SCHOOL CLIMATE AS A DETERMINANT OF TEACHER PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KITUI COUNTY, KENYA

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DECLARATION

I declare that this thesis is my original work and has not been presented for a degree or any other award in any other university.

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APPROVAL BY SUPERVISORS

We confirm that the work reported in this thesis was carried out by the candidate under our supervision as university supervisors.

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DEDICATION

This thesis is dedicated to my late parents Jedida Ndeleva and Joseph Ndambo (rest in peace), my beloved husband Joseph Mang'uu, children Emily Nduku, Benjamin Ndambo, Esther Kanini and my grandson Shawn Ethan for their inspiration, support and encouragement to complete my doctoral studies.

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ABSTRACT

Any educational organization that wants to be successful must place a high priority on fostering a supportive school climate and raising the caliber of its faculty. Teachers in Kitui County have expressed concern about a hazardous learning environment. Despite the fact that studies on the school environment in Kenya have been conducted, none of them have gone into further detail about the connection between the school climate and failing teachers. A study of this kind was necessary as a result. The goal of this study in Kitui County was to determine how the school environment impacts teachers' productivity. The findings of this study may be helpful for secondary school administrators who want to improve the settings of their institutions. The aim of the variables included in this study was to explore the relationship between teacher academic success and school culture. The study's objectives were to: (1) ascertain the impact of easily accessible teaching and learning resources on teachers' performance in public secondary schools in Kitui County; (2) examine the impact of teaching workload on teachers' performance in public secondary schools in Kitui County; and (3) investigate the impact of principals' leadership styles on teachers' performance in Kitui County public secondary schools. and The purpose of this study is to look at how cooperation affects academic performance in the public secondary schools in Kitui County. This study used a mixed methods approach and descriptive survey research design to uncover and evaluate the viewpoint of teachers and the indicators of school environment, which were based on three motivational theories: the McGregor theory x and y, Maslow's Hierarchy of needs, and Hertzberg's two factor theory. Participants were 2417 instructors from Kitui County's 400 public secondary schools. A combination of random and systematic procedures were used to choose 488 instructors and 40 school administrators. A proportionate selection process was used to randomly choose 20% of the 2417 instructors from each sub-county. Due to this, a total of 528 respondents—40 administrators and 488 instructors—took part in the survey. To gather the data, principals and teachers were given interview schedules and questionnaires, and records were evaluated. We evaluated the validity of the instrument using factor analysis. Split-half reliability calculations were made for principal checklists and teacher surveys. A pilot project to assess research tools involved 25 educators and 5 administrators from Katulani sub-county. The reliability of the questionnaires and interview schedule was generally excellent (0.89 for the former and 0.8 for the latter). The data were analyzed using Pearson product-moment correlation since it offers a quantitative evaluation of the strength of a link between two variables. Both descriptive and inferential statistics were used in the analysis of the data. Descriptive statistics were presented using percentages, frequencies, and tabular presentations of the data, which were then analyzed in light of the study's objectives. The study discovered and concluded that there was a statistically significant correlation between teaching and learning resources, teachers' workload, principals' leadership, and teacher performance using Pearson Product Moment Correlation analysis. The study concluded that there was a link between the school climate and teachers' performance at the public secondary schools in Kitui County. The research advises administrators to provide enough instructional resources and balance teachers' workloads, especially with regard to assessments, in order to enhance the indicators of the school environment.

LIST OF ACRONYMS AND ABBREVIATIONS

AGR - Agriculture

AIDS - Acquired immune deficiency syndrome

ANOVA - Analysis of Variance

BST - Business studies

CBE - Curriculum based establishment

CED - County Director of Education

CHEM - Chemistry

COMP - Computer

CRE - Christian religious education

EFA - Education for All

E-MAIL - Electronic mail

EMIS - Education management information system

ERP - Enterprise, Resource, Planning

ETFO - Elementary teacher's federation of Ontario

HIS - History

HIV - Human immune deficiency virus

HOD - Head of department

ICT - Information communication technology

IPPS - Individual program plans

KIS - Kiswahili

KNUT - Kenya national union of teachers

KSA - Knowledge, Skills and Abilities

KUPPET	-	Kenya union of post primary education teachers
LDCS	-	Less developing countries
NCEA	-	New Zealand Council of Educational Achievement
NCTE	-	National council for teacher education
OECD	-	Organisation for Economic Co-operation and Development
PTR	-	Pupil Teacher Ratio
SEQIP	-	Secondary Education Quality Improvement Program
SIM	-	Simulation
SMT	-	School management team
STEM	-	Science Technology, Engineering and Mathematics
TSC	-	Teacher's service commission
UNESCO	-	United nation's educational scientific and cultural organization
USA	-	United States of America
WHO	-	World Health Organisation

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CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter gives a brief background of the study, statement of the problem, the purpose, objectives, assumptions and significance of the study; the scope, limitations, and delimitations.

1.2 Background to the study

School climate is a very important aspect to be considered in any learning institution since it influences the motivation of different stakeholders in academic performance. Baharuddin, (2021). Many people and civilizations have long seen education as the key to a brighter future. Ambrose (2010) contends that educational institutions must offer their staff members a happy workplace if they are to be successful. According to Maxwell (2017), one of the most crucial elements in both teacher effectiveness and student learning is a pleasant school environment. Since principals are charged with running the school, it is up to them to keep the classrooms happy and productive so that the teachers can do their jobs more effectively. "School climate" is defined by Adeogun and Olisaemeka (2011) as "the total of all characteristics of a school, including but not limited to the degree of interpersonal relationships among students, teachers, parents, and administrators and the state of the physical facilities." Bernadin and Russel (2010) described performance as the record of outcomes produced on a specified job function or activity during a specified period. In addition, Simanjuntak (2003) stated that performance is the level of achievement of results for implementing specific tasks. Muhammad Surya (, 2004) addresses several factors that affect teacher performance such as reward, safety, interpersonal relationship, working environment conditions and opportunities for self-development and improvement. The impact of school culture on educators' effectiveness, however, is a topic that merits attention on a worldwide scale. A learning crisis, according to the World Bank (2017), is present in poor and middle-income nations because education systems there place too much value on schooling itself at the expense of actual student learning. The America-Africa Institute (2015) made a similar point, arguing that despite increased access to secondary education, many pupils are failing to acquire even the most fundamental competencies.

Goal no. 4 of the Sustainable Development Goals (SDGs) 2016-2030, as documented by UNESCO (2017), calls for all nations to ensure that all of their citizens have access to a high-

quality education that is both equitable and inclusive, and to work toward expanding and improving opportunities for lifelong learning. Everyone has to be equipped with the knowledge, skills, and values of the twenty-first century in order to meet the problems of today and build a better tomorrow, as outlined by the Sustainable Development Goals (SDGs). In order to do this, schools must cultivate an environment conducive to learning. The problem of young unemployment, as well as issues of income disparity, access to quality education, and the acquisition of basic skills for social development, may all be effectively addressed through the promotion of lifelong learning (OECD, 2012).

Jepketer, (2017) opined that the skills that will confront today's world challenges will depend on the improvement of students' performance with the teacher being part of the process or pathway to learning and adds that the teacher can only play this role adequately if the school climate is appropriate and promotes student learning. Further, Global Monitoring Report (2016), shows that Sub – Saharan Africa investment in education has not fully translated to development of functional skills and knowledge that could transform economies of which they live in general and individuals in particular.

As demonstrated by Weathers (2011), a positive school climate fosters a risk-free learning environment, positive peer dynamics, enthusiastic participation in class, and higher quality output. Teachers and principals have been given the duty of seeing to it that their pupils do well academically. A principal can nonetheless raise teachers' productivity even with limited means. The school's climate affects both the internal and exterior settings, which in turn affects teacher productivity and student learning. The term "school climate" is used to describe the overall atmosphere of a given institution. It is grounded on the commonalities of norms, objectives, values, interpersonal relationships, pedagogical methods, and institutional frameworks that students, parents, and educators bring to their experiences in school (Cohen & Ice, 2013). Human resources, instruction, administration, public relations, accounting, management, control, and guidance are all essential components of every educational institution.

Physical, social, and intellectual components are all recognized by the vast majority of studies. Physical factors include things like the cleanliness of the school and its facilities, the number

of pupils and teachers, the layout of the facility, and the accessibility of necessary materials (Cohen J, 2012). The social dimension encompasses the level of competitiveness, social comparisons among students, and the extent to which students and instructors are involved in decision-making at the school, as well as the quality of interpersonal connections between and among students, teachers, and support staff. The academic component is giving children what they need to succeed, holding teachers accountable for their students' growth, keeping parents and students up-to-date on their development (Cohen & Geier, 2010). Teacher performance may be thought of as the level to which educators are involved in their jobs, feel like they have a voice in important decisions, have access to useful tools for teaching and learning, are recognized for their efforts, and are compensated for them (Webb, 2014). Feedback, instructor class attendance, and student discipline are only a few of the measures of teacher performance.

Staff performance affects the school in measurable ways, including student performance on high-stakes testing and school climate, according to a study conducted in the United States on improving school morale in light of increased teacher responsibilities, high-stakes testing, and reduced school funding (Kristina, 2011). According to the research, principals are the most influential members of the school community, and as such, they should advocate for teachers, help them create positive relationships with their students, and provide them room to use professional discretion in the classroom. Angeline's (2010) research on the factors that lead to primary schools making AYP found that teachers may have a significant influence on their students' academic growth and highlighted the need of boosting teacher motivation to boost student achievement. Teachers' productivity was shown to be affected by the general atmosphere of the school.

The atmosphere of an organization has its own particular flavor and has its own particular effect on people. The results of a study conducted by Selamat, Samsu, and Kamalu (2013) found that

the environment of the workplace had a substantial influence on the performance of instructors. Researchers observed that teachers' work performance was significantly influenced by the principal's leadership style. Educators from across Botswana, Malawi, and Uganda were polled on whether or not they agreed with the statement "teacher performance at their school was high" as part of a larger research examining the effect of the AIDS pandemic on schools in those countries. According to the results, both Botswana and Uganda have relatively excellent performance, whereas in Malawi, particularly in basic schools, problems have been identified due to teachers' poor output (Benn, 2002; Hyde & Swainson, 2004).

A small-scale examination of secondary schools in Lusaka, Zambia, found that teacher performance also varied considerably between schools in the same area. When broken down by how teachers' supervisors rated them, 44% received a high rating, 22% received an average rating, and 33% received a poor rating. Working with students was also shown to be the most important factor in teacher satisfaction. Conclusions included that teachers were most dissatisfied with work overload, inadequate income, and low status, but that the fulfilling aspect of the job was the key motivator for entering the profession. It is commonly held that a person's prospects for a happier, more successful life greatly improve with formal education (Republic of Kenya, 2011).

Teachers who acted as role models in maintaining discipline among girls and the school environment influenced girls' performance, according to a study by Mutia (2018) on administrative factors influencing performance of girls in Kenya Certificate of Secondary Education in mixed day secondary schools in Nzambani Sub- County, Kitui County, Kenya. As a result, the study suggested that school heads make available more facilities and supplies to their female students in order to boost their scores on the Kenya Certificate of Secondary Education test (KCSE). It also suggested that the Instructors' Service Commission provide

schools with more female teachers to serve as role models for the girls. The study also suggested that in order to boost the performance of female students, the management of the school should work to create a more welcoming atmosphere for female students. As a result, study demonstrated that the school environment affects both teacher effectiveness and student learning outcomes.

Based on the results of these studies, it is clear that the relationship between school atmosphere and teachers' effectiveness has received little attention from researchers. Few studies were found that looked at the correlation between school environment and teacher effectiveness in Kenya, and even fewer that focused on Kitui County. Kitui county educators are worried about the state of secondary education in particular. Inadequate materials, heavy workloads, poor leadership from the principal, and a general lack of collaboration were all highlighted as major problems. A number of instructors were said to be absent from the classroom, while others showed up to work late or inebriated. Other educators showed up to class grudgingly and frequently ran late. Teachers were seen leaving the building hastily after the last bell rung. Consequently, this research was necessary to understand the factors that led to such conduct and why educators were reluctant to remain on school grounds to fulfill their professional obligations. With rising expectations for a high-quality education and a steadily decreasing supply of qualified educators, this might help bridge a critical knowledge gap. In order to keep good teachers on staff, it is crucial to cultivate an encouraging environment at school. In order to close the existing knowledge gap, this study will focus on four indicators of school climate: teachers' workload, principals' leadership styles, students' willingness to work together, and the quality of available teaching and learning resources.

Any educational institution that wants to excel must pay close attention to school culture and the quality of its teaching staff. There are several quantifiable outcomes that may be traced

back to the school's atmosphere, including student accomplishment and teacher productivity. The school environment in which teachers are able to perform at their best requires that obstacles be removed on purpose. Taking action to improve teachers' performance can have a positive effect on student behavior, school morale, and test scores on the Kenya Certificate of Secondary Education.

Kitui County educators have voiced some worries about the state of secondary school education. There were a number of major concerns voiced, including low KCSE results (as evidenced by schools like Kalitini Secondary and Kanyangi Girls, which received mean scores of 3.78 and 4.38, respectively; Kitui County Education offices, 2019), a lack of adequate teaching and learning resources, excessive teaching loads, ineffective leadership from the principal, and a general lack of teamwork. A number of teachers were said to be absent from the classroom, while others showed up to work late or inebriated. Other educators showed up to class grudgingly or late regularly. Teachers were seen leaving the building hastily after the final bell rang. This study was necessary because it sought to understand the factors that contributed to teachers' unwillingness to remain on school grounds while on duty. Once more, it was important to identify the causes of poor outcomes in some educational institutions. With rising expectations for a high-quality education and a steadily decreasing supply of qualified educators, this could help bridge a critical knowledge gap.

Educators in Kitui County, Kenya's secondary schools struggle to keep up with students' needs because of a wide variety of obstacles. Overburdening workload, insufficient resources, poor relationships between principals and teachers, and a lack of teamwork are the most critical issues. These create an unfavorable environment, which can have an impact on how well teachers do their jobs. The high rate of absenteeism among Kitui County's teaching staff is a major cause for concern. The latter could be due to an unwelcoming environment at school.

Despite this, the research literature on school climate and teacher performance in Kitui County was found to be lacking, prompting the current investigation.

1.3 Statement of the problem

A growing body of empirical studies show that positive school climate is associated with, and can be predicted on academic achievement, reduced incidences of violence in schools, students' healthy development and teacher retention. For this to be achieved, the principal and teachers must play their roles adequately. Teachers' role has an essential effect in the teaching and learning process since performance is highly pegged on them for better students' achievement and implementation of specific tasks. Negative school climate is associated with negative outcomes for students and has been shown to result to harmful behaviour and low achievement. Neglecting to purposely address issues related to school climate and teacher performance might lead to missed opportunities for students' success and well-being.

The teaching and learning processes mostly occur in the classroom environment which is an important aspect of the school climate. The aspects of a classroom environment can affect student motivation either positively or negatively. Students who are more motivated put more effort into learning activities which leads to high performance. Teacher is entrusted with a responsibility of building positive relations, arranging the physical environment, setting high academic expectations, providing positive reinforcement, being open to feedback, encouraging collaboration and using current curriculum and teaching methods among others. This can be achieved if a favourable school climate is provided under good leadership and governance by the school principal in collaboration with teachers. An unduly stressful and unfavourable school climate erodes job satisfaction and morale, driving a number of teachers out of profession.

The physical aspects of a school climate have a direct bearing on teachers' productivity, performance, health, safety, comfort, concentration satisfaction and morale. Teachers in Kitui county have expressed dissatisfaction in their school climates which has led to poor teacher performance in some schools and hence low student achievement as indicated in the results of the last 3 years in Kitui county. (Appendix VI) The following data from some sampled schools is evident of poor performance by students in KCSE. Yambyu girls (extra county) 4.700(2020),4.520(2019) and 4.250(2018) and the mean was 4.49.Kauma secondary(county) displayed the following mean scores for 3 consecutive years:4.954(2020),4.691(2019) and 4.088(2018)The mean score was 4.58.Finally Usueni (county) showed the following results 4.050(2020),3.295(2019) and 4.490 (2018) and the mean score was 3.95.In view of the foregoing there was need to carry out this study and find out whether there was any relationship between school climate and teacher performance which had a direct bearing on students achievement and performance.

1.3 Purpose of the study

The purpose of this study was to examine the effects of school climate on teacher performance in public secondary schools in Kitui County.

1.4 Objectives of the study

The following statements guided this study:

1. To establish the effects of availability of teaching and learning resources on teacher performance in public secondary schools in Kitui County.
2. To examine the effects of teaching workload on teacher performance in public secondary schools in Kitui County.
3. To investigate the effects of principal's leadership behaviour on teacher performance in public secondary schools in Kitui County.

4. To find out the effects of teamwork on teacher performance in public secondary schools in Kitui County.

1.5. Null Hypothesis

The following null hypotheses were used in this study:

H_{01}. In Kitui County, public secondary school teachers' effectiveness is not correlated with the availability of classroom materials.

H_{02}. In Kitui County's public secondary schools, there is no correlation between teachers' workload and

H_{03}. There is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County

H_{04}. There is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County

1.6 Significance of the study

The study is expected to help principals in secondary schools to improve their school climates and create conducive teaching / learning environments. The study may further outline the indicators of administrative support offered by secondary school principals to accomplish workable climates within the school on teacher performance.

It is also expected to help the head teachers to develop positive interpersonal relationships and collaborative support networks in the school system and community for the purpose of delivering effective learning environment. This is expected to motivate the teachers and enhance their content delivery which will in turn improve student performance in public secondary schools.

The study is expected to form a basis for further academic research on determinants of successful organizational performance in public secondary schools in Kenya.

1.7 Limitations of the study

The study noted the following limitations:

(i) Unwillingness of respondents to provide information due to their attitude. In other instances, principals were not available to give their responses. To counter this challenge, the researcher assured the respondents that confidentiality would be upheld. The researcher also persisted whenever a principal was not available and visited the school several times in a bid to get the principal's response. The research also requested the principals to encourage the selected teachers within their schools to participate in the survey.

(ii) The tendency of the respondents to enquire from each other before providing information, thus the tendency of data collected being similar. To counter this limitation, the questionnaires were administered to individuals as opposed to groups. The researcher also encouraged the respondents to fill and hand back the questionnaires within the shortest time possible. The researcher also informed respondents the purpose of the study as well as the need to be honest.

1.8 Delimitations of the study

This study delimited itself to a fraction of 528 informants (composed of high school principals and teachers) who were sampled from each sub-county in Kitui County whose findings could be generalized to the whole county of Kitui. These were selected out due to their expert knowledge of the subject and standing in the industry. This study examined secondary schools in Kenya's Kitui County to see how the setting impacted teachers' output. Private secondary schools were not included in the study since they get constant funding.

1.9 Assumptions of the study

Assumptions are those things we take for granted in the study. They are statements by the researcher that certain elements of the research are understood to be true.

The study faced the following assumptions:

I. That the theoretical framework is an accurate reflection of the phenomena being studied (school climate)

II. That the respondents would be sincere and frank while answering the questionnaires

to the items in the questionnaires and interview schedule

1.10 Operational definition of terms

Determinant – For this study, it means a factor that decisively affects the outcome of teacher performance

School climate- In the context of this research, "school climate" refers to the overall atmosphere and tone of student life. Physical, social, and academic dimensions are all part of it, but in the context of this research, it refers specifically to things like classroom supplies, administrative support, student-teacher ratios, and principals' styles of management. In this study, aspects such as safety, teaching and learning institutional environment and interpersonal relationships contributes to improved academic outcomes of the students.

Availability of resources - For this study, it refers to physical facilities, laptops, printers, modems and flash disks and other storage facilities, vehicles, photocopiers and binders' laboratories, classrooms and textbooks among others. For this study human resources referred to employees such as teaching and non-teaching staff.

Teaching resources - For this study, it refers to teaching aids, charts teachers guide, real objects videos projectors, pictures, flip charts that aid in teaching

Learning resource - For this study, it refers to textbooks, videos, software, laptops, computers and other materials that teachers use to assist students to meet the expectations for learning.

Teamwork - in this study it refers to doing tasks collaboratively through communication in order to improve efficiency and effectiveness in an institution.

Teacher's workload - refers to the number of lessons that a teacher teaches per week along other duties such as guidance and counselling, attending staff and departmental meeting, disciplinary meetings and special occasions in schools.co-curricular activities are also part of the teacher's workload.

Principal's leadership behaviour - in this study entails administrative support, leadership style, recognition for teachers, personal growth and development.

Secondary school - is a school which provides education typically between the age of 11-16, after primary school and before higher education.

Teacher performance – It is the ability of a teacher to carry out instructional activities such as lesson planning or preparing, giving examination feedback and evaluation of teaching. But for this study it means lesson preparation, KCSE performance(feedback) and student's achievement.

Public secondary schools - These are schools which are government aided and are run under the guidelines of the ministry of education. But for this study these are schools whose school climate is going to be researched in order to find out how teachers perform.

A principal - is the formal head of the school organization and is the leader of a school community which is made up of students, teachers, subordinate staff and parents.

Autocratic / directive leadership - refers to autocratic behaviours where the principal makes decisions for the staff without consultation

Leadership behaviour - approach adopted by the principal to deal with situational demands in handling matters in public secondary schools

1.11 Organization of the study

The study was divided into five chapters. Chapter one consisted of overview of the study, background of the study which has related studies on the indicators of school climate and shall include, availability of teaching and learning resources, teacher workload, teamwork and principal's leadership behaviour. It highlights on statement of the problem, purpose of the study, research objectives and research hypothesis, significance of the study, limitations, assumptions of the study, definition of terms and the organization of the study.

Chapter two focused on literature review and has introduction, related literature on school climate on teacher performance, theoretical and conceptual framework.

Chapter three focused on the research methodology and it has an introduction, research design, target population, sample size and sampling technique research instruments, data collection procedures and data analysis techniques.

Chapter four consisted of data analysis and interpretation of findings.

Chapter five contained the summary of the research findings, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of literature that was informed by the following study objectives: school environment; teacher performance; availability of teaching and learning resources; teacher workload; principals' leadership behaviour; and teacher performance; and collaboration and teacher performance. The theoretical framework underpinning the study was specified and a conceptual framework that illustrated the variable interrelationships was provided.

2.2 School climate

Positive school atmosphere is an important factor in student achievement. Internal and external factors combine to produce a wide range of climatic conditions at educational institutions. The principle, as the school's top administrator, plays a crucial role in fostering a positive learning environment. Homana, Barber, and Torney-Purta (2006) state that "school climate" describes the overall qualities and environment of a school. Consists of the principal's leadership style, past experiences, and the school's routines and climate of safety (Adeyemi, 2004). Getzel (2003) also noted that instructors are essential to the success of the school and the development of the kids. Autocratic leadership from a school's principal, on the other hand, is associated with a less-than-desirable school atmosphere, one in which both children and teachers feel unsafe.

Different studies carried out on school climate have shown varying results .A study carried out by Escalante, M.N, Fernanolez Z, A, Goni P, E, Izar-de-la F, D & Cerio, L (2021) on school climate and perceived academic performance: Direct or Resilience-Mediated Relationship

revealed that the model of choice is that of partial mediation: the resilience mediates the relationship between two specific aspects of the school climate (peer relationship and teachers' ability to motivate) and perceived academic performance. These findings highlight on the importance of checking on variables and especially the content in which the subject interacts with the role of the teacher being observed keenly. Additionally, to promote the development of resilience due to the importance it has on the perception that students have about their school performance.

Another study conducted by Wentzel and Watkins, (2002) opined that the management of school climate entails that application of techniques and expertise of efficient organization, planning, direction and controls to the operations of the school, its students, teachers and immediate environment. The efficiency of a school system depends to a large extent on how human and material resources are mobilized and effectively utilized within a conducive environment to enhance teacher's job performance.

Empirically, grounded school climate research began in the1950s, when Hapin and Croft (1963) initiated a tradition of systemically studying the impact of school climate on student learning and development. Early systematic studies of school climate were also spurred by organizational research and studies in school effectiveness. The National School Climate Centre defines school climate as the quality and character of school life that is based on the patterns of students, parents and school personnel's experience of school life. The teaching approaches, administrative policies, and social conventions all contribute to the overall school environment.

Several distinct sorts of educational environments are explained below. Resources, teacher workload, team building, principals' leadership behavior, administrative support, communication, interpersonal interactions, and organizational structures are the markers of

school climate for this analysis. Ten secondary schools in Lagos State, Nigeria, were studied by Adeogun and Olisaemeka (2011) to establish the connection between school environment, student accomplishment, and teacher productivity for long-term progress. The results of their research showed that school environment has a significant impact on student achievement and teacher output. They also discovered a link between school climate and performance, highlighting the need of creating a supportive learning environment in schools for long-term growth.

