RELATIONSHIP BETWEEN BOARDS OF MANAGEMENT PRACTICES AND STUDENTS' PERFORMANCE AT KENYA CERTIFICATE OF SECONDARY EDUCATION IN KITUI AND MAKUENI COUNTIES, KENYA

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DECLARATION

I confirm that this thesis is my original work and has not been presented in any other university/institution for certification. The thesis has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other sources, including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

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DEDICATION

To my late parents: Esther Nzewa and Paul Mbii. They educated me when the girl child was discriminated against by harmful cultural practices. May the Lord rest their souls in eternal peace.

ACKNOWLEDGEMENT

I would like to recognize the minds that went into development of this thesis as it could not have been possible without the supervision and tutelage of Dr. Samuel N. Waweru and Dr. Charles M. Magoma. I am particularly grateful to both of them for their professional input, patience and commitment in taking me through this part.

My gratitude also goes to my children: Nthambi, Mbulo, Ngina and Nzewa. They showed me faith and gave me confidence to continue moving towards my goals. I learned from them that one can achieve their dreams in any age, and with passion for knowledge, it is never, never too late to learn.

My sisters Simbii, Kavengi, Annah and Ngina you encouraged me any time I looked like I was about to give up. Brother Songolo and Mrs. Nzile, feel appreciated for your assistance in transportation when I criss-crossed Kitui County. Sincere thanks go to Mrs Mutonga, and all the principals and members of boards who cooperated in filling the questionnaires. I am grateful to Mr Jacob Musili for his assistance during the data analysis process and Ms. Cecilia Muema for formatting the document all through from the proposal to the thesis stage.

May God's favour be with you all.

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ABBREVIATIONS AND ACCRONYMS

BEI	Basic Education Institutions
BOG	Board of Governors
BOM	Boards of Management
CEB	County Education Board
CDF	Constituency Development Funds
CDF	County Development Fund
DfE	Department for Education
EFA	**E**ducation for All
FDSE	Fee Day Secondary Education
FSE	Free Secondary
HSEB	High School Education Boards
HRM	Human Resource Management practices
IGAs	Income Generating Activities
OST	Open Systems Theory
IASB	Iowa Association of School Boards
IMF	International Monitory Fund
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KMTC	Kenya Medical Training College
KNHC	Kenya National Commission on Human Right
KSBA	Kentucky School Boards Association

MOE Ministry of Education

MSI Malaysian Skills Institute

NSBA National School Boards Association

NCSL National College for School Leadership

PA Parents Association

PD Professional Development

QUASO Quality Assurance and Standards Officer

SCDE Sub- County Directors of Education

SGB School Governing Bodies

SMC School Management Councils

TEA Texas Education Agency

TLM Teaching and Learning Materials

TSC Teachers service commission

UK United Kingdom

USA United States of America

US United States

UNESCO United Nations Educational Scientific and Cultural Organization

UNDESA United Nations Department of Economic and Social Affairs

WASCE West Africa School Certificate Examinations

WSSDA Washington State School Directors' Association

ABSTRACT

Secondary school management has been found to be the second important factor after teaching to have a tremendous effect on students' academic performance. However, BOMs quality of management has been questioned by many studies in Kenya and other countries. Based on this understanding, this study investigated the relationship between BOMs practices and students' KCSE performance in Kitui and Makueni Counties as the two counties have had a persistent poor KCSE performance yet the area has not sufficiently been investigated. The study objectives were to: assess the relationship between BOMs' financial resource management practices and students' KCSE performance; establish the relationship between BOMs' human resource management practices and students' KCSE performance; examine the relationship between BOMs' physical and material resource management practices and students' KCSE performance; determine the relationship between BOMs' students' welfare management practices and students' KCSE performance and lastly, to determine the extent to which financial, human, physical and material and students' welfare management practices predict students' KCSE performance. The study was anchored on Open Systems Theory and used correlation research design. The target population was 10,010 respondents composed of 9295 board members and 715 principals. Purposive, stratified, Krejcie and Morgan table, and systematic random sampling techniques were used to sample 709 BOM members and 54 principals. Questionnaires were used to collect data from BOM members and an interview schedule collected data from the principals. Statistical Package for Social Sciences (SPSS) was employed to process and organize the data. Descriptive statistics namely, means computed the extent boards participated on the practices with a mean below 2 being considered low, 2 to 3.5 moderate and above 3.5, high participation. Descriptive analysis found boards' participation in the four management practices being moderate to high. Further, correlation analysis revealed that the four board's practices correlated significantly with students' performance with the following coefficient: finance ($r=0.538$, p-value <0.01), human resource ($r=0.536$ p-value <0.01), physical and material, ($r=0.507$, p-value <0.01) and students' welfare ($r=0.554$, p-value <0.01). The four null hypotheses were rejected because the P values were below 0.05, the level of significant used for this study. Additionally, regressions analysis showed that boards' practices contributed significantly to students' performance with physical and material resource being the most important predictor. This study concludes that BOMs participation in management practices influenced students' performance. The study, recommends that the Ministry of Education should do induction/training programmes for board members in the following areas: In

finance: strategic plans, books of accounts supervision, and budgeting. In human resource: staffing needs identification, discipline, and linking school and community. On physical and material: creating adequate space for students, availing reliable WIFI, power and water supply, and school security. On students' welfare: students' discipline, data use and feedback to guide policy. This induction/ training should be done through workshops and seminars.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

The chapter presents the background to the study, statement of the problem, purpose of the study, objectives of the study, hypotheses of the study, significance of the study, assumption of the study, limitations of the study, delimitations of the study, theoretical framework, conceptual framework and operational definition of terms used in the study.

1.2 Background of the Study

Management of schools involves application of a series of actions, processes and practices established by legislation or parliamentary rules to achieve objectives and deliver effective services to the school (World Bank Paper, 2008). It entails practical activities, tasks and techniques that boards of management (BOMs) engage in to forecast, and make decisions with the aim of attaining the targeted educational goals. School management entails utilizing organization's resources effectively through the actions of working with and through people systematically to achieve the desired school outcomes and objectives.

Historically, school boards did not seem to prioritize student academic performance but their role and responsibilities have evolved in importance since the twentieth century (Ford, 2013). Reports prepared and studies done on international examinations, have established school management to be the number two utmost crucial aspect which sways students' academic

performance, the first being teaching standards (Ates, and Artuner, 2013; Bradshaw & Osborne, 2010). Consequently, school management and how it enhances students' academic performance has becomes the focus of increasing policy debate.

Many researches demonstrate clearly that BOMs are key in improving students' academic performance. There is unanimity in studies done in the United States (US) that boards indeed influence students' achievement. For Instance, Goodwin's (2010) study entitled 'changing the odds for student success in Colorado State' described boards' decisions and policies as having great impact on how students learned despite operating far from the classroom. Similar results were obtained by Lorentzen (2013) who examined school board governance behaviour and student achievement scores in Montana State US.

Moreover, Mizel (2010) observed that school management affects students' academic performance because it changes teachers' behaviour. According to Ye (2016) teachers' experience, knowledge, skills, etc. are crucial for teaching effectiveness, but the conditions under which teachers' work, which are provided by the school boards of management, also matter. Adriana, Fabiano, and Giovanni (2014) who studied the effect of managerial practices and students' performance across six developed countries namely; the United Kingdom (UK), Italy, Germany, Canada, Sweden, and the US also established that a strong and effective board is required at the top of every school to improve the academic performance of students.

Students' academic performance in many countries is defined as the outcome achieved by a student at the end of the secondary school education, which is considered to be an end to basic education. It has become the top priorities in secondary schools due to its overall contribution to social-economic development of any country (Global Education Center, 2010; Chua and Mosha, 2015). Odeh, Oguche and Ivagher (2015) stipulates that students' academic performance is gauged by way of tests and the scores students attain are seen as essential measure of performance (Bouchamma, 2012). Merit obtained is correlated with quality life and opportunities for successful employment of each person (Mpiluka, 2014). In Kenya, the examination done at the end of basic education is known as Kenya Certificate of Secondary Education (KCSE).

As a result of the paramount importance attached to educational attainment and the role it plays in a country, many governments worldwide have created and put in place secondary school management structures in form of boards. Their central role has been recognized to be the improvement of student academic performance. The boards operate on the concept of corporate governance which is distribution of responsibilities and rights among the different participants in an organization (Gilchrist and Knight, 2015).

There are some school board practices that have been accredited to exemplary students' academic performance. A research done in three Canadian

economically disadvantaged provinces namely; Ontario, Québec, and New Brunswick on effective school managers, established that effective boards provided secure and nurturing environment, protected teachers from extreme outside influence and ensured that the environment within the school was beneficial and encouraged team spirit. Most importantly, the boards had well-outlined academic and learning targets. They also ensured that rules and regulations that did not condone any form of violence were laid down (Bouchamma, 2012).

In the Washington State School Directors' Association (WSSDA) (2015) there were other board's practices that were found to be key to students' academic performance and they included: vision setting and goal establishment through strategic planning which was to be based on all the stakeholders' contribution including the teaching staff. Without a vision, the boards would operate in chaos (WSSDA, 2015). In a working paper entitled 'investing in improvement' Childress (2010) and OECD (2012) opined that in public school, a blueprint and resource sharing must be backed by a resource plan, which is an outline of all resources needed to achieve students' academic performance. Without a resource plan, there would be no strategy. Resource allocation and ensuring accountability at the school level, should rhyme with the goals, priorities and the strategic plan of the board (Ontario School Trustee, 2016).

Hanushek, Link, and Woessmann (2012) who examined the importance of school autonomy found out that, school boards who knew how to strategically allocate scarce resources maximized student performance. Those boards

prudently apportioned human and material resources and students benefitted more while badly managed schools were indeed found to worsen students' academic performance. Besides, the boards also received data on students' performance and of the school. Such reports included trends, successes and areas requiring improvement (Saskatchewan School Boards Association, 2015). The responses acquired and the assessment obtained, guided the strategy formulation afresh and gave guidance on how the goals and objectives of the school would be the subsequent year.

In England, United Kingdom (UK) and across Northern Ireland, which are benchmark countries for students' achievements, BOMs with similar roles to those in the US were found as they managed strategic planning, staff engagement and dismissal, administration, accountability, staff review and assessment (Department for Education (DfE), (2010). In addition, they also monitored and evaluated performance, approved the school budget, set strategic objectives, appointed the head teacher, acted as crucial companion who provided support and cohesion between the community and the school.

Even though literature shows the existence of elaborate guidelines on board' practices, boards still face constraints in their operations. For instance, Grissom (2012) did a survey linking board members conflict levels to district growth in academic performance in California public schools and found a negative association between school board member conflict and student performance. He thus saw the need for researchers to better understand the link

connecting boards' practices and students' performance. Another study done in Southern Mississippi to reveal school boards effectiveness meetings by Lee and Eadens (2014) found out that boards who were: disorderly, spent little time on student achievement; had poor relationship, were disrespectful, advanced own agendas; did not focus on strategic items and took excessive time during meetings, had students who performed poorly in examinations. Moreover, in Asia, a study done in Cambodia by Chruy and Tiep (2017) in general public education on financial management challenges, established that a relatively large number of board's respondents had not been formally trained on school management.

Similar to global trends, African countries are also committed to the academic success of their student thus they have increasingly embraced the concept of corporate governance as they know it leads to better school performance. The region has however been associated with low attainment in standardized tests (World Bank, 2014). In South Africa, for example, School Governing Bodies (SGBs were constituted by South African School Act (SASA) No.84 of 1996. That Act expects boards acting within the laid down structures in the constitution to get the opinions of the learners, teachers and parents before making decision develop school mission statement; determine the admission and language policy and adopt a code of conduct for the learner among other roles. However, Xaba (2011) highlighted some impediment to SGBs performance like inadequate skills for financial management, tension between

public school SGBs and the Education Department, problems in understanding the functions of the SGBs and failure to attend boards meetings.

In Tanzania, there were observed glaring disparities in learning outcomes which were blamed partly to the quality of financial management in the school (World Bank, 2014). Sulley (2016) did a study on challenges faced by school boards in managing community secondary schools in Kiteto District- Manyara Region of Tanzania and established to a large extent that school boards were aware of their practice that included; monitoring budget, controlling teachers and students discipline and ensuring availability of teaching and learning materials among other roles. Nonetheless, insufficient funds, training and cooperation between school boards and other stake holders greatly affected school boards performance.

In Kenya, prior to the year 2013, Boards of Governors (BOGs) created by the Education Act in 1966 managed public secondary schools. However, currently Board of Management (BOM) are governing secondary school education in Kenya, after the name BOG was changed by the Basic Education Act (Republic of Kenya, 2013) which is the law managing all education matters in Kenya. The change of name was necessitated by Sessional Paper No 14 of 2012 which proposed that the government establishes BOMs to reflect their new functions and enlarged participation (Republic of Kenya, 2012). As a result of that modification and for the intent of this study, the words BOG and BOM were used to mean the same thing.

As enumerated by section 55 of the Basic Education, Act - Republic of Kenya (2013) boards in public secondary school should be constituted by the County Education Board (CEB). It should have 14 members consisting of; six persons who should be appointed to represent both local community and parents' body; sponsors of the school have three positions reserved for them; a nominee to represent the CEB; one person to serve the special interest category in the society; and another slot preserved for people with special needs. Unlike the Education Act of 1966, the teaching staff have been given a slot within the BOM to appoint a teacher to represent them as well as the students. However, the student representative is an ex officio.

Boards in the process of performing their duties are permitted at times, to co-opt persons into the board whom it is contented that they have the knowledge and skills that would help them in the performance of their functions. The co-opted persons numbers however should not exceed three at any particular time and they are not allowed to vote during their co-option. Boards meeting should be held after every four months as stipulated by the Basic Education Act (Republic of Kenya, 2013).

There are numerous functions assigned to BOM of basic education institutions by the Basic Education Act in sub-section 59. For purposes of this study, the functions have been grouped into four namely: financial management practices; human resource management practices; physical and material management practices and students' welfare management practices. Under

financial management boards should oversee tasks like administration and supervision of school resources; and receive, collect and be accountable for all the funds accrued to the school. Among the human resource practices boards are mandated by the Act to; recommend the staffing needs of the school to the CEB, to engage, hire and pay the support staff as required by the school (Republic of Kenya, 2013).

As for physical and material resource, Basic Education Act, expects boards to run the school matters in accordance with the laid laws and directives managing the health, welfare matters and the safety issues at any place of work. The boards also are called upon to supply acceptable and satisfactory classroom, teaching and learning materials, school buildings, libraries, toilet facilities and other infrastructures for the school (Republic of Kenya, 2013). On students' welfare boards' practices include dealing with students' indiscipline issues and availing records of the same to the CEB. Availing guidance and counselling to all learners, ensuring human rights are observed, looking into student's welfare, and ensuring their safety are also part of their duties (Republic of Kenya, 2013). Boards are also charged with the duty of upholding the essence of unity, supporting peace, unification, sufferance, inclusion and getting rid of hatred and tribalism in the schools (Republic of Kenya, 2013).

Notwithstanding the comprehensive responsibilities of school boards in the Basic Education Act (2013), in Kenya researcher and lawmakers appear to notice that the problem of poor KCSE performance is deeply rooted in board's

management practices. For instance, in National Education Plan 2013 – 2018, Republic of Kenya (2015) inadequate management skills for BOMs in governance, administration, teacher management and performance levels were observed as challenges that hindered education targets. Coupled with that was inadequate integration of ICT into the education system which also lie under BOMs jurisdiction. These inadequacies in boards' practices have been found to have negative influence on academic performance.

Besides, more recently Republic of Kenya (2018) in the National Education Sector Strategic Plan for the Period 2018 – 2022 also lamented of similar governance, management and accountability inadequacies in secondary school. The inadequacies take the form of persistent mismanagement and misappropriation of resources and funds, abuse and exploitation of learners, lack of standards for physical safety in and around the school, lack of structures to engage communities, and excessive political interference in school management among others. The study also revealed, that the community surrounding the school at times stood on the way of the running of school. Inadequate school finances, shortage of staff personnel, embezzlement of finances, scanty physical facilities; insufficient support from the locals and students posting low grades in the national examinations were other inadequacies enumerated in the strategic plan.

In Kitui and Makueni Counties, the statistical data gathered on analysis of KCSE results for 2015, 2016 and 2017 by the Ministry of Education show a persistent below average performance in KCSE with a majority of the

candidates in Kitui and Makueni counties scoring less than C+ which is the minimum requirement for entry into public universities as depicted in Table 1.1.

Table 1.1: Kitui and Makueni County KCSE Mean Score for 2015-2017

Year	County	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	M/S
2015	Kitui	3	141	364	711	1002	1335	1625	2068	2457	2423	1396	121	5.05
	Makueni	5	213	536	975	1341	1713	2193	2810	3156	3270	1740	97	5.11
2016	Kitui		68	263	452	747	994	1358	1800	2397	3486	4570	843	3.97
	Makueni		67	340	640	938	1263	1643	2271	2968	4374	5724	1007	3.99
2017	Kitui		36	166	421	771	1098	1559	2201	2799	4561	5178	798	3.86
	Makueni		38	277	533	826	1165	1601	2175	3121	4649	6676	1634	3.74

Source: Republic of Kenya - Ministry of Education (2018)

The mean score for secondary schools in the two counties also indicated a downward trend for the three years which was worrying (Republic of Kenya, 2017). Researchers have found notable constraints within boards' jurisdiction of practices which may have caused the persistence poor KCSE performance. According to Musee (2017) who did a study on factors influencing principals' performance of administrative duties, in public day secondary schools in Mwingi East Sub –Kitui County, inadequate finances, delay in disbursement of funds and parents' poor payment of school fees led to inadequate facilities. Those inadequacies resulted to difficulties in running the schools. In Makueni County, a study by Mulei and Orodho (2014) on the preparedness of BOMs in

performance contracts and service delivery pointed out that poor financial management resulted in the many conflicts between stakeholders in public schools. Literature seemed to indicate that there exists inadequate capacity of boards in financial and human resource management associated with poor students' performance at KCSE in schools among other factors (Kuria, 2012).

In a study done in Kyuso Sub County, Kitui County by Mutemi (2015) on factors influencing effectiveness of boards in human resource management, it was established that majority of the board members lacked confidence and were not sure of their human resource management practices due to lack of induction, training and experience. Likewise, Nthale (2015) did a study on evaluation of strategies adopted by the school boards of management in improving infrastructure in secondary schools in Kilungu Sub County, Makueni County and established that, school boards were not effective in improving school infrastructure.

Based on the background of this study, the demographic characteristics of BOMs, challenges facing school boards, strategies boards use and the effect on student performance have been established through researcher, but the extent to which boards participate in their management practices and the relationship it has on students' KCSE is a significant research gap yet to be explored in Kitui and Makueni Counties. This research therefore examined the relationship between boards practice and students' KCSE performance in the two counties as academic performance continue to be of concern.

1.3 Statement of the Problem

Research has indicated that boards' management practices are second most crucial aspect after teaching quality that potentially improves students' academic performance. In spite of that, the quality of boards' practices has been questioned by many researchers locally and internationally. Previous researches done indicate that inadequate management skills exist within the board members leading to negative practices within the schools such as: mismanagement and misappropriation of resources, stakeholder's conflicts, failure to pay school fees, doubt when dealing with human resource and community, insecurity in and around the school, and learner exploitation among others.

Persistent poor KCSE performance trends have been observed in Kitui and Makueni counties raising concerns as it risks the students' quality of life, as well as their economic and social mobility. Although some research efforts have attempted to analyse the poor KCSE performance, they have limited themselves to other factor without regard to school boards practices which have been associated with poor performance by researchers. That gap prompted this research to explore the relationship between BOMs management practices in financial, HR, physical and material and student's welfare and students' KCSE performance so that boards may not unintentionally inflict harm on students' academic performance.

1.4 Purpose of the Study

The study sought to assess the relationship between BOM practices and students' academic performance in public secondary schools in Kitui and Makueni Counties, Kenya with the hope that boards would be able to make more intentional and measured contributions on their management practices to raise students' performance at KCSE.

1.5 Objectives of the Study

This study was guided by the following objectives: -

1. To assess the relationship between boards' financial resource management practices and students' KCSE performance in Kitui and Makueni Counties.
2. To establish the relationship boards' human resource management practices and students' KCSE performance in Kitui and Makueni Counties.
3. To examine the relationship between boards' physical and material resource management practices and students' KCSE performance in Kitui and Makueni Counties.
4. To determine the relationship between boards' students' welfare management practices and students' KCSE performance in Kitui and Makueni Counties.
5. To determine the extent to which financial, human, physical and material and students' welfare management practices predict students' performance at KCSE in Kitui and Makueni Counties.

1.6 Hypotheses of the Study

This study was guided by the following four null hypotheses:

H_{01} There is no significant relationship between boards' financial resource management practices and students' performance at KCSE in Kitui and Makueni Counties.

H_{02} There is no significant relationship between boards' human resource management practices and students' performance at KCSE in Kitui and Makueni Counties.

