.C. (1982). *The impact of school building age on the achievement of eighth grade pupils from the public schools in the state of Georgia*. Unpublished doctoral dissertation, University of Georgia, Athens.
- Chimombo, J., Chibwana, M., Kadzamira, E., Kunkwezu, E., Kunje, D. & Nampota, D. (2000). *Classroom, school and home factors that negatively affect girls' education in Malawi*. UNICEF.
- Cramer, J.R. (1976). *Some effects of school building renovation on pupil attitudes and behavior in selected junior high schools*. Unpublished doctoral dissertation, University of Georgia, Athens.
- Christopher, G. (1986). *The aesthetic environment and student learning*. School Business Affairs, 54(1), 26-27.
- Coclough, C. (1986). Primary Schooling and Economic Development, Washington World Bank Staff Working Paper No. 399

cooperatively in open instructional areas. Unpublished doctoral dissertation, Arizona State University.

Ministry of Education Science and Technology, 2003, Free Primary Education:

Every Child in School. Nairobi.

Olweya 3. (2001.). Education in Kenya: *Eroding Gains. Kenya at Cross Roads Scenarios for Our Future.* Nairobi. Institute of Economic Affairs Society for International Development.

Proshansky, H.M. (1970). *Environmental psychology: Man and his setting.* New York: Holt, Rinehart, and Winston, Inc.

Republic of Kenya, 2004, Economic Survey, 2003, Nairobi, Government Printer.

Republic of Kenya and United Nations, 2003, Millennium Development Goals Progress Report for Kenya, 2003, Nairobi.

Republic of Kenya, 1999, Totally Integrated Quality Education and Training TIQET: Report of the Commission of Inquiry into the System of Education in Kenya. Government Printer.

Stockard, J. & Mayberry, M. (1992). *Effective educational environments.* Oregon (ERIC Document Reproduction Services No. ED350674).

Senge, P.M. (1994). The fifth discipline: The art and practice of the learning organization. New York: Currency Doubleday.

Sifuna, D. N., 1990, Development of Education in Africa: The Kenyan Experience, Nairobi, Initiatives Ltd.

Sifuna, D. N. 2003 The Pastoralist Communities and Free Primary Education

Kenya: A Preliminary Survey, Nairobi, M0EST, and Action Aid-Kenya 2003.

Skinner, B.F. (1953). Science and human behavior. New York: Macmillan.

Squires, D. & McDougall, A. (1994). Choosing and using Educational Software: A teachers' guide, London: The Falmer Press

Too, 3 . K (2005). Quality of free primary Education in Kenya, The Educator, School of Education Moi University, Moi University Press, Eldoret.

APPENDIX IA

SCHOOL ENVIRONMENT FACE SHEET AND DEMOGRAPHIC CHART OF

RESPONDENTS

Dear respondent,

This questionnaire is to help the researcher CANUTI ONYANGO META, gather information on: "*School environment and academic performance of pupils in selected public primary schools in Butula division, Butula District, Kenya*". For confidentiality, the responses provided will be treated with highest degree of confidentiality. To ensure the same, do not write your name or any other form of identity anywhere on this form. Where alternative responses are given, mark your choice by putting a tick ☐ in the box next to the appropriate answer.

1.0 Section A: Profile of the Respondents

Age: Below 20 ☐ 20 - 29 ☐ 30-39 ☐ 40-49 ☐ 50 and above ☐

Gender: Male ☐ Female ☐

Marital status: Single ☐ Married ☐

Level of education

Certificate ☐ Diploma ☐ Bachelors ☐ Master ☐ Ph.D ☐

If any other please state-----

APPENDIX IB: QUESTIONNAIRE FOR LEVEL OF SCHOOL ENVIRONMENT

Your respective answers are to range from 1 = Strongly disagree; 2 = Disagree;

3 Neither agree nor disagree 4 = Agree; 5 = Strongly Agree.

Case	Variables	1	2	3	4	5
2.1	School buildings and physical environment in my school are well set and impressive					
2.2	Principal leadership in form of conduct of teachers in my school is comprehensible					
2.3	There is satisfaction with the School makeup in my school					
2.4	Parental involvement in the running of school activities in my school					
2.5	Programs of learners are consistent with the interests of the pupils in my school					
2.6	Ample time is being devoted to instructing and br guiding of learners in my school.					

APPENDIX IC: LEVEL OF ACADEMIC PERFORMANCE OF PUPILS

Your respective answers are to range from 1 = strongly disagree; 2 = Disagree;

3 = Neither agree nor disagree 4 = Agree; 5 = Strongly Agree.

Case	Variables	1	2	3	4	5
3.1	The level of academic performance of pupils is low in my school as compared with private schools in the region					
3.2	The level of academic performance of pupils in my school is moderate as compared with private schools in my region					
3.3	The level of academic performance of pupils in my school is high as compared with other private schools in my region					

APPENDIX ID: RELATIONSHIP BETWEEN LEVEL SCHOOL ENVIRONMENT AND ACADEMIC PERFORMANCE OF PUPILS

Your respective answers are to range from 1 Strongly disagree; 2 = Disagree;

3 = Neither agree nor disagree 4 = Agree; 5 = Strongly Agree.

Case	Variables	1	2	3	4	5
	School building and physical environment has effect on the academic performance of pupils in public primary schools					
	Principal leadership in terms of conduct of teachers in schools has effect on the academic performance of pupils in public primary schools					
	Teacher satisfaction with school structure has effect on the academic performance of pupils in public primary schools					
	Parental involvement has effect on the academic performance of pupils in public primary schools					
	Differentiation in student programs has effect on the academic performance of pupils in public primary schools					
	Time devoted to instruction, has effect on the academic performance of pupils in public primary school					

Thank you

APPENDIX II

SCORE SHEET FOR PUPILS' ACADEMIC PERFORMANCE OF PRIMARY SEVEN AND EIGHT

This questionnaire is to help the researcher CANUTI ONYANGO META, gather information on: "*School environment and academic performance of pupils in selected public primary schools in Butula division, Butula District, Kenya*". For confidentiality, the responses provided will be treated with highest degree of confidentiality. To ensure the same, do not write your name or any other form of identity anywhere on this form. Where alternative responses are given, mark your choice by putting a tick [] in the box next to the appropriate answer.

1.0 Section A : Profile of the Respondents

1.1 Age: Below 10 ☐ 11-15 ☐ 16-20 ☐ 21 and above ☐

1.2 Gender: Male ☐ Female ☐

1.3 Rank in the family

First born ☐ Last born ☐ Middle ☐

If not specify:-----

1.4 Class Level

Primary Four ☐ primary five ☐ primary six ☐

Primary seven ☐ primary eight ☐

College EREGI from 1994 to 1998

Course PTE certificate

Secondary schools attended

Bukhalalire secondary 1980 to 1984 (O level),

Kolanya high school 1985 to 1986(A level)

Primary school attended

Musibiriri primary school 1975 to 1979

Work experience

Worked as from 1988 as a teacher up to date. Has been a senior teacher and later programme officer of Busia Teachers ECPE training college. At present, he is also the coordinator of post graduate students (2010-2011) at KJU taking masters in Educational Administration and management.

Other relevant Data

A member of Cooperative society's , a farmer, and a spiritual leader.