Academic achievement showed the extent to which a student, teacher or an institution has attained their short- or long-term educational goals. According to research conducted at Australia's Newcastle University by Maxwell (2017), titled "The Impact of School Climate and School Identification on Academic Achievement," both students and teachers have a substantial role in shaping students' performance in the classroom. Students' perceptions of the school's atmosphere were shown to have a major impact on how they felt about their school, whereas teachers' feelings about their own school played a far less significance.

Another study conducted by Greenway (2017) on the relationship between school climate and student Achievement showed that there is statistically significant relationship between school climate and student achievement in middle schools in the region. Discussion and implications of the findings suggested that there was need to implement the required changes for the school. Hence if the right climate is practiced in a school, it may enhance teacher performance.

Being aware of students perception towards performance in KCSE is crucial since it enables the teacher to help the students and facilitate the need to have a healthy environment for learning .Gun Bayi, I (2007) in his study on school climate and teacher perception on climate factors: Research into nine urban High schools found that all teachers reported open climate in relation to the factors of team commitment, organisational clarity and standards, intimacy and

support, autonomy, member conflict, medium climate in relation to the factors of risk and in reward. Additionally, teachers of art, music and physical Education reported higher open school climate than others.

There is a dearth of research on school atmosphere and teacher performance, particularly in Kitui County, despite the fact that a number of studies have been conducted on the topic (Thomson, 2005; Allen, 2003; Volkwelin & Zhou, 2005; Johnsrud, Heck, & Rosser, 2000). There are six distinct forms of workplace atmosphere, as described by Halpin (1967). He categorized them as either open or closed, independent or managed, authoritative or friendly.

An open environment has low levels of disengagement and obstruction, as well as high levels of closeness, morale, and concern. Being considerate means recognizing employees as people and treating them accordingly. The term "open atmosphere" is used to characterize how genuine and honest communication is between the administrator, instructors, students, and parents. According to Hoy & Sabo (1998), an open atmosphere is a reflection of the principal's and teachers' willingness to work together, encourage one another, and be receptive to one another's ideas and efforts. The principal cares about the teachers, inspires and supports them, lets them perform their jobs as they see fit, and doesn't get in the way of their teaching obligations in any manner. They treat one another with professional and personal concern, respect, and assistance (Halpin, 1966). Every educator appreciates working in such an open and honest environment.

A closed climate is the second type. There is a significant amount of apathy, obstruction, morale, and carelessness. One of the most prominent features of such an environment is a general lack of dedication and/or productivity. A strict and domineering principal who is uncaring, unhelpful, and unresponsive. There is widespread dissatisfaction among the faculty and administration. This leads to widespread dissatisfaction and a lack of respect for the

principal (Silver 1983; Halpin 1966; Costley & Todd 1987; Hoy & Sabo 1993). (1998). Teachers are less effective or efficient in this setting (Raza & Shah, 2010).

The third kind, an independent environment, gives educators unrestricted time and space to study whatever interests them. The drive and passion of the main prototype. Everyone, from instructors to students, is content. There is no danger or outside influence. Both teachers and students have a strong drive to succeed academically. The principal, despite her tireless efforts, is rather distant. The term "aloofness" is used to describe the relationship between a principal and their staff.

The regulated climate, the fourth type, is less open than either the open or the autonomous environment. There is a culture of accomplishment that prioritizes individual success over meeting community needs. While some employees may have real, warm relationships with one another, most people in the workplace live in relative solitude. Everyone works hard, yet there is little time for socializing. The principal is quite authoritarian; she is cold and uncaring. Issues that arise in the private lives of employees are not prioritized. The workplace has become more result-oriented and authoritarian. Rather of delegating authority, he or she takes on all of the duties necessary to keep the institution running well. The parental atmosphere is the fifth type of environment. To put it another way, it's characterized by a lack of coldness. Despite his or her best efforts, the principal is often ineffectual in the classroom. Teachers do not get along well with one another, and he takes a more authoritarian approach. The principal and the instructors have a tight relationship, yet the principal has unreasonable expectations of the teachers.

The familiar climate is the sixth kind. The environment represents a carefree, do-what-you-please attitude. The teacher in charge seems more concerned with keeping the peace than getting any real work done. The vast of educators aren't really invested in their main role. Even within the dedicated staff, there are others who feel alienated by the principal's management

style because they disagree with her and her colleagues. Those who aren't fully invested in something often band together with others who share their apathy. Because of the principal's and teachers' close relationship, school performance has declined. The principal is a caring individual, but she does not place a high value on student achievement. Staff cooperation is low, and his actions run counter to school goals (Aderounmu et al., 1988; Downey et al., 1995). Thus, the aforementioned atmosphere affects instructors' output since it impacts teachers' morale.

Academic achievement is almost entirely measured with grades (by course or assignment) that is formative and summative assessment that enables a learner to move from one grade to another progressively. Further, Wei, Darling – Hammond, Andree, Richardson & Orphanos (2009) confirmed that in order for children to reach high levels of accomplishment, instructors must have in-depth subject knowledge, higher order teaching abilities, engage in professional development, and see improvements in academic performance in schools. Effective classroom management, classroom climate, professional behaviours, and teacher beliefs are among the factors with the strongest evidence that contribute to teaching effectiveness and increase performance in students and teachers, according to a study by Coe, Aloisi, Higgins, and Major (2014). Another study by Raza, A.S., Mehr, P., and Shah, A. (201O), On Impact of Organizational Climate on Performance of College Teachers, found that these factors also play a role. The study therefore recommended that teachers may be given chances to discuss their academic problems in groups, seminars and conferences. In addition, the study recommended that performance of teachers can be increased by promoting open as well as controlled climates and avoiding closed climates. These climates are important in that they may contribute to conducive school environment which influences both teachers and students' performance. They may be implemented through administrative policy and measures in order to enhance teacher performance in schools.

2.2.1 Teacher performance

Teachers and the interplay between internal and external influences are crucial to the success of a country's educational system, which is why they play such an important role in society. A positive school atmosphere and happy educators are crucial to the success and consistency of any school (Wentzel & Watkins, 2002). Research synthesis looks at how teacher effectiveness is currently assessed, as pointed out by Goe, L., Bell, C., and Little, O. (2008) in their study on approaches to evaluating teacher effectiveness. Policy implications are discussed with the findings. Bernardin and Russel, 2010 further categorize how different measures have now been reviewed, explain why different measures are best for different purposes (such as high stakes evaluation vs. formative evaluation), and suggest how the results of the research might be utilized to inform the National discourse about instructional leadership.

Student and instructor qualities, as well as the nature of the school's physical space and available instructional materials, all interact to determine students' academic outcomes. Always favourable results are achieved if the contact is positive, but negative interactions lead to declining results (Akram, M 2014). Pajare (2002) found that school infrastructure and resources might have a significant impact on student achievement in secondary education.

Evaluating teacher performance entails the formal process that a school uses to review and rate teachers’ performance and effectiveness in the classroom. The findings from these evaluations are used to provide feedback to teachers and guide their professional development. According to Sawchuk (2015), measuring teachers' effectiveness first became common practice in the 1990s in industrialized nations.

In an effort to establish a connection between teacher assessment and student growth, Stronge and Tucker (2005) performed a research in Dallas, Texas, USA. According to the results of the study, a significant drop in student performance was seen when high-achieving pupils were

paired with low-performing teachers. Here, low-performing educators were characterized by high absenteeism and turnover, classroom misbehavior, and tardiness in reporting for work.

Most principals in Entebbe Municipality were not familiar with their own or their teachers' job descriptions, according to a research conducted by Baregeya (2009). This study aimed to determine how general and institutional supervision methods of principals affected teachers' performance on the job. Educators are tasked with a wide variety of responsibilities designed to impact their pupils' academic performance. Every student deserves to have access to engaging lessons and stimulating classroom discussions, and effective performance and growth in schools facilitates the continual development of educators to that end. Teacher effectiveness is measured by student achievement on the Kenya Certificate of Secondary Education Exam (KCSE), as well as by parent and student comments, classroom participation, and student behavior. Absenteeism, poor time management, high stress levels, teacher turnover, and substance misuse are all symptoms of a demotivated teaching staff (Raza 2010, Thapa & Cohen, 2013).

The quality of the teaching staff is universally recognized as a critical factor in students' achievement, but there is less consensus on how a teacher's presence affects the atmosphere in the classroom. The entire variance in teacher quality is believed to be a function of the depreciation rate of student learning, which Hanushek (2011) analyzes in terms of its monetary worth. Educator effectiveness may be measured by looking at factors including years of experience, salary, and certification. Neal's (2011) perspective on how educators process student performance data is insightful. A teacher divides his or her time between a variety of responsibilities, including advising pupils and administering regular assessments for formative evaluation. The quantity and quality of a teacher's training is a good place to start when evaluating their competence in the classroom. Improved training for educators does not have a

major impact on student outcomes. Teachers' pay in the United States are heavily influenced by their level of education and years of experience in the field.

It is also crucial to provide appropriate chances for in – service training for instructors. Teachers are unable to develop their expertise beyond the foundation laid by their pre-service education because of a lack of suitable in-service training opportunities (Republic of Kenya, 2013). Fewer advancement prospects mean fewer ways to reward and inspire educators (UNESCO, 2002).

Another study by Yusuf, F.Z (2020) on the effects of school climate and teacher self-efficacy on job satisfaction mostly STEM teachers: a structural multi-group invariance approach showed that there is a strong direct impact of school climate of teacher self-efficacy on job satisfaction and a mediating effect of teacher self-efficacy between school climate and job satisfaction.

2.3 Influence of readily available educational materials on classroom efficiency

A significant portion of the large gap in secondary school academic achievement can be attributed to differences in instructional resources (Kuria 2015). According to Gitonga (2014), textbooks and other forms of audiovisual teaching aids are crucial to quality instruction. The use of technology in the classroom, such as laptops and textbooks, may have both beneficial and bad effects on instructors' effectiveness. The capacity of teachers to deliver high-quality instruction is influenced by their working environment. Teacher effectiveness is affected by a number of factors, including the ease of access to textbooks and other learning resources and the amount of work required of them (Akram, 2014). It is important to properly prepare and analyze a teaching tool before implementing it in the classroom. This places responsibility on the educator. Space and equipment are also crucial factors in the success of any educational program (Osarenren & Osaghae, 2012). Teachers may be less effective if they don't have access

to these materials, as stated by a 2010 article by Rochelle, Shechtman, Tatar, Hegedus, Hopkins, and Empson.

The role of resources is to provide a source of learning experience for learners which facilitates the process of interaction between students and teachers during the teaching learning process. Further, it helps the students to learn and increase their experience meeting different learning needs .These resources also makes learning real and meaningful to the learners .Ambugo, M.M(2012 conducted a study on the relationship between availability of teaching/learning resources and performance in secondary school science subjects in Eldoret Municipality and found that availability of textbooks, revision books, laboratory chemicals and equipment was higher in the high performing schools than in low performing schools. The findings showed that 2 out of 7 low performing schools did not have a laboratory. Hence all the 5 low performing schools that had a laboratory lacked laboratory technicians and only one of them was fully equipped. In addition, none of the low performing schools had a library and all the teaching and learning resources between the high performing schools had more than one laboratory. Consequently, there were differences in availability of teaching and learning resources in the high performing and low performing schools. Therefore, the study recommended that the ministry of Education should initiate more training programmes on the provision, improvisation and utilization of teaching and learning resources. Further, it should also help in the ongoing programmes like SMASSE among others.

Instructional materials are essential tools in learning every subject in the school curriculum. They allow the students to interact with words, symbols and different ideas in ways that develop their abilities in reading, listening, solving, viewing, thinking, speaking, writing, using media and technology. (Digital Literacy Skills). A study carried out by John, L.T (2016) on the role of instructional materials in academic performance in community secondary schools in Rombo

District revealed that instructional materials are the key to teachers and students' performance. It also showed that most community secondary schools in Rombo District suffer shortage of essential teaching and learning materials, teachers used different strategies to minimize the challenges of attaining and using quality instructional materials like borrowing books and improvisation. The study recommended that the government should budget sufficient funds for improving the availability of instructional materials in all secondary schools. These findings are important i8n that they may have a relationship in the findings of this study.

In another study on teaching and learning resources availability and teacher's effective classroom management and content delivery in secondary schools in Huye district, Rwanda by Bizimana (2014), the findings found that the level of teaching and learning resources in the study locale was insufficient hence compromising the effectiveness of classroom management and content delivery. There was a positive and significant correlation between most of the teaching and learning resources and level of classroom management and content delivery ($r=0.711$, $p<.001$) at 0.05 level of statistical significance.

The purpose of teaching / learning resources is to make lessons interesting, easy to learn and enable teachers' to easily express concepts. Learning materials can significantly increase learners' achievement by supporting learning. They help to bring out memorable and captivating lessons to the learners. A study conducted by Dr Joshua, G.M, Nyawara, C.& Kosgey, J. (2017) On teaching and learning resources implications on availability and use in the performance of English language in Kenya found that most pupils had limited /insufficient access to learning materials, most teachers are overloaded and lack English language specialization. Hence the government of Kenya should ensure that pupils have sufficient learning materials in order to enhance good performance.

Another study carried out by Monicah, N, Peter K, & Esther, M (2020) On the influence of teaching and learning materials availability on the development of upper primary schools in Karuga zone, Gilgil sub-county showed that teaching and learning materials availability ($r=0.652$, $p-<0.001$) has a positive and statistically significant influence on the development of pupils in upper primary. The study recommended that the government of Kenya through the ministry of Education should improve on the availability of teaching and learning resources in public primary schools to enhance optimal development of the pupils.

Teaching and learning are facilitated by the availability of teaching/learning materials, which also serve to incentivize educators. Hoop (2010) found that several nations in sub-Saharan Africa suffered from persistent shortages of both material and human resources, suggesting that this was not the case. Hoop claims that governments often favor a few number of secondary schools with the majority of funding, with the majority of secondary schools being in the country's major cities. This practice often means that schools in the country's rural areas are overlooked (Hoop, 2010). Paul & Bennell (2004) conducted research on teacher motivation and incentives in sub-Saharan Africa and Asia, and they concluded that additional work was needed in this area for human resource development.

Classroom resources are things that instructors can utilize in the classroom to facilitate student learning and growth. These resources serve as a roadmap for both the educator and the pupil, and they provide a helpful pattern for the classroom. Kurdziolek's (2011) research on Virginia classroom resources and their influence on student learning found that resources themselves are not self-enacting, meaning that they do not make change inevitable, and that variations in their impacts depend on variations in their usage (Cohen, Raudenbush & Ball, 2002; Grubb, 2008). Teachers, students, materials, and the physical space itself all contribute to the school's atmosphere, which in turn shapes the nature of classroom education. According to another

study conducted across four districts in Uganda (Madina, Wokadala, & Bategeka, 2010), expanding access to educational materials is not the most pressing need if we want to raise standards in Uganda's public elementary schools.

It turns out that having more materials to use in the classroom really hurts student learning. This indicates that schools may be prioritizing the availability of teaching resources over the quality of education they provide. The report urged the education ministry to place a greater emphasis on teacher monitoring and to require educators to fulfill their responsibilities while also using learner-centered approaches to the classroom. This necessitates allocating more resources into monitoring classroom instruction and inspecting schools. Therefore, this study suggests that rather than being primarily influenced by resources, teaching and learning are influenced by the techniques that are used. As pointed out by Sheu and Ijayai (2016), the success or failure of a country's educational system is tied to the number and quality of resources available to teachers and students. This demonstrates the critical importance of instructional materials, particularly for classroom instructors, in influencing student achievement.

In order for learning and teaching to take place, it is crucial that both teachers and students have access to reliable reference resources. Textbooks, sets of books, instructors' manuals, dictionaries, encyclopedias, atlases, models, field excursions, charts, calculators, computers, the internet, and field trips are all examples of possible teaching and learning tools. Both the instructor and the student benefit from these tools since they allow the student to work independently and access useful reference information. The papers guarantee that the execution of the curriculum is well-planned and organized, leading to better results from both the teachers and the pupils (Ngure, 2012).

Job dedication and contentment on the job are two indicators of a teacher's effectiveness in the classroom. In their study of the relationship between school climate and teacher performance, Faislat and Kola (2013) of Lagos, Nigeria found that factors such as classroom size, leadership style, motivational strategies, and teacher morale all played a role in influencing educators' ability to do their jobs effectively. It is widely accepted that for a long time, low teacher motivation has negatively impacted student achievement in Kenya (Kimundo, 2012). Jackson (1997) claims that teachers' lack of motivation shows up in a variety of ways: they don't want to be involved in school activities, they don't show up to class on time, they miss days unexpectedly, they don't seek out professional development opportunities, they don't use engaging or innovative methods in the classroom, they don't care about attending meetings, they aren't helpful when they could be, they miss deadlines, they don't go above and beyond what's expected of them, and so

Extrinsic aspects of a job, such as working conditions, relationships with peers and subordinates, compensation and perks, job stability, and so on, are what Herzberg called hygiene factors (sometimes called dissatisfiers). Hygiene considerations are highlighted by Ndani & Elishaba (2010), who reference research from Howes, Smith & Clanlinsky (1995), Love, Ryre & Faddis (1992), and Essa (2003). Researchers found that pre-school teachers' emotional and social development improved when their "hygiene" demands were met. Teachers in these studies responded well to students' needs, praised their efforts, and resorted to less severe forms of discipline. Children improved in areas such as cognition, language, and socialization as a result of these healthy emotional modifications. Children's behavioral issues decreased, and they developed social skills. These favorable results for kids underline the importance of inspiring educators by furnishing them with adequate tools for the classroom.

People attribute a lack of motivation to a number of external causes, including their immediate social and physical work environment and the incentives they receive from their instructors. Large class sizes, multiple shifts, living in a remote area, having a high level of education, and having involved parents are all factors that Muchaelowa (2002) cites as important in keeping teachers inspired. Microsystems are what Black and Pukett (1996) refer to as the factors here.

According to Ndani & Elishaba (2010), the Microsystems are made up of the personal qualities of teachers, other caregivers and peers therein, as well as the quality of the physical environment to which the child is exposed. They also comprise of the activities, roles and interpersonal relationships experienced by the developing person, all of which have an influence on children's development. However, "evidence bound that the teacher is the most important single factor in determining what a school experience will be like for children" (Read, Gardner & Mahler, 1993*).*

As a result, it was crucial to design secondary schools with environments that encouraged teachers to engage in constructive dialogue with their students and to provide resources that aided in their professional growth. Parents in Kenya, say Ndani & Elishaba (2010), must work together to meet what Herzberg, Mausner, & Snyderman (1959) called "hygiene" variables or "job context" requirements. A few examples are the office's aesthetics, pay, perks, employment stability, and relationships with coworkers.

A study by Akungu (2014) on the influence of teaching and learning resources on students' performance in Kenya certificate of secondary school education in free day secondary education in Embakasi district Kenya found out that teaching and learning materials were available and utilized in schools especially those used in classroom instruction, like chalk dusters and charts except physical facilities are lacking and there is gross inadequacy of human resources. This resulted to overstretched resources with annual increase in enrolment rates thus

compromising the quality of education. The study further recommended that that the government should allocate more funds in order to provide for teaching learning resources, to improve the status and condition of physical facilities and employment of more teachers for better performance in curriculum implementation. The study also recommended for further research ICT integration and e-learning to complement human resources.

Over the past decade, e-learning has emerged as a potentially strong teaching and learning instrument, one that has contributed to positive and high productivity in developed countries (UNESCO, 2010). It's a game-changer because it helps kids and schools overcome barriers to success and achieve greater equality. The instructors' access to and familiarity with ICT tools and facilities was shown to be a crucial factor in the success of teaching and learning in a research on the topic conducted by Ghavifekr and Rosdy (2015). This suggests that online education has a significant impact on classroom results.

Inclusion in education refers to all students being able to access and gain equal opportunities to education and learning. The inclusive education resources and toolkit is a resource and reference for all staff working in education programming to assist the learners. Adequate support and services for learners is needed together with a well-designed individualized education program. According to research conducted by Rachel, Gladys Naftal, and Wesonga (2015) in the Nyamira North sub-County, Nyamira County, Kenya, it was found that pre-schools in the area lacked sufficient teaching and learning tools. Nearly eighty-two percent of respondents said that limited access to educational materials was a barrier to providing inclusive education. According to the findings, more money should be committed for the procurement of teaching and learning materials for special needs Education (SNE) students, and more teaching and learning resources should be supplied to guarantee the successful

implementation of inclusive education. The purpose of this research was to better understand the impact of teachers' access to learning materials.

According to research by Panda and Mohanty (2003), classroom instruction is greatly influenced by the quality of the instructor. To fulfil their jobs satisfactorily, they may find that the resources made available to them fall short of what the instructor considers necessary. Therefore, there was need to avail adequate teaching and learning resources to support teacher performance

The use of varied resources in the teaching/learning process helps learners to build knowledge for themselves developing different learning strategies in values, attitudes and skills thus laying the foundation for the learning process. A teacher is expected to use a wide range of teaching resources from books or other printed materials to encourage students to explore issues of interest in different learning areas. Omondi (2010) conducted research on mathematics education in secondary schools in Bondo district, Kenya, and found that the ratio of classrooms, laboratories, and textbooks to the number of students can be used to predict student achievement in mathematics. The study suggested that the government and all stakeholders pay more attention to a review of the curriculum, in-service training for teachers, recruitment of more competent teachers, learner motivation, increased government support for education, good teaching methods, a higher students-to-books ratio, and increased teacher compensation. Teacher effectiveness will rise in tandem with student achievement if sufficient resources are made available.

2.4 Teachers' workload and teacher performance

Teacher workload is an indicator of school climate that may influence teacher performance either positively or negatively. The Nova Scotia Teachers Union commissioned two researchers from St. Mary's University's Time Research Program (Harvey & Spinney, 2000) to undertake a study of teacher workload and working conditions. These researchers collected data using a 24-hour time diary that was completed by 45.7 percent of the 1,800 teachers in the random sample of teachers. Supplementary questionnaires were also administered to assess teachers' perceptions of the changes in time required to complete certain teaching related functions, and to determine a teacher's degree of involvement with Individual Program Plans (IPP's) for special needs students; the amount of preparation time assigned to teachers within the instructional day and; a teacher's perception of how often he/she felt pressed for time.

Findings based on the time use diaries indicated that fulltime teachers in Nova Scotia spent an average of 52.5 hours per week on school related activities. Also, as a result of the combination of an intensification of teaching, insufficient preparation time within the instructional day (average of 179.9 minutes per 5-7-day cycle) and teachers' feelings that their work is not fully appreciated, stress levels are high among teachers. The authors also concluded that teachers do not have enough time for planning, reflection and collaboration with their peers and this affected their performance.

Professionalism at the school level is positively related to students' effective educational outcomes. In classroom management teachers with higher professionalism tend to use more professional power as perceived by students. Another study on The Elementary Teachers' Federation of Ontario (ETFO) Teacher Workload and Professionalism Study, Executive Summary Submitted to: Ontario Ministry of Education by Directions Evidence and Policy Research Group (2014), through the Interviews conducted with ETFO members indicated that

workload is more a mental construct than a quantifiable entity. Teachers do not typically think of workload, unless the demands upon them become overwhelming, prompting them to regard the workload as "too heavy." This does not mean that workload has no external referents. Interviewees identified the following aspects of their work as frustrating or overwhelming: report card preparation, special education reporting, or preparing for a subject in the elementary curriculum (for example Art) for which they have had no formal preparation.

In addition to their instructional responsibilities, the average teacher responding to the survey spent 25 hours during the week most proximate to the survey administration on teaching related work, including 7 hours and 42 minutes planning and preparing lessons and nearly four additional hours assessing, correcting, evaluating or marking student work. According to the study the factors most frequently identified by interviewees as affecting teacher's workload were planning, marking and assessing, communication with parents and participation in extra-curricular programs. The number of students in a class, the range of their learning needs, and the number of identified special education students in the class, factors often referred to as class size and composition, were also perceived to affect teacher workload.

Teacher's workload has direct impact on their performance as well as students' academic achievement. This means that overworked teachers are less likely to bring the energy, insights and resilience, positive and caring relationship that is effectively required in the classroom for teaching and learning to take place (Grenata,2014). Further, Ayeni & Amanekwe (2018) found that high teacher's workload affects instructional task performance as well as student's academic performance. The study recommended that teachers should meet the workload standard for effective teaching and performance.

The most common measure of teachers' workload is by the number of hours a teacher has to teach per week (contact hours) The pupil teacher ratio (PTR) has also been used particularly

when teacher's workload in different countries is compared. A study conducted by Amalu (2013) on the impact of workload induced stress on the professional effectiveness of secondary school tutors in Cross River State showed that workload has no significant influence on seven dimensions (lesson presentation, use of instructional aids, evaluation of students, learning motivation, classroom management, supervision of co-curricular activities and personal/professional qualities) of professional effectiveness.