H_{03}There is no significant relationship between boards' physical and material resources management practices and students' performance at KCSE in Kitui and Makueni Counties.

H_{04} There is no significant relationship between boards' students' welfare management practices and students' performance at KCSE in Kitui and Makueni Counties.

1.7 Significance of the Study

The study findings revealed different practices that may be used by boards of management to realize improved performance at KCSE which has remained a challenge. Furthermore, other education administrators such as County Education Boards (CEBs) and other policy makers in education may utilize the results to enhance the quality of secondary school management standards in Kitui and Makueni Counties.

The findings of this study established management areas that boards need to be trained on. It is hoped that the findings will be helpful to lawmakers and county education offices in which the boards fall in identifying their training needs. In order to enhance students' KCSE performance, well planned induction courses for secondary school boards can be designed as a result to improve their skills, knowledge and experiences.

Moreover, different education stakeholders in education can use these finding to enhance students' KCSE performance. Such stakeholders may include; government, political leaders, influential people in community, teachers and parents to look for solutions that would help to overcome the challenge of low KCSE performance faced by secondary school in the counties. Kenya Education Management Institute (KEMI) and other education institutions may also find the study valuable in reviewing their management training programmes. Researchers may benefit from the results as they can use them as reference to further their research. Lastly, the Ministry of Education may also find the findings helpful in strengthening their efforts in management of secondary schools.

1.8 Limitations of the Study

This research was carried out in Kitui and Makueni Counties. The area is sparsely populated and therefore the schools were far apart. This posed a challenge of high transport cost and more time was consumed hence high cost of data collection. However, the challenge of poor terrain in most part of the

counties was overcome by employing the services of motorbike riders who located shorter routes to the schools in some instances.

Moreover, most participants were only available during their scheduled meetings. This posed a challenge because they were busy with their meeting's agenda and could not probably get sufficient time to respond to the questionnaires. The researcher had nevertheless requested the sampled principal to inform and motivate in particular their school board members to participate and fill the questionnaire either before or after the meeting. So, majority of the questionnaires were filled before the boards started their business for the day.

1.9 Delimitations of the Study

This study focussed only on public secondary schools in Kitui and Makueni Counties. Private schools were not included as many of them did not have boards of management in place. So, generalization of the findings to other counties and private schools should be done with caution. Data was collected from BOM members of the 351 public secondary schools in Kitui County and 364 in Makueni County who had presented candidates for KCSE for the last three years as that was the dependent variable of the study. Other tests and examinations done in schools were excluded from the study as they were non-standardization hence lacking consistence.

The study also covered the practices employed by BOMs in line with the roles assigned to them by Basic Education Act 2013. So, data was collected from the board members as they were the only ones who attend boards meeting hence it was assumed, they were in a better position to give the right data on the practices. The study confined itself to correlational research design with emphasis on closed-ended Likert scale responses. This choice of research design aligned the study more to quantitative techniques. Different outcomes may be yielded if different methodologies were used.

1.10 Assumptions of the Study

i. The school boards' practices had a significant positive relationship to students' academic performance in Kitui and Makueni Counties.

ii. This study assumed that all the board members had been trained on the management practices as per the Basic Education Act 2013 which gives them the mandate from which they draw the practices that they employ in secondary schools to improve student's performance.

iii. The study assumed that in school where board members had read the Basic Education Act 2013, the relationship between their practices and students' performance was positive while those who had not, the relationship was negative.

iv. It was also assumed that public secondary school in Kitui and Makueni Counties were open systems where boards' practices and students' academic performance are influenced by the county environments such

as values, politics and economic as assumed by the open system theory used in this study.

v. Lastly the study assumed that board members were the best respondents to conceptualize their practices and would be willing to respond to the questionnaire honestly.

1.11 Theoretical Framework of the Study

The study was guided by Open Systems Theory (OST) as the theoretical framework whose proponent is Von Bertalaffy. Von Bertalaffy (1956) defines a system as a set of parts which interconnect becoming interdependent. The theory shows the interaction of its parts in operation as the system moves towards its goal. There are outer forces that affect the system while being simultaneously dependent on them. Openness is a vital part of the systems as all organizations are believed to be special in part as a result of the special environment in which they operate.

Circumstances and condition that impact an open system can be as either specified or broad (Bastedo, 2004). The general ones emanate from the geographic region in which the organization is situated and they include; economic conditions, legal or political environment, social (cultural values) and quality of education which dictates educated work force in an organization. The theory is related to this study as secondary schools are open system with continual interaction with the broader external environment of which it is a part.

Like other organizations, schools should be organized to accommodate distinct issues and opportunities because of the conditions in which they operate. Schools should thus be designed to accommodate their uniqueness in issues and opportunities. Change in one part, would affect other parts and thus the whole system. In the school system the boards' practices are influenced by cultural values in form of ethics and the importance attached to education. Economic factors include the capability of parents to pay fees for the school and ability to fundraise among others. In the legal/political environment the boards have to balance between pressure and policies of the politicians in the area and the legal requirements of the central government. In terms of quality, the boards that operate in geographic regions with strong education system are better able to fill positions in the school.

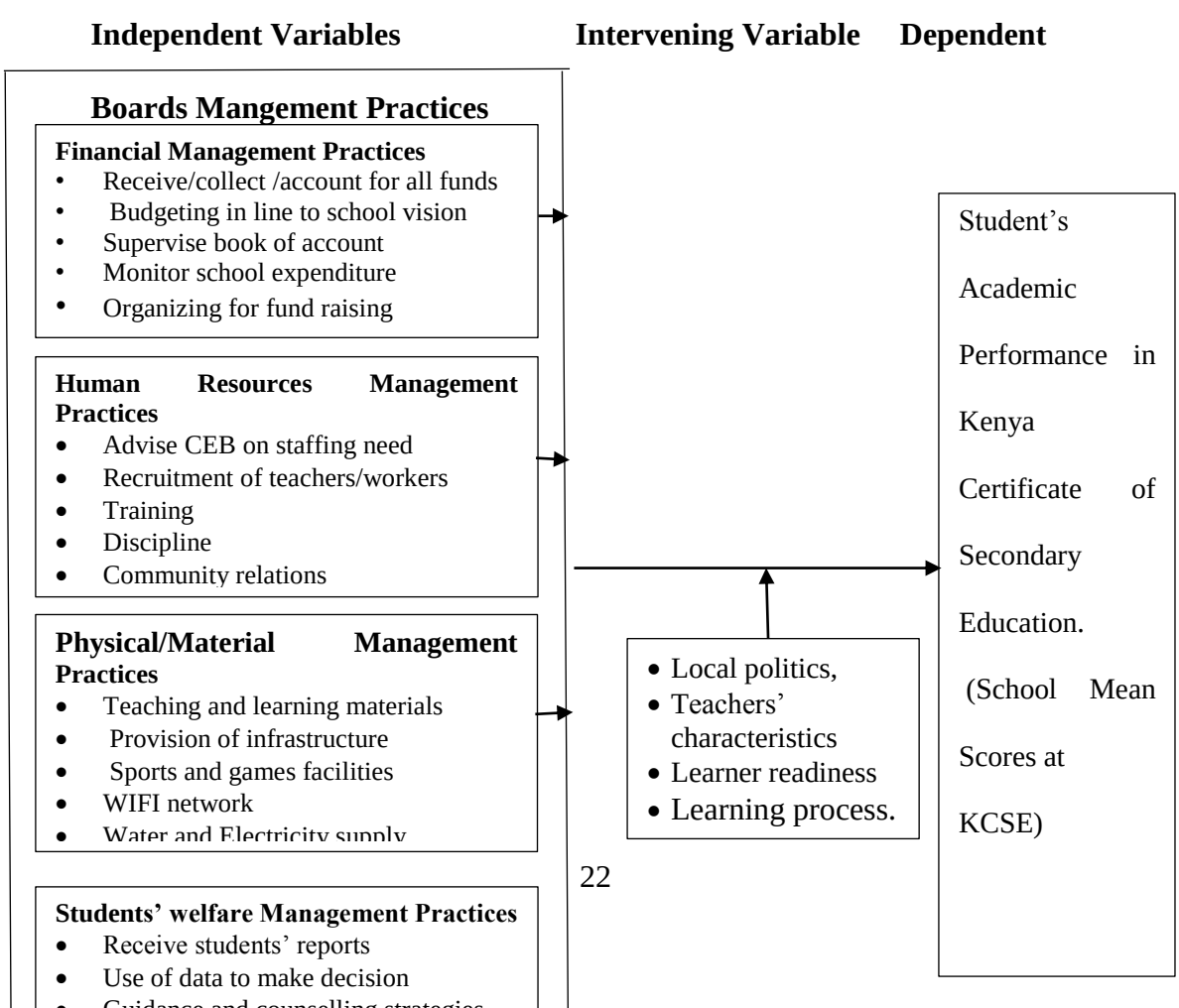
The open-systems theory also assumes that all large organizations comprise of the following fundamental components: inputs, transformation process, outputs and feedback (Lunenburg, 2010). The theory is applicable to this study as the elements apply to the relationship between practices of BOMs and students' academic performance as follows: public secondary school boards use inputs from their environment in this case: financial resource, human resource, physical resource and students. These inputs formed the independent variables for this study.

As for the transformation processes, the school boards of management job involve combining and coordinating the various resources (inputs) to attain the goal of the school which is to transmit core knowledge and values to the learners. Tasks performed by school managers within the school impacts on the learning process enabling students to become educated citizens capable of contributing to their society. This study intends to determine the BOMs practices associated with desirable output (students' performance) with an aim of ensuring that those practices are retained, and to identify practices associated with undesirable outputs, so that they could be discouraged.

According to OST, outputs are the results obtained after running an entire system. They are represented by the products, results or accomplishments of the system which in a school include the academic performance levels of students. In this study output is the academic performance of students at KCSE examinations. For purposes of this study feedback came in form of KCSE results which are shared with the BOM member who deliberated on the next cause of action to be taken. This study was set to ascertain the extent to which boards of management of secondary schools in Kitui and Makueni Counties managed the schools as open systems.

1.12 Conceptual Framework of the Study

A conceptual framework relating to the BOMs practices and academic performance was idealized and was displayed in Figure 1.1


Independent Variables
Intervening Variable
Dependent
Boards Mangement Practices
Financial Management Practices
Receive/collect /account for all funds
Budgeting in line to school vision
Supervise book of account
Monitor school expenditure
Organizing for fund raising
Human Resources Management Practices
Advise CEB on staffing need
Recruitment of teachers/workers
Training
Discipline
Community relations
Physical/Material Management Practices
Teaching and learning materials
Provision of infrastructure
Sports and games facilities
WIFI network
Water and Electricity supply
Students' welfare Management Practices
Receive students' reports
Use of data to make decision
Local politics,
Teachers' characteristics
Learner readiness
Learning process.
Student's Academic Performance in Kenya Certificate of Secondary Education. (School Mean Scores at KCSE)

Source: Researcher

Figure 1.1: Conceptual Model Showing the Relationship between Boards Practices and Students' Academic Performance

The conceptual framework Figure 1.1 shows the four variables related to BOMs practices that have been found to have a significant influence on students' KCSE performance. The conceptual framework is related to the Open Systems Theory used in this study as BOMs management practices are a part (sub-system) of the whole school system that are the second factor in importance after teaching quality to raise students' academic performance. Further, the theory stipulates that open systems are influenced by its environment which provides key resources to the organization to sustain it in form of inputs. In a school, finance and human resource are considered the primary inputs that run a school.

In this study, conceptual framework figure 1.1 shows the inputs in form of independent variables. The first input is the board's financial management practices which involve: BOMs receiving, collecting and accounting for all funds, budgeting in line with the school vision, supervision of books of accounts, monitoring school expenditure, deliberating on audited reports and organizing for fund raising among other practices. These practices influence

students' performance when done effectively as they enable a school to acquire and provide facilities such as physical structures, instructional material and human resource. Likewise, when board are ineffective in financial practices it leads to mismanagement of funds which adversely affects the aforesaid practices.

There are board's human resource management practices such as recruitment, advising the CEB on staffing need of the school, recruitment, discipline and training of human resource, ensuring safe environment and community relations that directly influence students' performance. The human resource of any school has been found to be the most valuable asset as it coordinates other activities to ensure attainment of goals. For instance, teacher's quality lie within the human resource practices and as the research indicates, it is the first component that influences students' academic performance. Correspondingly, in schools where recruitment, training, discipline and workers safety and security are guaranteed, student academic performance improve while the opposite is true for boards that disregard the said HR practices.

Physical and material practices which include supply of; infrastructure, teaching and learning materials, sports and games facilities, adequate space for the number of students, WIFI networks, water and electricity are other valuable inputs. Availability, adequacy and effective utilization of the physical and material resources guarantees effective performance of school. When insufficient, inefficiency, under-utilization and over utilization of physical and

material resources abound, the output, which in this study is students' performance is negatively affected.

Student's welfare is another input which the boards of management cannot ignore as the primary concern of any school is teaching and learning directed to the student. Student welfare management practices is therefore a basic aspect of board and it involves; receiving students report, data use to make decisions concerning the students' progress, guidance and counselling, ensuring that school rules comply to the children's Act and ensuring that human rights and safety are adhered to by all for the wellbeing of the student. Caring, loving, healthy and safe learning environment encourages students to focus on learning thus improving their academic performance. Toxic school environment full of conflicts, bullying, favouritism and fear makes students dread going to school which adversely affects their academic performance. Intervening variables are other inputs that affect students' academic performance in the conceptual framework in Fig 1.1. They include the local politics, teachers' character and behaviour, students and teacher relationship which affect academic performance of the students. Nevertheless, in this study the intervening variables were not studied.

Open Systems Theory also has the element of transformation process which in this study is the combining and coordinating of the four resources to attain the school goal which is students' KCSE performance. The changes boards make on the input transforms to output which can be positive or negative. In the conceptual framework the dependent variable which is the KCSE performance

forms the output of the study. School KCSE performance was examined by use of school mean scores. In conclusion, figure 1.1 indicates that if the four input variables are managed effectively, then the output, which is the students' KCSE performance would improve. Nevertheless, if the four independent variables are managed ineffectively then students' KCSE performance would be low.

1.13 Operational Definition of Terms

Financial Resources Management Practices – These are techniques BOM use in receiving, collecting budgeting and accounting for any funds accruing to the school.

Human Resources Management Practices – These are the methods used by BOM in establishing staffing needs, recruiting, and employing, training, disciplining, remunerating non-teaching staff and community relations.

Physical and Material Resources Management Practices – These are the steps and techniques employed by boards in provision of proper and adequate teaching and learning materials, physical facilities and implementation of regulations governing safety and health.

Practices –These are practical methods, activities, steps, tasks and techniques that boards of management engage to promote students' performance at KCSE.

Relationship – The state of interconnectedness that exist between boards' practices and students' KCSE performance.

School Board - This is a body composed of representative of the following: Parents of pupil in the school or local community, the teaching staff, sponsor

of the school, special interest group, persons with special needs, the students' council who is an ex official, the principal and a person nominated by County Education Board (CEB).

Student's Performance at KCSE - In this study, students' performance will be determined by the school's KCSE mean scores for the last three years (2015, 2016, and 2017 means score at KCSE). High performing schools are those whose performance at KCSE is or above a mean score of 6.01 out of 12.00 while low performing schools have mean scores below 6.00 out of 12.00 as that is halfway the mean of 12.

Student's Welfare Management Practices - These are the methods used by BOM in dealing with pupils' discipline cases, provision of guidance and counselling, looking in student's welfare, observing human rights, data use to make decision and ensuring their safety.

1.14 Organization of the Study

This study is arranged in five chapters. The study is introduced in chapter one by pinpointing the school boards practices that relate to students' academic performance in an endeavour to establish the best practices that school boards may employ to improve students' academic performance. The statement of the problem highlights the inadequacies within BOMs and its relation to students' academic performance. The purpose, objectives together with the significance of the study are listed. The chapter ends by providing the theoretical and conceptual framework of the study.

Chapter two provides an introduction mentioning the purpose of the study and a summary of what is contained in the chapter. It proceeds to elaborate on literature linked to BOMs practices and student' academic performance. Based on the objectives based on the objectives, critical review of the literature was done starting with financial, HR, physical and material and students' welfare management practices. The chapter ends with summary of literature reviewed and isolation of gaps.

Chapter three described the research design, study variable, study locale, target population, sampling techniques and sample size, research instruments, data collection and data analysis procedures used. Chapter four concentrated on data analysis, presentation and interpretation. Chapter five presented a summary of findings, conclusion and recommendations of the study. It also contains suggestions for further study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents literature related to relationship between BOMs practices and students' KCSE performance in Kitui and Makueni Counties, Kenya. The sub-headings for this chapter include; BOMs financial resources management

practices and students' academic performance, BOMSs human resources management practices and students' academic performance, BOMs physical and material resources management practices and students' academic performance and BOMs student's welfare management practices and students' academic performance.

2.2 Boards' Financial Resources Management Practices and Students' Academic Performance

School finance are considered the energy that run schools as they enable the schools to acquire and provide facilities such as physical structures, instructional material and human resource which have been associated with influencing students' performance (DfE, UK, (2013). In a review by OECD (2017) entitled the funding of school education: connecting resources and learning in Paris, it was observed that in history, no school or institution has ever succeeded without appropriate use of its financial resources. However, a report by World Bank (2008) entitled governance, management and accountability in secondary education in Sub Saharan Africa in Washington DC warned that the ability of a school to enhance teaching and learning does not depend on the abundance of financial resource but on quality management of resources (World Bank, 2008).

High quality school management including financial efficiency have a significant and positive impact on students' performance. Mascitti Miller (2013) study done in the US, entitled, resource allocation: practices in urban elementary schools, observed that BOMs efficient utilization of school funds

provided a conducive learning environment which by extension impacts positively on the students' academic performance in schools. Rosen & Gayer (2014) noted that in spite of the importance associated with finances in shepherding the much-needed change and accomplishment of services, sometimes the resource is misused and embezzled by those in authority. Countries worldwide are struggling with major obstacles like greed, corruption and misappropriation of resources (Rangongo, 2016).

The Basic Education Act in Kenya has mandated boards to receive, collect and account for all funds (Republic of Kenya, 2013). In Kenya public secondary boards receives or collects its funds from various sources. The Government is the major financier using funds voted by Parliament each year and spends 5% of its GDP on education and 21.0 % of government expenditure in 2017/18 (Republic of Kenya, 2018; The Kenya Institute for Public Policy Research and Analysis (KIPPRA), 2019). The funds are either from taxes or international donor agencies. Other monies are channelled through the County Development Funds and Constituency Development Funds (CDF) in devolved units. Fees collected from the parents or guardians, private firms or individuals also form part of the finances board is supposed to manage in schools.

The brief by (KIPPRA) (2019) labelled Education and Training Budget, Education and Training Sector opined that although education remained the most important investment for the government, a large variation existed

between approved budgets and actual spending which reflected on the credibility of the budgets. Itegi (2016) suggests the necessity of boards using strategic plans to ensure efficient and effective use of the available resource. Nevertheless, majority of the school were found not to have any.

Income Generating Activities (IGAs) is another source of income in schools. A study carried out in Tanzania, Moshi by Amos and Koda (2018) entitled contribution of school-based income generating activities in quality education provision in secondary schools managed by the catholic diocese found out that the major IGAs were crops, vegetable and poultry. The aforesaid IGAs assisted the school to provide balanced diet to the students while the surplus was sold and the money would be used to shield the school from challenges such as parents' failure to pay school fees. The study established that schools with more IGAs performed better in national examinations as compared to those without or with limited IGAs. That means that boards should be encouraged to start IGAs in their school to supplement their finances. It is therefore recommended that boards should be motivated to start IGAs in school to supplement school finances.

In Kenya a study by Lichoro (2012) on income generating activities and their influence on academic performance in public secondary schools in Tigania East District, Kenya found out that most schools had IGAs related to farming and few were based on hire of school facilities. The study used descriptive design and the data was collected from BOG chairpersons, the principals,

teachers and students. Questionnaires and observations check list were used to collect data from respondents. Unlike the results of the study of Amos and Koda (2018) done on schools managed by the Catholic Diocese of Moshi Tanzania, the management of IGAS in public secondary school was still cited as a major challenge. As a result, IGAs were found not to play any significant role in contributing to school resources and academic performance. Nevertheless, school managers need to be trained on the management of IGAs as Lichoro's study noted that a great potential existed in public secondary schools of turning IGAS into reliable sources of additional funding.

Odundo and Rambo (2013) study on effect of school-based income generating activities on the financial performance of public secondary schools in Kenya, suggested that schools having IGAs were wealthier than those without. The study concluded that IGAs improved the ability of the schools to acquire assets. It thus recommended the government should formulate the necessary framework to guide and standardize IGAs projects. Besides, school managers should be introduced to suitable training programs to be advised on IGA matters as they have been authorized to allow reasonable use of the facilities of the schools including the charging of a fee by The Basic Education Act, 2013.