According to the World Health Organization (WHO) (2014), the overall well-being of teachers affects the school climate it noted that poor teacher's mental health is the major cause of early exits from the profession with up to quarter of new employees leaving within two years and third in a decade. The causes of stress include large classes, heavy workload, poor working relations with seniors, failure to understand and follow regulations, diverse learning needs of students and emotional disturbances arising from personal matters. Glazzard & Rose (2019) noted that teacher's performance is affected by the school climate especially when the teacher has a diminished mental wellbeing. Hence there is need to take care of teachers' well-being by ensuring that they are not overworked. Coupled with this is the fact that guidance and counselling should be carried out in schools by the relevant authorities to minimise the number of teachers leaving the profession and others going for early retired due to work related stresses.

Instructional management are those events and procedures involved in the decision to initiate a specific activity for an individual student. In a study carried out by the American International Journal of Education and Linguistics Research(2018) carried out a research on teacher instructional workload management and students' academic performance in public and private secondary schools in Akoko North East Local government Ondo State, Nigeria, and the results showed that there was a negative correlation between teachers workload and students' academic achievement performance (r=-0.420) and a disparity between teachers, actual

workload and workload policy standard and there was a significant difference in teachers workload between public and private secondary schools. The findings further indicated that teacher's workload was high in teaching activities (76.8%) and had a negative impact on teachers' instructional tasks performance and students' academic performance. The study recommended that school proprietors should employ adequate and qualified teachers to meet the workload standard for effective teaching.

A teachers' influence on ideas and expectations of his or her students' capabilities have an effect on student academic performance and achievements. Teachers guide students on academics and extracurricular activities and are also responsible for shaping a student's future. They impart knowledge, good values, traditions, modern day challenges and ways to overcome them. A study on the effects of teachers' workload on student Academic performance in community secondary schools in Mbeya city by Idde Gwambombo (2013) revealed that the teachers' workload is heavy and has negative effects on student's academic performance in community secondary schools. It recommended that the government should employ competent teachers in order to increase the teaching force.

Several factors affect student achievement such as quality instruction and delivery style, class size, parent involvement, relationships with peers, assessment and school facilities apart from teachers' workload. A study by Rose & Adika (2019) on Determining Influence of Teachers Workload on Academic Performance in Secondary Schools Suba Sub County Kenya, revealed that influence of teacher's workload on academic performance was significant ($r=0.523$, $N=154$, $p<0.01$ and that an additional unit increased teacher workload which resulted to a decrease in pupil academic achievement at 0.558 coefficient. The study concluded that it is important to reduce workload with tighter control in monitoring attendance to teachers in

classroom. The study recommended that all stakeholders be involved in enhancing students' academic performance and the teachers to observe best practices in performing their duties.

According to Mutua, E. (2019) in the daily nation (Wednesday 10 July, 2019) the roll out of the competency-based curriculum experts must ensure that teachers do not get burn out by heavy workload and other job-related factors. Potential triggers should be identified and corrective measures taken early. It was advised that teacher's mental well-being should be an integral part in the implementation of the new curriculum.

Teacher evaluation policy is the best vehicle to judge the quality and assuring that every classroom has a highly qualified teacher. There is lack of teacher evaluation supervision by the principals. Darling-Hammond (2013) noted that the breakdown of teacher supervision and evaluation has provided insufficient feedback to teachers on their lesson delivery hence affecting both the teacher performance and student's achievement.

The curriculum-based establishment in Kenya requires every teacher in secondary school to teach a maximum of 28 lessons per week along other duties like marking continuous assessments for students, attending departmental meetings and talking to parents and participating in co-curricular activities (TSC County office Kitui 2019). Recent research in Kenya by the Saturday Standard (19th Sept. 2015) shows that Kenya has fewer teachers when compared to its peers in sub-Saharan Africa and they have an average of 25 pupils per teacher. In the year 2013, the Kenyan ratio 29:1 was also way above the UNESCO benchmark 17:1. In 2014 the growth rate for teachers went below that of pupil ratio and may become progressively worse due to increased number of retirees and natural attrition. Other teachers have moved to other ministries with better remuneration.

Most secondary schools have about eight departments namely Language (Kiswahili and English), science (Chemistry, Physics and Biology), Humanities (CRE, History and

Geography), Technical (Business, computer, and Agriculture) Games, Boarding and Counselling. In these departments a teacher is supposed to teach 27 lessons per week alongside other duties. Hence if a teacher leaves a certain department the workload goes up. This may result to low teacher morale since the teacher is overworked. Teachers are also entrusted with curriculum instruction, community relations, curriculum development and innovation, reward strategy and motivation, setting up school organizational goals, objectives, and mission and vision statements and also coining the school motto among other duties. The other roles included assessment and feedback, students' discipline, guiding and counselling among others (Hoffman, 2009). Poor teacher performance can be costly to an organization. Millet (2010) revealed that low morale can gradually destroy teachers' commitment and adversely affect productivity or the service delivery and alienate those they are supposed to serve i.e., students and other stakeholders. Hence there is need to carry out this study to find out whether high workload on secondary school teachers affect their performance.

2.5 Leadership style

2.5.1 Principal's leadership behaviour and teacher performance

Principals use their behaviour to help them guide, direct and influence the work of their team in their schools. Effective leaders create a foundation of fairness and openness, communicate constantly and exhibit strong and active listening skills. Some studies have been carried out on principal's leadership behaviour. Emu& Nwannunu, (2018) showed that the strength of any school lies within its academic performance. A school whose students perform well in National examinations is respected and every parent would wish his or her child to study there. This school is looked at as being strong. The strength of any school lies in its leadership. Principal leadership behaviour can influence performance in general in their schools for both the students and teachers. There are different variables that affect principal's leadership behaviour. An efficient principal handles the responsibility with care without placing priority on any extrinsic

reward but needs to develop or sharpen his or her skills towards taking or making decisions that will better off the life of the school as well as the students' wellbeing.

The ability to work with people and build collaboration, balance strategic and operational objectives and adjust to change are crucial for successful school principal leadership. A study carried out by Asena, M.J (2020) on principals' leadership behaviours influence on teachers' job satisfaction in public secondary schools in Kenya, concluded that directive, supportive, participative and achievement-oriented leadership behaviours had a significant influence on teachers' job satisfaction. The study found that teachers preferred directive leadership behaviours as opposed to principals' achievement-oriented leadership behaviours. It recommended that the government should put in place policy reforms on the action plans that influence job satisfaction of teachers.

There are several types of leadership styles namely: autocratic, democratic, laissez-faire paternalistic and transformational leadership among others. In order to perform efficiently and effectively a school principal should not incline towards one leadership style but may combine two or more depending on school type and size. Another study conducted by Abwalla,J (2014) ,on the principals leadership style and teacher performance in secondary schools of Gambella Regional state in Ethiopia revealed that there is a positive relationship between leadership style s and teachers performance (r=0.980) the relationship is significant(sign p=0.001 at 0.05 level).The findings further showed that principals leadership style variable (democratic was the most practiced leadership style in general secondary schools of Gambella Region. The teacher's performance was found to be moderate in general secondary schools. The study concluded that principals' leadership style had significance effects on decision-making, communication and delegation to improve the level of teachers' performance since teachers have not been performing to the expectation. The study recommended that the principals of

general secondary schools should use mixed leadership styles of autocratic and democratic styles of leadership.

The following factors may influence teacher's job satisfaction: communication, involvement, leadership, school climate and structure. Ramazan, C. (2018) carried out a study on the relationship between school principals' leadership behaviour and teachers job satisfaction: systematic review and found that school principals transformational leadership behaviours had a strong relationship with teachers' job performance as compared to interactional leadership behaviours and were an important predictor of job satisfaction. Negative relationships were revealed between laissez-faire leadership and job satisfaction. School principals' administrative behaviours that encourage participation and are flexible, sharing leadership of the school and exhibiting individual oriented and supportive leadership behaviours were recommended by this study since they were found to enhance teachers job satisfaction.

According to Ekpo, Akpan, Essien & Imo – Obot, (2009), leaders are perceived to be people who set directions and impacts individuals to take after that course. A leader is perceived as a person who knows what needs to be done and then mobilize both human and material resources to get it accomplished. Leadership enhances effective school administration and encourages good teachers' student association which improves academic performance of learners. Positive school leadership has a significant effect in building up teachers' enthusiasm for school activities, image and occupational fulfilment (Camman, Fischman, Jenkins & Wesh, 1993)

To be an effective transformational leader, principals must be flexible enough to embrace leadership methodologies and styles reasonable for progressive school association (Bush 2011). Smith (1998) emphasized that when employees' duties are properly designated and there is a cordial association between the administrators and workers, there is bound to be an improvement on workers performance and learner's educational attainment.

Nicholson & Patricia (2002) in their study on transactional and transformational leadership and their effect on occupation fulfilment found that value – based initiative was not decidedly identified with employment fulfilment but rather that transformational leadership was. They concluded that adequate application of this leadership style could lead to improved teachers' management relationship. Adequate application of appropriate leadership style could motivate and enhance the behaviour of employees (Siskin, 1994). Ijaiya (2000) observed that teachers in Secondary Schools preferred to be involved in decision making in order to improve their employment relationship with the school management.

Principal – teacher interactions change among schools and even among instructors in a similar school. Those interactions influence teacher's job performance (Walsh, 2005). This is due to the fact that teachers who consider principals to be facilitators, supporters and reinforcers of the stated school's mission instead of as guiders, chiefs and pioneers of their individual motivation are significantly more inclined to feel more responsible for students learning (McEwan, 2003)

Employees working together ought to share a special bond for them to deliver their level best. It is essential for individuals to be honest with each other for a healthy interpersonal relationship and eventually positive ambience at workplace. This can create a positive school climate and hence high teacher performance. Kennesaw (2008) &Welch (2014) carried out a study on the impact of school climate on school outcomes in North West Georgia, USA in a rural school system and a review of literature suggested that school climate can affect many areas and people within schools. It further suggested that positive interpersonal relationships and optimal learning opportunities in all demographic environments can increase school achievement levels and reduce maladaptive behaviours (Rauf, 2013). This can be achieved through the principal building rapport with the teachers.

An interpersonal relationship is a social connection or affiliation between two or more people. They are built on loyalty, support and trust. According to Kara (2016) interpersonal relationship and other relationships starts with building rapport. There are eight areas identified in building rapport, these are disclosure, honesty, and respect, supporting and monitoring, recognizing the individual, sharing, mimicking, interacting socially, availability, accessibility and responsiveness, caring and bonding, and communicating effectively. It is also important to note that there are fifty attributes of rapport from within these domains such as admitting faults and mistakes, listening and paying attention, creating a positive environment, engaging in personal discussions, smiling, using humour, being accessible and responsive, showing concern, and ensuring that communication is comfortable. The principal on the other hand should use nonverbal behaviour of smiling; touching, nodding affirmatively, posturing to show involvement and maintaining eye contact. These have been found to increase rapport with the non-teaching staff. All these parameters when applied well in school set up creates a positive school climate and hence improving teacher's performance.

An in-depth analysis of the elementary school showed that lack of faculty and staff respect for administration, hostile work environment, and poor interpersonal relationships lead to teachers' low performance. Deep frustration and anger on part of faculty staff were apparent in a substantial number of written responses to open-ended questions. When half of the faculty and staff are dissatisfied with their work, environment and administration, teaching and learning is almost certain to be negatively impacted. Hence there is need to carry out this study and investigate the effects of teambuilding on teacher performance in Kenya.

Delegation of duties is also important in a school and can have an effect on teacher's performance. Delegation is an administrative process where the principal transfer part of their authorities to teachers and other subordinates (Bakar, 2015). This may also result in teachers

and other members of staff participation in decision making hence utilizing collaborative planning, thus creating a positive school climate. Aunga and Masare (2017) reported that the delegation of duties by the principal created a positive school climate since the teachers felt motivated. They became committed, satisfied, disciplined and improved teachers' performance.

Teacher motivation refers to the reasons emanating from individuals' intrinsic values to choose to teach and sustain teaching. A study carried out by Kongnyuy, (2015) in North West Region of Cameroon on motivation and changing fortunes in teachers' output: Empirical evidence on selected secondary school revealed that boosting teachers' morale, promotion of teachers, good work environment and cordial interpersonal relationships positively influenced teachers' output. It was therefore recommended that principals should strengthen in-service training facilities for teachers; appointment into posts of responsibilities should consider qualification, experience and personal skills of the teacher concerned and that trust, confidence, delegation of power and shared decision making should be encouraged amongst principals. This improves the school culture and climate.

Prokopchuk (2016) noted taking time and making the effort to purposefully engage colleagues in supportive fashion and will help develop trust. This is important in improving school climate hence improved performance for both teachers and students. When the principal is able to recognize accomplishments, he encourages the development of relationships and respect. Recognition is taking the time to celebrate and "recognize others' contributions to the success of the school (Harris, Edmonsons & Combos, 2014).

Organizational climate influences employees' attitude and productivity. Nurharani, Nur & Nur (2013) carried out a study on the importance of organizational climate on teachers' job performance in Malaysia and found out that teachers in a secondary school were unable to carry

out their tasks and the organizational climate in the school was unhealthy. The study also showed that organizational climate was found to be a significant factor that could affect teachers' job performance. In terms of organizational climate dimensions, one aspect of principal's leadership behaviour and teachers' behaviour: thrust and hindrance were found to be critical factors in enhancing teachers' job performance. The findings of this study have implications to the role of principal in exercising positive job behaviour and do not over emphasize on paperwork as it would benefit teachers' classroom instruction and students' academic achievement. Based on the findings, this study also provides recommendations for practices and future research.

One of the best ways a principal can motivate teachers is by showing respect for their time- both during and after school. A study conducted by Ayene Tamrat (2016) on principals' leadership style and their effects on teacher performance in the Tigray Region of Ethiopia showed that there was a statistically significant relationship between the job performance of teachers and the leadership styles employed by principals.

Teacher perceptions are shaped by their background knowledge and life experiences. These experiences might involve their family history or tradition, education, work, culture or community. In a study conducted by Kabutu, Ndirangu, Sang & Okao, (2014) on secondary school teachers' perception of the factors that influence their morale and commitment to work, a case of Nakuru Sub County in Kenya showed that teachers perceived remuneration, opportunity for further training, responsibility, social status, a sense of belonging and job security as impacting on the level of morale and commitment to their duties. The study found out that there was no statistically significant relationship between teachers' gender, age, and experience and commitment to work. However, there was statistically significant relationship between the professional qualifications and commitment to work. The study also established

no statistically significant relationship between teachers' characteristics and perception of the factors that influenced their performance and commitment to work. In all cases alpha coefficient was equal to 0.05. Therefore, there is need to carry out research on school climate and principal's leadership behaviour and fill the knowledge gap that still exists.

2.5 2 Administrative support and teacher performance

This is very important in any learning institution as it impacts on students' achievement either positively or negatively. On the other hand, effective teacher performance greatly depends on administrative support. According to Hirsch & Emerck (2007), administrative support refers to the involvement of principals and other school leaders in supporting teachers' task and helping them in improving their teaching. It is the principal of the school who sets a conducive environment for his or her teachers. Davidson (2005) asserted that leaders should set a proper organizational climate that allows communication between the superior and employees to enhance good performance. Secondary school principals are not only charged with the responsibility of upholding discipline in their schools but also ensuring that teachers are well taken care of by providing a conducive working environment. Teachers need to be offered the necessary support in order to boost their motivation for better performance in teaching. Teambuilding and communication are vital indicators of administrative support. Research shows that focusing on social factors such as morale, group interaction and supportive relationships has a strong effect on performance and success of an institution.

A caring and supportive environment provided by principals' boosts teachers morale and helps them do their best work. It also makes them want to stick around thereby improving retention. A study done in Georgia South University by (Randolph-Robinson, Vickie Tantee, 2007) on "Leadership Behaviours that Contribute to Teacher Morale" suggests that a relationship exists between leadership behaviour, staff morale and job performance. It hypothesizes that principals who consciously practice transformational leadership behaviours have a positive impact on the

morale and productivity of their teachers. Leadership behaviour clearly impacts teacher performance, and a positive relationship between leadership behaviour and teacher morale is evident in several areas. These findings indicate that teacher performance can be predicted on the basis of the leadership style asserted by the principal. Principals who use a participatory style of leadership are more likely to have more satisfied and productive teachers than principals who use an autocratic style of leadership.

For effective teacher performance the school principal should get to know the teachers, create a home away from home and celebrate successes for both teachers and students. Principals should also empower their teachers by involving them. In another study on Teacher Motivation in Sub-Saharan Africa and South Asia (Kwame, 2012) further showed that teacher motivation depends critically on effective management, particularly at the school level. If systems and structures set up to manage and support teachers are dysfunctional, teachers are likely to lose their sense of professional responsibility and commitment. The study indicated that teacher management is most crucial at the school level, where the importance of their work and their competence in performing it are crucially influenced by the quality of both internal and external supervision. The findings of the studies indicated that many teachers, and in some countries like South Africa and Malawi the majority of teachers, did not feel that they were well managed. Management training for school and other key managers was minimal and there was political interference in all types of management decisions in South Asia.

2.6. Teamwork and teacher performance

Teamwork is the ability to work with others through cooperation and communication in order to accomplish a common goal. In institutions where teamwork is embraced, it supports curriculum instruction and implementation which leads to better students' performance. Hence the principal should support teambuilding activities in their schools in order to encourage

teachers to perform better in their duties and responsibilities. Baker, Salas, King, Battles & Barach, 2005, Ballargroud et al, 2017). A study from Netherlands on the Effectiveness of Teamwork Training on Teamwork Behaviours and Team Performance showed positive and moderate effects on teamwork and team performance.

Teamwork is a very important way of working together as a team for a common purpose (Polega; Amorim Neto, Brilowski, Baker, 2019). It is important for team members to understand what brings them to work together. Cross, Rebele and Grant (2016) opined that teamwork continues to increase in every area of present work life. This is because the troubles facing the world and organizations are multifaceted hence the need for having team work to help achieve a common goal (Salas, Shiffler, Thayer, Bedwell and Lazzara, 2015). The most important thing to note is that teamwork results to innovation, safety, fewer errors and saving lives (O'Neil, 2017). He stated that teams must be able to deliver the stakeholders objectives at the highest quality. Hence in a school setting when teachers work as a team their goal is students' achievement thus, they have to equally have a high performance to achieve this. In a study carried out on correlational teamwork in secondary schools in Musoma Tanzania by Makewa, Ngussa, Arego and Kuyoja (2016) the findings showed that there was a positive and strong relationship between teamwork and morale of work and leadership. Moderate and positive relationship was also found between teamwork and communication. Another study on effects of principals' teamwork capabilities on the adoption of strategic management in public secondary schools in Baringo, Kenya by Moindi, Changeiywo & Sang (2016) revealed that principal's teamwork capabilities had a significant effect on the adoption of strategic management in public secondary schools.

Establishing the purpose of recognition of teachers by the school principal is vital because it leads to flow of other decisions from the purpose. Recognition most often serves to reward

good work for teachers as well as students. O'Neil (2017) also noted that teams' recognition by the principal would enhance their interactions. This then would mean that the teamwork would encourage members to become more innovative. When the team members are innovative the knowledge attribute influences their interactions and turn members to learning and actual teamwork (Benoliel and Schechter, 2018). This means there is the input-output process that helps to improve on the environment, task, time and leadership. Team members are also made aware of their boundaries and their recognition of diversity in these attributes yet managing their issues actively in cross-boundary teaming outcome which is high student's achievement as well as high teacher's performance (Edmondson & Reynolds, 2016).

On the other hand, Kara (2016) noted it is important to develop relation through rapport. Rapport can be developed in eight different areas identified which can be summarized as disclosure, honesty and respect, supporting and monitoring, recognizing the individual, sharing mirroring, mimicking and matching; interacting socially, availability, accessibility and responsiveness, caring and bounding and communicating effectively. This would then imply that rapport attributes to admitting when one is on the wrong, listening and paying attention, creating a positive environment, engaging in personal discussion, smiling and using humour, being accessible and responsive, showing concern and ensuring communication is comfortable. The study also found that the school principal could develop rapport by increasing their presence within the school community and being accessible as well as creating time to engage in dialogue.

Teams perform best when there is division of labour and each person specialises in the tasks, they are most efficient at. Another study was carried out by Machiel, B (2017), on stimulating teachers team performance through team oriented human resource practices, the roles of effective team commitment and information processing. The findings of this study revealed

that there was a positive relationship between the team oriented human resource practices of recruitment, team development, team evaluation and teamwork facilitation and team innovation. In addition, the results showed that all practices except team development were positively related to team efficiency.

Good teamwork is likely to result to greater team performance and satisfaction. A study carried out by Hwang (2018) in central Michigan University on the relationship between teamwork and team performance experiences from enterprise resource planning (ERP) simulation competition investigated teamwork as a contributor to team performance in the context of a competition. The research measured team working five dimensions contributing to the teams' work, interacting with teammates, keeping the team on track, expecting quality and having relevant knowledge, skills and abilities. Net income was the measure for team performance. Data from 62 student teams showed that all 5 teamwork dimensions had appositive correlation with net income. Teams with relevant knowledge, skills and abilities (KSA) were more likely to generate higher net income. Expecting quality was the second most significant dimension followed by interacting with teammates and contributing to the teams work all five teamwork dimensions had a significant positive correlation with team satisfaction.

The knowledge base and skills needed for teambuilding are not in place in most traditional school settings. Embracing teamwork adds value to institution and increase teacher performance thus creating a sense of ownership. In a study carried out by Buettgenbach, Church, Forker, Hellen, Nelson & Scott, (2015) at Wichita state university, on Teambuilding in the Educational Setting found collaboration, team development, reflection, positive leadership, shared vision and purpose as key elements for developing and maintaining teams. The qualitative research methods included interviews of the principal, a staff member and two teachers in each of six separate schools to determine the best methods for team development

and maintenance. Teachers who graduated a decade or more ago did not receive training in the process of teaming. Therefore, professional development is a requirement for effective implementation of teacher teams.

In another study on determinants of teacher participation in teamwork for improved performance in public secondary schools in Taita district Kenya by Kitonga, B (2014), the results showed that teacher participation in teamwork is more prevalent in institutions where democratic leadership is practised and that democratic leadership training and favourable school culture were important in teacher participation in teamwork. Further the study also found that teacher participation in teamwork is prerequisite for improved performance. It recommended the need for stake holders to put in place measures to enable adequate roll out of teamwork among teachers in all schools. The study findings concur with the findings of this study that showed that there is a significant relationship between teamwork and teacher performance.

Benchmarking is a tool used for improvement of performance. When teachers work in a teamwork they are supposed to identify, understand and adopt outstanding practices from within the same school to improve performance. Achama & Nwogu (2013) reported that benchmarking increases potentials for improvement in numerous ways such analysing the best practices of peer institutions then adapting and developing programs that can help improve their school. It also strengthens the school when teacher practice what they have learned as a team hence transforming the school climate or culture. Benchmarking can be extremely useful to influence and shape school decisions especially when teachers work in a team to enhance their performance and student's achievement.

Achama & Nwogu (2013) also note that benchmarking motivates team to team work collaboratively internally to surpass external benchmarks. This means the principals become

open to new methods, ideas and process and practices that improve effectiveness, efficiency and performance. This means the principal and teachers will prioritize improvement opportunities, shirt internal thinking from input to quality output hence positive affecting teacher's performance which in turn gives higher student achievement.

Monitoring and evaluation are two terms used hand in hand for assessment. Monitoring is seen as the answer to the question, how are we doing? While evaluation answer the questions on did, we achieve what was set out to be achieved? Hence when teachers work as a team, they are able to evaluate how they performed together. Narinasamy & logeswaran (2015) notes that monitoring is carried out through assessment and as an ongoing process to establish whether teaching and learning takes place as expected or not. This means the principal is able to establish teacher's performance. Monitoring is also seen to assist the principals and teachers on the needs of learners and obstacles encountered by teachers and vice versa. Hence as a team member the principal is able to communicate to the teachers by offering them feedback and it can also lead to specific professional development efforts.

A case study conducted in schools in Kamwenge district of Uganda revealed that teamwork among school management team (SMT) impacts positively on the quality of teaching and learning. The study used a purposive sample of 40 teachers from ten government grant-aided primary schools. A survey questionnaire and interview schedule were used to collect data from ten primary schools in Kamwenge District. That study was similar to the current study as teamwork and its influence on teacher performance is one of the independent variables under study. According to Cohen, (2012) effective principals should be able to identify symptoms that signal a need for team building. The following are some of them: decreased productivity which could be noted through low students achievement in examinations and poor discipline, conflicts and hostility among the members of teaching staff, confusion about assignments,

missed signals and unclear relationships, decisions being misunderstood or not carried through properly, apathy and lack of involvement and initiation, innovation and routine actions taken for solving complex problems, complaints or favouritism or discrimination, ineffective participation in staff meetings and minimal effective decisions and complains about quality of service for example teachers missing lessons and delayed feedback (Cohen,2012).

Manning & Saddle, Mire, (2000), Lambert, (2003) findings showed that the themes of leadership, collaboration, team development and team building, time, accountability and reflection, trust, shared vision and purpose, communication, and conflict as important indicators of school climate that influenced team building. From the studies cited there is still need to carry out this study and find out whether team building as a management approach affects teacher performance in public secondary schools in Kitui County.

2.6.1 Communication and teacher performance

The principal can motivate teachers through public recognition, giving constructive feedback and promoting healthy relationships in their schools (Martin, 2011). Teachers, appraisal and promotion, recruitment and even transfer is done through communication. This ensures high performance in schools at a lower cost. New ideas, views, suggestions from teachers are converted to higher performance. Teachers know their roles and have better understanding hence Communication binds the working group together in team building.

It is important to create a safe environment, encourage teamwork, and give positive feedback. Effective communication can help to build and foster a safe learning environment where students thrive, prosper and learn. A study carried out by Fred (2010) in Sam Houston State University on communication, the process, barriers, and improving effectiveness showed that every administrative function and activity involves some form of direct or indirect communication. Whether planning and organizing or leading and monitoring, school

administrators communicate with and through other people. This implies that every person's communication skills affect both personal and organizational effectiveness (Brun & Summers, 2010). The study concluded that one of the most inhibiting forces to organizational effectiveness is a lack of effective communication (Lutgen-Sandvik, 2010). Moreover, good communication skills are very important to one's success as a school administrator. The study further indicated that recruiters rated communication skills as the most important characteristic of an ideal job performance (Yate, 2009).

There are several factors that influence teacher performance such as aptitude, attitude, mastery of subject content, teaching methodology, personal characteristics, the classroom environment, general mental ability, personality, relations with students, preparation and planning and effectiveness in presenting subject matters. A study carried out by Dike C& Eric, O.C (2019) on school climate and teachers' performance in public secondary schools in Rivers State, Nigeria found that autocratic leadership style negatively affects teachers' attitude to work but democratic leadership style positively enhances teachers' performance. The study further noted that teachers who are highly paid perform better in school unlike those who are not well paid. Additionally, teaching small class enables teachers to perform well and enhances teachers' classroom management strategy leading to student's individual attention. Downward communication improves teacher's performance unlike upward communication which comes as rumours, affecting teacher's performance negatively. The study made the following recommendations: Rivers state government should ensure that teachers in public secondary schools are provided with internet facilities, computers and laptops, principals should use democratic leadership style, teachers' salaries and allowances should be adequate and regularly paid and principals should use proper communication channels to avoid rumours.

It is also noted that some principals spend 70 to 80% of their time on interpersonal communication with various stakeholders (Green, 2010; Lunenburg & Irby, 2006; Matthews & Crow, 2010; Sergiovanni, 2009; Tareilo, 2011; Ubben, Hughes, & Norris, 2011). Effective principals know how to communicate, and they understand the importance of ongoing communication, both formal and informal: faculty and department meetings; individual conversations with parents, teachers and students; and telephone calls and e-mail messages with various stakeholder groups. The study recommended that schools must develop an awareness of the importance of senders and receivers' responsibilities and adhere to active listening skills. Hence there is need to find out in this study whether teacher performance is affected by communication (time and clarity of information) in Kitui County which affects teacher performance.

This study is anchored on a theoretical and conceptual framework which guide in the interpretation and clearer understanding of the study findings.

2.7. Theoretical framework

Theoretical framework is the structure which can hold or support a theory of a research study. It introduces and describes the theory that explains why the research problem under study exists This study has its basis on McGregor's Theory X and Y (1960), Maslow's Hierarchy of needs theory, by Chapman (2010) and Hertzberg's two factor theory, Herzberg et al (1959) as indicated in the Boundless management book (2014). Performance refers to the act of accomplishing or executing a given task (Lindsay 1995); Griffin, 1997; Owei1999). McGregor (1960) developed the theory of job performance in his X and Y theories. Theory X assures that lower order needs dominate individuals, they dislike work, must be coerced, shirk responsibilities and displays little ambition. In theory Y, employees view work as natural, they are committed, self-directed and self –controlled, responsible and creative. McGregor held to

the belief that theory Y assumptions were more valid than theory X; therefore, he proposed ideas such as participation in decision-making, responsible and challenging jobs and good group relations as approaches that would maximize an employee's job motivation. Thus, theory X postulates a negative attitude that brings low performance while theory Y predicts that positive attributes result in high performance (Adeyemi, 2004). In this regard the teachers' performance could be measured through annual report of his/her activities in terms of performance in teaching, lesson development, actual teaching and the teachers' commitment to job, extra-curricular activities, supervision, effective leadership, motivation and school discipline. In this study the variables that interrelate are: school climate and teacher performance in public secondary schools in Kitui central sub-county.

(i) Maslow's Hierarchy of needs theory

Maslow's studies into human motivation led him to propose a theory of needs based on a hierarchical model with basic needs at the bottom and higher needs at the top. This theory made a considerable influence on development in management theory during the1950s/60s partly due to the simplicity of the model and partly due to the identification of higher needs. These needs are thus: physiological/basic needs, love and belonging security, recognition/self-esteem and self-actualization needs. This theory helps school manager to visualize employee motivation and understand what influences employees' performance and the requirement to satisfy basic needs in order to achieve higher performance.

Application of Abraham Maslow Hierarchy of needs

The hierarchy of needs theory is relevant to this study as the theory is applicable to organizational orientation and employee performance as argued by Greenberg & Baron, (2003). The two opined that the theory is able to suggest how principals can lead their teachers or subordinates to become self-actualized. The idea implies the dual role of the theory first to

the school and second to teachers on the basis that both the school and the teacher must decide on the performance of their institution, and that when teachers put in their best in curriculum instruction the school climate should ensure that teachers levels of their needs are reflected in the values the institution holds with high esteem (Greenberg & Baron, 2003).

The cultural framework of the school should reflect the fact that teachers' physiological and security needs are paramount; therefore, when such needs became culturally focused, performance will be improved tremendously in that institution (Maslow, 1954). This argument implies a reversed effect that if the need is not culturally focused on, the performance standard will not be met. Thus, a school should provide healthy working conditions that enable teachers meet their basic needs. If all the working conditions are met according to this theory, then teacher performance may be influenced either positively or negatively. Teachers need security of tenure for their jobs and self-actualization needs for personal growth and development. This theory is still relevant today in our institutions and it is going to give the basis of the study in theoretical framework.

(ii) Herzberg's Motivation (two factors) Theory

Herzberg's two factor theory was developed by Fredrick Herzberg in 1959. He did so by interviewing two hundred professionals. This theory postulates that motivation has two independent factors i.e., maintenance factors-salary, fringe benefits, type of supervision, climate of work, working conditions and administrative policies and motivational factors-achievement, recognition for accomplishment, challenging work, increased responsibility, growth and development.

Application of Herzberg's two factor theory

This hypothesis is applicable to the present investigation since it elaborates on two aspects that influence educators' effectiveness. Factors such as these aid in keeping people motivated and engaged. Intervening factors in this analysis are salary and working circumstances. Salary, organization policy and administration, supervision, interpersonal interactions, and working circumstances are all examples of hygiene factors (dissatisfies). Achievement, recognition, responsibility, and promotion are the motivating elements (satisfiers). Teachers' effectiveness may improve or suffer as a result of these variables. The researcher can use this idea as a starting point for investigating the relationship between school culture and teachers' effectiveness. The hygiene and motivational factors are noticeable in all the educational settings in the world. These theories form a basis to this study which seeks to investigate the influence of school climate on teacher performance in Kitui County.

This study is conceptualized in a framework that relates the independent variables with the dependent variable.

2.8. Conceptual framework

This study conceptualizes the availability of teaching/learning resources, teachers' workload, principal's behaviour as well as team building in the school environment form the school climate. It is conceptualized that student achievement, lesson preparation and feedback (KCSE) results, may influence teacher performance in any institution. In this study the school climate is going to be the independent variable. The dependent variable is the teacher performance.

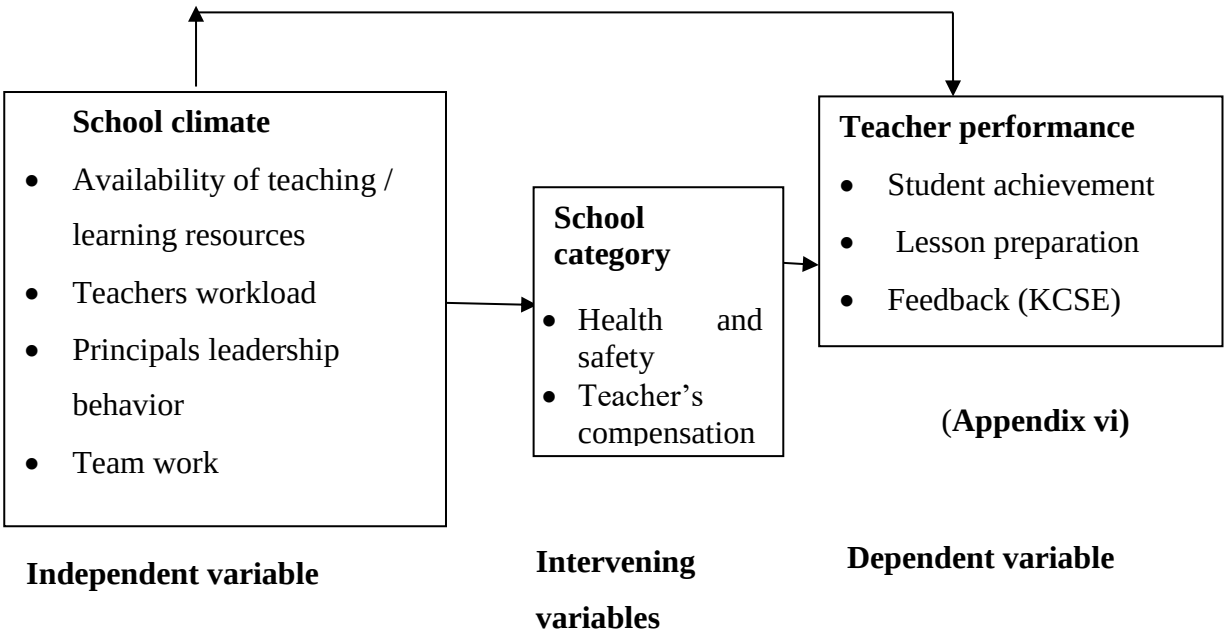

Figure 1: Teacher effectiveness in relation to school environment

2.9. The accessibility of instructional materials

This research uses variables such as teacher workload, principal leadership style, and opportunities for teamwork to describe the school atmosphere. The effectiveness of educators can be directly impacted by these factors. In this study, researchers looked at how well teachers did in terms of student learning and behaviour, as well as in terms of delivering information, providing feedback, and planning lessons. The category of school is an intervening variable that itself is affected by things like health and safety at the workplace. Such factors strengthen the reliability of the study's findings, allowing for more confident conclusions to be drawn.

CHAPTER THREE

RESEARCH METHODOLOGY

3 .1 Introduction

Methodology details for the study are provided here. Specifically, it addressed issues of research methodology, population, sample size and methods, instruments, validity and reliability of instruments, data collection, and analysis.

3.2. Research Design

This study employed descriptive survey design which was deemed appropriate for the study. Descriptive survey design is an efficient way of collecting information about a large group of people and a flexible medium to measure attitudes, knowledge and preferences. Kothari (2012) explains that it is less susceptible to error, easy to administer and can be tailored exactly to the phenomena you wish to study.

3.3. Target Population

Target population is the study population that has a specific opportunity to take action on the problem identified by the researcher and is affected by the problem. Mbwesa, (2008) defined target population as the entire group of people, events or things that the researcher wishes to investigate. According to Mugenda and Mugenda (2003), target population is the entire group of individuals, events or objects having similar observable characteristics. The interest of the researcher in selecting members of the target population is to reach candidates who can describe their experiences to address the research goal (Asiama, N., Mensah, H. K., & Oteng – Abayie, E., 2017). This implies that, a researcher can carry out a study anywhere as long as the population has similar observable characteristics and generalize the results.

The population of this study consisted of all secondary school principals and teachers in Kitui County which has 16 sub-counties: Kitui Central, Ikutha, Katulani, Kitui West, Kyuso, Lower Yatta, Matinyani, Migwani, Mumoni, Mutito, Mutomo, Kisasi, Mwingi Central, Mwingi East, Nzambani and Tseikuru (Kitui County staffing office data, 2018). Kitui County has a total of 400 public secondary schools and in all the 16 sub-counties there are 2417 teachers (Kitui County Education office, Education Management Information System (EMIS) April, 2019). The population of the study was 40 principals and 488 teachers randomly selected from all Sub-Counties of Kitui County.

3.4 Sample size and sampling procedure

A sample is a small proportion of large population selected for observation and analysis (Best and Kahn, 2011). In descriptive research, a sample size of 10-50% is acceptable (Mugenda & Mugenda, 2003). For this survey, a sample of 10% of the total population (2417) of schools was sampled from each of the 16 sub-counties (Mugenda & Mugenda 2003). The schools sampled from each sub-county were randomly selected. All principals in the sampled schools were purposively selected for the study. Teachers in the sampled schools from the all the sub-counties were randomly sampled from 400 schools in the 16 sub-counties. Therefore, the sample size for the study was 528.

Table 1: Sampling frame

Category of Respondents	**Number**
Principals	40
Teachers	488
Total	**528**

Best and Khan (2011) was used to guide this study by use of fractional method where principals were sampled from the 400 public secondary schools in Kitui County 400x10/100=40. 20% of 2417 teachers were randomly selected from each sub-county. All Public secondary schools in each sub county were printed in a paper; the papers were then folded in the same pattern and design and put into a basket. The basket was then shaken to mix the papers together. After this, the schools were randomly selected by picking a single of paper containing the names of the school. For example, in lower Yatta out of 122 teachers only 24 were selected. Hence each of the three schools randomly selected 8 teachers. Random sampling method was applied in selection of all teachers in the 16 sub-counties.

Table 2: Sample size

Sub-county	All HTRS (400) No. of N	n schools	N=Total no. of teachers	Sampled teachers=n
1.Lower Yatta	27	3	122	24
2.Mwingi Central	37	4	130	26
3.Nzambani	15	2	115	24
4.Kisasi	16	2	102	20
5.Kitui West	32	3	298	60
6.Mumoni	20	2	85	18
7.Matinyani	18	2	155	32
8.Kitui Central	34	3	255	52
9.Katulani	19	2	178	36
10.Migwani	42	4	269	54
11.Ikutha	28	3	111	22
12.Kyuso	18	2	124	24
13.Mutomo	33	3	147	30
14.Mutitu	21	2	100	20

15.Mwingi East	29	3	116	24
16. Tseikuru	11	1	110	22
TOTAL	**400**	**40**	**2417**	**488**

The sampling procedures showed how each individual subject was chosen. Saunders Lewis, Thornhill (2012). purposive sampling technique was used for the principals, since all of them were selected since they had crucial information as respondents for this study. The sample size for this study was therefore 488 teachers and 40 principals, making a total of 528 respondents. The teachers to be interviewed were then randomly selected at school.

3.5 Data collection instruments

The purpose of research instruments in research was to collect data for the study (Mugenda, 2003). Survey instruments were used for the study: questionnaire, an interview schedule and document analysis to collect data. These instruments are in the appendices (Appendix II, III and IV).

3.5.1 Principals' Interview Schedule (PIS)

An unstructured interview schedule was used for the principals of the public secondary schools selected for the study. Interviews enabled the researcher to get first-hand information and clarifications whenever needed. The interviewer had control over the interview and kept the interviewee focused and on track to completion. This was in line with Kothari (2012). (Appendix IV).

3.5.2 Teachers Questionnaires (TQ)

There was a questionnaire for teachers. According to Kothari (2012), the use of questionnaires enables the researcher to get large amount of information from a large number of people within a short period of time and in a relatively cost-effective way. Questionnaires can provide evidence of patterns amongst large populations (Kendall, 2008). This study used a structured questionnaire which enabled the participants to respond to prompts by selecting from pre-determined answers. Questionnaires were divided into four sections. Section A contained bio - data of the respondents and items on availability of teaching/learning resources; Section B contained items on teacher's workload; Section C – principal's leadership behaviour and Section D contained items on teamwork. The questionnaires for teachers had Likert Scale questions. (Appendix II)

3.5.3 Document Analysis

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (Bowen, 2009). According to O'Leary (2014), there are three types of documents: Public Records (official records), personal documents and physical evidence (artefacts) in the physical environment. This study explored written documents in the secondary school setting so as to derive meaning. This study looked at Class registers, Teacher attendance register, Block timetable, teaching staff meeting minutes, Examination results as well as Ledger book showing available Teaching / learning materials (Appendix VI)

3.6 Piloting of Instruments

The researcher sought the advice of experts from the department of Curriculum Instructional Educational Management (CIEM) concerning all the research instruments meant for data

collection. Piloting was conducted in Katulani sub-county which has 19 public secondary schools and 178 teachers. Schools in this county had similar characteristics as the sampled schools in which the study was conducted in order to assess the validity and reliability of questionnaires, interviews and document analysis as instruments of data collection which were used in the study. The sub county was selected randomly from the list of the 16 sub counties.

During piloting, four questionnaires were distributed to the respective respondents and then collected after being filled. They were analysed and their results used to revise the items in all the questionnaires. The aim was to establish if the instruments are workable and develop ways of improving those not working. (Louis et al, 2008).

According to McLeod S (2019), Split-half reliability was used in which the test questions were divided into two parts and then both parts given to one group of respondents at the same time. The scores from both parts were correlated. The test questions were randomly divided into two parts and even questions were separated from odd questions each half of the test for the respondent was scored and the correlation coefficient for the two halves was sought. These were administered to the same secondary school once.

3.7 Validity and Reliability

3.7.1 Validity

Validity determines what survey questions to use and helps to ensure that researchers are using questions that measure important issues in a study. As proposed by Wilkinson (1991) Orodho (2003) expert options, literature searches and pretesting of open–ended questions help to establish content validity. The preparation of instruments was done by reading other research works, books and journal and also in close consultation with supervisors in order to ensure that

the items in the questionnaire and interview cover all the areas under investigation (Best & Kahn, 1993)

3.7.2 Reliability

Reliability can be estimated by comparing different versions of the same measurement. The research instruments were appraised through a pilot study on 25 teachers and 5 principals of public secondary schools in Katulani sub – county, constituting 7% of the sample size. This is in agreement with Mugenda and Mugenda (1999) who opined that a pilot sample of 1% - 10% of the sample size was appropriate.

The researcher used split-half reliability this was done by comparing the results of one half of a test with the results from the other half which was a test for a single knowledge area. This was split into two parts and then both parts were given to the respondents at the same time. The scores from both parts of the test were correlated. This was used to test the reliability of questionnaires and principal's checklist. The split-half reliability technique was used to ascertain the instrument reliability (McCleod. S 2019). Randomly the test questions were divided into two parts and the researcher separated even questions from the odd questions. Each half test for the respondents was scored. The researcher found that the correlation coefficient for the two halves using Pearson correlation coefficient moment was 0.89 for questionnaires and 0.8 for interview schedule. This showed that the indicators of school climate affected teacher performance and students' achievement.

Pearson product moment correlation coefficient was calculated for each research instrument. It is computed when both variables to be correlated are expressed as continuous scores. The coefficient r is the most widely used bivariate correlation technique because most educational measures yield continuous scores since r has a small standard error (Gall and Borg 1996). In social sciences acceptable reliability coefficient ranges from 0.8 (Nunnally and Bernstein 1994,

Gregory 1992, Crocker and Algina. 1986). The split half method is a quick and easy way to establish reliability for large questionnaires in which all questions measure the same construct. This means it is appropriate for tests which measure different constructs. Reliability of the research instruments was estimated to be 0.89 meaning that the instruments were reliable.

3.8 Procedure for data collection

The researcher got permission to collect data from the department of Curriculum Instruction and Educational Management (CIEM) and the school of Post Graduate studies of Maasai Mara University. The researcher also obtained a license to conduct research from the National Council of Science and Technology (NACOSTI) and a letter of introduction from County Director of Education (CDE) Kitui County. Permission from Heads of schools sampled to conduct interviews was sought. The respondents were informed earlier in advance to allow adequate duration for respondents to fill the questionnaires.

This was done through the various principals of public secondary schools in Kitui County. The interview schedule for principals and questionnaire teachers was presented by the researcher and made arrangements for filling them. Certain duration for filling in the questionnaires was allowed to such respondents but not exceeding a week before collecting the questionnaires Information from the required documents was availed through the assistance of deputy principals or the principal. The information collected from document analysis was coded, analysed and recorded. Content analysis was done thematically.

3.9 Data analysis

Data analysis is the process of scrutinising, cleaning, converting and modelling data with the goal of determining valuable information, to produce relevant conclusions to support decision making. For this survey, qquantitative data collected using the questionnaires was coded, data

inputted into a computer and checked for precision (editing). The Statistical Package for the Social Sciences (SPSS) version 22 software (specifically linear regression) was used to process the data due to its accuracy and efficiency. Data was later edited before being classified and summarized according to the variables and objectives of the study. Pearson correlation moment coefficient was used to analyse results obtained based on quantitative data of the study. The use of frequency distribution, graphs, tables and percentages were applied. After organizing the data into tables and graphs the researcher described the various aspects arising from the study and finally made interpretations based on the descriptions given. Descriptive statistics were utilized to describe and make generalizations about a larger set of data.

Pearson correlation moment (r) was used to analyze findings on the influence of availability of teaching and learning resources on teacher performance, the effects of teaching workload on teacher performance, the influence of principal's leadership behaviour and team building on teacher performance (Menon Condon & Hommung 2012). Summary of the data analysis is as illustrated below in Table 3. For qualitative data, the data was coded, organized thematically, and analyzed.

Table 3: Method of analysis

Hypothesis	**Independent variable**	**Dependent variable**	**Method of analysis**
Ho1: There is no statistically significant relationship between availability of teaching and learning resources on teacher performance	Teaching learning resources	Teacher performance	Pearson r
Ho2: There is no statistically significant relationship between teaching workload and teacher performance	Teaching workload	Teacher performance	Pearson r
Ho3: There is no statistically significant relationship between principals' leadership behaviour and teacher performance.	Principal's leadership behaviour	Teacher performance	Pearson r

Ho4: There is no statistically significant relationship between teamwork and teacher performance.	Teamwork	Teacher performance	Pearson r

3.9.1 Document analysis

This method enabled the researcher to get access to information that could be difficult to get in any other way (Kothari, 2012). In addition to that, research is relatively done at a low cost particularly when the documents are easily accessible. Documents analyzed included: class attendance registers for students, teacher's attendance register, the daily occurrence book, block timetable, the minute's book and examination results. These documents were availed by the principal and class teachers. From them, information on teachers and learners' discipline, available resources, and daily occurrences in a school and teacher performance was collected.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents an analysis of data obtained from the study and discusses the findings of the study in accordance to the research objectives. Data was collected using questionnaires, interview schedule and document analysis from 40 schools in all the 16 sub-counties of Kitui County. The chapter further includes instrument return rate, analysis of demographic characteristics of the respondents that could confound the relationship between the indicators of school climate and teacher performance. The questionnaires were analyzed and presented using figures such as frequency distribution tables and either pie charts, bar graphs or line graphs. The study used Pearson correlation moment coefficient to analyse the data collected. The headings and sub-headings in this chapter are guided by research objectives, interview schedules and hypotheses. Information on characteristics of respondents was collected according to gender, age, level of education and years of teaching experience. This was important since it guided the researcher to establish whether gender, age and teaching experience had any effects on teacher performance.

The study expected to find solution on the following hypotheses:

4.1.1 Null Hypothesis

The following null hypotheses were used in this study:

1. H_{01} There is no statistically significant relationships between availability of teaching / learning resources on teacher performance in public secondary schools in Kitui County

2. H_{02}. There is no statistically significant relationship between teaching workload and teacher performance in public secondary schools in Kitui County
3. H_{03}. There is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County
4. H_{04}. There is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County

4.2 Questionnaire Return Rate

Questionnaire return rate denotes the number of responses received by the researcher and can be used for the study. This study administered questionnaires for teachers and principals' interview schedules. The return rate for the survey was 100%, with 40 principals out of the targeted 40 were able to participate in the study and accepted to be interviewed while out of the 488 teachers, all the 488 (100%) filled and returned their questionnaires. The principals assisted in encouraging the teachers to participate hence the positive feedback. Mugenda and Mugenda (2003) indicated that when the return rate is at 50% this is adequate for reporting on the study findings while a 60% return rate is good and 70% and above is very good. This implies that this study's return rate was very good, and the information given was quite representative.