Budgeting is an activity BOMs engage in for efficient utilization of school finances. School-based budgeting is a tool which assists school's board to achieve high performance in their practices (OECD, 2017). Boards are advised to ensure that their budgets should be competently drawn based on financial

regulations and a rigorous investigation into the education needs of the school (Public Audit Act, 2015). However, the process of budgeting is not always straightforward in schools. This is attributed to lack of capacity building for strategic budget planning at the school level (OECD, 2013). Due to ignorance by the school managers on simple techniques like budgeting, they have been found to be inefficient in managing finances in their schools.

A study entitled factors affecting financial management practices in public secondary schools in Embu West Sub-County, Kenya, found a statistically positive relationship between BOM practices and financial management. But data collected by Kaguri, Ibuathu and Kubaison (2014) shows that budgeting in schools is often done in either a careless approach or not done at all. In addition, in the budgetary process there is least involvement of education stakeholders. Similar results were obtained in South Africa by Mestry (2006) study on the functions of school governing bodies in managing school finances, which observed inadequate teamwork among the members of the school governing body and also with the principal. The study indicated that, many times, information regarding school finances was intentionally held back by the information concerning school finances.

School management boards are also supposed to competently deliberate on audited reports, supervise preparation of books of accounts and trial balances. That as a result causes improved performance. Literature reviewed nonetheless showed that BOM members did not have the needed applied skills to comprehend and translate financial record presented to them before making

decisions (Mobegi, Ondigi and Simatwa, 2012). Furthermore, Muturi (2013) who examined factors influencing board of management competence in financial management in public secondary schools in Nakuru-North District, Kenya established that to a very large extent, the education level, in service training and occupation influenced abilities of the members of BoM in financial management. As a result, Kaguri, Ibuathu and Kubaison (2014) posit that financial reports were found to be inadequately prepared while auditing was done in an erratic way.

On the contrary, findings in Mutuku (2011), Musee (2011) and Athman (2016) found BOM members being greatly involved in; analysing monthly trial balance, preparation and approval of school budgets, discussing audit report and organizing fundraising activities but did not participate in seeking donations, subsidies and scholarships. The head teachers interviewed in Kimando (2011) study also apprised the boards highly in regard to their efficiency in financial planning and controlling the expenditure in their schools

Some studies however differ on whether financial management practices have a relationship to students' academic performance. For instance, Tumen (2013) found out that financial management practices at high schools, or the way schools generate revenue and allocate resources, have no consistent impact on the performance of students. Nevertheless, Mobegi et al (2012) study findings and also the audit report done by Transparency International (2011) show

inefficiencies in financial management resulted to decline in quality of education.

From the foregoing it is clear the studies reviewed (Transparency International, 2011; Mito & Simatwa, 2012: Tumen, 2013: Athman, 2016 and Muturi, 2013; Kaguri, Ibuathu and Kubaison, 2014) indicated that BOM member lack the competence in financial management such as budgeting, monitoring of school expenditure, understanding and interpretation of financial reports, balancing of financial books, and carrying out basic internal scrutiny of the school funds. Their ineffectiveness is as a result of illiteracy and lack of training. This current study thus set to interrogate how the situation was in Kitui and Makueni counties with the aim of inspiring boards to engage more in the aforesaid practices to improve students' KCSE performance.

2.3 Boards' Human Resources Management Practices and Students' Academic Performance

Human resource management (HRM) is a process through which organizations attract, train, motivate, evaluate, compensate and retain people (Centre for School Change, 2017). Nakpodia (2010) indicated that human resource is a very crucial factor in any organization as inadequate human efforts, would lead to failure of all other component of an organization as they are only fruitful when handled by skilled and self-driven employees. People possess abilities, experiences and skills that are able to generate innovation and creative spirit in any organization. Popescu & Crenicean (2011) concluded that since the major aim of schools is to provide quality teaching and learning environments, the

teachers and the support staff are the essential personnel who would ensure the attainment of the purpose.

In human resource sector, secondary school board has a responsibility to inform the CEB the personnel need of the school. School managers are saddled with the responsibility of considering beforehand, the required human resource necessary to ensure that the school runs smoothly for the accomplishment of the set goals. Planning should be based on assessment of the current teaching and non-teaching personnel in the school system (Akpan, 2011). Tadess (2011) did a study in Ethiopia named human resource management practices in selected secondary schools of East Shoa Zone and ascertained that inappropriate planning was critical limitations to students' performance. So, it is important that school boards do forecasting on the HR needs early and promptly to determine vacancies in their school as HR more so teachers have been found to be the first factor that influences students' performance (Okebukola, 2010).

(Republic of Kenya, 2013).

It is the duty of boards to engage, hire and pay the support staff as required by the school recruit and in accordance with Basic Education Act, 2013. In Kenya teacher recruitment and selection was centralized to the school level guided by World Bank/International Monitory Fund (IMF) policies, as a way of improving service delivery since 1996. Under such arrangement, Teachers Service Commission (TSC) identifies the available vacancies and advertises

for applications, then the boards of management conducts interviews based on guidelines provided by TSC.

However, there were negative consequences observed to have emanated from the school-based teacher recruitment. That was cited to be a weakness on the side of BOM in Kenya. The effects included; manipulation of the recruitment process in an unfair manner to be inline with interest of certain board member in the school or society. In some of the schools, boards were reported to have declined to preselect qualified candidates in an attempt to hire their favourite candidates. In other case the dates for interview were concealed in order to fill the vacancies with their preferred people (Aloo et al., 2011). Kipsoi and Sang (2008) reported that school-based teacher recruitment government policy was reported to be tribal, biased, dishonest and lacked merit. The study also questioned the abilities of BOG concerning the right clarity and operationalization of the hiring rules. These negative outcomes have effect on the teacher quality as stated by Oluwadare (2011) in a study done in North West political zone of Nigeria where he found that teacher quality had a significant relationship to the students' performance levels in secondary schools in the region.

According to Hanover Research (2016) it is important to ensure favourable working conditions are maintained by enhancing both physical and psychological welfare of the workers which bring about work and life satisfaction. To attract and keep qualified teachers, a secure, gratifying and supportive working environment is of necessity. Contrarily, large class sizes,

big workload, support for teacher professional development or indiscipline students, for instance, makes teaching and learning strenuous. A study by Ye (2016) on working conditions and its effect of teacher effectiveness established that effective teaching and student performance was influenced greatly by the teaching and classroom related working conditions at school. In Kenya Ouma and Munyua (2018) carried out a study on the relationship between teachers' working conditions and students' academic performance in public day secondary schools in Nyando Sub-County, Kenya. The findings of the study revealed that teacher working conditions had significant relationship to students' academic performance.

In recent years, however teacher deficit has been expressed as a concern in many countries. Attracting and retaining of qualified teachers has been regarded as the main challenge particularly in Latin America, Sub Saharan Africa, and in Asia (UNESCO, 2012). The deficit is no less evident in Kenya as according to Republic of Kenya (2018) National Education Sector Strategic Plan for The Period 2018 – 2022, Ministry of Education, there was a demand of 58,291 at the post primary school level. That demand has been associated with the fast ballooning of school Affordable Day Secondary School Education programmes. The increase and governments objective of 100% transition from primary to secondary education, has already led to the establishment of new secondary schools which has exaggerated the increased demand for teachers.

As a result of the government's inability to supply adequate teachers, an additional cost has been shifted to the school income as BOMs employ

teachers known as Board of Management BOM teachers. Namuyu (2012) also established that volunteer teachers were also hired by the boards. A study by Munyasia (2017) on influence of board of management teachers' wage bill on provision of quality education in public secondary schools in Gem Sub-County, Kenya found out that an increase in expenditure on BOM teachers, improved KCSE performance. However, the study observed that an increase in the wage bill of BOM teacher compromised the quality of education as funds budgeted for other vote heads is directed to pay the BOM teachers. The study recommended that, government should have policy that guides hiring and remuneration of BOM teachers and cater for their wages.

Workers discipline also takes a considerable time of BOM members to attend to. Kindiki (2009) found out that many students' unrests in schools had sometimes been reported because of problems such as; poor quality food, shortage of water, unclean toilets and other issues that were under the jurisdiction of the support staff. Some non-teaching staff members especially in boarding schools were reported to have hidden cell phones for students while others to have had sexual relations with students (Mutuva, 2012). Kindiki (2009) study established that in handling such types of workers discipline problems, BOG members were very useful. In the findings of Mkongo (2013) all BOGs stated that they participated in teachers discipline nevertheless Kindiki (2009) indicated that many heads of schools in handling teachers' discipline, often preferred to deal with a third party to help them face

errand teachers or they would seek intervention of TSC especially when the discipline cases were of large magnitude.

Boards are also expected to manage school matters in line with the health, safety and sanitation laws and guidelines. Summarily the Occupational Health and Safety Act (2007) purposes and goals can be said to include securing a safe and health working environment. Added to the Act is the Safety Standards Manual for Schools in Kenya introduced by the government through MOE in recognition of the crucial significance of school safety in 2008.A study by Makau (2016) done in Yatta Sub-County, Machakos County Kenya on school factors influencing implementation of safety standards in public secondary schools noted that school boards did not sensitize teachers and students on issues of safety standards.

Another study by Nyakundi (2012) also found safety standards had not been executed fully in accordance with the MOE guidelines. The partial implementation was blamed on inadequate funds as well as lack of supervision. The results of the two studies are an indication that there could be security lapses in schools in Kenya. Makau and Nyakundi studies adopted descriptive survey design, targeted principals' and secondary school teachers. This study targets the BOMs themselves and will use correlational design to establish how the situation is in Kitui and Makueni counties. Kenya National Commission on Human Right (KNHC) (2014) identified Kitui County among the counties affected by insecurity owing to deaths of teachers and medical

staff reported in some of the areas in the county. That led to mass exodus of the said professionals.

Communication is a key factor to be considered by the BOMs as in Iowa School Board Compass (2000) found in Plough (2014) study which came to be known as the Lighthouse I study (1998-2000), in high-achieving districts school boards indicated that they had strong communication with the superintendent, staff, and each other. They did that by scheduling post-board meetings to provide in-depth briefings on policy decisions to teachers and administrators. They also did not rely on one source of information rather they received information from many sources including the principals, teachers and even sources outside the district. They however agreed that the principal was the primary source of information.

Ford (2013) found out that relationship conflict among the board appeared to be particularly destructive, while cooperation in general was positive. Thus, to him school boards should reduce conflict and increase cooperation. Communication between the board chair, head teacher and other board members was a governance quality characteristic found to be directly related to school boards effectiveness.

Boards should work closely with all stakeholders to improve students' performance. In Namibia Njahi (2014) findings indicate that parents and principals were satisfied with stakeholders' participation, although their observations suggest that decisions at meetings were not taken democratically.

Orodho and Adan (2014) observed that where board members regularly met the teachers and students to exchange ideas and advise them, a balanced relationship was realized between teachers, workers and students. Such a relationship enabled the students and helped them to even work harder to pass their examinations.

From the reviewed literature, it is clear that HR forecasting, working conditions, teachers demand, and HR code of conduct, communication, resolving and minimizing conflicts and engagement of community is very important in improving students' performance. This study is set to cross-examine the extent to which boards participated in the practice and how they related to students' academic performance in in Kitui and Makueni Counties.

2.4 Boards Physical and Material Resource Management Practices and Students' Academic Performance

The Basic Education Act (2013) is clear that the supply of sufficient and suitable physical facilities and materials for secondary schools was the duty of the boards. Provision of sufficient learning facilities and equipment's which improves the quality and significance of imparted skills are vital as effective teaching and learning takes place when the students interact with their surroundings. For instance, a study on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE) conducted by Momoh (2010) concluded that student's academic performance was significantly affected by material resources since they discouraged rote-learning and facilitated the learning of abstract concepts and

ideas. Education is compromised when the resources are scarce which inevitably is reflected in students' low academic performance.

Similarly, in Kenya, physical and material resource are important as Kindiki (2009) study results show that BOG members were able to help in the implementation of curriculum in those school's where resources were adequate Curriculum implementation was found to be difficult in areas where resources were inadequate. The study by Orodho et al (2014) found out that insufficient school facilities more so teaching and learning materials directly impacted on the quality of learning. Besides, Musyoka (2018) whose study sought to establish the school-based factors influencing students' performance in KCSE in public secondary schools in Kathiani Sub County found out a positive significant relationship between teaching resource and physical facilities and with students' performance at KCSE. Where physical facilities were lacking in schools, learning was hampered leading to poor performance (Kitonyi, 2013).

An analysis of physical facilities by Atieno (2014) on influence of teaching and learning resources on students' performance in KCSE in free day secondary school in Nakuru, found availability of instructional materials but physical facilities were inadequate. In the compulsory subjects, instructional resources were found to be sufficient and the ratio of student-to-student sharing was minimal. However, the study showed that the physical facilities were over stretched which had a negative influence on students KCSE performance. Namuyu (2012) study findings done in Busia District on the role

of BOM in improvement of public schools, established that BOMs had taken up to construct and renovate classrooms, provide desks, and even fence school compound.

In Kenya overcrowding in public secondary schools has been found to be a worrying trend. The government's drive to ensure all boys and girls transit to secondary school from primary schools since 2018 happened in already overstretched schools with inadequate resources to meet the demand. In an article written by Mutisya (2020) he enumerates some of the consequences of overcrowded classrooms to include students drop in academic performance as the teacher does not have the necessary time to satisfy all student learning requirements. Overcrowded classes are not a Kenyan issue only as Olaleye, Ajayi, and Oyebol (2017) study done in Nigeria on impact of overcrowded classroom on academic performance of students in selected public secondary schools in Surelere local government of Lagos state had almost all respondents indicating that overcrowded classrooms negatively affected academic performance of students, which was singled out as the principal genesis of students' poor academic performance in public schools.

Provision of electricity to schools is equally important because United Nations Department of Economic and Social Affairs (UNDESA) (2014) argue that there are diverse services it can deliver in the classroom. For instance, access to electricity installation of computers and televisions which facilitates teacher to initiate ICTs in their teaching. Teachers can thus teach early prior to the

usual classes or late in the evening where there is lighting. In those schools endowed with electricity, qualified teachers who have been correlated with improvements on tests can be hired and be retained. In Kenya, lighting in school has permitted remedial teaching by the teachers early in the day and late at night to make up for lessons not covered at the usual school hours, due to a shortfall of staff (Kirubi, Jacobson, Kammen and Mills, 2009). Notwithstanding the importance of access to electricity, World Bank (2014) and UNESCO (2014) noted that in every five primary and secondary schools in African continent studied, averagely four of them required access to electricity.

Athman (2014) study done in Mombasa County found out that most of the schools also had adequate water and electricity. However, it should be noted that Mombasa is an urban county as compared to Kitui and Makueni counties the areas of study for this study, which are in rural setting hence the need for this study to explore the actual situation in the two counties. Having tenable safe water supply locales, hand-washing stands and sanitation facilities are important as they lead to children performing better. It also encourages girls to come to school during menstruation as water helps them avoid menstrual odour and discomfort (UNICEF, 2015). It is the duty of the board to provide water and electricity was available as they made decisions of what infrastructure to have in schools. That has not been examined by any study, a gap this study intended to fill.

BOMs implementation of curriculum was found to be difficult in areas where there were inadequate resources mainly teaching and learning materials, desks, fence for school compound, overcrowded classrooms, and unavailability of water and electricity (Atieno, 2014). Therefore, this research intended to evaluate the status of school board's practices on physical and material facilities in Kitui and Makueni Counties and how it related to KCSE performance.

2.5 Boards Student's Welfare Management Practices and Students' Academic Performance

Students' welfare encompasses emotional and intellectual wellbeing of students, their conduct or behaviour and their safety. It is the sum total of policies planned and implemented by the school boards to promote student wellbeing. Boards have been charged with the duty of advocating for quality learning for every child in line with the guidelines laid down in the Basic Education Act and in any applicable law (Republic of Kenya, 2013).

For boards to achieve their mandate, they should engage in data-based decision-making in issues related to students. Effective boards embraced and monitored data, including that information which is negative. They used data to drive continuous improvement (Barth, 2011). That involved collecting, analysing, reporting, using data for school improvement and communicating through data. That way boards know whether students' achievement gaps have been narrowed or not (The American Association of School Administrators (AASA), 2014).

In the Lighthouse 1 study (2000) and Togneri and Anderson (2003) board members in high-achieving schools used data and justified decisions based on that data. They also identified specific student needs through data. By comparison boards in low-achieving districts tended to provide little evidence of considering data in the decision-making process. Instead, they greeted data with a "blaming" perspective and frequently discussed their decisions through anecdotes and personal experiences rather than by citing data. The boards relied on the interpretation made by the principals as they believed the principals "owned" information. They talked very generally about test scores. As a result, board members, left data to the principal to interpret and recommend solutions.

In Kenyan context, studies have shown that poor student's achievement have a direct or indirect link to inadequate or improper use of data on the part of boards of management as they waste time and resources implementing curriculum areas and policies that mismatch their students' needs (Dawo & Simatwa, 2010). Unfortunately, the possible contribution of data use has not been explored in Kenya a concern that sends an implicit message that Kenyan school boards might be using data improperly or are not using data at all to guide their practices as already reported by studies from other contexts such as the USA, New Zealand and England (AASA, 2014; Schildkamp & Ehren, 2010).

Without school discipline the success of academic performance of students can never be achieved. Good discipline prepares learners for the future and creates

a good image of the school. BOMs have been instructed by the Basic Education Act to manage pupils' discipline issues and avail reports to CEB. It is their duty to provide guidance and counselling to every student, observe students' well-being, look into human rights and guarantee their security (Republic of Kenya, 2013).

In Kenya each school sets its own school policies to maintain discipline and order. Schools are self-governing with authority to make school rules and the teachers exercise reasonable disciplinary powers to enforce the rules. However, the rules must be in compliance with the Children's Act Cap. 141. of the laws of Kenya (Republic of Kenya, 2012).

Ogolla (2017) carried a study on the influence of school boards of management strategies on students' performance at KCSE in Suna West –Migori County, Kenya. The findings were that BOMs ensured that there were school rules and regulations which were issued to the students and parents. Both the students and their parents signed them during admission to show that they agreed to the rules and the responsibilities thereof. The same rules and regulation applied during student's discipline cases. Juma (2011) who did a study in Dar es Salaam Region, Tanzania on the role of school discipline on students' academic performance found out that in best performing schools, rules and regulations were suitable in managing school discipline. On the contrary many

discipline problems were observed in the least performing schools as they had written rule and regulations which were not well executed.

Deviant and misfit behaviours brought about by use of illegal substances such as drugs were dealt with by use of religious knowledge. Co-curricular activities were used to reduce ill behavior and encourage good morals. This was established by Okoro and Amadioha (2016) who looked at issues of use of extracurricular activities to develop social morality among lower secondary school students. However, a more recent study done by King'oina (2017) whose respondents were teachers and head teachers revealed that majority of the respondents were of the opinion that in the administration of students' discipline in schools, board members did not take part. From the chairpersons of BoM interviewed in the study, they confirmed that indeed most board members did not participate in matters of student's discipline. The current study targets BOM member themselves to explore the extent they played their tasks and how it related to school in the counties.

The WSSDA (2015) study in the US, reported as well that in their respective schools, boards members rarely participated in management of disciplinary matters. These finding are similar to those found in Perumal (2011) report that in schools students' indiscipline negatively influenced academic performance. In relation to enhancing guidance and counselling programmes in schools' majority of teachers and head teachers in Kong'oina (2017) had similar results that board did not have a hand at all in guidance and counselling programmes

in schools. It is important to point out that the functions of the BOM is to make policies on guidance and counselling programmes then leave the implementation of the same to the relevant department within the school. At very rare occasions were board members involved in direct counselling to the concerned students.

It is also the duty of BOM to champion for the elimination of hate speech, spirit of cohesion, unification, peace, patience, inclusion and tribalism at the school (Republic of Kenya, 2013). A study done in Cameroon by Dze-Ngwa, Ayafor, Agborbechem and Tamajong (2009) entitled Peace and Citizenship Education: Towards Internal Cohesion in Cameroon concluded advocated for peace education to be introduced in secondary schools. The aim is for peace-builders to be trained to serve as nurseries for peace-building processes. In a classroom, informal peace education should also be carried out in meetings and other social groups. Maintenance of peace has been found to be a determinant factor to improved academic performance.

Many of the studies that endeavoured to assess the place of school discipline in students' academic performance were conducted outside Kenya. A few of the researches that have been carried out in Kenya focus on the role of the principal/teachers and academic performance but not the role of boards. Little has been investigated empirically regarding a possible relationship between boards' management practices on students' welfare and academic performance

in the public secondary schools in the two counties. This study thus intents to bridge that gap.

2.6 Summary of Literature Review and Isolation of Knowledge Gaps

Evidence from the studies reviewed reveal that school boards practices have influence on student performance but much of the effective school research ignores the practices of BOMs and its relationship to students' academic performance. Several researches have been done focussing on boards of management but they are limited in a number of ways. Many of the studies done especially in developing countries context focussed its attention primarily on school principals and their influence on students' academic performance. Few studies with quantifiable and reliable measures of the relationship between boards' practices and students' performance at KCSE exist in Kenya.

Little systematic knowledge exists about the BOMs practices being investigated under the new dispensation - The Basic Education Act in Kenya. Majority of the studies done however deal with only one strand of school boards practice (Wanjohi, 2011). Board practices on finance resources, human resources, physical and material resources and students' welfare have not been investigated in a single study in previous researches. Others researches in the area of BOM have ventured in other variable such as compositions of BOMs or on their demographic variables such as age, experience, profession and academic qualification and their influence on student's performance (Nyakundi, 2012 and Mutemi, 2015). This study's intent is to investigate their

success or failure in the execution of their duties and how that relates to students' academic performance in KCSE.

In terms of school BOMs training and development, literature does not communicate whether the BOM members have been trained or inducted on the functions given to them by The Basic Education Act, 2013, which are technical so by assessing the relationship between these practices and students' academic performance in KCSE, a gap on the training needs of the BOMs may be identified. Training is an important factor as Plough (2014) found out those board members who were trained performing highly.

A gap exists in the methodology as majority of the studies done on BOMs have used descriptive research design (Kindiki, 2009; Namuyu, 2012; Atieno, 2014; Orodho and Adan, 2014 and Mkongo, 2013) just to mention a few. This study used correlational designs to measure the relationship on the two variables – BOMs practices (Independent variable) and students' academic performance at KCSE (Dependent variable).

Besides the study intent was to use the general system theory which has not been found to be commonly used in studies reviewed BOMs practices and students' academic performance at KCSE. Moreover, findings show gaps in boards of management data usage in Kenya an area which has not been researched on in Kitui and Makueni Counties. This present research was

therefore carried out to explore appropriate knowledge that would fill the identified knowledge gap.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The purpose of this study was to evaluate the relationship between Boards of Management Practices and Students' Performance at KCSE in Kitui and Makueni Counties, Kenya. In this chapter the research design, study variable, study locale, target population, sampling techniques and sample size, research instruments, data collection and data analysis procedures used were described.

3.2 Research Design

The study adopted a correlational research design which involves observation of two variables in order to establish a statistically corresponding relationship between them. In correlation, a test statistic is used to explain and calculate the degree of relationship between variables or set of scores without the researcher

controlling any of them (Creswell, 2012). Correlational research design complimented this research as it could be used to clarify the degree of relationship between BOMs practices (independent variable) and student's performance (dependent variable) in public secondary schools in Kitui and Makueni Counties.

3.2.1 Study Variables

The independent variable for this study was management practices of BOMs in public secondary school which included financial resource, human resource, physical and material resource and students' welfare management practices. The dependent variable was student performance at KCSE measured in mean grades.

3.3 Study Locale

The study was done in Kitui and Makueni Counties located in lower Eastern Kenya. Kitui County is the seventh largest county in Kenya. It borders seven counties; Tana River to the east and southeast, Machakos and Makueni to the west, Tharaka and Meru to the north, Embu to the northwest, and Taita Taveta to the south. Kitui County has16 Sub-counties which are: Kisasi, Nzambani, Kitui West, Migwani, Kitui Central, Mutitu, Kyuso, Lower Yatta, Matinyani, Katulani, Ikutha, Mwingi Central, Mutomo, Tseikuru, Mwingi East and Muumoni.

Makueni like Kitui County borders several counties which include; Machakos to the North, Kitui to the East, Kajiado to the West and Taita Taveta to the South. Makueni County has 8 Sub-counties namely: Makueni, Kilungu, Mbooni East, Mbooni West, Mukaa, Kibwezi, Kathonzweni, Makindu and Nzaui (County Government of Kitui, 2014: Makueni County Integrated Development Plan, 2013- 2017).

The two counties were chosen for this study due to the fact that they lie in the eastern region of the Kenya which is arid and semi-arid zones. They are prone to frequent and prolonged drought due to the harsh climatic conditions which are linked to low social economic status (SES) (County Government of Kitui, 2014: Makueni County Integrated Development Plan, 2013- 2017). Low SES leads to lack of resources which means that the BOMs may not have access to resources that can be used to sustain decent schools to improve students' KCSE performance (Diwakar and Shepherd, 2018).

Juma (2011) noted that schools from low SES backgrounds were often seriously deprived of vital facilities and resources negatively affecting students' performance in the examinations. BOMs practices and by extension teacher effectiveness. Besides the two counties were selected because the performance in KCSE of majority of the candidates was less than C+ which is the minimum requirement for entry into public universities as depicted in Table 1.1. In addition, no similar study had been undertaken in the two counties.

3.4 Target Population

The target population for this research comprised of 10,010 board members and principals (4563 boards member and 351 principals from Kitui and 4732 board members and 364 principals from Makueni County). The board members were from 351 public secondary schools in Kitui County and 364 in Makueni County which had presented candidates for KCSE exams for the previous three years i.e. 2015, 2016 and 2017. Although according to Basic Education Act, 2013, a school board should be composed of 14 members, this study used 13 members of the boards as the students' representatives is an ex officio member who does not take part in decision making in the meetings. The student thus does not participate in BOMs practices.

3.5 Sampling Techniques and Sample Size

A sample is a sub-group derived from the target population to represent the whole population (Mugenda and Mugenda, 1999). The targeted population for this research was stratified into two group's namely; board members and the principals. The two strata were purposively sampled as they were the only ones who attended board meetings and activities which are confidential hence, they were the most suited to provide more objective assessment of board practices.

Krejcie and Morgan's sample size formula was used to calculate the sample size for BOM members who participated in this study (Krejcie and Morgan, 1970).

$$S=\frac{X^2 NP(1-P)}{\delta^2(N-1)+X^2 P(1-P)}$$

S= Sample size required.

X^2 = the table value of chi square for one degree of freedom at the desired

Confidence level 95% which has value of 3.841

N = the population size

P = the population proportion (assumed to be .50 since this would

Provide the maximum sample size)

δ = the degree of accuracy expressed as a proportion (.05)

Kitui County has a total of 351 public secondary schools each with 13 BOM members.

Therefore, the sample size required was $\frac{3.841*4563*0.5(1-0.5)}{0.05^2(4563-1)+3.841*0.5(1-0.5)}$

=354

Makueni County has a total of 364 public secondary schools each with 13 members of BOM total of 4541

Therefore, the sample size required was $\frac{3.841*4732*0.5(1-0.5)}{0.05^2(4732-1)+3.841*0.5(1-0.5)}$ =355

Total sample size for the board members in both counties was 354+355=709.

3.5.1 Sample Size

The sample size for this study was 354 and 355 BOM members for Kitui and Makueni respectively totalling to 709 respondents. Census sampling whereby all the 13-board member in the sampled school took part in the study was utilized to get the number of schools and principals to take part in the study. So, the sampled population obtained from each county using Krejcie and

Morgan's sample size formula (354 Kitui and 355 Makueni) was divided by 13. That translated to approximately 27 public secondary schools from each county. The total number of sampled schools and principals to be interviewed were therefore 54.

Systematic sampling technique was used to get the individual school that participated in the study. The technique was suited for the study as there was a complete and up to date list of all the public secondary schools at the County Education Offices. A random start was identified near the beginning of the sampling frame and then the other cases were selected at fixed, periodic interval (Samar, 2017). The technique ensured that each school in the two counties had a known and equal probability of being selected. So, questionnaires were administered to 709 board member and 54 principals bringing the total sample to 763. The targeted population and sample size was shown in Table 3.

Table 3.1: Target Population and Sample Size - Krejcie and Morgan Formula

County	Targeted Boards population	Target Principals Population	Sampled BOM Members	Sampled Principals	Total Sample
Kitui	4563	351	354	27	354
Makueni	4732	364	355	27	355
Total	**9295**	**715**	**709**	**54**	**763**

3.6 Research Instruments

Two sets of data collection tools were employed for this research which were questionnaires and interview schedule. The questionnaire comprised of two sections (*see Appendices III*). Section A and section B. Section A consisted of questions seeking the demographic information of the respondents like their gender, age, academic qualification of BOMs, type of school they served, number of years they served as BOM members and the segment respondent represented in the BOM. Data on students' performance at KSCE was also obtained in this section.

Section B had 51 indicators of BOMs practices in form of statements identified from literature reviewed and categorized into the four key BOMs managerial areas. The first section was financial practices (ten items) followed by human resource practices (twelve items). The third was physical and material resource practices (sixteen items) and student welfare practices (twelve items). The quantitative measures were on a five-point rating scale with values extending from 1 (worst performed) to 5 (best performed) managerial practices. It was a self-administered questionnaire. The questionnaires were used as they matched this research as quantitative data would be generated to produce either numerical data or data that could be arranged into categories. The respondents were also literate thus able to read and answer the components in the questionnaire adequately.

Qualitative data was collected through an interview schedule for the principals (*see Appendices II*). Items in this interview schedule sought information on the four key areas of BOMs practices. The information obtained was meant to compliment data obtained through questionnaire because Maud (2008) argues that employing a single mental process may provide only a partial picture of the situation in a study. The dependent variable which is student's achievement was determined by the school's KCSE mean scores. The mean scores were collected for the years 2015, 2016 and 2017 from all the schools that were involved in this study.

3.7 Piloting of the Study

Pilot study was conducted before embarking on the main study. The actual piloting of the research tools was conducted in two public secondary schools in each county (Kitui and Makueni) which were chosen randomly from the targeted population. The number of BOM member from both counties-Kitui and Makueni were 28 which are in line with Hill (1998) who suggests that a researcher should use 10 to 30 participants for pilots. The schools used for piloting were drawn from the same locale to ensure that the participants had similar characteristics as those of the main study. The piloted schools did not form part of the sample. The objective of piloting was to allow for moderation on the unclear items so as to reword, simplify and resolve any ambiguities in the questionnaires. The responses were used to improve the instruments.

3.7.1 Validity of the Instruments

Validity is defined as the extent to which items in the research tools measures what they claim to measure accurately (Best & Kahn, 2004). The validity of the research tools was improved by use of expert judgement. Copies of the questionnaire and interview were given to an appointed panel of three professional experts drawn from school of education, Kenyatta University. The panel looked into all the items in the questionnaires in order to ascertain if they had content validity and then revisions were done accordingly. The relevance and the extent to which the instrument covered the specific objectives were also investigated.

A three-point Likert scale rating validation checklist was prepared from the questionnaire. The experts stated the level of relevance of each item in the questionnaire indicating 1- Very relevance, 2- relevant and 3- not relevance. The responses were used to compute the content validity index (CVI) as follows:

CVI = Number of items rated relevant

Total number of items

$$CVI = \frac{41}{51} = 0.803$$

From the pilot study it was noted that some items were not relevant to the BOMs practices, the language used in some was ambiguous and some questions found in the background were not necessary. Any items which needed correction on the aspects of relevance, format of instruments and

adequacy of items was modified accordingly. A final form of the instruments was constructed after the pilot study had been done. Content validity was further strengthened by the expert's interrogation of the grammar, use of words and the order of the wording in the interview schedule which collected qualitative data.

3.7.2 Reliability of the Instruments

Reliability is prescribed as the extent to which the instruments that collect data yields steady and persistent outcomes if they are reproduced by other researchers (Best & Kahn, 2004). Cronbach alpha which measures internal consistency was used in this study to guarantee that the various items in the tools provided consistence scores as the data set was continuous. In this case, the tool used to gather information about practices of school board on financial resources, practices of school board on human resources, practices of school board on physical and material resources, practices of school board on students' welfare as structured in the questionnaire. The range for the alpha of coefficient ranges from 0 to 1. A high score would mean a more reliable generated scale. Kombo (2009) stated that 0.70 or more is an acceptable co-efficient. Therefore, all the items in the questionnaire had the acceptable Cronbach's Alpha coefficient of 0.70 meaning the results of the study were highly reliable as indicated in Table 3.2.

Table 3.2: Reliability Analysis

Reliability Cronbach's Alpha	Standardized Reliability Cronbach's Alpha	No. Items	Comments
0.91	0.93	51	Accepted

3.8 Data Collection Procedures

After acceptance of the research proposal by Kenyatta University, all the necessary documents including a permit to collect data from the National Commission for Science, Technology and Innovation (NACOSTI) were obtained. The researcher also sought audience with the Kitui and Makueni County Directors of Education (CDE) and County Commissioners to inform them of the intended study and to seek clearance. Then the researcher paid courtesy visits to the sampled school to create rapport with the principal and to seek permission to be allowed to gather the information needed from boards members on the day they met in the school or on the most convenient time. Once permission was granted the researcher assistants and the researcher oversaw the filling of the questionnaires by board members. During the administration of the questionnaire, the purposes and meaning to some of the items were explained where need arose. The filled questionnaires were retrieved immediately to ensure high return rate. Appointments were made with the principals on when to conduct their interviews. Majority of them were interviewed same day prior to the boards meeting.

3.9 Data Analysis

After data collection, data cleaning followed to identify any incomplete, irrelevant or incorrect data for purposes of improving on the quality. This was done by modifying replacing or deleting errors and omission so that the data would be consistent with other similar data sets. Processing and organization of data was done by use of Statistical Package for Social Sciences (SPSS) which is a windows-based program that is used to enter and analyse data. Both descriptive and inferential statistics were adopted to process the collected data. Descriptive statistic was used to explore the extent to which the identified practices in the four objectives had been adopted in the sampled schools and were summarized in terms of means and standard deviation.

Secondly, inferential statistics namely Pearson Correlation was employed to establish the relationship between boards' practices and students' academic performance for objective one to four. Thirdly, multiple linear regressions were used to predict students' performance at KCSE based on the value of boards practices (financial, human resource, physical and material, and students; welfare) within the selected schools. Lastly qualitative data from open ended questions was coded to develop similar themes and was presented in narratives and verbatim. Although analysis of the quantitative and qualitative data was done separately, the results were merged for comparison. The data was analysed based on the objectives of this research as exhibited in Table 3.3.

Table 3.3: Data Analysis Plan

Objective	Independent Variable	Type of Data	Test Statistics	Mode of Presentation
1.Relationship between BOMs' financial resource management practices and students' KCSE performance	Financial resource management practices	Quantitative Qualitative	Mean, Pearson's correlation, thematic	Tables, narrative and verbatim
2. Relationship between boards' human resource management practices and students' KCSE performance	Human resource management practices	Quantitative Qualitative	Mean, Pearson's correlation, thematic	Tables narrative and verbatim
3 Relationship between boards' physical and material resource management practices and students' KCSE performance	Physical/ material resource management practices	Quantitative Qualitative	Mean, Pearson's correlation, thematic	Tables, narrative and verbatim
4. Relationship between boards' students' welfare management practices and students' KCSE performance	Students' welfare management practices	Quantitative Qualitative	Mean, Pearson's correlation, thematic	Tables, narrative and verbatim
5. Extent to which financial, human, physical and material and students' welfare management practices predict students' KCSE performance	Financial, human, physical and material and students' welfare management practices	Quantitative	Multiple Linear Regression	Tables

3.10 Logistical and Ethical Considerations

Logistical issues in research are the activities or tasks that a researcher must tackle before, during and after the field study (Orodho, 2009). According to Mugenda and Mugenda (2012) ethical considerations are the moral principles or codes of behaviour that call for respect of the integrity of the research participants. In the present research, the main ethical issues revolved around logical, ethical, human relations and legal issues. As far as possible, the researcher addressed these key issues as follows:

3.10.1 Logical –Pre-Field, Field and Post Field

The researcher ensured that the questionnaires were neat, easy to use, code and analyse. All the questionnaires were given an identification number before they were administered to the respondents. Clear instructions on how each item in the questionnaires were given and enough space was left for filling the responses. After obtaining a consent from Kenyatta University to perform the research, a research licence was sought from the National Commission for Science, Technology and Innovation (NACOSTI). After the study license was granted, due to the widespread locale of the study, four research assistants were trained on; all aspects of administration of the questionnaire, how to establish rapport with the respondents and on how to check through the completed questionnaires and interview schedule to identify errors and omissions. The researcher in collaboration with the research assistants piloted and revised the questionnaires. After data was collected, the instruments were collected, numbered and edited. Later they were coded and analysed.

3.10.2 Ethical Issues–Informed Consent, Anonymity and Confidentiality

Before collection of data commenced, a letter introducing the study (*see Appendix I*) and explaining shortly the goal of the study, was used to seek permission from all participants and to urge them to engage in the research voluntarily and to be as honest as possible. Respondents were guaranteed that the knowledge they would be kept private and would only be utilized for research purposes only. The letter requested them, not to write their names so that they remained anonymous. All the responses received from boards who participated, was treated as highly private. The respondents were informed of their free will not to participate if they so wished and those who chose to withdraw, their decision was respected by the researcher. As for the principals, verbal consent was obtained at the point when the research sought permission to visit their schools and during the interviews.

3.10.3 Human Relation Issues

Before gathering of data commenced, the right process was followed to reach the appropriate authorities in the chains of command and official consent was granted through writing. Authority to visit the schools was sought from the County Director of Education, the County Commission and the principals of participating schools before any data was collected. Additionally, data collection was conducted with regard and concern for the honour and welfare of the participants. The researcher and the research assistants were formal and decent in their conduct and behaviour throughout the investigation as that had been demonstrated during the research assistants training where the various

case scenarios of being the data collectors, a BOM member, a principal and also an interviewer were role-played.

3.10.4 Legal Issues

All the sources of information cited in this study were acknowledged to avoid plagiarism. To ensure that the research did not contain any duplicated content, Turnitin Software was also used.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This study aimed at assessing the relationship that existed between Boards of Management Practices and Students' Academic Performance in Kitui and Makueni Counties. This chapter presents the findings, interpretations and discussion according to the objectives of the study.

The study addressed itself to the following objectives:

i. To assess the relationship between boards' financial resource management practices and students' KCSE performance in Kitui and Makueni Counties;
ii. To establish the relationship between boards' human resource management practices and students' KCSE performance in Kitui and Makueni Counties;
iii. To examine the relationship between boards' physical and material resource management practices and students' KCSE performance in Kitui and Makueni Counties;
iv. To determine the relationship between boards' students' welfare management practices and students' KCSE performance in Kitui and Makueni Counties; and
v. To determine the extent to which financial, human, physical and material and students' welfare management practices predict students' KCSE performance in Kitui and Makueni Counties.

The chapter was divided into the following sub-sections: response rate of the respondents, reliability analysis, demographic information, descriptive statistics for dependent and independent variables, tests of parametric test, and finally the inferential analysis. Under inferential analysis, person's correlation analysis and multiple regressions were performed. Quantitative and qualitative data were analysed separately but in the presentation of results they are merged together as they were connected.

4.2 Response Return Rate

Response return rate is the number of the research instruments returned after administration of the tools to the respondents expressed in percentage. For this study, two data tools were adopted as the main data collection tools (i.e. the principals' interview schedule and the boards' questionnaire). The principals' interview schedule (*Appendix II*) was administered to 54 principals and boards' questionnaire (*Appendix III*) was administered to 709 BOM members in 54 schools from the two counties. The results are presented in Table 4.1.

Table 4.1: Study Response Return Rate

Respondents	Sampled	Returned	%
Board members	709	620	87.4
Principals	54	46	85.1
Total	763	666	87.2

The questionnaires and interviews were administered as designed in the sampling design (section 3.5). 620 out of the709 questionnaires administered

to the board members were returned, forming 87.4% return rate. 46 principals out of 54 were interviewed bringing the return rate to 85.1%. The overall percentage return rate for the study was 87.2%. In some cases, although, all the instruments were distributed to the respondents, some of them were not returned despite the researcher's efforts to follow up. In other cases, some principals requested for their schools to be left out of the study since they could not convene a board of management meeting during the whole period of this study's data collection while in majority of the cases, the board meetings were not attended by all the members. Best and Khan (2006) appraised a response return rate of 50% to be satisfactory, 60% to be good and above 70% as being very good. In regard to this, this study's response rate was considered to be very good as it was above the baseline postulated by Best and Khan.

4.3 Boards, Principals Demographics and School characteristics

This sub section addresses the demographic attributes of both the board members as well as the principals**.** The respondents were requested to give their demographics based on gender, age, academic qualifications, school type and the segment of stakeholders they represented in the board.

4.3.1 Boards Members Demographics and School Characteristics

The demographic information for BOM members in this sub-section was obtained from four multiple- choice questions which included gender, age, school type and the segment of the group they represented in the board. The findings are exhibited in Table 4.2.