4.3 Demographic Characteristics of the Respondents

This section represents the distribution of respondents by gender, age, level of education, designation and experience as reported in the data collection instruments. The reason for including these attributes is to help understand the background characteristics of the respondents and find out whether they have any effects on teacher performance.

Table 4: Demographic Information of Respondents

Categories	Variables	Frequency	Percentage
Nature of Respondents	Principals	40	10.0
	Teachers	488	90.0
	Total	**526**	**100.0**
Gender – Principals	Male	30	74.0
	Female	10	26.0
	Total	**40**	**100.0**
Gender – Teachers	Male	188	38.5
	Female	300	61.5
	Total	**488**	**100.0**
Age – Principals	Below 30 years	4	10.0
	31-40 Years	13	32.5
	Above 40 Years	23	57.5
	Total	**40**	**100.0**
Age – Teachers	20-24 Years	10	2.0
	25-29 Years	156	32.0
	30-35 Years	200	41.0
	36+ Years	122	25.0
	Total	**488**	**100.0**
Level of education - Principals	PHD	7	17.5
	Masters	21	52.5
	Bachelors	12	30.0
	Diploma	0	0.00
	Total	**40**	**100.0**
Level of Education – Teachers	PHD	18	3.7
	Masters	312	64.0
	Bachelors	124	25.4
	Diploma	34	6.9
	Total	**488**	**100.0**
Designations	Principals	40	7.6
	Deputy Principals	57	10.8
	Senior Teachers	20	3.8
	Heads of Department	91	17.2
	Class Teachers	320	60.6
	Totals	**528**	**100.0**
Professional Experience – Principals	Above 15 Years	13	32.5
	11 to 15 Years	9	22.5
	5 to 10 Years	8	20.0
	Below 5 Years	10	25.0
	Totals	**40**	**100.0**
Professional Experience – Teachers	Above 15 Years	127	26.0
	11 to 15 Years	160	32.8
	5 to 10 Years	165	33.8
	Below 5 Years	36	7.4
	Totals	**488**	**100.0**

As indicated in table 4 above, thirty (30) of the principals were males (74%) while ten (10) of the principals were females (25%). On the other hand, a hundred and eighty-eight (188)

teachers (38.5%) were males while three hundred (300) (61.5%) were females. In terms of age, most of the teachers (41%, 200) were aged 30-35 while 32% (156) of the teachers were aged 25-29 years of age, 25% (132) were 36 years and above. Only 2% (10) were between 20-24 years of age. This implies that with the mature age of the teachers, they probably had attained or accrued, higher competency and skills. For the principals, this study sought to know whether there was a significant relationship between the principal's leadership behaviour and teacher performance. The principal's age was an important factor because it was assumed that age comes with not only physical maturity but life and professional experience as well as competencies attained over time and skills to run a learning institution. In term of their age, 57.5% (23) of the principals were above 40 years while 32.5% (13) were aged 31-40 years and 10.0% (4) were 30 years of age and below. Professional qualification is an important indicator of professional development of a teacher. Professional development helps teachers to continually expand their knowledge and skills to implement the best educational practices. These results showed that most of the respondents (teachers - 64.0% (312) and principals - 52.5% (21)) had master's degrees while 25.4% (124) of the teachers and 30% (12) of the principals held bachelor's degrees. On the other hand, eighteen teachers (3.7%, 18) and seven principal's (17.5%, 7) had Doctor of Philosophy degrees. From the results, 6.9% (34) of the teachers were Diploma holders and there were no principals with Diploma qualifications. The results of the study showed that majority of the respondents were class teachers (60.6%, 320) followed by Heads of departments (17.2%, 91), Deputy Principals (10.8%, 57), Principals (7.6%, 40) and senior teachers (3.8%, 20). In terms of experience, (32.5%, 13) of the principals and (26%, 127) of the teachers had over 15 years' experience. Majority of the teachers (33.8%, 165) had an experience of between five and ten years while only 7.4% (36) had an experience of below five years. The study findings also showed that twenty-five percent (25%) of the principals had an experience of below five years.

4.4. Content Analysis: Performance by the selected schools from Kitui County

This objective of this section was to find out the performance of teachers in the selected public secondary schools from the targeted area of Kitui County. The performance was used as the dependant variable against which the other objectives such as effects of availability of teaching materials, effect of workload on performance, principal leadership as well as effect of teamwork on performance. This (Performance of teachers) was measured using the average Kenya Certificate of Secondary Education (KCSE) mean scores of the selected schools for three years: 2018, 2019 and 2020.The analysis of all the schools in their respective categories is presented in the Table 5 below.

Table 5: KCSE Performance by category and school

3 YEAR - KCSE ANALYSIS					
SCHOOL	**CATEGORY**	**2020**	**2019**	**2018**	**Mean**
Kitui School	National	9.151	8.588	7.632	8.46
Muthale G.		8.105	8.102	*7.895*	8.03
Average		**8.628**	**8.345**	**7.764**	**8.246**
Yambyu Girls	Extra County	4.700	4.520	4.250	4.49
Chuluni Girls Sec		6.381	5.940	5.930	6.08
Ikutha Boys		6.271	5.904	6.426	6.20
Katheka Boys		6.634	5.908	*5.770*	6.10
Kimangao Girls		6.493	7.300	6.500	6.76
Kisasi Boys		7.474	8.467	6.672	7.54
Kyondoni Girls		7.400	6.491	*6.126*	6.67
Kyuso Boys		6.609	5.900	6.088	6.20
Maliku Girls		6.991	6.308	6.076	6.46
Matinyani Boys		7.939	7.667	6.931	7.51
Mbitini Girls		7.050	6.978	7.028	7.02
Mulango Girls		7.050	6.879	7.138	7.02
Mutomo Girls		5.837	5.397	4.745	5.33
St. Angelas-Mutune		7.460	6.989	7.020	7.16
St Charles Lwanga, Kitui		8.350	7.690	8.098	8.05
St Peter's Nzambani		5.402	5.955	5.700	5.69
Itoloni Girls		5.900	4.900	4.700	5.17
Kyamboo Secondary		6.700	7.340	6.890	6.98
Migwani Boys		6.643	6.720	6.211	6.52
Thitani Girls		6.870	6.280	6.265	6.47
Average		**6.708**	**6.477**	**6.228**	**6.471**
Ikanga Boys	County	6.800	7.000	4.960	6.25

3 YEAR - KCSE ANALYSIS					
SCHOOL	**CATEGORY**	**2020**	**2019**	**2018**	**Mean**
Kalitini Sec		4.510	4.681	4.208	4.47
Kanyangi Girls		4.922	2.027	4.380	3.78
Kauma		4.954	4.691	4.088	4.58
Kimangao Boys		5.314	3.590	4.790	4.56
Lower Yatta Girls		4.678	4.400	3.890	4.32
Masavi Girls'		5.021	5.225	4.654	4.97
Nguuku		4.580	4.438	4.328	4.45
Nuu Sec		5.000	6.333	6.000	5.78
Usueni		4.050	3.295	4.490	3.95
Voo		5.768	5.542	4.814	5.37
Average		**5.054**	**4.657**	**4.600**	**4.770**

As the table above (Table 8) illustrates, the three-year average for the 48 schools ranged from a means score of 8.46 for Kitui School to a means core of 3.780 for Kanyangi girls. National schools had a combined average score of 8.246, Extra County school had 6.471, County schools at 4.770. The Extra County schools and the national school's performance were above average while county schools' performance was below average. The performance by school and category was mixed with one of the extra county schools performing better than a national school and a number of county schools performing better on average than extra county schools. This performance could be attributed to the school environment. Hence a healthy school environment could be observed in learning institutions in order to uphold.

4.5 Teacher effectiveness in relation to the accessibility of instructional materials

Teaching / learning resources are generally the resources that teachers use to supplement classroom instructions with a view of supporting learners meet their expectation for learning. For this survey, these includes textbooks, reference materials, projectors, e-resources etc.

Teachers' effectiveness may be affected by the accessibility of classroom materials. Knowledge, competence, and abilities are supported, facilitated, influenced, and encouraged via the use of resources in direct and indirect ways. A study by Sheu and Ijaiya (2016) found that teachers' productivity increased when more materials were made available to them. In order to determine if there is a connection between the availability of teaching and learning resources and teacher performance, this study surveyed educators. The results are as shown in Table 6.

Table 6: Availability of teaching / learning resources on Teacher's performance

	BASE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Textbooks are adequate	488 100%	244 50%	118 24.2%	10 2.1%	116 23.7%	0 0%
2. Availability of reference materials	488 100%	36 7.4%	215 44.1%	7 1.4%	213 43.6%	17 3.5%
3. School has functional projectors	488 100%	27 5.5%	255 52.3%	10 2.0	105 21.5%	91 18.7%
4. E-resources are available in school	488 100%	93 19.1%	195 40.0%	17 3.5%	108 22.1%	75 15.3%
5. E-resources are available to teachers	488 100%	16 3.3%	230 47.1%	16 3.3%	137 28.1%	89 18.2%
6. Teachers use demonstrations during subject delivery	488 100%	163 33.4%	283 58.0%	23 4.7%	19 3.9%	0 0%
7. Teachers use child centred methods while teaching	488 100%	96 20.0%	318 65.2%	24 4.9%	48 9.8%	2 0.1%

The mean score and standard deviation for the above ratings is as indicated below in table 10.

Table 7: Availability of teaching / learning resources ratings mean score and standard Deviation

	Mean	Std. Deviation
Textbooks are adequate	4	1.214
Availability of reference materials	3.08	1.143
School has functional projectors	3.05	1.306
E-resources are available in school	3.25	1.392
E-resources are available to teachers	2.89	1.267
Teachers use demonstrations during subject delivery	4.21	0.703
Teachers use child centered methods while teaching	3.94	0.821

To test whether there was a relationship between availability of teaching / learning resources on teacher performance in public secondary schools in Kitui County, a null hypothesis was used. The hypothesis was stated as follows:

- *H_{01} There is no statistically significant relationships between availability of teaching / learning resources on teacher performance in public secondary schools in Kitui County…**Kimweli, February - 2022**. The discussion below shows how each attribute affects teacher performance.*

A number of attributes were presented to the respondents with a 5-point scale to test. Each of the attribute is analyzed below.

4.5.1 Textbooks are adequate

Fifty percent of those polled (244 people) strongly believe that there are sufficient textbooks, while another 24 percent agree (118 people) and 23 percent disagree (116 people). Slightly more than (2.1%, 10) were agnostic. This means that, in the presence of textbooks, pupils would be able to gain knowledge Other than the teachers' questionnaire, the survey also targeted the principals. The principal's questionnaire was analysed through qualitative approach. The feedback from the principals showed that there were enough / adequate textbooks in the

schools. Only a few of the principals had issues with textbooks for some specific subjects. The quote below is from one of the principals on the issue of textbooks.

"…we do not have issues with textbooks, we are supplied with textbooks by the government directly and also, we benefit from the Secondary Education Quality Improvement Program (SEQIP) Program, who gives use textbooks covering Mathematics, English, Chemistry, Biology and Physics…." ***Mr. Kamau; Principal – February 2022***

The outcomes suggest that principals and instructors had a common opinion that their schools had sufficient textbooks. Sheu and Ijayai (2016) argue that the success or failure of a whole country's educational system is contingent on the breadth and depth of its supply of educational materials. This lends credence to Hertzberg's two-factor theory (1959), which proposed that remuneration, organizational policy and administration, supervision, interpersonal connections, and working circumstances are the hygiene factors (dissatisfiers) in the workplace. When these conditions are met, performance is optimal; when they are not, the inverse is true.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between availability of textbooks (M=4.00, SD=1.214) and Performance (M=2.74, SD=0.826) as illustrated in table 7 above. With 486 degrees of freedom (df), critical r = 0.098 (this is based on the sample size and reference is made to Appendix VII: Critical r Table) at an alpha level of 0.05. The analysis produced an r of .034 which is lower than the critical r (0.098) as shown in the table 8 below. The results of the computation show no positive correlation between the two variables under test (r (486) = 034, p>.05).

Table 8: Adequate Textbooks

Correlations			
		KCSE Performance	**Textbooks are adequate**
KCSE Performance	Pearson Correlation	1	.034
	Sig. (2-tailed)		.456
	N	488	488
Textbooks are adequate	Pearson Correlation	.034	1
	Sig. (2-tailed)	.456	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= 0.034, critical *r*= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r 0.034. Based on the attribute availability of textbooks, the null hypothesis that there is no statistically significant relationship between availability of teaching / learning resources on teacher performance in public secondary schools in Kitui County was confirmed.

4.5.2 Availability of reference materials

In addition, among instructors, 44.1% (n=215) agreed that reference materials were readily available, while 7.4% (n=36) highly agreed. Nonetheless, 1.4%,7 were unsure whether or not their schools had sufficient reference resources. Insufficient reference materials were cited by a sizable percentage of educators (43.6%; 213) and were highly cited by 3.5%; (17).

Feedback from the principals on the issue of reference materials was almost unanimous; reference materials were available but not adequate. There were number of changes especially on the humanities, which according to the principals; the reference materials are not updated adequately. However, the principals indicated that with digitisation taking root in schools, this is an issue that will in future be sorted. Below is a comment from one of the principals.

"… the issue of reference material is not a straightforward one, we can say we have reference materials and most schools do have reference materials. However, how updated are these

*reference materials? The way lessons are done currently, there is need to be dynamic in how the reference materials are availed and prepared; we need to go digital quickly to fully sort this area…." **Mr. Minda; Principal – February 2022***

According to the results of the research, instructors have access to textbooks and other reference materials for lesson planning, but students do not always have access to the resources they need to do in-depth research on issues that have been specifically requested by their teachers. This means that everyone, from professors to pupils, may use the many reference works that are readily available, especially on the Internet. The findings corroborate the claims of Yara and Omondi (2017), who argued that access to relevant resources enhances both instruction and student achievement. The results of the study carried out by Bizimana (2014) found that there was a positive and significant correlation between most of the teaching and learning resources and the level of classroom management and content delivery ($r=0.711$, $p<0.001$) at 0.05 level of statistical significance. The results of this study are not in agreement with the findings of this study which showed that there is a statistically no significant relationship between availability of teaching and learning resources (Availability of reference materials) and teacher performance ($0.913>0.05$) level of statistical significance.

The use of instructional materials generally improves students understanding of concepts and lead to high academic achievements. A study carried out by Monicah, N, Peter, K & Esther, M (2020) on the influence of teaching and learning materials availability on the development of pupils in upper primary schools in karuga zone Gilgil sub-county revealed that teaching and learning materials availability ($r=0.652$, $p=0.001$ at 0.05 level of statistical significance) had a positive and statistically significant influence on the development of pupils in upper primary. These findings concur with the findings of this study which showed that availability of teaching and learning resources had a positive significant relationship with teacher performance.

Another study by Rachael B. Bosibori, O. Gladys, N. Naftal, and N. Wesonga (2015) found that preschool centers in Nyamira North sub county, Nyamira County, Kenya, lacked adequate teaching and learning resources, with 78% of respondents saying that a lack of these materials hindered the implementation of inclusive education. Hence there is need for the Kenyan government to improve on the availability of teaching and learning resources in all public, primary and secondary schools in order to enhance teacher performance.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between availability of reference materials (M=3.08, SD=1.143) and Performance (M=2.74, SD=0.826) as shown in table 7 above. With 486 degrees of freedom (df), critical *r* = 0.098 at an alpha level of 0.05. The analysis produced an r of -.003 which is lower than the critical r (0.098) as shown in the table 9 below. The results of the computation showed a no negative correlation between the two variables under test (r (486) = -.003, p>.05). This meant that there was no significant relationship between availability of learning and teaching materials and teacher performance.

Table 9: Availability of reference materials

Correlations			
		KCSE Performance	**Availability of reference materials**
KCSE Performance	Pearson Correlation		-.003
	Sig. (2-tailed)		.942
	N	488	488
Availability of reference materials	Pearson Correlation	-.003	1
	Sig. (2-tailed)	.942	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= -0.003, critical *r*= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r -0.003. Based on the attribute availability of reference materials, the null hypothesis that there was no statistically significant relationship between availability of

teaching / learning resources on teacher performance in public secondary schools in Kitui County was confirmed.

4.5.3 School has functional projectors (those that were in use)

The study sought to find out if the school had functional projectors for enhancement of teaching and learning. (57.30%, 257) of the respondents were in agreement that the schools had this resource (52.30% ,255) agreed (5.50% ,27) strongly agreed) while (40.10%,197) disagreed on the issue.

Based on the results of the study, it was determined that having access to working projectors in the classroom allows teachers to provide students with additional e-learning options. Because of this, they will perform better. The finding from the principals was mixed, with some indicating that they do have the projectors while other said they do not have the gadget.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between availability of reference materials (M=3.05, SD=1.306) and Performance (M=2.74, SD=0.826) as shown in table 7 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of .043 which is lower than the critical r (0.098) as shown in the table 10 below. The result of the computation shows a no negative correlation between the two variables under test (r (486) = .043, p>.05).

Table 10: School has functional projectors

Correlations			
		KCSE Performance	**School has functional projectors**
KCSE Performance	Pearson Correlation		.043
	Sig. (2-tailed)		.034
	N	488	488
	Pearson Correlation	.043	1

Correlations			
		KCSE Performance	**School has functional projectors**
School has functional projectors	Sig. (2-tailed)	.034	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= 0.043, critical *r*= 0.098

The *p*-value is higher than the alpha value 0.05 and the critical *r* of 0.098 is greater than calculated *r* 0.043. Based on the attribute school has a functional projector, the null hypothesis that there Kitui County's public secondary schools' teachers' effectiveness is not correlated with the number of available teaching and learning resources was confirmed in as far as the availability of functional projectors is concerned.

4.5.4 There are E – resources in the school

Aina, R F (2014), on availability of e resources in relation to teacher performance showed that this was a critical aspect which should be looked in to during this era of digital literacy. Scaling up quality instruction such as through pre-recorded quality lessons, facilitating differentiated instruction, and expanding opportunities to practice is key to technological advancement. Lack of e resources in an institution can lower academic performance for students and teachers. If resource materials are used wisely, they make remarkable enhancement of lesson impact and hence better students' achievement.

To what extent do secondary schools have access to e-resources that may be used to improve instruction and student learning was the focus of this research. Some 59.1%, or 1,293 people, of those who responded said they agreed that schools have access to e-resources for use in classrooms, while 37.4%, or 1,167 people, disagreed. Of those polled, just 3.5% (or 17 people) were undecided.

The majority of educators' responses stated that most schools did in fact have access to electronic materials. Only 42% of principals (n=197) said their schools had enough access to e-resources, while 58% (n=283) said the opposite. Teachers may have felt well taken care of in terms of e-resources, but this may be an indicator that principals' goal of fully equipping the schools with e-teaching / learning tools had not been accomplished.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between availability of E-resources in schools (M=3.25, SD=1.392) and Performance (M=2.74, SD=0.826) as shown in table 7 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.026 which is lower than the critical r (0.098) as shown in the table 11 below. The results of the computation showed no negative correlation between the two variables under test (r (486) = -.026, p>.05).

Table 11: E-resources are available in school

Correlations			
		KCSE Performance	**E-resources are available in school**
KCSE Performance	Pearson Correlation		-.026
	Sig. (2-tailed)		.562
	N	488	488
E-resources are available in school	Pearson Correlation	-.026	1
	Sig. (2-tailed)	.562	
	N	488	488

P<0.05 (2-tailed); df= 486; r= -.026, critical r= 0.098

The *p*-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r -.026. In public secondary schools in Kitui County, where the focus was on the availability of e-resources, the results supported the null hypothesis that there is no statistically significant link between the availability of teaching/learning resources and classroom management.

4.5.5 E- resources were available to teachers

The purpose of the research was to determine if educators have access to digital materials. A total of 230 respondents (47.1%) expressed agreement, with 16 (3.3%) offering strong agreement, that instructors have access to E-resources to employ in the classroom. 150 people (46.3% of the sample) in the research, however, either did not agree or strongly disagree that electronic materials were readily available to educators. Only 16 people (3.5% of the sample) had no stance.

From the principals, most indicated that they do not have e-resources for use by both the teachers and the learners, and especially dedicated resource to the teachers. Below is a quote from one of the principals;

"… The schools have a number of challenges, and resources are mainly availed to infrastructure and other areas. Resources for e-resource are limited. For example, for my school, the computers are only available for teachers involved in exams…." ***Mrs. Jane N. Secondary School teacher in Kitui County – February 2022***

Accordingly, the results from the instructors ran counter to the opinions expressed by the principals. Teachers were able to maintain contact with their students outside of the traditional school day using e-learning platforms, sharing materials, videos, ideas, methods, and pedagogical practices. These results are consistent with those reported by Ghavifekr & Rosdy (2015), who discovered that, thanks to e-learning, instructors are more prepared for their classrooms. The use of electronic resources in the classroom can have a noticeable effect on regular lessons. When teachers use online materials in the classroom, students gain fresh perspectives on familiar topics. The majority of schools have failed to successfully implement e-learning, despite the fact that the government has supplied each school with a small number

of computers for use in a shared computer lab. This suggests that teachers were able to refine their methods of instruction with the use of electronic tools.

Table 10 shows the results of a Pearson product moment correlation analysis of the possible link between instructors' access to electronic resources (M=2.89, SD=1.267) and students' performance (M=2.74, SD=0.826). With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .012 which is lower than the critical r (0.098) as shown in the table 12 below. The results of the computation showed there was a negative correlation between the two variables under test (r (486) = .012, p>.05).

Table 12: E-resources are available to teachers

Correlations			
		KCSE Performance	**E-resources are available to teachers**
KCSE Performance	Pearson Correlation		.012
	Sig. (2-tailed)		.792
	N	488	488
E-resources are available to teachers	Pearson Correlation	.012	1
	Sig. (2-tailed)	.792	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= .012, critical *r*= 0.098

The crucial r of 0.098 is higher than the estimated r of 0.043, and the p-value is higher than the alpha value of 0.05. The conclusion that there is no statistically significant correlation between the availability of teaching / learning resources and teacher performance in public secondary schools in Kitui County was sustained based on the attribute availability of e-resources to instructors.

4.5.6 Educators focus their lessons on the needs of the students.

The purpose of the research was to determine if educators were using learner-centered strategies in the classroom. According to the findings, 65.2% of respondents (318 out of 538), agree that they adopted a child-centered approach in the classroom, while 20% (96 out of 538), strongly agree. The employment of a child-centered approach in the classroom was supported by all save the 4.9% who were unsure or uncommitted. Only 49 people (or 9.9 percent) were against or highly opposed to the child-centered approach. In other words, the results of the survey suggest that most educators are employing methods that put the needs of the students front and center. This is viewed as a potential strategy for boosting classroom efficiency. Incorporating child-centered learning strategies is a skill that may greatly improve student achievement in the classroom. The findings corroborate those of Andiema and Kitainge (2016), who found that classrooms where instructors prioritized the needs of the children they were instructing fared better. The research found that the child-centered approach to education was widely supported.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teachers using child centered methods while teaching (M=3.94, SD=0.821) and Performance (M=2.74, SD=0.826) as shown in table 10 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .006 which is lower than the critical r (0.098) as shown in the table 13 below. The result of the computation shows no positive correlation between the two variables under test (r (486) = .006, p>.05).

Table 13: Teachers use learner centred methods while teaching

Correlations			
		KCSE Performance	**Teachers use learner centered methods while teaching**
KCSE Performance	Pearson Correlation		.006
	Sig. (2-tailed)		0.887
	N	488	488
Teachers use learner centered methods while teaching	Pearson Correlation	.006	1
	Sig. (2-tailed)	0.887	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= .006, critical *r*= 0.098

Neither the critical value of 0.098 nor the estimated value of 0.006 are less than the alpha value of 0.05. It was shown that there is no statistically significant association between the availability of teaching / learning materials and teacher performance in public secondary schools in Kitui County, as measured by the characteristic Teachers adopt learner focused techniques when teaching.

4.5.7 The demonstration method is widely used by educators.

Since the demonstration approach has been hypothesized to affect teacher effectiveness, this study set out to determine whether or not instructors really utilize it. The survey found that both teachers who highly agreed (33.4%, 163) and those who agreed (58%, 283) were employing the demonstrative technique in the classroom. However, just 3.9%19 of people polled had the opposite opinion. On the other hand, 4.7% (23 people) were unsure if they employed the demonstration approach or not. The survey revealed that principals had no say in the matter and that instructors were allowed to make their own decisions based on what they thought would work best for their students. Here is a quotation from one of the main players:

"…it's important to let the teachers be, they are professionals, they know what is the best for the different categories of their learners; personally, my official policy is for the teachers to implement what is the best fit…" ***Ms. Eunice; Principal – February 2022***

The majority of responders, the survey found, employed demonstrative techniques in the classroom. The demonstration approach of presenting material is only one example of how a positive school atmosphere may benefit students. This is consistent with Herzberg's two-factor theory (1959), which suggests that a worker's performance is significantly affected by maintenance and motivating variables including income and working circumstances. Teachers' effectiveness is impacted by factors such as compensation and working circumstances because these factors affect how employees go about their jobs. According to Millet (2010), dismal mood in the classroom can have a domino effect on student engagement, instructor dedication, and school performance (students). This study's findings that there is no statistically significant relationship between teaching / learning resources and teacher performance run counter to those of Otieno (2017), whose research on the topic found a positive correlation between eight independent variables and the dependent variable measure mathematics performance (P0.05).