Table 4.2: Demographic of the Board Members

Boards Demographics		F	%
Gender	Male	414	66.7
	Female	206	33.3
Age (Years)	Below 30	9	1.5
	31-40 Years	78	12.6
	41-50 Years	302	48.7
	50 and Above	231	37.2
Educational Level	Primary	14	2.3
	Secondary	102	16.5
	Diploma	167	26.8
	Bachelor	257	41.5
	Master	80	12.9
School Type	National	23	3.7
	Extra-County	56	9.0
	County	164	26.5
	Sub-County	377	60.8
Representation in BOM	Sponsor	167	26.9
	Community/PA	321	51.8
	Special Interest	29	4.7
	Special Needs	12	1.9
	Teacher	44	7.1
	CEB Nominee	47	7.6

According to Table 4.2, more male board members, 66.7% as compared to females, 33.3% participated in the study. This implies that BOM committees were male dominated. These findings were not any different for there were other studies done related to this study which indicated that boards in many schools were male dominated. For instance, Mutinda (2014) study in Kiamwangi Sub County, Kenya established that women did not desire to be in leadership positions. due to traditional factors that overly deemed women as lacking managerial skills. As a result, 92% chairpersons of the BOMs were men. Even recent studies as that of Ogolla (2017) done in Suna West had big percentages of the BOM members being male. The situation was not any better in urban centres as Kalungu (2015) study done in Westland District, Nairobi, also found men to be the majority BOM members. Gender of the managers may affect student's motivation especially for the girls' schools as they could lack role models to emulate in their endeavour to become managers. This may however not be the case as board of management are rarely involved directly with students themselves. However, gender policy has been put in place in Kenya which focuses on equal rights for men and women and the attainment of Goal 3 of the Sessional Paper No. 14 of 2012 whose aim was to eliminated gender and geographical diferences in Basic Education by the year 2017. This study, just like many others, found a gender gap in that the females were underrepresented in the school boards of management. The gender policy was thus not implemented fully in the constitution of the BOMs (Republic of Kenya, 2015).

From the Table, the age of board members depicts majority, (48.7%) to have been in the age group 41-50 years old, followed by (37.2%) who were in the 50 and above years. Those aged between 31-40 years constituted 12.6% while below 31 years formed a mere 1.5%. That meant that BOMs in the two counties were dominated by mature people with over 85.9% of the respondents' age being 41 years and above. The probable reason for this could be that, it is at this age that many people have children in secondary schools hence the interest of managing the schools. The findings implied that the BOM members were likely to have enough experience to run the affairs of the schools appropriately. There is a similarity of the results with those of studies done by Mutinda (2014) and Ogolla (2017) which concurred that the big percentage of the board members who answered the items were in the age of 40 and 50 years. In Mkongo (2013) study, the age of the more than half of the board members who respondent ranged between 51 and 60 years. These findings implied that young people did not have interest school management. This lack of interest could be as a result of lack of children in the secondary school going age. Nevertheless, the foregoing literature is clear that fair representation programs and policies seeking to address past discrimination seeking to increase representation of women and youth in appointed positions have not been adhered to a significant extent in the composition of BOMs in secondary schools. The Constitution of Kenya (COK) (2010) and the gender policy (Republic of Kenya, 2015) were precise on a third gender rule as in

article 81 (b) indicated that two thirds would be the maximum number for either gender allowed in the elective public bodies.

Academic qualification of the BOM members was also sought and majority had a bachelor's level of education with 41.5 % followed by 26.8% with diplomas and 16.5% who had reached the secondary school level of education. The study however established that there were 2.3 % of some board members who had primary school education level as their highest educational qualifications despite the policy being clear that the people to be appointed must have at least secondary school level of education.

These results were not a surprise as Athman (2016); Wainaina (2015) and Akinyi (2017) are examples of other studies that had findings confirming indeed that guidelines had been breached as some board members had primary school education as their highest level of education. Nzoka and Orodho (2014) and Abaya (2016) also concluded that lack of managerial skills among the board members could be explained to be as a result of comparably the modest level of formal education with some having attained only primary school certificate. Despite that, it is worth noting that majority of the BOMs who responded to this current study were educated enough to understand BOM practices. This implied that the board members were qualified to handle practices that influenced students' performance in their respective schools as they possessed the minimum qualification required by the law.

This study attracted majority of the BOM members from the sub-county level of schools with 60.8% followed by county schools with 26.5% representation. Extra-County schools had 9.0% and the least number of BOM were from the national schools 3.7% which was attributed to the small number of such schools in the two counties. On the other hand, sub-county types of schools were the majority in the counties as compared to the other categories which explained why the majority of the respondents were from such schools.

As for stakeholder's representation in the BOMs, majority of the respondents, 51.8% represented the community/parent's association, followed the sponsor with 26.9%. The CEB nominee 7.6%, the teachers 7.1 %, special interests 4.7% and special needs category 1.9% were least represented in the boards. These results were due to the fact that the Basic Education Act has given each only one slot unlike the sponsor, community and parents who have three slots each in terms of boards' composition. In the majority of the studies reviewed such as Abaya (2016), Nzoka and Orodho (2013) and Akinyi (2017) none had shown representation of the special needs group in the composition of the boards they studied. This could be interpreted to mean that either none of the special need's persons had shown interest in the management of the schools or they had not been nominated by the CEB as stipulated in the Basic Education Act.

4.3.2 Demographic Characteristics of Principals

The demographic information in this sub section was obtained from four open ended questions. The respondents were requested to give their demographics characteristic on gender, age, academic qualifications and school type. The findings were displayed in Tables 4.3.

Table 4.3: Demographic of the Principals

Principals Demographics		f	%
Gender	Male	35	76.1
	Female	11	23.9
Age	31-40 years	7	15.2
	41-50 Years	24	52.2
	50 and Above	15	32.6
Educational Level	Diploma	3	6.5
	Bachelor Degree	31	67.3
	Master	13	28.2
Type of School	National	2	4.3
	Extra-County	5	10.9
	County	12	26.1
	Sub-County	27	58.7

In terms of gender, the principal's results were not any different from those of the BOM members *(Table 4.2)* as majority 35 (76.1%) were male while only 11(23.9%) were female. This is interpreted to mean the male principals were

more than females in both counties. Kingi (2018) who did her study in three sub-counties namely: Kiambu, Machakos and Kajiado Counties in Kenya established similar results that there were more male principals (54%) in the secondary school than were female principals (46%). Makuto (2014) also found that male principals (80%) were more than the female colleagues. The reason for these results could be that more males are educated more than the females because of the cultural beliefs. The gender of a principal could have an influence on student's performance because Elias' (2013) study done in Bangladesh on influence of principal's gender on academic success established that the principal's gender significantly affected students' academic performance.

According to the findings, significantly better performance was correlated with leadership of female head teachers in primary schools than those led by male head teachers. However, in secondary schools the opposite was true as under the leadership of male head teachers, significantly better grades were obtained in the examinations than the students led by female head teachers. So, it was expected that students in both counties would perform better going by those results (Elias, 2013). But as seen from the results on Table 4.6 on the KCSE performance, that was not the case in this study.

In terms of age, out of the 46 principals 24(52.2 %) were between the age of 41-50 years of age, 15 (32.6%) were above 50 years and only 7 (13.2%) were between 31-40 years. Similar studies had been obtained by Kingi (2018) who

found principals to be between 40-50 years in Kiambu, Machakos and Kajiado sub counties. This was an indication that most of the principals had relevant experience hence could influence the practices of BOM in their respective school to influence student's KCSE performance. Matula, Mulwa, and Kyalo (2018) observed that in school finances the experience of a principal were indeed crucial because, they were in a position to advise the boards on the same.

From Table 4.3, Majority 31(67.3%) of the principals who were interviewed had bachelor's degree as their highest educational level 14(63.6%). Those who had master degree were 13(28.2%) and only 3(6.5%) had diploma. The results implied that requirements of TSC were adhered to as all the principals had diplomas, bachelor's degree and master's degrees. As observed by Matula, Mulwa, and Kyalo (2018) the principals' education level determined how effective he/she would be in financial management and by extension school physical facilities. So, in school where principals were qualified the boards by extension would be expected to be effective with the principal being the chief advisor.

The largest number of the principals who participated part in this research were heads in sub-county schools, with 27(58.7%). They were followed by 12(26.1%) of the principals were from county schools and 2(4.3%) national school principal. The few number of national schools was attributed to the small number of such schools in the two counties. Munanu (2010) did a study on relationship among school type and secondary school students' self-esteem,

academic achievement in Nairobi County, Kenya and found out that self-worthy was common among many of the students from national and extra-county schools. Comparatively those students from sub-county schools had low self-esteem. Those students with high self-dignity performed also highly in academic while the opposite was also true. This was associated mainly with the suffient instructional and physical resources found in the national schools as compared to sub county schools. Admission of students to secondary schools also depended on the KCPE marks obtained by pupils with majority of sub county schools admitting students with less than 250 marks which is the average mark at KCSE. This meant that the low KCSE performance in Kitui and Makueni Counties could be associated with the many sub county schools which formed the largest number of the respondents who participated in this research.

4.3.3 Training of Members of the Boards on School Management Practices

Board members had been asked to respond on whether they had been trained on management practices. Two questions were used. One question was closed-ended while the other was open-ended. The results of the closed-ended question are presented on Table 4.4.

Table 4.4: Training of Members of the Boards of Management on the Practices

Response	f	%
Strongly Agree	226	36.5
Agree	106	17.1

Disagree	242	39.0
Strongly Disagree	46	7.4
Total	620	100

On whether board members had received adequate training on management practices, majority 307(53.6%) strongly agreed or agreed. These findings showed that slightly more than half of the board members had been trained on management practices in both counties. The respondents were asked to provide the body that offered the training. Majority 45% of board members indicated that they had been trained by Ministry of Education in collaboration with County Directors of Education, 8.7%, indicated that they were trained by Catholic Diocese of Kitui. As the Open Systems Theory used in this study purports, there are outer forces that affect a system while being simultaneously dependent on them so the school likewise is influence by external stakeholders like the church who come in to train the managers.

From interviews with the principals, it is confirmed that the Ministry of Education trained them during the inauguration of the boards in schools. A few of the principals indicated that they had organized seminars and workshops at the school level. For instance, one principal from a county school said, “We, as a school, organized for seminars and workshops for our boards.”

It was however clear that the Catholic Diocese of Kitui was involved in training of BOMs in the Catholic sponsored schools. One principal from a Sub County School had this to say:

> Yes, the board members were trained by the Ministry of Education (MoE) and Catholic Diocese of Kitui. The ministry officials were the Quality Assurance and Standards Officers (QUASO) from the Sub-County Directors of Education (SCDE). Their induction majored on board's roles as presented in the Basic Education Act, 2013.The induction was done during the inaugural ceremony of the BOMs.

However, a few of the principals indicated that BOMs in their schools had not been inducted on their practices at all but were referred by the officers from ministry to the legal documents found in the school. One principal had this to say:

> We photocopied the section that deals with school management in the Basic Education Act and gave to the board members to go and read at home. Am not sure whether they read or not but they contribute well in the meetings.

Although the results showed that induction was done, there is still need for boards to be trained properly as majority of them were only inducted into the practices.

4.3.4 School's KSCE Mean Score 2015, 2016 and 2017

The BOM members had been asked to give the mean scores for the schools they served in the last three years which formed the dependent variable of this study. The mean scores were guided by the performance data base within the

school as data was collected at school. Table 4.5 shows BOM feedback on the mean score of their schools in the year 2015, 2016 and 2017.

Table 4.5: Boards' Response on KCSE Mean Score - 2015, 2016 and 2017

County/ Performance	Kitui			Makueni		
	2015	2016	2017	2015	2016	2017
N	293	293	293	280	280	280
Mean	5.317	5.000	4.594	4.729	4.436	3.768
Median	5.000	4.000	4.000	4.000	4.000	3.500
Mode	4.0	4.0	4.0	4.0	4.0	3.0
Std. Deviation	1.6854	1.7102	1.5335	1.5650	1.5575	1.2670
Minimum	2.0	2.0	2.0	2.0	2.0	2.0
Maximum	8.0	8.0	7.0	8.0	8.0	6.0

Table 4.5 indicates that Kitui County had a mean score of 5.3 with a standard deviation of 1.7, 5.0 with standard deviation of 1.7 and 4.6 with standard deviation 1.5 while Makueni had a mean score of 4.7 and standard deviation of 1.6, 4.4 with standard deviation 1.6 and 3.5 with standard deviation 1.2 in the years 2015, 2016 and 2017. Additionally, both counties had minimum score of two and maximum of nine.

The principals' response on their schools mean score for the three years in Kitui County ranged from 1.9 – 8.09 mean scores for the schools sampled. For Makueni County the mean ranged from 2.09-7.78. The least mean scores were was observed in the year 2017 in both counties. Both results from the BOMs and principals are closely related to the data obtained from Ministry of

Education (2017) results analysis for the three years (2015, 2016 and 2017) *(Table 1.1 refer*) on KCSE performance for Kitui and Makueni Counties of below 6 points out of a possible maximum of 12 points (Republic of Kenya - Ministry of Education, 2017). The principals also indicated a decline in performance in the two counties as they had a minimum of 2 and maximum of 6 among their response.

Overall, the performance in both counties would be considered poor as would either translate to a C or a C- yet the minimum mean grade for entry into university is a C+ (Kenya Universities and Colleges Central Placement Service (KUCCPS), 2019). These results could be as a result of majority of the schools studied herein being sub county schools as a study done by Glennerster, Kremer, Mbiti and Takavarasha (2011) on Access and Quality in the Kenyan Education System had found out that performance was weakest in those type of schools (then referred to as district school) as compared to the other school like national schools.

This can be interpreted to mean that majority of the students from schools in Kitui and Makueni Counties did not meet the minimum entry requirement for university education which is considered to be very important in in the 21st Century. A large number of studies exists that show that individuals who obtain university degrees obtain economic and social advantage correlated with higher average earning which leads to economic growth (OECD, 2010;

Chan, 2016 and Bosupeng, 2017). They also contribute to the social-economic well-being of individuals and the society among other benefits (Hout, 2012).

4.4 Analysis of Descriptive and Inferential statistics.

The study employed five objective to guide it namely: to assess the extent to which boards' financial resource management practices influence students' performance at KCSE in Kitui and Makueni Counties, to establish how BOMs' human resource management practices influence students' performance at KCSE in Kitui and Makueni Counties, to examine the extent to which BOMs' physical and material resource management practices influence students' performance at KCSE in Kitui and Makueni Counties, to determine how BOMs' students' welfare management practices influence students' performance at KCSE in Kitui and Makueni Counties; and to determine the relationship between financial, human, physical and material and students' welfare management practices predict students' performance at KCSE in Kitui and Makueni Counties.

The data obtained was analysed using both descriptive and inferential statistics. For descriptive statistics means ranging from 0 to 5 were computed in line with Lee (1999) found in Bademo and Tafera (2016) who opined that any mean below 2.00 should be construed as low extent, mean between 2 to 3.5 should be average, while a mean of 3.5 to 5 should imply high extent.

In order to utilize parametric tests such as correlation and regression, normality test was conducted to guide the process through Shapiro Wilk test. The findings were displayed in Table 4.6.

Table 4.6: Normality Test

Counties	Shapiro-Wilk		
	Statistic	Df	Sig.
Performance	958	618	.316

a. Lilliefors Significance Correction

The null hypothesis behind the normality test stated that; student's performance assumed a normal distribution against the alternative hypothesis that it was not normally distributed. The findings from Shapiro Wilk test indicated a $p=0.316>0.05$. Therefore, the study failed to reject the null hypothesis and concluded that the students' performance data assumes normal distribution. The findings of this study were presented in line with each objective as follows:

4.4.1 Relationship between BOMs Financial Management Practices and Students' KCSE Performance

The first objective of the current research was to assess the relationship between boards' financial resource management practices and students' KCSE performance.in Kitui and Makueni Counties. Ten items linked to boards' financial resource management practices had been identified from literature reviewed and used to assess the objective.

The null hypothesis for the objective stated that:

H_{02} There is no significant relationship between BOMs' financial resource management practices and students' performance at KCSE in Kitui and

Makueni Counties. Section 4.4 thus endeavoured to analyse the extent to which boards' participated in the identified practices, the significance, direction and strength of the linear relationship between students' performance and board's financial resource and also testing of the hypothesis.

The results of descriptive analysis were presented in Table 4.7.

Table 4.7: Boards' Financial Resource Management Practices in Kitui and Makueni Counties

(1) Strongly Disagree **(2)** Disagree (**3)** Undecided **(4)** Agree (**5**) Strongly Agree

BOMs Financial Management Practice	**1**		**2**		**3**		**4**		**5**		**Mean**	**SD dev**
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**		
Budgeting process in line with the school vision	15	2.4	15	2.4	45	7.2	404	65.1	142	22.9	4.04	0.782
Budgets done by the principal then approved by BOM	0	0	48	7.8	15	2.4	409	65.9	148	23.9	4.06	0.759
Principal spends funds with board's approval	15	2.4	0	0	55	8.9	317	51.2	233	37.5	4.22	0.797
BOM supervises books of accounts and trial balances	26	4.2	51	8.2	87	14.0	373	60.2	83	13.4	3.61	1.066
Deliberate on audited reports	30	4.8	0	0	19	3.1	410	61.2	161	25.9	4.09	0.848
Monitors school expenditure	15	2.4	32	5.1	55	8.9	336	54.0	182	29.3	4.03	0.897
Organize for fundraising	0	0	15	2.4	66	10.6	393	63.4	146	23.6	4.08	0.657
BOM can account for all monies collected in the school	0	0	45	7.2	104	16.7	340	54.9	131	21.2	3.90	0.811
Initiated other income generating activities (IGAs)	305	49.1	97	15.7	55	8.9	106	17.1	57	9.2	2.22	1.433
Projects are done in line with sch. strategic plan	0	0	15	2.4	96	15.5	316	51.0	193	31.1	3.98	1.029
Overall Mean											3.79	

Table 4.7 shows that majority of the board member participated to a great extent in: budgeting process in line with the school vision, forming (88.0%, n=546), ensuring that the principal spend funds in accordance with the board's plan and budget (88.7% n=550), supervising the preparation of books of account and trial balances, deliberating on audited reports (73.5%, n=456), deliberated on audited reports (92%, n=571 monitored school expenditure (88.5%, n=518) and ensured projects are done in line with school strategic plan (82.1%, n=509 among other financial practices. These findings were interpreted to mean that boards' participation in financial management in Kitui and Makueni Counties was adequate to support teaching and learning activities in the schools to the extent of improving the students' academic performance as indicated by the high percentages.

The study interviewed the principals on whether board members were competent in the same financial management practices and majority of them were of the opinion that the board members were competent. A principal from a national school interviewed indicated that his BOM members participated appropriately in approving school budgets.

Another principal from a county school had similar opinion:

> Yes, my board members are competent in financial management. We have some who have background accountants. Those are the ones who guide the rest in matters regarding school financial management. They are very keen on financial reports presented during the boards meeting. Others are involved in budgeting and procurement activities in the organizations they work for. So, they are very useful to the school when it comes to school finances.

These results indicate that the school gain from the society as financial skills obtained from other sectors are used to assist in the management of school which is in agreement with the Open Systems Theory used to guide this study.

Another principal from a similar (county) school had this to say, "Yes, my board members are involved in budgeting, fundraising and they make follow ups on school purchases."

Contrary to that response, a principal from a sub-county school had this response:

> Majority of the board member in my school are not competent. Most of them have skills not related to school management. In fact, I think many of them are there because of the allowance we give after each meeting. The worst affected group is the parents' association representatives.

Another principal from a sub-county school opined that, "Yes, we go through budget preparation in conjunction with teachers then it is presented to the board after preparation. Board members go through each item one by one before they approve the budget. However, they do not check books of accounts. They get that information from auditors."

Yet another one from a similar school responded, "Although this has been our first board, we have discussed the school audited report accounts from 2015, 2016 and 2017 and the board members spotted issue of concern and responded to others. They are quite conversant with budgeting and procurement."

Another principal from a sub-county school had interesting remarks regarding his board members:

> My board passes the budget as it is presented to them after preparation. As for interpretation of financial reports from auditors some are unable

> to do that. I think around a third of the board members could have some knowledge on school finance. The rest are not professionals hence lack exposure.

From the principals, interview finding, it can be concluded that those board members who were incompetent in the two counties, were mainly from the sub-county schools but those from national, extra-county and county schools were found to be more conversant with financial management practices.

Also, majority of the BOMs had members amongst them who had financial management competencies which led to sound financial management practices. The reason for the incompetence in the sub county schools could be due to age of the schools as majority of them were the recently established schools and that could be the reason why they could not attract professional board members who are competent in financial management. They also may have lacked finances to train their boards due to the number of students they had as compared to the other types of schools who were well established in terms of enrolment as government subsidies were given based on the enrolment in each school.

Studies done by Mutuku (2011) in Nzaui Sub County, Makueni County and Athman (2016) in Mombasa County in Kenya concured with this study's findings as they found BOM members to be greatly involved in preparation and approval of school budgets. Nevertheless, Mobegi et al. (2012) study done in public secondary schools in Gucha District, Kenya, contradicts the findings as they found out that BOM members lacked necessary technical skills to understand and interpret financial reports in making decision. As a result of the

inadequate skills in financial management, board's effectiveness was very minimal which had negative effect on student's performance. Kaguri et al. (2014) study done in Imenti North District, Kenya, also differ with the findings of this study as it established that budgeting in schools was often done in either a careless fashion or not done at all with minimal involvement of education stakeholders in the budgetary process. OECD (2017) report from Paris, France agreed that the process of budgeting is not always straightforward in schools due to lack of capacity building for strategic budget planning at institutional level.

The research indevoured to test the hypothesis on whether a significant relationship between boards' financial resource management practices and students' performance at KCSE in Kitui and Makueni Counties existed. The null hypothesis was stated as: H_0: There is no significant relationship between boards' financial resource management practices and students' performance at KCSE in Kitui and Makueni Counties. A Simple Linear regression check was done. The findings were presented in a model summary in Table 4.8.

Table 4.8: Model Summary for Boards' Financial Resource Management Practice

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	. 538[a]	.286	.236	.786

The R value was 0.538 represents the simple correlation. It indicated a relatively strong degree of correlation. The adjusted R Square value of 0.236 indicated how much of the dependent variable, "students' performance", could be explained by boards' financial resource management practice. In this case 23.6% of student's performance variability could be explained to be as a result of school boards financial resources practices. The R square and adjusted R squared had minimal difference, implying that boards' financial resource management practice predicated students' performance. That meant that 76.4% of the variation in student performance could not be explained by the boards' financial resource management practice. To check how well the sample data fitted in the regression model, *F* value was obtained. The model summary of ANOVA was shown in Table 4.9.

Table 4.9: Goodness of Fit Summary for Boards' Financial Resource Management

		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.476	1	6.476	10.285	.000[b]
	Residual	183.330	618	.630		
	Total	189.806	619			

a. Dependent Variable: Performance

b. Predictors: (Constant), Practices of School Boards on Financial Resources

Table 4.9 showed that boards' financial management practices helped to explain variation on student performance. This was demonstrated by *F* value $F(1, 618) = 10.285$, $p < .001$ indicating that the model was justifiable for the regression equation. Accordingly, R^2 which was 28.6% was significant. A

simple regression check was done to examine the effect of financial resource management practice on student performance in Kitui and Makueni Counties. This was shown in Table 4.10.

Table 4.10: Simple Regression on Boards'' Financial Resource on Student Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.286	.196		1.511	.000
Practices of School Boards on Financial Resources	.236	.078	.26	3.162	.002

a. Dependent variable: Students' performance

Table 4.10 shows that practices of school boards on financial resources management had an effect on student performance. This was demonstrated by the (p value < .002). As a result, the null hypothesis which stated that: "There is no significant relationship between student performance and practices of school boards on financial resources management in Kitui and Makueni Counties" was rejected. The results also showed that the coefficient of practices of school boards on financial resources management was positive (.286) which implied that, the slope "a" is statistically significant. The intercept of the regression line was: Y= .286+.236X meaning that when practices of school boards on financial resources management increased by 1 unit, student performance increased by .522. The standardized beta value of

.26 shows that an improvement of boards' financial resources management by 1% would cause an improvement in students' performance by 26%. This meant generally that that board' financial resources management practices resulted to positive student's achievement. The regression finding of this research indicated that as manifested by a ($P < .002$) a significant relationship between boards' financial resources management practices in Kitui and Makueni Counties and student performance existed.

4.4.2 Relationship between Boards' Human Resource Management Practices and Students' Performance.

The second objective of the study aimed at establishing how boards' human resource management practices influence students' performance at KCSE in Kitui and Makueni Counties. Twelve statements linked to boards' human resource management practices were identified from literature reviewed and used to assess the objective.

The null hypothesis for the objective stated that:

H_{02} There is no significant relationship between boards' human resource management practices and students' performance at KCSE in Kitui and Makueni Counties.

This analysis sought to analyse the extent to which boards participated in the identified practices, the significance, direction and strength of the linear relationship between students' performance and board's human resource. It also tested the hypothesis. The findings for descriptive analysis were shown in Table 4.11.

Table 4.11: Boards' Human Resource Management Practices in Kitui and Makueni Counties

(1) Strongly Disagree **(2)** Disagree (**3)** Undecided **(4)** Agree (**5**) Strongly Agree

BOMs Human Resource Management Practice	**1**		**2**		**3**		**4**		**5**		**Mean**	**SD dev**
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**		
Forecasts the HR needed in our school and advise CEB	15	2.4	95	15.4	95	15.4	331	53.3	84	13.5	3.6	0.982
Follow guidelines to hire teachers and support staff	0	0	15	2.4	81	13.1	308	49.7	216	34.8	4.17	0.739
At time we fill vacancies with 'our people'	262	42.3	159	25.6	76	12.3	68	10.9	55	8.9	2.18	0.413
Attend to discipline of teachers and workers	21	3.4	`0	0	138	22.2	355	57.3	106	17.1	3.85	0.673
Have policies in regard to safety and health at school	0	0	19	3.1	89	14.3	368	59.4	144	23.2	4.03	0.701
We support teacher professional development	0	0	15	2.4	112	18.1	330	53.2	163	26.3	4.03	0.734
Link community for resources for school improvement	0	0	0	0	118	19.1	413	66.6	89	14.3	3.95	0.511
Receive information from many sources even outside	19	3.1	0	0	280	45.2	206	33.2	115	18.5	3.79	0.79
Schedule post-board meetings to brief teachers on plans	0	0	157	25.3	184	29.7	219	35.3	60	9.6	3.29	0.912
Employ board teachers to reduce teacher's workload.	0	0	0	0	148	23.9	366	59	106	17.1	3.93	0.61
Safe environment/protect teachers from undue pressure	0	0	19	3.1	118	19.1	343	55.3	140	22.5	3.97	0.419
Effective communication between BOM and Principal	0	0	0	0	125	20.1	300	48.5	195	31.4	4.11	0.219
Overall Mean											**3.73**	

According to Table 4.11, Majority of the board member showed that they focussed on the HR needed in their schools and advised the CEB on the staffing needs of their schools (66.9%, n=415), they followed recruitment guidelines to hire qualified teachers and that non-teaching staff were hired on merit (84.5%, n=248), they attended to discipline of teachers and workers, (74.4%, n=461), had policies in regard to safety and health of worker and student (82.6%, n=512), they supported teacher professional development with majority 79.5% (n=493) and they employed board teachers to reduce teachers workload (76.1%, n=472) among others.

It was clear from the finding that majority of the board member agreed that they participated in human resource practices to a great extent as indicated by the high percentages obtained. This study thus concludes that boards' participation in HR practices in Kitui and Makueni Counties was sufficient to support productive instruction which would improve students' academic performance. Finding from qualitative data obtained from the principals' interviews on whether the board members were competent in the identified human resource management practices had one of the national school principals indicating, "Yes they are competent as any recruitment or discipline cases were carried out according to the laid down procedures.

Another principal from an extra county school observed that:

> They are very competent. They understand hiring procedures, discipline procedures and are involved in mobilization of the community especially the member in sub- committee which deals with that. They are involved in TSC teacher's recruitment, employ BOM workers and they deal with disciplinary issues concerning teachers and non-teaching staff.

Further, a principal from a sub-county school observed that, "My board members are competent but are too busy in their places of work thus majority of the times, they are unavailable for BOMs meeting." From the results, it was noted that as compared to financial management practices, boards' participation in this area of HR was to greater extent. Generally, it can be concluded that majority of the BOMs were competent in hiring and disciplinary issues in both counties as shown by the results of this study which should have resulted to improved students' KCSE performance.

Unavailability for meetings due to busy work schedules was identified as the major challenges especially in the sub-county schools which paralyzed board's agendas. One possible reason for this could be that the sub-county schools may not have been giving sufficient allowances to the board members as they were the same ones who indicated that they wished allowances could be factored in free secondary education funds.

These results were in sharp contrast to earlier research studies done elsewhere. For instance, a study done in Ethiopia by Tadess (2011) ascertained that, there were inappropriate HR planning practices that had critical limitations to students' performance. Kipsoi, et al. (2008) in their paper presented at CCEAM Conference, had also found negative outcomes in processes such as some BOM members not hiring qualified applicants to favour their candidates whom they thought were favourable while others did not disclose the interview dates in order to fill the vacancies with their people. Kaposi's study had been reported the recruitment to be particularly racial, corrupt and biased and not based on merit. The qualification of BOG concerning the right translation and operationalization of the recruitment policies was also an issue of concern in the report. Aloo et al. (2011) study done in Nyando District, Kenya, had also found manipulation of the recruitment process in an unfair manner to favour the who is who in the society.

Further, Kong'oina (2017) disagrees as his study found out that boards were involved in discipline only when there was an emergency. Makau (2016) study done in Yatta Sub-County, Machakos County, Kenya, noted that school boards did not sensitize teachers and students on issues of safety standards hence the school were prone to insecurity. Nyakundi's (2012) study done in

Marani District, Kisii County, Kenya also found safety standards had not been executed fully in accordance with the MOE guidelines.

However, the results agreed with other researches to some extent for example, Mkongo (2013) who studied challenges faced by board of governors in secondary school's management in Taita– Taveta County, Kenya, established that BOGs were involved in the discipline of teachers and workers. Mutuva (2012) study done in Nzaui District in Makueni County also found out that in handling workers discipline problems, BOG members were very useful.

In conclusions, both the board members and the principals seemed to agree that boards were competent in majority of the HR practices. The highly ranked practice was recruitment guidelines to hire qualified teachers and non-teaching staff on merit as indicted by a mean of 4.17 and standard deviation 0.39 in Kitui and Makueni Counties while the least identified HR management practice was board members were corrupt when employee with a mean of 2.18 and standard deviation of 0.324. This implied that in both counties, canvasing for job opportunity was not allowed rather recruitment was done based on merits and the qualification of the applicants.

The boards members in Kitui and Makueni Counties however needed to improve on HR areas such as scheduling post-board meetings to provide teachers with in-depth briefings on policy decisions and goals of the board and also attendance of the boards meetings. They also needed to improve on ensuring that they received correct information from many sources even outside the school using the recommended communication channels in order to make informed decision.

The study sought to test the hypothesis on whether there was significant relationship between boards' human resource management practices and students' performance at KCSE in Kitui and Makueni Counties. The null hypothesis was stated as: H_0: There is no significant relationship between boards' human resource management practices and students' performance at KCSE in Kitui and Makueni Counties. A Statistical Linear regression check was done and the findings shown in Table 4.12.

Table 4.11: Model Summary for Boards' Human Resource Management Practices and Student Performance

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.536	.336	.320	.890

The value of R represented a simple correlation. The correlation coefficient *r*=0.536 showed a positive linear relationship between boards' human resource management practices and student performance. The model summary showed that 32% of the variability in students' performance could be explained by boards' human resource management practices as indicated by the adjusted R squared while 68% of the variation in students' performance could not be explained by boards' human resource management practices.

To establish the extent to which observed data matched the values in the regression model, F value was established. The ANOVA model summary was presented in Table 4.13.

Table 4.12: Goodness of Fit Summary for Human Resources

		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.524	1	4.524	6.230	.000[b]
	Residual	210.975	618	.725		
	Total	215.499	619			

Table 4.13 revealed that the model was relevant for this study and was as a result was suitable for the regression equation. This was shown by *F* Statistics which had value $F\ (1, 618) = 6.23$, $p < .05$. R^2 is 33.6% which was significant.

Table 4.13: Simple regression on Practices of School Boards on Human Resources

1	(Constant)	.643	.189		3.284	.001
	Practices of School Boards on Human Resource	.186	.069	.179	2.449	.0013

a. Dependent Variable: Students' Performance

The regression results showed that there was significant relationship between practices of school boards on human resources and student performance as shown by a *p* value =.0013<0.05. That meant that the null hypothesis that had stated; "There is no significant relationship between practices of school boards on human resources and student performance in Kitui and Makueni Counties was rejected. This means all efforts in practices geared towards addressing issues concerning human resources practices, would improve student performance in the two counties.

The intercept of the regression line was: Y =.643 + .186X. This confirmed that when practices of school boards on human resources increased by 1 unit students' performance increased by .829. The standardized beta value of 0.179 indicated that an increase in addressing activities related to human resource by

1% would result to students' performance improvement by 17.9%. %. It could therefore be deduced that any effort done to address human resource practices resulted to significant improvement in students' performance. This study thus concludes that practices of school boards on human resources in Kitui and Makueni counties contributed significantly to student academic performance.

4.4.3 Relationship between Boards' Physical and Material Resource Management Practices and Students' Performance.

The third objective of this study intended to examine the relationship between BOMs' physical and material resource management practices and students' KCSE performance in Kitui and Makueni Counties. Fifteen items linked to this objective were identified from literature review and used to assess the objective.

The null hypothesis for this objective stated that:

H_{02} There is no significant relationship between BOMs' physical and material resource management practices and students' performance at KCSE in Kitui and Makueni Counties.

This analysis sought to analyse the extent to which boards' participated in the identified practices, the direction and strength of the linear relationship between students' performance and boards' physical and material resource management and testing of the hypothesis.

Results of the descriptive statistics analysis were presented in Table 4.15

Table 4.14: Boards' Physical and Material Resource Management Practices in Kitui and Makueni Counties
1) Strongly Disagree **(2)** Disagree (**3)** Undecided **(4)** Agree (**5**) Strongly Agree

BOMs Physical and Material Resource Management Practices	1		2		3		4		5		Mean	SD dev
	N	%	N	%	N	%	N	%	n	%		
There's adequate teaching and learning materials	0	0	22	3.6	53	8.5	399	64.4	146	23.5	4.09	0.66
School staffroom has adequate chairs and tables	0	0	0	0	114	18.4	402	64.8	104	16.8	3.98	0.59
Adequate classroom for the no. of students in the school	0	0	63	10.2	72	11.6	347	56.0	138	22.2	3.90	0.86
Adequate no. of latrines for no. of students in school	34	5.5	110	17.7	152	24.6	210	33.8	114	18.4	3.42	0.13
Dining hall/adequate space for no. of students in school	102	16.4	150	24.2	103	16.7	231	37.2	34	5.5	2.91	0.21
A well-equipped science/agriculture/home science lab.	68	10.9	81	13	97	15.7	340	54.9	34	5.5	3.31	0.11
A well-equipped computer lab for teaching and learning	106	17.1	146	23.5	114	18.4	220	35.5	34	5.5	2.88	0.21
Have a freely available Wi-Fi network	133	21.4	129	20.8	154	24.9	135	21.8	69	11.1	2.83	0.30
Enough and well-prepared fields for games and sports	15	2.4	216	34.8	137	22.2	233	37.5	19	3.1	3.04	0.97
Fields have sufficient equipment for games and sports	62	10	0	0	175	28.3	345	55.6	38	6.1	3.19	0.65
Storage facilities or books and equipment is sufficient	0	0	203	32.8	148	23.9	216	34.8	53	8.5	3.19	0.65
There is a water supply which is reliable	82	13.3	99	16	100	16.1	273	44	66	10.6	3.22	0.23
Power supply is reliable	30	4.8	99	16	187	30.2	184	29.6	120	19.4	3.45	0.79
School is fenced, has gate/gate keepers for security	51	8.2	138	22.2	186	30	198	32	47	7.6	3.09	0.84
Allow lawful use of sch. facilities/ allow charging a fee.	48	7.8	124	20	158	25.5	248	40	42	6.7	2.94	0.19
Overall Mean											3.10	

According to Table 4.15, the largest number of the respondents reported to have ensured that the school had sufficient teaching and learning resources like books, textbooks and teaching aids (87.9%, n=545), the schools had staffrooms with adequate chairs and tables, majority (81.6%, n=506), had adequate classrooms for the number of students in the school, majority (78.2%, (n=483).

However, minority of the boards also indicated that schools had: well-equipped computer lab which was used for teaching and learning (41.0%, n=254),) dining hall that had adequate space for the number of students in the school (42.7%, n=265), had freely available Wi-Fi network (42.2%, n=262), had enough and well prepared fields for games and sports, (40.6%, n=252), had reliable power supply within their school (49%, n=304) had been properly fenced with a gate and gate keepers to ensure security of all persons (39.5%, n=245) among others.

From the results it was clear that although the BOMS indicated that there could be adequate teaching and learning material, there was no single school that had adequate physical material. This study thus concluded that, although the mean score for physical and material was 3.10, that boards' participation in the practices was insufficient to support effective teaching and learning which

would improve students' academic performance. This was because the findings that teaching and learning materials were readily available may have been enhanced by the fact that this study was undertaken at a time when the government of Kenya was providing all text books in all secondary schools which form part of the teaching and learning materials.

The principals were interviewed on whether the board members were competent in physical and material resource management practices. Majority of the principals agreed that board members were competent in the area. One principal from a county school had this to say:

> Yes, they are, as some of them assess the construction of buildings in the school. They are good and are conversant with the building and construction procedure, safety, and maintenance practices. I always avail the policy regarding building and construction whenever we have a building or construction project.

Another from a sub county school simply indicated, "They have inadequate skills as they rarely participate in the provision of physical facilities except a few who would practically inspect school projects especially buildings."

One principal interviewed from a national school had this interesting observation:

> Yes, they are competent in that area as they are very keen during the meetings on how teaching and learning materials are used. Text book is an area they have interest in as some board members have been asking me whether students returned text books issued to them and whether the school had a policy on how to replace the free textbooks

> being delivered by the government as they were not readily available in bookshop.

In sharp contrast to the sediments of the national school principal, another principal from a sub county school had this to say, "No. They are at times a hindrance in physical and material resource maintenance especially when it comes to financial implication."

A few of the principals from the sub-county schools indicated that some board members' lack of experience was a key challenge in execution of physical and material management practices. Some board members were noted to have knowledge in utilization of the local available resources such as sand as one principal from a sub-county school noted:

> Some board members had good suggestion such as selling the sand available in the community to raise funds for the schools for the purpose of ensuring that physical and material resources were optimized which could enhance students' performance. In fact, my board allows parents to bring the locally available material like sand and foodstuff such as maize from their farms to school as a way of paying school fees

The reason for such responses could be because there was plenty of sand in the dry river bed of Kitui and Makueni Counties which belonged to the community.

Boards had also been given an open-ended question to indicate the challenges they faced when performing practices related to physical and material resources. Land was noted to be a big challenge in schools as many of the secondary schools had been started in the compounds of existing primary schools. Inadequate storage facilities and maintenance of already available physical and material resources were named to be major challenges that could affect students' performance directly or indirectly in many of the schools in both counties.

Many of the researches done had similar findings. Olaleye, et al. (2017) study done in Surelere Lagos State, in Nigeria had almost all respondents agreeing that classrooms were overcrowded and that was singled out as the major reason as to why of student's academic achievement in public schools was poor. Musyoka (2018) study in Kathiani Sub County and Kitonyi (2013) study done in Kaiti Division, Makueni found out that learning in the schools was hampered by lack of the physical facilities leading to poor performance. Atieno (2014) study in Nakuru Municipality and Akinyi (2014) found congested staffrooms and physical facilities which were overstretched to have influenced students' academic performance at KCSE negatively.

Inadequacy in some facilities like computer rooms and WIFI connections as was found in this study is a detriment to students' academic performance as a study done to examine the influence of school computer use frequency on the test scores of 15- year-old students in the US established that students use of computers daily at school assisted them to perform better as compared to those who used computers once a week or once a month (Letao et al., 2010). Susan, et al. (2016) study in the United States Military Academy advises if the internet is availed and used with restriction for purposes of research, it would improve students' academic performance. Computer use and its integration into effective teaching and learning activities was found to plays a more vital part in influencing student's academic performance than just having computers in schools which may not generate the intended effect (Letao et al, 2010).

These results concur with data by World Bank (2014) and UNESCO (2014) which estimated that roughly in every five schools surveyed in African countries, four of them lacked access to electricity. UNDESA (2014) argued that there are multiple services powers can provide in the classroom. For instance, for ICTs to be introduced in the classroom, electricity access is crucial to facilitates use of computers and televisions. That would enable teachers to teacher their classes early in the morning or late at night as there is

lighting. Electrified schools also attract better qualified teachers, correlated with improvements on students' performance, whom principals can recruit and retain.

In summary boards in Kitui and Makueni Counties highly identified the practice of ensuring the school had sufficient teaching and learning resources in the form of books, textbooks and teaching aids as demonstrated by a mean of 4.09 and standard deviation 0.66 Boards' least identified practice on physical and material resources was having a freely available Wi-Fi network as indicated by a mean of 2.83 and standard deviation of 0.30. This implied that boards had not performed well in providing WIFI network and well-equipped computer lab which would be used for teaching and learning to improve students' academic performance. They also did not allow school facilities to be used by the community at a fee which could be a source of finances for the school. Boards thus needed to improve on the identified practices where they were performing least. Another area to be looked into was security as less than 50% of the BOM members indicated that their school had not been properly fenced with a gate and gate keepers to ensure security of all persons.

The study sought to test the null hypothesis which stated that H_0: There is no significant relationship between physical and material management practices and student performance was also tested. A regression test towards the mean was done and a model summary was obtained. The results were presented in Tables 4.16.