The study further recommended that there was need to review curriculum and recruit more competent teachers. In another study by Orodho (2014) on teaching and learning resource availability and teacher's effective classroom management and content delivery in secondary schools in Huye district, Rwanda found that there was a positive and significant correlation between most of the teaching and learning resources in the in-classroom management and content delivery (p=<0.001 which is in agreement with what this study found. The study recommended the government of Rwanda should ensure that the required teaching and learning resources should be equitably distributed in schools across the country in time in order to

facilitate timely implementation of curriculum. For this study, use of demonstrations during subject delivery was found to be statistically significant (0.001<0.05).

Teachers' use of demonstrations during topic delivery (M=3.94, SD=0.081) and Performance (M=2.74, SD=0.826) in table 10 above were analyzed using a Pearson product moment correlation to see whether or not a link existed between these two variables. At the 5% significance level with 486 df, the critical value of r is 0.098. According to table 14, the study yielded a r value of.144, which is greater than the required r value of 0.098. Computational findings demonstrated a statistically significant positive relationship between the two independent variables (r (486) = 0.144, p>.05).

With a p-value of 0.098, the computed r-value of 0.144 was lower than the crucial r-value of 0.098. To conclude, the results of this study did not contradict the null hypothesis that there was no correlation between the availability of teaching/learning materials and teacher performance in Kitui County's public secondary schools. In its place, the sentence may read as follows: "There was a statistically significant association between the availability of teaching/learning materials on teacher performance in public secondary schools in Kitui County." This indicated that in Kitui County's public schools, teacher effectiveness was affected by the availability of teaching/learning materials.

Table 14: Teachers use demonstrations during subject delivery

Correlations			
		KCSE Performance	**Teachers use demonstrations during subject delivery**
KCSE Performance	Pearson Correlation		.144
	Sig. (2-tailed)		0.001
	N	488	488
Teachers use demonstrations during subject delivery	Pearson Correlation	.144	1
	Sig. (2-tailed)	0.001	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .144, critical *r*= 0.098

4.5.8 Educator effectiveness in relation to the accessibility of instructional materials

As has been observed above, from each of the independent variables was analyzed against the dependent variable which is the teacher performance. Correlation analysis was used to determine the relationship between the two variables, availability of teacher and learning resources and performance. A correlation is a number between -1 and +1 that measures the degree and direction of association between two variables. This was done using Pearson Product-Moment Correlation Coefficient.

Based on this, the null hypothesis; *Teachers' effectiveness at Kitui County, Kenya's public secondary schools has not been shown to be correlated with the availability of teaching and learning resources* was not confirmed as one of the attributes Teachers use demonstrations during subject delivery had a p-value which was lower than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r 0.144. This showed a statistically significant relationship between the two variables. Therefore, this meant that the null hypothesis is changed to *Teachers' effectiveness at Kitui County's public secondary schools is correlated with the level.*

4.6 Effects of workload on teacher performance

Workload amongst teachers can be viewed from different aspects including number of subjects a teacher is handling, number of hours spent in class per day / week, number of students being handled by one teacher for a single lesson, examination settings, role modelling, formative assessments, feedback to the students, number of script (answer sheets being marked, other duties / extra-curricular activities they might be involved in. The study's secondary objective was to analyse how much time teachers spent grading student papers impacted their productivity in public high schools in Kitui County. The amount of work assigned to instructors is a significant factor in creating either a positive or negative atmosphere in the classroom. The teachers were given several statements to respond to in relation to their workload in the school environment. The responses led the study to examine whether there was a relationship between the teacher's workload and their performance. The results are as shown in Table 15

Table 15: Effects of workload on teacher performance

	Base	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Teachers have high teaching workload	488	6	61	17	96	308
	100%	1%	13%	3%	20%	63%
Have ample time to prepare students assessments	488	41	244	7	120	76
	100%	8%	50%	1%	25%	16%
Teachers carry out student's role modelling effectively	488	0	0	16	344	128
	100%	0%	0%	3%	70%	26%
Teachers give formative assessment and feedback	488	0	0	12	260	216
	100%	0%	0%	2%	53%	44%
Teachers provide consistent and constructive feedback to the learners	488	0	12	0	380	96
	100%	0%	2%	0%	78%	20%
Teachers use different assessment methods such as checklist, a rubric, portfolio and observation schedules	488	36	12	0	392	48
	100%	7%	2%	0%	80%	10%

The mean score and standard deviation for the above ratings is as indicated below in table 16.

Table 16 : Effects of workload on teacher performance mean score and standard

Deviation

	Mean	Std. Deviation
Teachers have high teaching workload	4.31	1.088
No ample time for lessons preparations	3.66	1.064
Have ample time to prepare students assessments	2.89	1.302
Adequate time is provided for marking assessments	3.13	1.466
Teachers carry out student's role modelling effectively	4.23	0.493
Teachers give formative assessment and feedback	4.42	0.541
Teachers provide consistent and constructive feedback to the learners	4.15	0.523
Teachers motivate learners to learn	4.1	0.659
Teachers outline learning objectives	4.15	0.684
Teachers develop the introduction for the lesson	4.05	0.887
Teachers create a realistic timeline for class activities	4.15	0.523
Teachers give informal assessment and feedback	4.12	0.506
Teachers give formal assessment and feedback by use of report cards	3.78	1.029
Teachers give summative assessment and feedback	3.88	0.709
Teachers allow learners to do self-assessment and feedback	4	0.666

4.6.1 Teachers have high teaching workload

Majority of the respondents (82.8%,384) agreed that teachers had a high teaching workload. Only (13.7% ,66.8) of the teachers disputed the statement that teachers had a high workload while only (3.5% ,17.1) remained neutral.

This meant that teachers had a high workload. This finding concured with the findings from the principals who indicated that their teachers are overloaded with work mainly due to increased enrolment following the government policy of 100% transition (Education Act 2013), with the number of teachers employed by TSC not adequately covering the increment in number of learners. This was likely to have an impact on the performance, although the schools in collaboration with the parent and teachers' association (PTA) had found a way of compensating the teachers with a view of motivating them otherwise it may have a drastic impact on the performance.

When teaching workload is high then teacher's performance may be adversely affected. The teaching workload could be attributed to teaching activities involved, which may entail both curricular as well as co -curricular. The observation schedule showed that the block timetable indicated majority of the teachers had more than 30 lessons weekly as well as other tasks. This was higher than the recommended 27 lessons per week alongside other duties.

This could also affect teacher's performance. The results agreed with those of Ayeni & Amanekwe (2018) who reported that the teaching activities may increase teacher's workload and may have a negative impact on teachers' performance. The findings also concured with those of Tancinco (2016) who noted that teaching load had a negative effect on teachers' performance.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between Teacher's workload –The study showed that teachers had high working load (M=4.31, SD=1.088) and Performance (M=2.74, SD=0.826) as indicated in table 16 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of -.012 which was lower than the critical r (0.098) as shown in the table 17 below. The result of the computation shows a weak negative correlation between the two variables under test ($r(486) = -.012$, $p>.05$).

Table 17: Teachers have high workload

Correlations			
		KCSE Performance	**Teachers have high workload**
KCSE Performance	Pearson Correlation	1	-.012
	Sig. (2-tailed)		.786
	N	488	488
	Pearson Correlation	-.012	1

Correlations			
		KCSE Performance	**Teachers have high workload**
Teachers have high workload	Sig. (2-tailed)	.786	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= -.012, critical *r*= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r -.012. Based on the attribute Teachers had high workload, the null hypothesis that there was no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as far as the use of teachers' workload is concerned.

The study went further to ascertain whether teachers had adequate time for lesson preparation. The results indicated that about seventy-one percent (70.75%,311) of teachers agree that there was no ample time for lesson preparation while twenty-four percent (24%,115) said they had ample time for lesson preparation and five percent (5%,29) remained neutral. This implied that teachers were overloaded with duties and responsibilities as well as high teaching workload which affected their time for lesson preparation. The researcher observed that lack of ample time to prepare for lessons might have an impact on both students' achievement as well as the teacher's performance.

These results corroborated the principals' response where there was a consensus that the teachers were overloaded with instructional and non-instructional tasks hence this affected their performance. Further the principals indicated that the teachers had sufficient daily planning time. This implies that teachers did not have enough time to prepare for the lessons due to high workload.

The results agree with Tancinco (2016) who reported that teacher preoccupation with other responsibilities within the school setup could have an effect on their performance as well as their lesson preparation.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload - no ample time to prepare for lessons preparations (M=3.66, SD=1.064) and Performance (M=2.74, SD=0.826) as illustrated above in table 16. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.011 which is lower than the critical r (0.098) as shown in the table 18 below. The result of the computation shows no positive correlation between the two variables under test (r (486) = -0.011, p>.05).

Table 18: Teachers have ample time for lesson preparation

Correlations			
		KCSE Performance	**Teachers have ample time for lesson preparations**
KCSE Performance	Pearson Correlation		-.011
	Sig. (2-tailed)		-.0815
	N	488	488
Teachers have ample time for lesson preparations	Pearson Correlation	-.011	1
	Sig. (2-tailed)	-.0815	
	N	488	488

P<0.05 (2-tailed); df= 486; r= -.011, critical r= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r -.011. Based on the attribute teachers have ample time for lessons preparations, the null hypothesis that there is no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as far as ample time for lesson is concerned.

The study further set out to establish whether there was time to prepare students for assessment. Fifty-one percent (51%,257) disagreed to the fact that they had time to prepare students assessment while thirty-four percent (34%,146) indicated that adequate time was provided for marking assessments.

This implied that the high workload could not allow teachers to have time to prepare student assessments. The study therefore found out that there was no sufficient time for teachers to prepare student assessments.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload – Teachers have ample time to prepare students assessments (M=4.21, SD=0.703) and Performance (M=2.89, SD=1.389) as illustrated in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .024 which is lower than the critical r (0.098) as shown in the table 19 below. The result of the computation showed a weak positive correlation between the two variables under test (r (486) = 0.024, p>.05). With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r -.011, this confirmed the null hypothesis that there was no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County. This was confirmed in as far as ample time to prepare students assessment is concerned.

Table 19: Teachers have ample time to prepare students assessments

Correlations			
		KCSE Performance	**Teachers have ample time to prepare students assessments**
KCSE Performance	Pearson Correlation		.024
	Sig. (2-tailed)		.589
	N	488	488
Teachers use demonstrations during subject delivery	Pearson Correlation	.024	1
	Sig. (2-tailed)	.589	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= .024, critical *r*= 0.098

4.6.2 Teachers have adequate time to mark student assessments

The finding for this attribute was mixed, with (48%,222) which indicated that they had adequate time for marking the students' assessment (26%,129) Strongly agreed (22% 105) agreed while on the other hand, (45%,219) indicated that they did not have adequate time (29% 138) disagreed (16% 93 agreed). (8% ,40) were neutral on the matter.

For the principals' segment, more than half of the principals disagreed that teachers marking, and correcting students work took a lot of time since there was a set time for the same. A quote from one of the principals was;

"…. Setting and marking of learners' assessment is part of the teachers' roles and responsibilities, therefore, the teachers should not state that they do not have time to carry out a role they are required to…." ***Mr. Ali Principal – February 2022***

The results from Metin (2013) agree with the findings of this study since teachers lack sufficient time for preparation of students for assessment. He noted that the classes were overcrowded, a lot of paperwork and insufficient learning environment hence making it difficult for teachers to have ample time to mark students' assessments.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between Teacher's workload – Teachers have adequate

time for marking assessments (M=3.13, SD=1.466) and Performance (M=2.74, SD=0.826) as tabulated above in table 16. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.019 which is lower than the critical r (0.098) as shown in the table 20 below. The results of the computation showed a strong negative correlation between the two variables under test (r (486) = -0.019, p>.05).

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r -.019, this confirmed the null hypothesis that there was no statistically significant relationship between teachers' workload on the effectiveness of Kitui County, Kenya's public secondary school teachers. There was really enough time allotted for grading assignments, as indicated.

Table 20: Teachers have ample adequate time for marking of assessments

Correlations			
		KCSE Performance	**Teachers have adequate time provided for marking assessments**
KCSE Performance	Pearson Correlation		-.019
	Sig. (2-tailed)		.682
	N	488	488
Teachers have adequate time provided for marking assessments	Pearson Correlation	-.019	1
	Sig. (2-tailed)	.682	
	N	488	488

P<0.05 (2-tailed); df= 486; r= .019, critical r= 0.098

4.6.3 Teachers carry out student's role modelling effectively

Further, the study went ahead to find out whether teachers carried out student's role modelling effectively as this could be an indicator of a teacher's performance. Study findings showed that majority of the respondents (64.91%. 361) agreed that teachers carried out student role modelling effectively while (32.74% 178) disagreed and only (2.33%, 11) remained neutral.

This means that teachers carried out student role modelling effectively. This meant that teachers carried out student role modelling effectively. However, this may be contradictory to earlier findings which indicated that teachers were overloaded and did not have adequate time to perform other tasks such as student role modelling.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between workload - Teachers carry out student's role modelling effectively (M=4.21, SD=0.703) and Performance (M=4.23, SD=0.493) as shown above in table 16. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .047 which is higher than the critical r (0.098) as shown in the table 21 below. The result of the computation shows a weak positive correlation between the two variables under test (r (486) = 0.047, p>.05).

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r= .047, this confirms the null hypothesis that there is no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as far as Teachers carry out student's role modelling effectively is concerned.

Table 21: The majority of lessons in my school include teachers demonstrating

Correlations			
		KCSE Performance	**Teachers carry out student's role modelling effectively**
KCSE Performance	Pearson Correlation		.047
	Sig. (2-tailed)		0.297
	N	488	488
Teachers carry out student's role modelling effectively	Pearson Correlation	.047	1
	Sig. (2-tailed)	0.297	
	N	488	488

P<0.05 (2-tailed); df= 486; r .047, critical r= 0.098

4.6.4 Teachers give formative assessment and feedback

Under formative assessment implementation on learners, (44.30%, 216) strongly agreed and (53.30%, 293) agreed that the teachers implement formative assessments with only (2.50% 13) remaining neutral. The study findings shows that formative assessment is conducted by the teachers and backed by the principals who indicated that both formative and summative assessments are conducted by the teachers with formative assessment being the dominant assessment. This meant that even with the increased workload, they were still able to perform their set duties.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teachers' workload – Teachers give formative assessment and feedback (M=4.42, SD=0.541) and Performance (M=2.74, SD=0.826) as shown above in table 19. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of .360 which is higher than the critical r (0.098) as shown in the table 22 below. The results of the computation show a strong positive correlation between the two variables under test ($r (486) = .360, p>.05$).

The p-value is higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r .360. Therefore, the null hypothesis that there are no statistically significant relationships between teachers' workload in public secondary schools in Kitui County was rejected and it could now read, there is a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This means that availability of teachers' workload influences teacher performance in public schools in Kitui County.

Table 22: Teachers give formative assessment and feedback

Correlations			
		KCSE Performance	**Teachers give formative assessment and feedback**
KCSE Performance	Pearson Correlation		.360**
	Sig. (2-tailed)		0.001
	N	488	488
Teachers give formative assessment and feedback	Pearson Correlation	.360**	1
	Sig. (2-tailed)	0.001	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r*=.360, critical *r*= 0.098

4.6.5 Teachers provide consistent and constructive feedback to the learners

The study sort to establish whether the teachers gave consistent and constructive feedback to their learners. The response was generally in the affirmative with (97.60% ,485) in agreement (19.70%,97) strongly agreed and (77.90%,337) agreed. On the flipside, (2.50%,15) of the respondents disagreed with the statement. The impact of the above ratings was that most of the learners were getting consistent feedback from their teachers.

The principals indicated that they ensured that the teachers were giving consistent feedback by ensuring that formative and summative assessments were conducted as well as directly checking with the learners through learner's notes and extended activities. This ensured that teachers' claim on the issue was being verified by their seniors for the benefit of the learners.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload - teachers provided consistent and constructive feedback to the learners (M=4.15, SD=0.523) and Performance (M=2.74, SD=0.826) as shown above in table 16. With 486 degrees of freedom (df), critical *r* = 0.098 at an alpha level of 0.05. The analysis produced an r of .147 which was lower than the critical r

(0.098) as shown in the table 23 below. The result of the computation showed a strong positive correlation between the two variables under test (r (486) 0.147, p>.05).

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r .147. Therefore, the null hypothesis that there were no statistically significant relationships between teachers' workload in public secondary schools in Kitui County was rejected and it could now read, there is a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This meant that availability of teachers' workload influenced teacher performance in public schools in Kitui County.

Table 23: Teachers provide consistent and constructive feedback to the learners

Correlations			
		KCSE Performance	**Teachers provide consistent and constructive feedback to the learners**
KCSE Performance	Pearson Correlation		.147**
	Sig. (2-tailed)		0.001
	N	488	488
Teachers provide consistent and constructive feedback to the learners	Pearson Correlation	.147**	1
	Sig. (2-tailed)	0.001	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r*.147, critical *r*= 0.098

4.6.6 Teachers motivate learners to learn

The study sought to establish whether teachers motivated the learners to learn other than just teaching. The results showed that majority of respondents (92.70%, 480) did indeed motivate their learners to learn, (70.70%,338) agreed and (22.00%,123) strongly agreed. Only (4.9% 24) disagreed with that while (2.40%,12) were neutral. The results are illustrated further in Figure 10. The principals confirmed this and indicated that there are a number of approaches that are used to motivate the learners including reinforcing the learners' efforts as well as encouraging, appreciating and rewarding the learners.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between Teacher's workload – Teachers motivate learners to learn (M=4.21, SD=0.703) and Performance (M=4.10, SD=0.659) as indicated above in table 16. With 486 degrees of freedom (df), critical $r = 0.048$ at an alpha level of 0.05. The analysis produced an r of .048 which is lower than the critical r (0.098) as shown in the table 24 below. The result of the computation shows a weak positive correlation between the two variables under test (r (486) .048, p>.05).

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r= .047, this confirmed the null hypothesis that there was no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as far as motivation of learners by teachers is concerned.

Table 24: Teachers use demonstrations during subject delivery

Correlations			
		KCSE Performance	**Teachers use demonstrations during subject delivery**
KCSE Performance	Pearson Correlation		.048
	Sig. (2-tailed)		.295
	N	488	488
	Pearson Correlation	.048	1

Correlations			
		KCSE Performance	**Teachers use demonstrations during subject delivery**
Teachers use demonstrations during subject delivery	Sig. (2-tailed)	.295	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*.048, critical *r*= 0.098

4.6.7 Teachers Outline learning objectives

The study sought to find out whether teachers outlined learning objectives to the learners. The study results showed that (24.4%,125) and (70.7%,338) strongly agreed and agreed respectively that they were outlining study objectives to the learners while teaching. At the same time, only (2.4%,11) of the respondents disagreed strongly. An equal number (2.4%,11) remained neutral on the issue.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between Teacher's workload – teachers outline learning objectives (M=4.15, SD=0.684) and Performance (M=2.74, SD=0.826) as shown in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .026 which is lower than the critical r (0.098) as shown in the table 25 below. The result of the computation showed a weak positive correlation between the two variables under test (r (486) .026, p>.05).

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r= .026, this confirms the null hypothesis that there is no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as far as teachers outlining learning objectives are concerned.

Table 25: Teachers outline learning objectives

Correlations			
		KCSE Performance	**Teachers outline learning objectives**
KCSE Performance	Pearson Correlation		.026
	Sig. (2-tailed)		0.001
	N	488	488
Teachers outline learning objectives	Pearson Correlation	.026	1
	Sig. (2-tailed)	0.001	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .026, critical *r*= 0.098

Majority of the respondents (92.7% 481) of the respondents agreed that teachers developed the introduction for the lessons (68.30%,294) agreed and (24.40%,113) agreed strongly). Only (7.30%,31) of the teachers disputed the statement that teachers developed introduction for the lessons, (4.90% ,28) disagreeing strongly while (2.4% ,9) disagreed.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload – Teachers develop the introduction for the lessons (M=4.05, SD=0.887) and Performance (M=2.74, SD=0.826) as illustrated in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.117 which is lower than the critical r (0.098) as shown in the table 26 below. The result of the computation showed a strong negative correlation between the two variables under test (r (486) = -0.117, p>.05).

The p-value is higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r -.117. Therefore, the null hypothesis that there are no statistically significant relationships between teachers' workload in public secondary schools in Kitui County was rejected and it could then read, there was a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This

meant that availability of teachers' workload influenced teacher performance in public schools in Kitui County.

Table 26: Teachers develop the introduction for the lesson

Correlations			
		KCSE Performance	**Teachers develop the introduction for the lessons**
KCSE Performance	Pearson Correlation		-.117**
	Sig. (2-tailed)		0.01
	N	488	488
Teachers develops the introduction for the lessons	Pearson Correlation	-.117**	1
	Sig. (2-tailed)	0.01	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r*= -.117, critical *r*= 0.098

The study went further to ascertain whether teachers create realistic timelines for class activities. The results were positive confirmation that the teachers created realistic timelines with (97.5% ,480) of the respondents confirming that teachers create realistic timelines for class activities (78.00%,348) agreeing while (19.50%,116) agreeing strongly). Only (2.40%,11) of the respondents disagreed with the statement. By creating a realistic timeline for class activities, means that the teacher is able to determine beforehand how to manage activities and allocate enough time for the more important areas.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload – teachers create a realistic timeline for class activities (M=4.15, SD=0.523) and Performance (M=2.74, SD=0.826) as shown in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .147 which is lower than the critical r (0.098) as shown

in the table 27 below. The result of the computation showed a weak positive correlation between the two variables under test (r (486) 0.147, p>.05).

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r .147. Therefore, the null hypothesis that there are no statistically significant relationships between teachers' workload in public secondary schools in Kitui County was rejected and it could then read, there was a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This meant that availability of teachers' workload influenced teacher performance in public schools in Kitui County.

Table 27: Teachers creates a realistic timeline for class activities

Correlations			
		KCSE Performance	**Teachers create realistic timelines for class activities**
KCSE Performance	Pearson Correlation		.147**
	Sig. (2-tailed)		0.001
	N	488	488
Teachers create realistic timelines for class activities	Pearson Correlation	.147**	1
	Sig. (2-tailed)	0.001	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r* .147, critical *r*= 0.098

4.6.8 Teachers give informal assessment and feedback

The study went on to find out whether teachers gave informal assessments and feedback to the leaners. From the study, it was found out that (80.30%,468) of the respondents agreed that teachers gave informal assessment and feedback to the learners while (17.20% ,93) strongly agreed. On the flipside, only (2.50%,13) disagreed with the said statement.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload – Teachers give informal assessment and feedback (M=4.12, SD=0.506) and Performance (M=2.74, SD=0.826) as shown above in table 16. With 486 degrees of freedom (df), critical *r* = 0.098 at an alpha level of 0.05. The analysis produced an r of -.041 which is lower than the critical r (0.098) as shown in the table 26 below. The result of the computation showed a weak negative correlation between the two variables under test (r (486) = 0.041, p>.05).

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r= -.041, this confirmed the null hypothesis that there was no statistically significant relationship between teachers' workload on teacher performance in public secondary schools in Kitui County was confirmed in as the statement teachers give informal assessment and feedback is concerned.

Table 28: Teachers gives informal assessment and feedback

Correlations			
		KCSE Performance	**Teachers gives informal assessment and feedback**
KCSE Performance	Pearson Correlation		-.041
	Sig. (2-tailed)		0.371
	N	488	488
Teachers gives informal assessment and feedback	Pearson Correlation	-.041	1
	Sig. (2-tailed)	0.371	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= -.041, critical *r*= 0.098

4.6.9 Teachers give formal assessment and feedback by use of report cards

The study went on to find out whether teachers gave formal assessments and feedback by use of report cards. From the study, it was found out that (65.60% ,329) of the respondents agreed that teachers gave informal assessment and feedback to the learners while (17.20%,95) strongly

agreed. On the flipside, (12.30%,90) disagreed with the said statement while (4.90% ,24) disagreed strongly. To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teacher's workload – teachers give formal assessment and feedback by use of report cards (M=3.78, SD=1.029) and Performance (M=2.74, SD=0.826) as shown in table 16 above. With 486 degrees of freedom (df), critical *r* = 0.098 at an alpha level of 0.05. The analysis produced an r of -.184 which is lower than the critical r (0.098) as shown in the table 29 below. The results of the computation showed a weak negative correlation between the two variables under test (r (486) = -.184, p>.05).