Table 4.15: Model Summary for boards' Physical and Material Management Practices

R	R Square	Adjusted R Square	Std. Error of the Estimate
.507	.192	.137	.848

a. Predictors: (Constant), School Boards Physical and Material Resources Practices

The model summary demonstrated that 13.7% of the total variability in the student performance could be explained by boards' physical and material management practices as indicated by adjusted R squared value of 0.137. That implies that 13.7% of the total variability in students' performance could be explained by school boards physical and material resources practices while

86.3% of the variation in students' performance could not be explained by boards' physical and material resources practices. The R value was 0.507 which represented the simple correlation indicating a relatively strong degree of correlation between physical and material management practices and student performance.

To check on the level to which observed values matched of the regression model, *F* value was secured. The ANOVA model summary was displayed in Table 4.17.

Table 4.16: Goodness of Fit for Physical and Material Resources ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.657	1	6.657	10.179	.000[b]
Residual	181.812	618	.654		
Total	188.469	6`19			

a. Dependent Variable: Performance

b. Predictors: (Constant), Practices of School Boards on Physical and Material Resources

Table 4.17 show that the model was suitable for this study and was for that reason acceptable for the regression equation. This was evidenced by *F* Statistics value $F(1, 619) = 10.179$, $p < .05$. R^2 is 19.2% and was significant.

Table 4.17: Simple regression on Boards' Physical and Material Resources on Student Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
(Constant)	2.47	.129		2.889	.000
Practices of School Boards on Physical and Material Resource	.387	.0382	.448	3.019	.001

a. Dependent Variable: Students' Performance

The regression findings were that there existed a significant relationship between practices of school boards on physical and material resources and student performance. With a *p* value =.001<0.05 the rejection of the null hypothesis that "There is no significant relationship between the practices of school boards on physical and material resources and student performance and student performance was supported". This implied that practices of school boards on physical and material resources contributed to students' performance positively. The intercept of the regression line was: Y =2.47 + .387X established that when practices of school boards on physical and material resources increased by 1 unit, student performance increased by 2.857. The standardized beta value of 0.448 meant that an improvement in

involvement of practices of school boards on physical and material resources by 1% would lead to an improvement in student performance by 44.8%. It could therefore be deduced that the more the boards' got involved on practices related to physical and material resources, the more the student's performance improved. This study concluded that practices of school boards on physical and material resources contributed to student performance significantly.

4.4.4 Relationship between Boards' Students' Welfare Management Practices and Students' Performance.

The fourth objective of this study intended to determine the relationship between boards' students' welfare management practices and students' KCSE performance in Kitui and Makueni Counties. Twelve items linked to this objective were identified from literature review and used to assess the objective. The null hypothesis for the objective stated that:

H_{04} There is no significant relationship between boards' students' welfare management practices and students' performance at KCSE in Kitui and Makueni Counties. The data obtained was analysed and the findings indicating the extent to which boards participated in the identified practices, the direction and strength of the linear relationship between students' performance and boards' students' welfare management practices. The results of the descriptive statistics were presented in Table 4.19.

Table 4.18: Boards' Students' Welfare Management Practices in Makueni County.

(**1**) Strongly Disagree (**2**) Disagree (**3**) Undecided (**4**) Agree (**5**) Strongly Agree

Item BOMs' Students' Welfare Management Practices	**1**		**2**		**3**		**4**		**5**		**Mean**	**SD dev**
	N	**%**	**N**	**%**	**N**	**%**	**n**	**%**	**n**	**%**		
Receive students reports on areas requiring improvement	0	0	31	5	51	8.2	352	56.8	186	30	4.8	0.77
Data /feedback provided guides new policy/direction	0	0	31	5	47	7.6	372	60	170	27.4	4.1	0.73
Making/execution of school rules to maintain discipline/order	25	4	50	8	61	10	298	48	186	30	4.07	0.75
The school rules are in line with the Children's Act	0	0	0	0	106	17.1	306	49.4	208	33.5	4.0	0.97
Learners are provided with guidance/counselling	0	0	0	0	60	9.6	345	55.7	215	34.7	4.25	0.61
Human rights are observed using school rule	0	0	0	0	120	19.3	254	41.1	246	39.6	4.2	0.74
Advocate for the spirit of cohesion, elimination of hate	0	0	0	0	31	5	157	25.4	432	69.6	4.19	0.5
Focus on students' spirituality through clubs and society	0	0	0	0	60	9.6	363	58.6	197	31.8	4.22	0.6
Gets reports on students discipline in our meetings	0	0	0	0	0	0	405	65.4	215	34.6	4.34	0.47
Discipline is dealt with in line with the laid down procedures	0	0	155	25	31	5	322	52	112	18	3.12	0.6
Makes reports to CEB on all pupils' discipline cases	0	0	75	12.1	109	17.5	314	50.7	122	19.7	3.77	0.6
Collect, analyse, and report, students' improvement.	0	0	155	25	74	12	310	50	81	13	4.02	0.71
Overall Mean											**4.09**	

Table 4.19 showed that a large number of the board members affirmed that: they been fed with students as well as school progress reports (86.8%, n=538) the data provided or feedback received guided new policy and direction (87.4%, n=542), boards participated in the development and operationalization of school rules which maintained discipline and order (78%, n=484), the school rules were in line with the Children's Act (82.9%, n=514), they ensured elimination of hate speech, peace, integration, tolerance, inclusion and tribalism by being involved in peace and team spirit activities like music (95.4%, n=589), they ensured that all learners were provided with guidance and counselling (90.4%, n=560) and all indicated that they got reports on students' discipline in their meetings (100%, n=620) among others. The findings had high percentages on majority of the items implying that boards' practices in student welfare was adequate to support teaching and learning which would lead to enhanced students' academic performance.

Results from the principals interviewed on whether the board members were competent in students' welfare management practices indicated that most boards frequently held meetings to discuss students' performance and reviewed the reports that were aimed at improving student performance but they were not directly involved with students' affairs. One principal from a county school said, "Boards are involved in ratifying the guidelines and policies teacher put in place concerning students' welfare but they are not directly involved with the students." A principal from a sub- county school also noted, "Having a teacher within the board has helped the board a lot in dealing with students' welfare."

A principal from a sub-county school had contrary sentiments that:

> The boards over relied on what they gathered from students without bothering to establish the truth or otherwise. Some interacted casually with students. I fear being rejected and ejected from the school if I do not give in to their demands, even when at times they are flouting government policies.

From the foregoing sentiments, it could be said that some school board members depended on gossip to make decisions rather than collecting data using valid methodologies. Nevertheless, not all the principals had negative comments about the board members' performance on student welfare as one from a county school had this to say:

> Yes, they are very particular on the welfare of students with an intention to create a child friendly school. They frequently discuss issues that ensured a peaceful environment prevailed in the school for student to undertake their learning without disturbances.

A challenge however was noted of some board members interfering with the running of the schools in terms of discipline of the students. One extra county school principal cited an incidence in which one board member wanted the deputy to re-admit a student who was a relative of the said board member without reference to school rules. The principal revealed that:

> This particular board member went to my deputy principal's office and requested for the student to be re admitted back to the school unconditionally. Because the student had been brought to the deputy's office by the class teacher, the deputy called the class teacher and it was agreed that the students could not be re admitted as he had gone against the classroom rules set by the class teacher and other students. The case was brought by the board member to my office and of course I had to support my deputy and my teacher as matters discipline are paramount in any school which is concerned about student's performance. Since that time the said board member stopped attending boards meetings.

In the area of students' welfare management's practices, the principals noted that involvement of parents was a key area that BOMs had achieved greatly.

The principals indicated that BOM had set strategies that ensured that parents were involved in their children's affairs in school. Nevertheless, the board members rated themselves highly in this area of students' welfare practices but findings from the principals differed especially in the area of collecting information to make sound decisions on student welfare.

As regards challenges faced by boards in the area of students' welfare, the principals informed that some of the board members were too busy while others travelled long distances to attend the meetings. Some board members also had their own personal interests which at times brought conflict of interest. Others were said to be poor in time management while others lacked knowledge on policies that dealt with students' welfare. Specifically, they were not conversant with the legal documents dealing with students' welfare in schools.

In conclusion, it was noted that the finding from the board themselves about their practices in the area of students' welfare management scored higher percentages on all the items as compared to the other three areas namely: finance, human resource and physical and material resource. The practice that was linked to student's welfare management that scored higher than the rest was that boards set school rules in line with the Children's Act as indicated by a mean of 4.13 and standard deviation of 0.58. This implied that the boards were very keen on ensuring that protection of students as per children's Act was implemented in the rules and regulations they made.

Boards least scored practice linked to students' welfare management practices was that boards made reports available to CEBs on all students' discipline cases as indicated by a mean of 3.54 and standard deviation 0.85 in Kitui County and in Makueni County with mean of 3.77 and standard deviation of 0.90. Despite scoring the least, it had a mean close to 4 which implies that in both counties BOMs ensured discipline among students.

These results were in agreement with a study done by Department of Education Guide (2017) in UK that schools that had a safeguarding duty towards the child and young people in their care performed better in students' achievement. Ong'enge (2016) study done in Busia County, Kenya demonstrated that the greater number of the boards who respondents in the study accepted that they conducted regular meeting with their principals to discuss school governance issues which improved management of the school therefore influencing academic performance of the students. Further, Barth (2011) study in Ohio, US established that effective boards embraced and monitored data, including that information which was negative to achieve their mandate in issues related to students.

The results are also in agreement with a study done in Cameron by Dze-Ngwa, et al. (2009) that advocated for peace education to be introduced in secondary schools. The aim was for peace-builders to be trained to serve as nurseries for peace-building processes. The study also suggested that in a classroom,

informal peace education should also be carried out in meetings and other social groups. As concerns data use, American Association of School Administrators (AASA) (2014) advises that boards should be involved in collecting, analysing, reporting, using data for school improvement and communicating through data. That way they would know whether students' performance gaps had been narrowed or not.

Okoro and Amadioha (2016) study carried out in Nigeria agree that using extracurricular activities could reduce ill behavior and encourage good morals which are requirements for better performance in academics. However, Kong'oina (2017) finding differed as the study indicated that the greatest number of board members were not involved at all in discipline issues in schools but only spent time in schools when there were emergencies.

This study sought to test the hypothesis on whether there is significant relationship between BOMs students' welfare management practices and students' performance at KCSE in Kitui County and Makueni County. The null hypothesis was stated as: $H_{0:}$ there is no significant relationship between BOMs students' welfare management practices and students' performance at KCSE in Kitui County and Makueni County. A statistical regression analysis was performed and a model summary was obtained as shown in Table 4.20:

Table 4.19: Model Summary for BOMs Students' Welfare Management Practices

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.554[a]	.286	.250	.830

a. Predictors: (Constant), Boards' Students' Welfare Management Practices

The R value showed positive degree of linear relationship between the board' students' welfare management practices and student performance as indicated by *r*=0.554. Table 4.20 indicated the adjusted R2 as .250, which implied that boards' participation in students' welfare practices accounted for 25% of the variance in students' KCSE performance. So, 25% of the total variability in students' performance can be explained by boards' students' welfare management practices while 75% of the variation in students' performance cannot be explained by boards' students' welfare management practices.

To check the conformity between the sample and the regression model, *F* value was calculated and an ANOVA model summary was shown in Table 4.21.

Table 4.20: Goodness of Fit for Boards' students' welfare management practices

County			Sum of Squares	Df	Mean Square	F	Sig.
Kitui	1	Regression	5.135	1	5.135	5.737	.000
		Residual	260.445	618	.895		
		Total	265.580	619			

a. Dependent Variable: Performance

b. Predictors: (Constant), Practices of School Boards on Students Welfare Resources.

Table 4.21 indicated that the model used was suitable and consequently fit for the regression equation. This was shown by *F* Statistics with a *F* value of (1, 618) = 5.737, $p < .0001$.

Table 4.21: Linear Regressions on Boards' students' welfare management practices and Student Performance

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.15	.029		6.319	.000
	Practices of School Boards on Students Welfare Resource	.260	.182	.262	2.276	.018

a. Dependent Variable: Students' Performance

The regression results were clear that a significant relationship between the boards' students' welfare management practices and student performance existed. This was indicated by p value=.018<0.05. That evidence led to rejection of the null hypothesis that "There is no significant relationship between the boards' students' welfare management practices and student performance. It meant that any practices that were undertaken by the boards to address boards' students' welfare management practices contributed positive to students' performance.

The intercept of the regression line was: Y =1.15 + .26X.

This confirmed that when boards' students' welfare management practices increased by 1 unit, student performance increased by 1.41. The standardized beta value of 0.262 indicated that increase in boards' students' welfare management practices by 1%, would lead to increase in student performance by 26.7%. It could therefore be deduced that any effort undertaken to address students' welfare management practices would be expected to lead to improvement in student performance. This study indicates that boards' students' welfare management practices significantly contributed to students' performance.

In conclusion, the findings revealed that boards' practices in terms of financial resources, human resource; physical and material resources and student welfare practices played a significant role towards to students' academic performance. This implied that any effort of boards to address the practices would results to better student academic performance.

Nevertheless, in terms of the systems theory used to guide this study, boards' practices function is a system of financial, Human, physical and material and student welfare resources working together to deliver desired outputs (students' performance). The areas of boards' weaknesses would be nonconformities which imply deviation from the set standards or norms, thereby a problem. By this research locating where they occur within the

board members solution should be found. This would enhance the efficiency and effectiveness of the school.

4.4.5 Regression Analysis to determine the extent to which Financial, Human Resource, material and physical and Students' Welfare Predict Students' Performance at KCSE.

Objective five was set to determine the extent to which financial, human, physical and material and students' welfare management practices predict students' performance at KCSE in Kitui and Makueni Counties**.**

The study sought to test the hypothesis on whether the financial, human, physical and material and students' welfare management practices predict students' performance at KCSE in Kitui and Makueni Counties. The null hypothesis H_0 stated that: There is no significant relationship between financial, human, physical and material and students' welfare management practices and students' performance at KCSE in Kitui and Makueni Counties. A Multivariate Linear regression check was performed and a model summary was produced. The results were shown in Tables 4.23.

Table 4. 22: Model Summary for Boards' Practices

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	. 838[a]	.886	.876	.536

The R value was 0.838 which represented the simple correlation. It indicated a relatively strong degree of correlation between student performance and boards' practices. The adjusted R Square value of 0.876 showed how much of

the dependent variable, "students' performance", can be explained by boards' financial, human, physical and material and students' welfare management practices. In this case 87.6% of student's performance variability cold be explained to be as a result of boards' financial, human, physical and material and students' welfare management practices. The R square and adjusted R squared had minimal difference, implying that boards' financial, human, physical and material and students' welfare management practices predicated students' performance. This meant that only 12.4% of the variation in student performance could not be explained by the boards' financial, human, physical and material and students' welfare management practices.

In order to establish whether boards' financial, human, physical and material and students' welfare management practices helped to predict the variation in students' performance, ANOVA goodness of fit Table was generated. The results were presented in Table 4.24.

Table 4.23: Goodness of Fit Summary of Boards' Practices

County			Sum of Squares	Df	Mean Square	F	Sig.
Kitui	1	Regression	5.135	1	5.135	5.737	.000
		Residual	260.445	618	.895		
		Total	265.580	619			

a. Dependent Variable: Performance
b. Predictors: (Constant), Practices of School Boards on Students Welfare Resources

Table 4.24 showed that the model was appropriate for this study and was as a result suitable for the regression equation. That was evidenced by F Statistics value F (1, 250) = 59.282, $p < .05$. R^2 is 88.6% which was significant. The findings meant that the null hypothesis that "There is no significant relationship between financial, human, physical and material and students' welfare management practices and students' performance at KCSE in Kitui and Makueni Counties was rejected.

Table 4.24: Multiple Regressions on Boards' Practices

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	0.286	0.196		1.511	0.002
Practices of School Boards on Financial Resources	0.236	0.078	0.26	3.162	0.001
Practices of School Boards on Human Resource	0.246	0.78	0.25	3.226	0.031
Practices of School Boards on Physical and Material Resource	0.387	0.382	0.448	3.019	0.001
Practices of School Boards on Students Welfare Resource	0.260	0.0073	0.262	4.176	0.013

The standard beta coefficient in Table 4.25 indicated that practices of school boards on financial resources explained 26% of variation in student performance holding the other factors constant. Practices of school boards on human resource explained 25% of variation in student performance holding the other factors constant. Practices of school boards on physical and material resource explained 44.8% of variation in student performance holding the other factors constant. Practices of school boards on students' welfare resource explained 26.2% of variation in student performance holding the other factors constant.

The results meant that there was need for school board members to increase their participation in financial, human, physical and material and students' welfare management practices for students' performance at KCSE to improve in Kitui and Makueni Counties. Also in terms of systems theory and in practice, changes made in one component of the four would usually affect all the other components.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate the relationship between boards of management practices and students' performance at KCSE in Kitui and Makueni Counties, Kenya. This chapter presents a summary of findings, conclusion and recommendations of the study. It also gives suggestions for further study.

5.2 Summary of the Findings

The study was conducted to assess the relationship between Boards of Management Practices and Students' Academic Performance in Kitui and Makueni counties. The study addressed the following objectives: to assessing the relationship between BOMs' financial resource management practices and students' KCSE performance in Kitui and Makueni Counties; to establish the relationship between BOMs' human resource management practices and students' KCSE performance in Kitui and Makueni counties; to examine the relationship between BOMs' physical and material resource management practices and students' KCSE performance in Kitui and Makueni counties; to determine the relationship between BOMs' students' welfare management practices and students' KCSE performance in Kitui and Makueni Counties and

lastly; to determine the extent to which financial, human, physical and material and students' welfare management practices predict students' performance at KCSE in Kitui and Makueni Counties.

The respondents to this study were secondary school board members and principals. To achieve the objectives of the study data was collected from 620 board members and 46 principals through questionnaire for the board members and an interview schedule for the principals. The data was analysed using descriptive and inferential statistics. The study embraced a correlational research design as a framework to guide the study. The findings of the study are presented as per the objectives.

5.2.1 BOMs Financial Resources Management Practices and Students' Performance at KCSE

The findings established that boards were highly involved in financial resource management practices as indicated by (Mean = 3.79) as per school boards response. However, thematic analysis noted that majority of school boards from sub county schools were not conversant with; budgeting, checking of books of accounts and interpretation of audited reports**.** Further, the findings indicated that school board's financial resource management practices had a strong positive significant relationship to the students' performance with a Pearson correlation coefficient r=0.538, which was significant at 0.01 level of significance. An R Square value of .236% was realized in the two counties which meant that 23.6% of student's performance could be explained by BOMs' financial resource management practice.

A probability (p) value of 0.002 that is below 0.05, in financial resource management practices was obtained indicating that on overall, the model applied could statistically significantly predict the outcome variable. The null hypothesis that stated "there is no significant relationship between BOMs' financial resource management practices and students' performance at KCSE in Kitui and Makueni Counties" was thus rejected. That meant that school board members participated in financial resource management practices in the two counties resulted to improved students' KCSE performance. Thus, they should increase their participation in the practices.

5.2.2 BOMs Human Resources Management Practices and Students' Performance at KCSE

Boards of Management were found to be highly involved in human resources management practices with a (Mean=3.73) as per the board of management responses. Qualitative analysis from the principals agreed that BOMs were competent in majority of the practices in this area but many times board meetings lacked quorum. Practices of school boards on human resource and students' performance was found to have a strong positive relationship with a Pearson correlation coefficient r=0.536, p-value <0.01. The R value 0.536 indicated a relatively strong correlation between school boards human resource practices and students' performance. The R Square .329 meant that 32.9% of the students' performance was as a result of school boards human resources practices in Kitui and Makueni Counties. A probability (p) value of 0.013 that is below 0.05 was obtained indicating that on overall, the model

applied could statistically significantly predict the outcome variable. Thus, the null hypothesis that stated that "there is no significant relationship between BOMs' human resource management practices and students' performance at KCSE in Kitui and Makueni counties" was also rejected. The implication of these findings was that school boards participated in human resource practices in the two counties led to improvement in students' KCSE performance. So boards should frequent participate in HR management practices.

5.2.3 BOMs Physical and Material Resources Management Practices and Students' Performance at KCSE

Results from the boards indicated that BOM member were moderately involved in physical and material resource management practices with a (Mean = 3.10). Thematic analysis from the principals interviewed, established that boards from **s**ub county schools lacked skills in provision of same especially where finances were involved. A Pearson correlation coefficient r=0.507, p-value <0.01 was obtained which was significant at 0.01 level of significance. That showed that practices of school boards on physical and material resources influenced students' performance. Moreover, an R values of 0.507 was attained, indicating a relatively strong degree of correlation. Thus, dependent variable, (students' performance), could be explained by the independent variable, 'BOMs' physical and material resources practices ". An R square of .137 implying 13.7% of the students' performance was as a result of school boards' physical and material resources practices in Kitui and Makueni Counties. This was supported by a probability (p) value of 0.001 that is below 0.05 which indicates that the model applied could statistically

significantly predict the dependent variable. Thus, the null hypothesis that stated that "there is no significant relationship between BOMs' physical and material management practices and students' performance at KCSE in Kitui and Makueni counties" was therefore rejected. This meant that BOMs' participation in physical and material resources practices in the two counties improved students' performance hence they should be encouraged to participate more in the area.