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 w greater than calculated r -.184. Therefore, the null hypothesis that there are no statistically significant relationships between teachers' workload in public secondary schools in Kitui County was rejected and it could then read, there was a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This meant that teachers' workload influences teacher performance in public schools in Kitui County.

Table 29: Teachers give formal assessment and feedback by use of report cards

Correlations			
		KCSE Performance	**Teachers give formal assessment and feedback by use of report cards**
KCSE Performance	Pearson Correlation		-.184**
	Sig. (2-tailed)		0.0
	N	488	488
Teachers give formal assessment and feedback by use of report cards	Pearson Correlation	-.184**	1
	Sig. (2-tailed)	0	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r*= .184, critical *r*= 0.098

4.6.10 Teachers give summative assessment and feedback

The study went on to find out whether teachers give summative assessment and feedback. (82.90%,470) of the respondents agreed with the statement that teachers give summative assessment and feedback to their learners. (7.30%,54.) of the respondents strongly agreed with the statement under review, cumulatively those in agreement with the statement were (90.20%.,478) On the other hand, (7.3%,46) (4.9% 25) disagreed while (2.4%.9) strongly disagreed). (2.4%,9) of the respondents were neutral.

As was observed above under teachers give formative assessment and feedback, the principals have confirmed that both formative and summative assessments are conducted by the teachers.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between workload – teachers give summative assessment and feedback (M=3.88, SD=0.709) and Performance (M=2.74, SD=0.826) as indicated in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.266 which is lower than the critical r (0.098) as shown in the table 30 below. The result of the computation showed a weak negative correlation between the two variables under test (r (486) = -0.266, p>.05).

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r -.266. Therefore, the null hypothesis that there are no statistically significant relationships between teachers' workload and performance in public secondary schools in Kitui County was rejected and it could now read, there is a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This meant that teachers' workload influenced teacher performance in public secondary schools in Kitui County.

Table 30: Teachers give summative assessment and feedback

Correlations			
		KCSE Performance	**Teachers give summative assessment and feedback**
KCSE Performance	Pearson Correlation		-.266**
	Sig. (2-tailed)		0
	N	488	488
Teachers give summative assessment and feedback	Pearson Correlation	-.266**	1
	Sig. (2-tailed)	0	
	N	488	488

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

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

P<0.05 (2-tailed); df= 486; *r*= .266, critical-*r*= 0.098

4.6.11 Teachers allow learners to do self-assessment and feedback

The study went on to find out whether teachers allowed learners to do self-assessment and feedback. Overall, (95.10%,483) of the respondents confirmed that teachers allowed learners to do self-assessment and feedback (82.90%,471) agreed and (12.20%,60) strongly agreed. Overall, (4.8%,23) disagreed with the statement with the rating for both disagree and strongly disagree shared equally. Majority of the principals confirmed that indeed teachers allowed learners to do self-assessment and feedback.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between workload – teachers allowed learners to do self-assessment and give feedback (M=4.00, SD=0.666) and Performance (M=2.74, SD=0.826) as indicated in table 16 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis-produced an r of .090 which is lower than the critical r (0.098) as shown in the table 31 below. The result of the computation showed a weak positive correlation between the two variables under test (r (486) = .090, p>.05).

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 was greater than calculated r .090. Therefore, the null hypothesis that there are no statistically significant

relationships between teachers' workload and performance in public secondary schools in Kitui County was rejected and it could now read, there was a statistically significant relationship between teachers' workload and teacher performance in public secondary schools in Kitui County. This meant that teachers' workload influenced teacher performance in public schools in Kitui County.

Table 31: Teachers allow learners to do self-assessment and feedback

Correlations			
		KCSE Performance	**Teachers allow learners to do self-assessment and feedback**
KCSE Performance	Pearson Correlation		.090**
	Sig. (2-tailed)		0.048
	N	488	488
Teachers allow learners to do self-assessment and feedback	Pearson Correlation	.090**	1
	Sig. (2-tailed)	0.048	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .090, critical *r*= 0.098

4.6.12 Correlation between teaching workload and performance

As has been observed above, from each of the independent variables was analyzed against the dependent variable which is the teacher performance. Correlation analysis was used to determine the relationship between the two variables, teachers' workload and performance. A correlation is a number between -1 and +1 that measures the degree and direction of association between two variables. This was done using Pearson Product-Moment Correlation Coefficient. Idde, G (2013).

Based on this, the null hypothesis; *There is no statistically significant relationship between teaching workload and teacher performance in public secondary schools in Kitui County* was not confirmed as a number of attributes a p-value which was lower than the alpha value 0.05. This showed a statistically significant relationship between the two variables. Therefore, this

meant that the null hypothesis showed that: *There was statistically significant relationship between teaching workload and teacher performance in public secondary schools in Kitui County.*

4.7 Principal's leadership behaviour on teacher's performance

Under Principal's leadership behaviour on teachers' performance, the study was trying to approve or disapprove the third hypothesis for this study, that there is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County. The principal leadership behaviour can vary significantly with the performance of teachers. Teacher's performance differs significantly in relation to the most, moderate and least leadership behaviour of the principal. Malhotra L, Hussein I & Bhatia, H (2019) noted that effective principal leadership behaviour acts as a catalyst for increasing teacher's performance which in turn improves on students' performance and school climate in general. The study measured a number of attributes related to principal's leadership behaviour including creation of rapport with teachers, delegation of duties, recognition and celebration of teachers' contributions amongst other areas.

With this in mind this study sought to investigate the relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County. The results are as shown in Table 32.

Table 32: Influence of principal's leadership behaviour on teacher performance

	BASE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Principal creates rapport with teachers	488	98	337	7	23	23
	100%	20%	69%	1.4%	4.8%	4.8%
Principal delegates duties to teachers	488	156	332	0	0	0
	100%	32%	68%	0%	0%	0%
Principal recognizes and celebrates the	488	127	284	07	49	21

	BASE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
contributions of school community members to school improvements efforts	100%	26%	58.2%	1.4%	10%	4.4%
Principal demonstrates effective group process and consensus building skills in school improvement efforts	488 100%	141 28.9%	258 52.9%	10 2.0%	49 10%	30 6.2%
Principal mentors' teachers on career Progression	488 100%	187 38.3%	231 47.3%	10 2.0%	59 12.1%	1 0.3%
Principal shares student data with all Shareholders	488 100%	200 41%	195 40.0%	4 0.8%	29 6%	60 12.2%
Principal nurtures and develops the leadership capabilities of others	488 100%	166 34%	164 33.6%	23 4.7%	112 23%	23 4.7%

The mean score and standard deviation for the above ratings is as indicated below in table 33.

Table 33 : Pprincipals'' leadership behaviour ratings mean score and standard Deviation

	Mean	Std. Deviation
Principal creates rapport with teachers	3.95	0.909
Principal delegates duties to teachers	4.32	0.467
Principal recognizes and celebrates the contributions of school community members to school improvements efforts	3.92	1.029
Principal demonstrates effective group process and consensus building skills in school improvement efforts	3.88	1.119
Principal mentors' teachers on career Progression	4.11	0.946
Principal shares student data with all Shareholders	3.91	1.326
Principal nurtures and develops the leadership capabilities of others	3.69	1.28

4.7.1 Principal creates rapport with teachers

Majority of the teachers (69%,331) agreed that the principal leadership behaviour of creating rapport with teachers influenced their performance while (20% ,105) of them strongly agreed that the principal creating rapport with the teachers influenced teachers' performance. This implied that when the principal had a good rapport with the teachers it had an effect on their performance in class.

From the principals' segment, majority of them agreed that they (principals) had a good rapport with teachers and this rapport was likely to have a positive school climate.

The results agreed with those of Kara, (2016) who reported that it was important for the school leader to create a good rapport with the teachers to help in good performance among the teachers. He also noted that this practice would help the school to develop skills necessary to navigate the complex relationship terrain that surrounds their position. The findings on another study carried out by Wachira, Gitumu and Mbugua (2017), showed that there was a significant relationship between principals' leadership behaviour (p=0.001) and teachers job performance. The study recommended that the government and local leaders should sensitize parents in co-operating with the school principal in improving academic performance. These findings concurred with the findings of this study which showed that when the principal has a good rapport with teachers it resulted to positive school climate.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between principal's leadership behaviour – teachers created rapport with teachers (M=2.05, SD=0.909) and Performance (M=2.74, SD=0.826) as illustrated in table 33 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of .007 which is lower than the critical r (0.098) as

shown in the table 34 below. The result of the computation shows a weak positive correlation between the two variables under test (r (486) = 0.007, p>.05).

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.007, the null hypothesis that there is no statistically significant relationship between principals' leadership and teacher performance in public secondary schools in Kitui County was confirmed in as the statement principal created rapport with teachers was concerned.

Table 34: Principal create rapport with teachers

Correlations			
		KCSE Performance	**Principals create rapport with teachers**
KCSE Performance	Pearson Correlation		.007
	Sig. (2-tailed)		0.871
	N	488	488
Principals create rapport with teachers	Pearson Correlation	.007	1
	Sig. (2-tailed)	0.871	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .007, critical *r*= 0.098

4.7.2 Principal delegates duties to the teachers

A majority of the teachers (68%332) agreed that the principal delegates' duties to teachers and (32%,163) strongly agreed. This implied that principals delegated duties to teachers which made teachers feel accepted and respected in the different capacities hence creating a positive school climate which helped improve teacher's performance. The results from the teachers concurred with those of all the principals who noted that they delegated duties to teachers to enable them run the school effective and improve on both teachers and students' performance. The results agreed with Aunga and Masare (2017) who noted that the delegation of duties by the principal created a positive school climate since the teachers felt motivated, they became

committed, satisfied, discipline and improved teachers' performance, but statistically this was found to be insignificant (0.996>0.05).

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between principal's leadership behaviour - principal delegates duties to teachers (M=1.68, SD=0.467) and Performance (M=2.74, SD=0.826) as illustrated in table 33 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of 0.0 which is lower than the critical r (0.098) as shown in the table 35 below. The result of the computation shows that there is no statistically, there is no relationship between the two variables under test (r (486) 0.0, p>.05), which confirmed the null hypothesis that there was no statistically significant relationship between principals' leadership and teacher performance in public secondary schools in Kitui County was confirmed in as far as the statement principal's delegates duties to teachers to teachers was concerned.

Table 35: Principal delegates duties to teachers

Correlations			
		KCSE Performance	**Principal delegates duties to teachers**
KCSE Performance	Pearson Correlation		.0
	Sig. (2-tailed)		0.992
	N	488	488
Principal delegates duties to teachers	Pearson Correlation	.0	1
	Sig. (2-tailed)	0.992	
	N	488	488

P<0.05 (2-tailed); df= 486; r= 0, critical r= 0.098

4.7.3 Principal recognizes and celebrates the contributions of school community members to school

About (59%,327) of the teachers agreed and (26% ,156) strongly agreed that the principals recognize and celebrate the contribution of school community members to school improvement efforts. This implies that the principal recognizes teachers' efforts, subordinates and the student on improvement efforts hence creating a positive school climate that in turn affected teacher's performance.

Almost all the principals agreed that they recognize and celebrate the contribution of school community members to improve on the performance of teachers. Muteti that;

"…during school prize giving days the school management makes sure to recognize all teachers' efforts during the past year. This is marked by the different subject categories from the previous year's performance, where the best improved subject is recognized; the most improved department and teacher are also recognized. This helps the teachers work hard to achieve the school set goals hence improving on their performance as well as that of the student" This interview was conducted on 21 June 2021.

The findings agreed with Prokopchuk (2016) who noted that the school principal should create a school culture that is essential in improving the school performance. This could be done through collaborative leadership, professional development, develop a common vision that involves students, teachers and the community and is effectively communicated.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between principal's leadership behaviour - Principal recognizes and celebrates the contributions of school community members to school improvements efforts (M=4.21, SD=0.703) and Performance (M=2.08, SD=1.029) as shown in table 33 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05.

The analysis produced an r of 0.043 which is lower than the critical r (0.098) as shown in the table 36 below. The result of the computation shows a no positive correlation between the two variables under test (r (486) 0.043, p>.05).

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.043, the null hypothesis that there is no statistically significant relationship between principals' leadership and teacher performance in public secondary schools in Kitui County was confirmed in as the statement Principal recognized and celebrated the contributions of school community members to school improvements efforts was concerned.

Table 36: Principal recognizes and celebrates the contributions of school community members to school improvements efforts

Correlations			
		KCSE Performance	**Principal recognizes and celebrates the contributions of school community members to school improvements efforts**
KCSE Performance	Pearson Correlation		0.043
	Sig. (2-tailed)		0.344
	N	488	488
Principal recognizes and celebrates the contributions of school community members to school improvements efforts	Pearson Correlation	0.043	1
	Sig. (2-tailed)	0.344	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*=.043, critical *r*= 0.098

4.7.4 Principal's talents in leading groups and achieving agreement on solutions are evident in the school's progress.

On the other study revealed that (55%,323) agreed, with another (29%,130) strongly agree and (10%,49) disagree of the teachers that the principal demonstrates effective group process and consensus building skills in school improvement efforts.

From the principals' survey, over two thirds of them agreed that they demonstrated effective group process and consensus building skills to improve teacher's performance.

The study implies that a majority of the teachers were in agreement that when the principal demonstrate effective group process and consensus building skills help their school to improvement hence leading to a positive school climate that had an impact on teacher's performance. Another study on management of school climate and teachers job performance by Emu, Nwanunu and Heoma (2018) showed that safety of school environment and principals' leadership style significantly influenced teachers' job performance. The study recommended that school administrators must ensure that both class and staffrooms are well equipped and properly ventilated, and principals must be liberal in dealing with teachers and students so as to enhance teachers' job performance. According to Dike, Cordelia, and Chikweru's (2019) research on school atmosphere and teachers' performance in public secondary schools in River's state, autocratic leadership style negatively impacts teachers' willingness to work while democratic leadership style favorably boosts teachers' performance. The study also found that high-paying instructors outperform their lower-paid counterparts in the classroom, and that teachers can better reach each of their pupils in a smaller class size. The opposite is true for upward communication, which often takes the shape of rumours and has a negative impact on instructors' performance. The study urged the government of Rivers state to implement the following policies in its public secondary schools: provide teachers with

access to the internet and computers, encourage principals to adopt a democratic style of leadership, pay teachers a living wage and benefits on a consistent basis, and establish clear lines of communication to quell rumours. The results concur with The Wallace Foundation (2013) who noted that school principals should be able to develop a team that can shape a vision of academic success for all students in their schools, create a climate that hospitable to education, cultivate leadership in teachers and other adults to assume their parts in realizing the school vision, improve instruction to enable teachers teach at their best and students learn at their utmost and manage people, data and processes to foster school improvement.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between principal's leadership behaviour - Principal demonstrates effective group process and consensus building skills in school improvement efforts (M=2.12, SD=1.119) and Performance (M=2.74, SD=0.826) as illustrated above in table 33. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of -.015 which is lower than the critical r (0.098) as shown in the table 37 below. The result of the computation showed a no positive correlation between the two variables under test (r (486) -0.015, p>.05).

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.015, the null hypothesis that there is no statistically significant relationship between principals' leadership and teacher performance in public secondary schools in Kitui County was confirmed in as the statement Principal demonstrates effective group process and consensus building skills in school improvement efforts was concerned.

Table 37: Principal demonstrates effective group process and consensus building skills in school improvement efforts

Correlations			
		KCSE Performance	**Principal demonstrates effective group process and consensus building skills in school improvement efforts**
KCSE Performance	Pearson Correlation		-.015
	Sig. (2-tailed)		0.734
	N	488	488
Principal demonstrates effective group process and consensus building skills in school improvement efforts	Pearson Correlation	-.015	1
	Sig. (2-tailed)	0.734	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*=.015, critical *r*= 0.098

4.7.5 Principal mentors' teachers on career progression

Another study found that (49% ,233) of the teachers agreed, (39 %188) strongly agreed with a small population of (12%,59) disagreeing that the principal mentors' teachers on career progression. The results implied that teacher mentorship on career progression is very important factor in positive school climate and this would have a positive effect on teacher's performance.

Result of the principals' survey showed that over two thirds of them, disagreed with the teachers on mentorship program on their performance. This was as indicated by a number of principals.

"…mentorship helps teachers to prepare to move to the next level in their career. It is important to note that when teachers lack mentorship, after the principal retires the school go through a hard time to get a good principal since the teachers were not mentored or they lack role models to help them grow in the career for future advances hence this may affect their performance in

*class and generally in other areas of responsibilities within the school." **Mr. Kato; Principal – February 2022***

The researcher observed that the number of teachers that disagreed with principal mentors' teachers on career progression as the teacher who dd not get support may be taken for extra classes to learn because of the amount of workload they had been accorded by the principal. The results agreed with UNESCO (2016) which noted that the principal was proactively involved in developing their staff, including supporting teachers through providing them opportunities to take added opportunities and career advancement this results in increased work motivation and performance. Hence increasing teacher retention and raising the quality of education.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between principal's leadership behaviour - Principal mentors' teachers on career progression (M=4.11, SD=0.946) and Performance (M=2.74, SD=0.826) as shown in table 33 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.012 which is lower than the critical r (0.098) as shown in the table 38 below. The results of the computation showed a negative correlation between the two variables under test (r (486) 0.012, p>.05).

Table 38: Principal mentors' teachers on career Progression

Correlations			
		KCSE Performance	**Principal mentors' teachers on career Progression**
KCSE Performance	Pearson Correlation		-.012
	Sig. (2-tailed)		0.786
	N	488	488
Principal mentors' teachers on career Progression	Pearson Correlation	-.012	1
	Sig. (2-tailed)	0.786	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* -.012, critical *r*= 0.098

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=-.012, the null hypothesis that there is no statistically significant relationship between principals' leadership and teacher performance in public secondary schools in Kitui County was confirmed in as the statement Principal mentors' teachers on career Progression is concerned.

4.7.6 Principal shares student data with all Shareholders

Most of the teachers (41% 190) strongly agreed that principal shared student data with all shareholders. This implied that student data especially on performance was shared with stakeholders who may include parents, education officer as well as students. From the principals' survey, more than three quarters (31%,161) of the principals indicated that they shared students' data with stakeholders.

The researcher observed that sharing of students' data showed that there was need for the stakeholders to help in different ways that would help to improve performance of the students as well as teacher performance. The results concurred with those of Hargreaves and Braun (2016) who reported that data can promote improvement in the quality and effectiveness in teaching and learning because it will help teachers to have improved performance. The attribute on the principal sharing the data with all stakeholders was found to be statistically significant (0.00>0.05).

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between a principal's leadership behaviour - Principal shared student data with all shareholders (M=3.91, SD=1.326) and Performance (M=2.74, SD=0.826) as shown in table 33 above. With 486 degrees of freedom (df), critical *r* = 0.098 at

an alpha level of 0.05. The analysis produced an r of -.176 which is higher than the critical r (0.098) as shown in the table 39 below. The result of the computation showed a weak negative correlation between the two variables under test (r (486) -0.176, p>.05).

Table 39: Principal shares student data with all shareholders

Correlations			
		KCSE Performance	**Principal shares student data with all shareholders**
KCSE Performance	Pearson Correlation		-.176**
	Sig. (2-tailed)		0.001
	N	488	488
Principal shares student data with all shareholders	Pearson Correlation	-.176**	1
	Sig. (2-tailed)	0.001	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*=-.176, critical *r*= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r -.176. Therefore, the null hypothesis - *There is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui Count;* was rejected and it could now read; *there is statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County*. This meant that principal's leadership influenced teacher performance in public schools in Kitui County.

4.7.7 Principal nurtures and develops the leadership capabilities of others

The least agreed upon item was on principal nurtures and develops the leadership capacities of others at (38 %,187) of teachers agree and (34%,166) strongly agree, and (23 %,154) disagree.

The findings above concurred with the findings of the principals' survey, where 32 principals confirmed that they nurtured and developed the leadership capacities of the teachers.

Combining the two, confirmed that the principals nurtured and developed leadership capacities of their teachers.

The results agreed with those of Killion, Harrison, Colton, Bryan, Delehant, & Cooke, (2016) who noted that principal nurturing of teachers to leadership had a high influence on students and peer performance. This could be directly or indirectly in areas such as promoting and facilitating professional learning and collaboration, designing, and implementing and support school on its implementation of various activities. Teachers led wherever they are and their leadership is more about their influence, this is because they are professionally driven and have personal moral purpose to contribute to the success of the students, hence influencing their performance.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between a principal's leadership behaviour - Principal shareed student data with all shareholders (M=3.69, SD=1.280) and Performance (M=2.74, SD=0.826) as illustrated in table 33 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of -.164 which is lower than the critical r (0.098) as shown in the table 40 below. The results of the computation showed a weak negative correlation between the two variables under test ($r(486) = -0.164$, $p>.05$).

Table 40: Principal nurtures and develops the leadership capabilities of others

Correlations			
		KCSE Performance	**Principal nurtures and develops the leadership capabilities of others**
KCSE Performance	Pearson Correlation		.164**
	Sig. (2-tailed)		0.0
	N	488	488
	Pearson Correlation	.164**	1
	Sig. (2-tailed)	0.0	

Correlations			
		KCSE Performance	**Principal nurtures and develops the leadership capabilities of others**
Principal nurtures and develops the leadership capabilities of others	N	488	488

P<0.05 (2-tailed); df= 486; *r*=- .164, critical *r*= 0.098

The p-value was higher than the alpha value 0.05 and the critical r of 0.098 is greater than calculated r -.164. Therefore, the null hypothesis - *There is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui Count;* was rejected and it could now read; *there is statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County*. This meant that principal's leadership influenced performance in public schools in Kitui County.

4.7.8 Summary of correlation between principal's leadership behaviour and performance

As has been observed above, from each of the independent variables analyzed against the dependent variable which was the teacher performance. Correlation analysis was used to determine the relationship between the two variables, principals' workload and performance. A correlation is a number between -1 and +1 that measures the degree and direction of association between two variables. This was done using Pearson Product-Moment Correlation Coefficient.

Based on this analysis, the null hypothesis; *There is no statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County* was not confirmed as two attributes returned p-value which was lower than the alpha value 0.05. This showed a statistically significant relationship between the two

variables. Therefore, this meant that the null hypothesis was changed to *There was statistically significant relationship between principal's leadership behaviour and teacher performance in public secondary*

4.8 Principal encourages teamwork on teacher performance

Teamwork could be described as the capability to work with others through collaboration and communication to achieve a common objective (Polega; Amorim Neto, Brilowski, Baker, 2019). It is important to note that there could be little or no mistakes when people work as a team. In a School set up there are benefits that come with working as a team player which can lead to improved school climate and teacher performance. This study therefore sought to establish the influence of team work on teacher's performance in public secondary schools in Kitui County, with a view of confirming or otherwise of the fourth hypothesis in this study, that there was no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County. The results are as shown in Table 41 below.

Table 41: Influence of teamwork on teacher performance

	BASE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Teachers consult on matters concerning	488	218	188	11	41	30
Students' welfare	100%	44.7%	38.5%	2.3%	8.4%	6.1%
Teachers work together to innovate new	488	183	301	04	0	0
Ideas	100%	37.5%	61.7%	0.8%	0%	0%
Teachers consult with parents on matters	488	193	188	10	96	1
concerning students	100%	39.5%	38.5%	2.0%	19.7%	0.3%
Teachers are actively involved in	488	130	143	7	138	70
benchmarking to improve standards	100%	26.6%	29.3%	1.4%	28.3%	14.4%
Teachers do not help the principal in	488	137	107	6	127	111
monitoring and evaluation	100%	28.1%	21.9%	1.2%	26.0%	22.8%

	BASE	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Teachers absent themselves from duty due to work related issues	488 100%	136 27.8%	104 21.3%	6 1.2%	128 26.2%	114 23.1%
Teachers being involved in creating Child friendly environment	488 100%	130 26.6%	107 21.9%	11 2.3%	130 26.6%	110 22.6%

The mean score and standard deviation for the above ratings is as indicated below in table 42.