5.2.4 BOMs Students' Welfare Management Practices and Students' Performance at KCSE

The finding of this study showed that Boards of Management were highly involved in students' welfare management practices with a (Mean = 4.09). Qualitative analysis from the principals interviewed had similar results although some indicated that some board members were not conversant with use of data to make decisions but relied on rumour which led to some misconception**.** A Pearson correlation coefficient r=0.554, p-value <0.01 at 0.01 level of significance showed that practices of school boards on students' welfare influenced students' performance. Besides, an R value of 0.554 indicated a relatively strong degree of correlation. The R Square value .250 meant that 25% of students' performance could be explained to be as a result of BOMs' students' welfare management practices. This implied that BOMs' students' welfare practices had influence on students' performance. A probability (p) value of 0.018 that was below 0.05 indicated that, the model applied could statistically significantly predict the outcome variable. Thus, the null hypothesis that stated that "there is no significant relationship between

BOMs' students' welfare management practices and students' performance at KCSE in Kitui and Makueni counties" was therefore rejected.

5.2.5 Extent to which Financial, Human, Physical and Material and Students' Welfare Management Practices Predicts Students' Performance at KCSE in Kitui and Makueni Counties

Using a Multivariate Linear regression test an R value of 0.838 and an adjusted R Square value of 0.876 was obtained meaning 87.6% of student's performance variability could be explained to be as a result of BOMs' financial, human, physical and material and students' welfare management practices. This meant that only 12.4% of the variation in student performance could not be explained by the BOMs' financial, human, physical and material and students' welfare management practices. Holding the other factors constant, physical and material resource was found to be the most important predictor as it could explain 44.8% of variability in students' performance, followed by students' welfare resource explaining 26.2%. Financial resource was third 26% and lastly human resource explained 25%. That meant that the more the board members increased their participation in physical and material, students' welfare financial and human management practices the more students' performance at KCSE would improve in Kitui and Makueni Counties.

5.3 Conclusions of the Study

From the foregoing findings conclusions were made in line with the objective as follows

5.3.1 BOMs Financial Resources Management Practices and Students' KCSE Performance

BOMs' participation in financial management practices in Kitui and Makueni counties was found to be generally high. The findings showed that school boards financial management practices Kitui and Makueni Counties had a statistically significant influence on students' performance. Frequent participation in financial management practices would enhance students' performance. The study however established that majority of the school did not have income generating activities of projects which could give the school extra finances apart from the conventional source.

5.3.2 BOMs Human Resources Management Practices and Students' KCSE Performance

On the second objective, the study findings indicated that BOMs' participation in human resources management practices in Kitui and Makueni counties was high. The findings further revealed that there was a statistical significant influence of human resources management practices on students' KCSE performance. The implication of these findings is that school boards participated in human resource practices in Kitui and Makueni Counties led to improvement in students' KCSE performance. So school boards should frequently participate in HR management practices

5.3.3 BOMs Physical and Material Resources Management Practices and Students' KCSE Performance

In objective three BOMs' participation in physical and material resource management practices in Kitui and Makueni counties was found to be

moderate. Likewise, the study established that school boards participation in physical and material resource management practice had a statistically significant influence on students' performance. That was an indication that the more the BOMs participated in the physical and material resource management practice, the more the students KCSE performance in Kitui and Makueni Counties improved.

5.3.4 BOMs Students Welfare Resources Management Practices and Students' KCSE Performance

School boards' involvement in students' welfare management practices was the fourth independent variable of interest to this study. The result indicated that school boards' participation in this area was very high as compared to the earlier three variables measured in this study namely: finance, human resource and physical and material resources. A statistically significant influence of boards' students' welfare practices was found on students' performance. That implied that boards' frequent participation in students' welfare practices would lead to improved students' performance.

It is thus evident that all the four hypotheses were rejected. This was because all the probability (P) values were less than the level of significance (0.05) used for the study.

5.3.5 Extent to which Financial, Human, Physical and Material and Students' Welfare Management Practices Predicts Students' Performance at KCSE in Kitui and Makueni Counties

The fifth objective of this study established the extent to which financial, human, physical and material and students' welfare management practices predicts students' performance at KCSE in Kitui and Makueni Counties. Using a Multivariate Linear regression test, the R values and adjusted R Square values obtained were high meaning that student's performance variability could be explained to be as a result of financial, human resource, physical and material and students' welfare management practices. Only a small percentage of the variation in student performance could not be explained by the BOMs' financial, human, physical and material and students' welfare management practices. That meant that the more the board members increased their participation in financial, human, physical and material and students' welfare management practices the more students' performance at KCSE would improve in Kitui and Makueni Counties. In conclusion, the study found out that financial, human resource, physical and material resource practices were all found to be significant predictors of students' academic performance.

5.4 Recommendations of the Study

This section makes recommendations in the line with the findings established after data analysis. This study established that school boards lacked adequate competencies in some areas of their practice. The study recommends that MOEST through Kenya Education Management Institute or the CEB should look into the strategies which could induct or train school board members through workshops and seminars more so in sub county schools on:

i. Financial management practices such as; strategic plans; supervision of books of accounts; budgeting; organizing for fundraising and in monitoring of school expenditure

ii. Human resource management practices such as; scheduling post-board meetings with teachers; advising the CEB on staffing needs of schools; discipline of HR; linking school with community and on minimizing conflict and maximizing cooperation. Board meetings lacked quorum at times due to absenteeism so MOEST should look into ways of motivating the BOMs. There is also need for the gender of the boards to be considered during appointment so that they are in line with the Constitution of Kenya which stipulates that a third of any membership in government institutions should be of either gender.

iii. Physical and Material management practices such as; creation of adequate space for learners in classes, dining halls, computer laboratory, availing WIFI networks, reliable power and water supply fencing and ways of improving school security.

iv. Students' welfare management practices such as; students' discipline, use of data for decision making and making reports to the CEB.

5.5 Recommendations for Further Research

This study suggests further research to be done in the following areas:

i. This study investigated the relationship between boards of management practices and students' academic performance at KCSE in Kitui and Makueni Counties which have the same geographical and climatic

conditions. Another study needs to be replicated in other counties endowed with better climatic conditions in Kenya to compare the BOMs practices with those of Kitui and Makueni Counties.

ii. Besides, a study can be carried to establish measures that can be taken to motivate the board members to be more involved in their participation in boards' management practices to influence students' performance as lack of quorum in the board meetings was found to be a major challenge.

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APPENDIX I

TRANSMITTAL LETTER

Dear Respondent,

This is a research study entitled Relationship between Boards of Management Practices and Students' Performance at Kenya Certificate of Secondary Education in Kitui and Makueni Counties, Kenya. The study is in partial fulfilment of one of the requirements for the attainment of the award of the Degree of Doctor of Philosophy (PhD) in the School of Education Management, Policy and Curriculum Studies, School of Education, Kenyatta University. The research thesis endeavours to generate knowledge to be utilized in improving student's performance in KCSE in Kitui and Makueni Counties. Your views are of importance in the study and I would appreciate your response to this questionnaire as a representative of your school. Your response will be kept confidential and anonymous for this is purely for

academic purpose. Thank you for your time, co-operation and contribution to the study. I shall be pleased to send you a copy of the findings of the study if you so desire.

Yours faithfully,

Mary Mbii

E83/CE/10572/2007

APPENDIX 11

INTERVIEW FOR PRINCIPALS

These questions are about you, your education and your position as school principal. In responding to the questions, please mark the appropriate box.

1 Please indicate your gender

2 What is your age?

3 What is your highest formal educational level?

4 What is the type of this school you are heading e.g. Sub county, county etc?

---

5 How long have you been working as a principal? ----------

6 Has the current board been trained on boards management practices?------

7 If your answer in question 8 is YES, who trained them?----------

8 Has the current board in your school been involved in setting or revising the school vision and the strategic plans? Please explain ----------

---

9 If your answer in question 6(i) is YES, whom among the education stakeholders did they involve in vision setting (Parents, students or community)

---

10 How did the board members in your school come to know their functions?

---

11 In your opinion, are the board members competent in financial management practices such as budgeting, procurement and supervision of books of account and fund raising and other related duties which influence student's performance? Kindly explain your answer

---

12 In your opinion, are the board members competent in human resource management practices such as hiring of human resource, disciplining of staff, linking with the community which influence student's performance etc. Please explain

---

13 In your opinion, are the board members competent in physical and material resource management practices which influence student's performance? Please explain your answer

---

14 In your opinion, are the board members competent in students' welfare management practices which influence student's performance? Please explain your answer/

---

15 What are some of the challenges you experience in dealing with the current board in execution of their duties?

---

16 How can the challenges you have mentioned in question 14 be overcame?

---

17 Kindly indicate your schools KCSE means for 2015-------2016------and 2017-

APPENDIX III

QUESTIONNAIRE FOR BOM MEMBERS

Section A: Demographic Information (Tick where appropriate in the space provided)

1 Indicate your gender?

Male [ ] Female [ ]

2 Age. Below 30yrs [ ] 31-40 yrs [ ] 41-50yrs [ ] 50yrs and above [ ]

3 What is your academic qualification?

Primary school [ ] Secondary school [ ] Certificate [ ] Diploma [ ] Degree [ ]

Masters [ ] Others (specify) _____

4 School type in which you are serving as BOM

National [ ] Extra County [ ] County [ ] Sub County [ ]

5. Indicate the segment you represent in the BOM composition

County Education Board ( ) Sponsor ( ) Community representative ( ) Special interest ( ) Special needs ( ) Teacher ( ) Parents Association (PA) ( )

6. i) Have you received any training on boards of management practices?

Yes ( ) No ( )

7 If your answer to question 7 is YES, who trained you?

---

8. What was your school's KSCE mean score in the year 2015___2016 ____ 2017___

SECTION B: Key indicators related to Practices employed by BOM in improving student's performance

Instructions:

The following statements represent various indicators of practices BOM members are supposed to engage in the management of secondary school to influence student's performance. Please tick (√) in the space provided to indicate how much you agree or disagree with the statements.

(1) Strongly Disagree **(2)** Disagree (**3)** Undecided **(4)** Agree (**5**) Strongly Agree

We do the following financial management practice or ensure they are done	1	2	3	4	5

9.Do budget in line with the school strategic plan/					
10. Budgets are done by the head teacher then brought to us to approve					
11. The head teacher spends funds with board's approval					
12.We supervises preparation of books of accounts and trial balances					
13.We deliberate on audited reports					
14. We monitor school expenditure					
15.We organize for fundraising/ Solicit for grants, donations and bursaries					
16. We are aware of all monies received/collected in the school and can account for it.					
17 We have initiated other income generating activities apart from school fees/government capitation and hire of school facilities					
18 We decide on the projects to be done in line with sch. strategic plan					

19. What challenges do you face in performing these functions related to financial resources? Please explain

We do the following human resource management practice or ensure they are done.	1	2	3	4	5
20. Forecast beforehand, the human resource needed in our school and advice the CEB on the staffing needs.					
21. Follow guidelines to hire qualified teachers and support staff					

22. Have had cases of corruption in teacher recruitment with some board member intending to favour their own candidates					
23. Attend to discipline of teachers and workers					
24. Have policies in place regarding safety and health of teachers and other worker in the school in accordance with Ministry's guidelines					
25. Support teacher professional development/Induction programs					
26. Link with the community to get resources for school improvement					
27. Receive information from many sources even those outside school					
28.Schedule post-board meetings with to brief teachers on BOMs decisions					
29. Hire board teachers/Volunteer teachers to ensure the teachers workload is low					
30. Minimize conflict and maximize cooperation within the board and also with teachers and other worker					
31. There is effective communication between BOM and Principal					

32 What challenges do you face in performing these functions related to human resources? Please explain

---

We do/ensure the following physical and material resource management practice.	1	2	3	4	5

33. There's adequate teaching and learning materials like books					
34. School staffroom has adequate chairs and tables					
35. Adequate classroom for the number of students in the school					
36. Number of latrines is adequate for number of students in school					
37.Have a dining hall with adequate space for number of students in school					
38 Have a well-equipped science/agriculture/home science lab.					
39. Have well-equipped computer lab used for teaching and learning					
40That all buildings, furnisher and the bus are well maintained					
41 Have a freely available Wifi network					
42. Have enough and well prepared fields for games and sports					
43. The fields have sufficient equipment for games and sports					
44. Storage facilities or books and equipment is sufficient					
45. There is a water supply which is reliable					
46. Power supply is reliable					
47. School is properly fenced, has a gate/gate keepers for security					
48. Allow lawful use of school facilities including charging of a fee.					

49. What challenges do you face in performing these functions related to physical and material resources? Please explain

---

We do/ensure the following on students' welfare management practice.	**1**	**2**	**3**	**4**	**5**
50. Receive reports on students/ school and areas requiring improvement					
51. Data provided /feedback received guides new policy and direction					
52. Are involved in making/execution of school rules to maintain discipline/order.					
53. The school rules are in line with the Children's Act					
54. All learners are provided with guidance and counselling in all areas					
56. Human rights are observed using school rule that guide on day to day interaction of all member					
57. Advocate for the spirit of cohesion, elimination of hate/peace etc. by students being involved in peace and team spirit activities					
58. Focus on students' spirituality through clubs and society					
59. Get reports on students discipline in our meetings					
60. Ensure discipline is dealt with in line with the laid down procedures					
621. We make reports to CEB on all pupils' discipline cases we deal with					
62. We collect, analyse, and report, students' improvement through data.					

63. What challenges do you face in performing these functions related to physical and material resources? Please explain

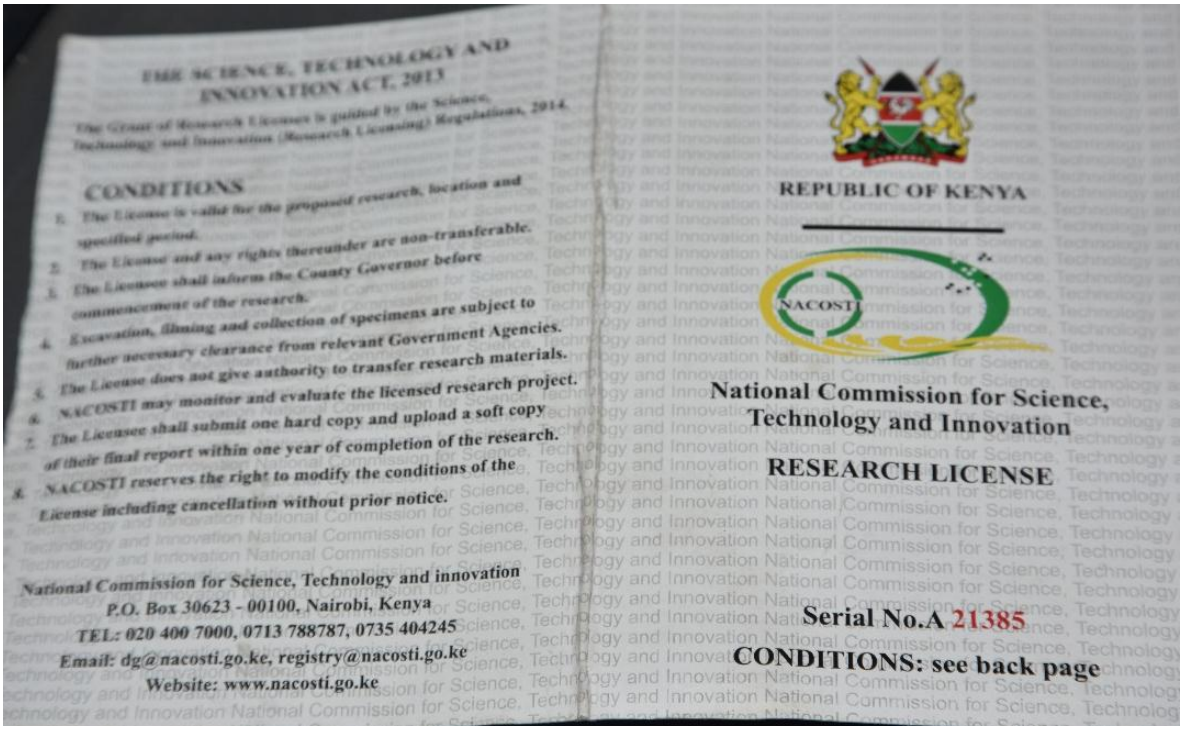
---

64. In your opinion what suggestions would you give which can assist you in performance of your functions in managing your school?

Thank you for your cooperation

APPENDIX IV

RESEARCH CLEARANCE PERMIT FROM NACOSTI



THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

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REPUBLIC OF KENYA

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RESEARCH LICENSE

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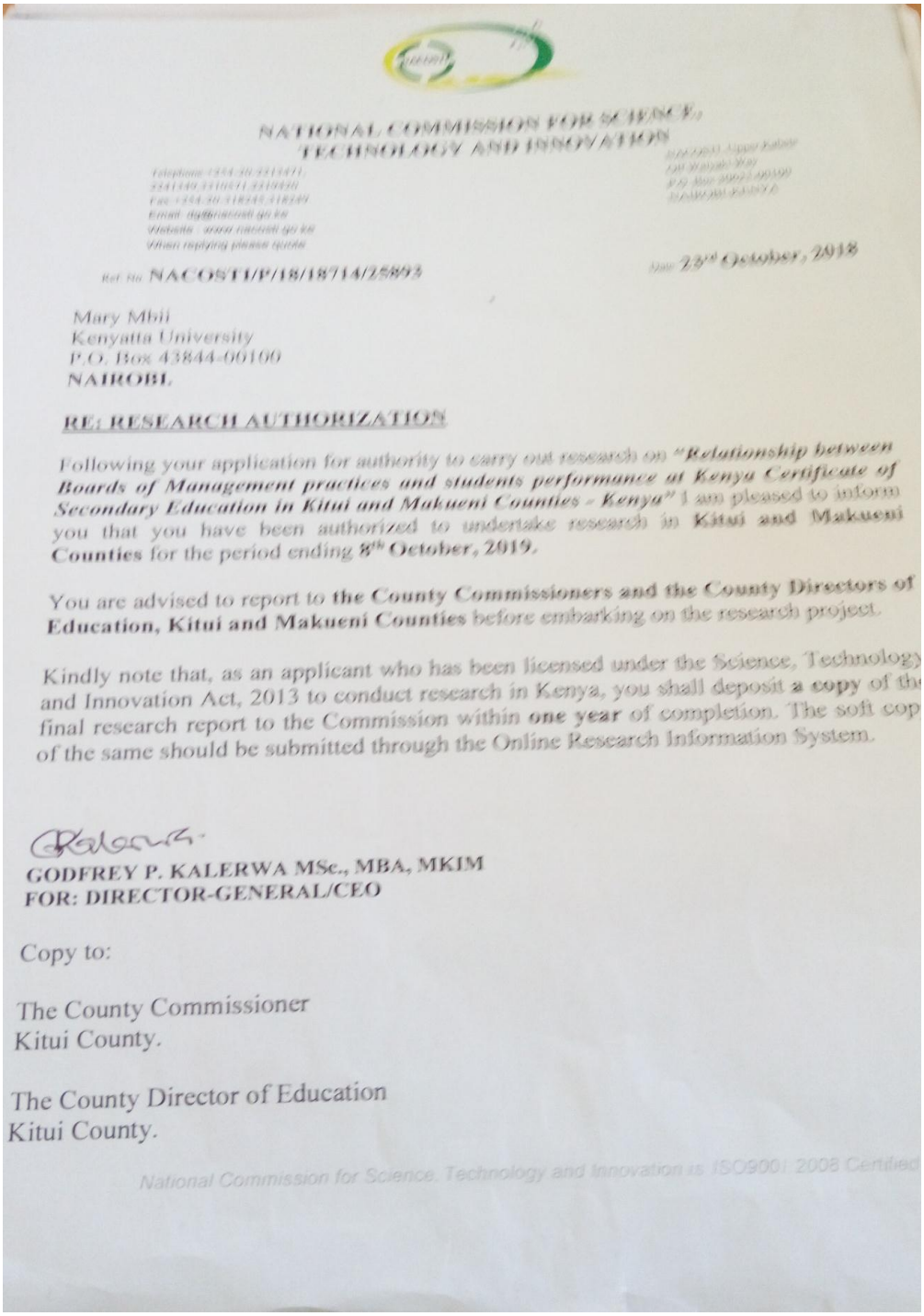
CONDITIONS: see back page

APPENDIX V

RESEARCH AUTHORIZATION FROM NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref No NACOSTI/P/18/18714/25893

Date 23rd October, 2018

Mary Mbii
Kenyatta University
P.O. Box 43844-00100
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Relationship between Boards of Management practices and students performance at Kenya Certificate of Secondary Education in Kitui and Makueni Counties - Kenya"* I am pleased to inform you that you have been authorized to undertake research in **Kitui and Makueni Counties** for the period ending **8th October, 2019.**

You are advised to report to **the County Commissioners and the County Directors of Education, Kitui and Makueni Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kitui County.

The County Director of Education
Kitui County.

National Commission for Science, Technology and Innovation is ISO9001: 2008 Certified