Table 42 : Teamwork ratings mean score and standard deviation

	Mean	Std. Deviation
Teachers consult on matters concerning Students' welfare	4.07	1.165
Teachers work together to innovate new Ideas	4.37	0.499
Teachers consult with parents on matters concerning students	3.98	1.106
Teachers are actively involved in benchmarking to improve standards	3.26	1.468
Teachers do not help the principal in monitoring and evaluation	3.07	1.585
Teachers absent themselves from duty due to work related issues	3.04	1.59
Teachers being involved in creating Child friendly environment	3.03	1.567

The study findings further showed that a majority of the teachers (46%,220) strongly agreed and (40% ,214) agreed that teachers consult on matters concerning student's welfare. From the principals' survey, the finding was in concurrence, as most of the principals (33%,164) agreed that teachers consult widely on matters concerning student's welfare. For qualitative data from interview,

"……There is an ample consultation not only amongst teachers in the same department, but also teachers in the whole school, which is quite healthy…." ***Mr. Edward; Principal – February 2022***

"……my teachers have an informal meeting every two weeks on Thursdays, no minutes are taken, no notes, just informal discussions on student welfare…." ***Mr. Hassan; Principal – February 2022***

From the above the study found that teacher's performance was influenced when they were able to consult on matters concerning student's welfare. The researcher observed that consulting among teachers and other stakeholders about the students helped the teacher understand the student better and hence this helped them perform their duties effectively. The results agreed with O'Neill & Salas (2018) who noted that teacher consultation about students advocated for great association with the students, readiness to teach and teacher commitment to help the students in their endeavours.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork - Teachers consult on matters concerning Students' welfare (M=4.07, SD=1.165) and Performance (M=2.74, SD=0.826) as illustrated in table 42 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -0.055 which is lower than the critical r (0.098) as shown in the table 43 below. The result of the computation showed a no negative correlation between the two variables under test (r (486) = -0.055, p>.05).

Table 43: Teachers consult on matters concerning Students' welfare

Correlations			
		KCSE Performance	**Teachers consult on matters concerning Students' welfare**
KCSE Performance	Pearson Correlation		-.055
	Sig. (2-tailed)		.224
	N	488	488
Teachers consult on matters concerning Students' welfare	Pearson Correlation	.055	1
	Sig. (2-tailed)	.224	
	N	488	488

P<0.05 (2-tailed); df= 486; r=- .055, critical r= 0.098

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=-.055, the null hypothesis that there is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was

confirmed in as the statement Teachers consult on matters concerning Students' welfare was concerned.

4.8.1 Teachers consult with parents on matters concerning students

The study also revealed that (41%,225) of the teachers strongly agreed and (39%,187) agreed that teachers consult with parents on matters concerning students whereas (20 %,98) were of the contrary opinion. This implied that principals allowed teachers to interact with parents on students' matters. The researcher observed that when parents and teachers were able to consult on students' matters, the teachers and parents would easily participate in helping the student to become better hence improved performance. The results agreed with those of Polega et. al., (2019) who noted that for a task to be accomplished there was need for both members to understand the team purpose and work towards the same objective, this was because both will be independent and depend on each other to accomplish the objectives.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork - Teachers consult with parents on matters concerning students (M=3.98, SD=1.106) and Performance (M=2.74, SD=0.826) as illustrated in table 42 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -0.033 which is lower than the critical r (0.098) as shown in the table 44 below. The result of the computation showed a no positive correlation between the two variables under test (r (486) = 0.033, p>.05).

Table 44: Teachers consult with parents on matters concerning students

Correlations			
		KCSE Performance	**Teachers consult with parents on matters concerning students**
KCSE Performance	Pearson Correlation		.033
	Sig. (2-tailed)		.462

Correlations			
		KCSE Performance	**Teachers consult with parents on matters concerning students**
Teachers consult with parents on matters concerning students	N	488	488
	Pearson Correlation	.033	1
	Sig. (2-tailed)	.462	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .033, critical *r*= 0.098

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=-.033, the null hypothesis that there was no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as the statement Teachers consult with parents on matters concerning students is concerned.

4.8.2 Teachers work together to innovate new ideas

Majority of teachers agreed (62% 325) and (38 %187) strongly agreed that teamwork helped teachers work together to innovate new ideas.

From the principals' survey, majority of the principals also agreed that teacher who worked as a team were able to bring in new ideas were able to improve on performance.

This implied that the school climate was improved when teachers work together to innovate new ideas which in turn helped in their performance. The researcher observed that when the principal pulls together the teachers to work develop a culture of teamwork this helps them become more innovative in their teaching. The results concurred with those of Benoliel & Schechter (2018) who noted that the principals pulled teachers away from the comfort of their closed classroom doors and instructional routine and allowed them to take the risk of learning and doubting with colleagues to ensure good performance of the school.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork - Teachers work together to innovate new ideas (M=4.37, SD=0.499) and Performance (M=2.74, SD=0.826) as indicated in table 42 above. With 486 degrees of freedom (df), critical *r* = 0.098 at an alpha level of 0.05. The analysis produced an r of .01 which is lower than the critical r (0.098) as shown in the table 45 below. The result of the computation showed that there was no positive correlation between the two variables under test (r (486) = 0.01, p>.05).

Table 45: Teachers work together to innovate new ideas

Correlations			
		KCSE Performance	**Teachers work together to innovate new ideas**
KCSE Performance	Pearson Correlation		.01
	Sig. (2-tailed)		0.001
	N	488	488
Teachers work together to innovate new ideas	Pearson Correlation	.01	1
	Sig. (2-tailed)	0.001	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*= .01, critical *r*= 0.098

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.01, the null hypothesis that there is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as the statement teachers work together to innovate new ideas is concerned.

On the issue of teachers being actively involved in benchmarking to improve standards 27% strongly agree and 29 percent agree while 30 percent disagree and 14 percent strongly disagreed. This implies there is a possibility that teachers were not of the idea of benchmarking to improve standards as indicated by the number that disagree. However, the principals' interpretation of the same was different, indicating that benchmarking critical, however, it's

done at the school level, not directly by each teacher. Some of the comments by the principals from the qualitative data include;

"Benchmarking is done all the time especially with schools at the same level – be it sub county, county, extra county or national schools; however, this is done from the school level not directly by the teachers…. However, if a teacher takes the initiative, it's not disallowed…" ***Ms. Anne W; Principal – February 2022***

The results agreed with European Agency for Special Needs and Inclusive Education (2018) who reported that benchmarking was important and helpful to schools but it worked well when the school climate was collaborative to reducing the gap on attainment as well as gaps between the teachers' performance from various schools.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork - Teachers are actively involved in benchmarking to improve standards (M=3.26, SD=1.468) and Performance (M=2.74, SD=0.826) as indicated in table 42 above. With 486 degrees of freedom (df), critical $r = 0.098$ at an alpha level of 0.05. The analysis produced an r of .044 which is lower than the critical r (0.098) as shown in the table 46 below. The result of the computation showed a no positive correlation between the two variables under test (r (486) 0.044, p>.05).

Table 46: Teachers are actively involved in benchmarking to improve standards

Correlations			
		KCSE Performance	**Teachers are actively involved in benchmarking to improve standards**
KCSE Performance	Pearson Correlation		.044
	Sig. (2-tailed)		0.336
	N	488	488
	Pearson Correlation	.044	1

Correlations			
		KCSE Performance	**Teachers are actively involved in benchmarking to improve standards**
Teachers are actively involved in benchmarking to improve standards	Sig. (2-tailed)	0.336	
	N	488	488

P<0.05 (2-tailed); df= 486; *r* .044, critical *r*= 0.098

With p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.044, the null hypothesis that there is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as the statement Teachers are actively involved in benchmarking to improve standards is concerned.

4.8.3 Teachers do not help the principal in monitoring and evaluation

The study findings showed that (28 %,140) strongly agree and (22%,111) agree of the teachers that teachers do not help the principal in monitoring and evaluation while (27 %,140) disagreed and (23%,154) strongly disagree were of the contrary opinion.

All the principals noted that they carried out monitoring and evaluation in their respective schools as the instruction supervisors. This implied that teachers were not supposed to monitor and evaluate each other. However, almost half of the respondents were of the contrary opinion that teachers helped in monitoring and evaluation. The study observed that monitoring and evaluation instrument or tools used by the principal should help in solving problems during teaching and learning hence improving on the performance of teachers. The results agreed with Newman M, Jones. & Webb (2012) who opined that monitoring tools were used in management as a means of identifying and creatively solving problems in teaching and learning hence improving performance of both the teachers and the learners. A study carried out by

Polega (2019) on principals and teamwork among teachers in United States showed that principals considered teamwork to be very important. They showed that time constraints, relationship concerns and experience are barriers to teamwork. The study further noted that principals take initiatives such as modifying schedules, team-building activities and professional development to foster teamwork among teachers. These findings are similar to the findings of this study which showed that there was a significant relationship between teamwork and teacher performance.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork – teacher do not help the principals in monitoring and evaluations (M=3.07, SD=1.587) and Performance (M=2.74, SD=0.826) as shown in table 42 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.062 which is lower than the critical r (0.098) as shown in the table 47 below. The result of the computation showed a no negative correlation between the two variables under test (r (486) = .062, p>.05).

Table 47: Teachers do not help the principals in monitoring and evaluations

Correlations			
		KCSE Performance	**Teacher do not help the principals in monitoring and evaluations**
KCSE Performance	Pearson Correlation		-.062
	Sig. (2-tailed)		0.171
	N	488	488
Teacher do not help the principals in monitoring and evaluations	Pearson Correlation	-.062	1
	Sig. (2-tailed)	0.171	
	N	488	488

P<0.05 (2-tailed); df= 486; r= .062, critical r= 0.098

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=-.062, the null hypothesis that there is no statistically significant relationship

between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as the statement teacher do not help the principals in monitoring and evaluations is concerned.

4.8.4 Teachers absent themselves from duty due to work related issues

The study set out to establish whether teachers absent themselves from duty due to work related issues as it was assumed that if there were some issues that left teachers uncomfortable or stressed, the teachers would look for all manner of excuses so as not to be at the place of work. The study results show that forty-nine percent of the respondents agreed that teachers absent themselves from duty due to work related issues while the same percentage (49%,255) disagreed. A small number of respondents (1.16%,9) remained neutral.

This implies a possibility that teachers could absent themselves from duty due to work related issues. This is because in many cases, workers can either be coerced or are bound by job obligations to be present at their duty stations whether they liked or not. This supports McGregor's theory X and Y. Theory Y states that man has to be forced to work since he doesn't like work. However, work dislike may emanate from unfavourable school climate. Findings from a study carried out by Norma A.S (2010) indicated that there is a significant relationship between teacher workload and teacher performance. The findings further showed that workload intensification is a primary factor which makes teachers to leave the profession early. These study findings concurred with the findings of this study which showed that teachers absented themselves from duty due to work related issues. Therefore, there was need for the school principals to ensure that teachers have the required workload for sustainability and better performance.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between teamwork- Teachers absent themselves from duty

due to work related issues (M=3.04, SD=1.590) and Performance (M=2.74, SD=0.826) as indicated in table 42 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of .03 which is lower than the critical r (0.098) as shown in the table 48 below. The result of the computation showed a weak positive correlation between the two variables under test (r (486) 0.03, p>.05).

Table 48: Teachers absent themselves from duty due to work related issues

Correlations			
		KCSE Performance	**Teachers absent themselves from duty due to work related issues**
KCSE Performance	Pearson Correlation		.03
	Sig. (2-tailed)		.507
	N	488	488
Teachers absent themselves from duty due to work related issues	Pearson Correlation	.03	1
	Sig. (2-tailed)	.507	
	N	488	488

P<0.05 (2-tailed); df= 486; r=.03, critical r= 0.098

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=.03, the null hypothesis that there is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as far as the statement Teachers absent themselves from duty due to work related issues is concerned.

4.8.5 Teachers are involved in creating child friendly environment

The study set out to establish whether teachers were involved in creating child friendly environment as it was assumed that a teacher who operated in a good school climate would be comfortable enough to create a child friendly environment. The study results showed that forty-nine percent (49%,233) of the respondents agreed that were involved in creating child friendly environment while the same percentage (49%233) disagreed. A small number of respondents

(2.33%,10) remained neutral. These results imply that teachers could either create a child friendly environment by themselves or might also have been forced to do so.

To establish whether there was a relationship, a Pearson product moment correlation was computed to assess the relationship between Teamwork - Teachers being involved in creating Child friendly environment (M=3.03, SD=1.567) and Performance (M=2.74, SD=0.826) as indicated in table 42 above. With 486 degrees of freedom (df), critical r = 0.098 at an alpha level of 0.05. The analysis produced an r of -.012 which is lower than the critical r (0.098) as shown in the table 49 below. The result of the computation shows a weak negative correlation between the two variables under test (r (486) = -0.012, p>.05).

Table 49: Teachers being involved in creating Child friendly environment

Correlations			
		KCSE Performance	**Teachers being involved in creating Child friendly environment**
KCSE Performance	Pearson Correlation		-.012
	Sig. (2-tailed)		0.792
	N	488	488
Teachers being involved in creating Child friendly environment	Pearson Correlation	-.012	1
	Sig. (2-tailed)	0.792	
	N	488	488

P<0.05 (2-tailed); df= 486; *r*-.012, critical *r*= 0.098

With-p-value being higher than the alpha value 0.05 and the critical r of 0.098 greater than calculated r=-.012, the null hypothesis that there is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County was confirmed in as far as the statement Teachers being involved in creating Child friendly environment is concerned.

4.8.6 Summary of correlation between teachers' teamwork and performance

As has been observed above, from each of the independent variables was analyzed against the dependent variable which is the teacher performance. Correlation analysis was used to determine the relationship between the two variables, principals' workload and performance. A correlation is a number between -1 and +1 that measures the degree and direction of association between two variables. This was done using Pearson Product-Moment Correlation Coefficient.

Based on this, the null hypothesis; *There is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County,* was confirmed by this research as all the attributes were found to be statistically insignificant.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the study summary, conclusions and recommendation in brief discussions based on the evidence from the study. The purpose of this study was to determine the effects of school climate on teacher performance in public secondary schools in Kitui County. This study was guided by the following objectives;

The following statements guided the study:

i. To establish the repercussions of educational resource accessibility on teacher performance in public secondary schools in Kitui County.
ii. To examine the effects of teaching workload on teacher performance in public secondary schools in Kitui County.
iii. To investigate the effects of principal's leadership behaviour on teacher performance in public secondary schools in Kitui County.
iv. To find out the effects of teamwork on teacher performance in public secondary schools in Kitui County.

The key findings and conclusions of this study were based on the responses to the following null hypotheses;

i. H_{01}. Kitui County's public secondary schools' teachers' effectiveness was not correlated with the availability of classroom materials.
ii. H_{02}. In Kitui County, public secondary school teachers' workloads were not correlated with their students' academic outcomes.
iii. H_{03}. It was shown that in Kitui County, Kenya, public secondary school

iv. H_{04}. In Kitui County's public secondary schools, we found no evidence of a significant correlation between teachers' levels of teamwork and their students' academic outcomes.

5.3 Summary of Findings

The main findings of the study are summarized based on the themes developed from the four objectives of the study.

5.3.1 The impact of teachers' access to materials for instruction and assessment

The research on classroom morale and efficiency was able to capture a 100% of all the participants – both the principals (40) and 100% of the teachers (488) returned their questionnaires. The study established that (91.4%,446) agreed that teachers use demonstrations during subject delivery. The survey also revealed that (85.2% ,414) of the teachers agree with the use of child centred method while teaching. It also established that (74.2% ,362) of the teachers agreed there were adequate textbooks. The study also revealed that 59.1% (288) of the teachers agree that e-resources are available in schools. The findings also showed that (57.8% ,282) of the teachers agree that the school had functional projector. About (50.4% ,246) of the teachers agree that e-resources were availed to teachers. For reference materials, (51.5% ,251) with their availability. The principal interview guide also showed that the school had adequate teaching and learning material including e-resource which were both used by the teachers as well as the students. This they noted helped in teacher performance. However, correlation analysis based on Pearson Product-Moment Correlation Coefficient showed mixed results. There was no correlation between a number of characteristics and student performance, including access to print textbooks, reference materials, a working projector, and electronic resources. There was a strong correlation between teachers' use of demonstrations and students' achievement.

5.3.2 Teaching workload on teacher performance

The study revealed that (97.6%, 476) of the teachers reported providing consistent and constructive feedback to the learners, same score with teachers creating realistic timelines for class activities and teachers give formative assessment and feedback. The also revealed that (97.5% ,476) of the teachers give informal assessment and feedback. The survey also noted (96.7%,472) of the teachers carry out students' role modelling effectively. About (95.3% ,465) agreed that the teachers outline learning objectives. (95.1% ,464) of the teachers confirmed that they allow learners to do self-assessment and feedback. The study revealed that (92.6%, 452) of the teachers motivated their learners to learn, same score as for those who reported that teachers develop the lesson introductions. The study also revealed that (90.2% ,440) of the teachers gave summative assessment and feedback while (,82.8% 404) confirmed that the teachers had high teaching workload, same score as Teachers give formal assessment and feedback by use of report cards. The study established from the (70.7% ,345) of the teachers have no ample time for lesson preparations. The study also revealed (47.5%, 232) of the teachers agree that adequate time is provided for marking assessments while (40.2% ,196) of the teachers have ample time to prepare student assessment. Correlation analysis based on Pearson Product-Moment Correlation Coefficient shows a number of the attributes have the p-value= $0.001<0.05$ level of significance, hence meaning there is statistically significant relationship between teaching workload and teacher's performance. These includes Teachers give formative assessment and feedback, Teachers provide consistent and constructive feedback to the learners, Teachers develop the introduction for the lesson, Teachers create a realistic timeline for class activities, Teachers give formal assessment and feedback by use of report cards, Teachers give summative assessment and feedback, Teachers allow learners to do self-assessment and feedback. This implies if the teacher's workload is reduced the performance could not be realized.

5.3.3 Principal's leadership behaviour on teacher performance

Further the study on school climate and teacher performance revealed that (89.2% ,435) of the teachers agreed that principal leadership behaviour of creating rapport with teachers influenced their performance. The study also revealed (68% 332) of the principals agreed to having a good rapport with the teachers hence influencing teacher's performance. It also revealed that 100% of the teachers agree that principal delegate's duties to teachers affecting their performance while (84.2% ,411) agree that principal recognizes and celebrates the contributions of school community members to school improvements efforts affecting their performance. The teachers agree (81.8%, 399) that the principal demonstrate effective group process and consensus building skills in school improvement efforts affected their performance. The study established from the (72%,352) of the principals that they demonstrated effective group processes and consensus building skills to improve teacher's performance. The study also revealed (85.6% ,418) of the teachers agree that principal's mentor's teachers on career progression affected their performance. The survey found out that (81% ,395) of the principal shares' student data with all shareholders while (67.6% ,330) of the teachers stated that the principal nurtures and develops the leadership capabilities of others, which improves performance. Correlation analysis based on Pearson Product-Moment Correlation Coefficient shows that two attributes have the p-value= $0.001<0.05$ level of significance, hence meaning there is statistically significant relationship between principal's leadership behaviour and teacher performance. These are principals' shares student data with all shareholders and also, they nurture and develops the leadership capabilities of others.

5.3.4 Teamwork on teacher performance

The findings of the study on teamwork as an indicator of school climate revealed that (99.2%,481) of the teachers agreed that teamwork helped teacher work together to innovate

new ideas that could improve their performance. This was also supported by (92.0% ,449) of the principals that teachers work as a team to innovate new ideas. The study revealed that (83.2% ,406) of teachers strongly agree that teachers consult on matters concerning student's welfare. This was also supported by (86.2% ,421) of the principals that teachers consult on matters concerning student's welfare. The study also established that (78% ,381) of the teachers strongly agree that teachers consult with parents on matters concerning students. The study revealed that (42.6% ,208) of the teachers disagreed that benchmarking helped improved school standards. The study also found out that close to half of the teachers (49.2%, 240) absent themselves from duty due to work related issues and that teachers were being involved in creating child friendly environment at (48.5% ,237). The study also revealed that half of the teachers agree that teachers do not help the principal in monitoring and evaluation. All the principals agreed that they carried out the monitoring and evaluation in their respective school as the instruction supervisors. Correlation analysis based on Pearson Product-Moment Correlation Coefficient shows that none of the attributes had a p-value= 0.001<0.05 level of significance. This implied that there was no statically significant relationship between teamwork and teacher performance.

5.4 Conclusions

The following conclusions could be drawn on the study on school climate as a determinant of teacher performance in public secondary schools in Kitui County. School climate had indicators such as availability of teaching and learning resources, teaching workload, principals' leadership behaviour and teamwork.

1.On the influence of availability of teaching / learning resources, the study has concluded that availability of resources requires extra support and proper utilisation for the same to influence performance. For example, in terms of availability of textbooks, close to three quarters confirmed that there were adequate textbooks in the targeted schools, but this was found to be statistically insignificant to improving performance. On the other hand, use of demonstrations during delivery was found to be statistically significant. This means that there is need to combine the different resources in a way that will harness the potential to improve performance.

2.On the effect of teacher's workload on their performance, the study revealed that teachers have a high workload and considering that the r is negative, it means that with a reduced workload, performance can improve. Assessments seem to play a key role in performance, and review of the way they are handled is likely to have a serious impact on the performance as they are found to be statistically significant.

3.On the influence of principal's leadership behavior on teacher's performance the study can conclude that principal's role is in offering sound leadership was important, but the key driver to improving performance was openness and well as the ability of the principal to nurture and develop leadership capabilities of others. In sports, the sportsmen are already accomplished athletes on their account. However, they do have coaches to harness the gift. This study confirmed the same, the principal need to give mentorship and guidance to improve on performance.

4.On principals encouraging teamwork on teachers' performance, the study revealed that although teamwork does exist within the sampled schools, and that this help teachers work together to come up with innovative ways of improving both their performance and that of the students, improve on matters concerning students' welfare and consult with parents on matters concerning students but the influence was not statistically significant, meaning it does not play the null hypothesis was correct; There is no statistically significant relationship between teamwork and teacher performance in public secondary schools in Kitui County.

5.5 Recommendations

Based on these conclusions, the study of school climate as a determinant of teacher performance in public secondary schools in Kitui County draws the following recommendations.

1. The success of teachers' performance depends on the principal's ability to make available enough teaching and learning resources. However, the way the resources are utilised is more important. For example, the availability of e-resources (both for learners and teachers) can be more productive, if the resource was used to present lessons in a more practical as opposed to the traditional approach.

2. There is need for the school principal to balance teacher's workload for them to become productive by getting enough time for lesson preparation. Resources should be found to help manage in assessments, as this is a key driver to improving performance. Considering that resources to employ more teachers might not be available, the head teachers can think outside the box, and have external examiners to oversee the assessments, which will free the teacher for more important roles such as lesson planning, assessment follow up, mentorship etc.

3. The research has seen that running an open policy school in as far as the learner's performance are concerned, as well offering nurturing talents is the key driver to performance, the principals need to follow this path and avoid delegations as delegations (though they help the one being delegated to), does affect the deliverables required of the said teacher. There is need for principal to use their leadership behavior of mentorship to mentoring more teachers in career progression as well as role modeling in other areas of leadership since this would help the teachers in their performance.

4. There is need for the principals to put in place a framework that would help teachers work as a team for the betterment of their performance and that of students. There is also need for

all stakeholders including parents to be involved on students' affairs to help them develop in the different areas of life including knowledge and behavior.

Suggestions for further Research

The study recommended the following areas to be addressed through further research:

A similar comparative research to be carried out on school climate and teacher performance involving both public and private secondary schools in Kenya.

i. A study to be carried out on the effects of using e-resources on students' achievement and teacher performance in competency-based curriculum.
ii. A Research focusing on the relationship between the uses of child centered method in curriculum instruction and the student's achievement in public primary schools to be carried out in Kenya.
iii. A study exploring on the principal's leadership behavior as a determinant of students' achievement in the implementation of competency-based curriculum in Kenya to be conducted

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APPENDICES

Appendix I: Introduction Letter to the Respondents

Maasai Mara University

Department of Education Administration

P.O Box 861, Narok

Dear Respondent,

I am a student at Maasai Mara University, perusing doctorate studies in Educational Administration, carrying out research on school climate as a determinant of teacher performance in public secondary schools in Kitui County. Kindly assist by completing the questionnaires and interview-based questions to the best of your knowledge.

Your responses will be treated with a lot of confidentiality purposed for this study only.

Thank you in advance.

Yours faithfully,

Mang'uu. S. K. Ndambo

Appendix II: Questionnaire for Teachers

Section One: Background Information

Kindly fill in your background information by ticking (√) in the bracket's spaces provided for each of the items.

1. What is your gender?

   Male [ ] Female [ ]

2. What is your age?

   20-24 ( ) 25-29 ( ) 30-35 ( ) 35+ ( )

3. What is your highest level of education?

Level of Education	**(√) Tick appropriately**
PHD	
Masters	
Bachelors	
Diploma	

4. Kindly indicate your designation

Designation	**(√) Tick appropriately**
Principals	
Deputy principals	
Senior Teacher	
Head of Department	
Class teacher	

5. Kindly indicate your professional experience as a teacher or principal

Experience	**(√) Tick appropriately**
Below 5 years	
5 to 10 years	
11 to 15 years	
Above 15 years	

In the following section tick (√) a rating number in the cell at the end of each statement that best describes your opinion

Key: 1. S.A -Strongly Agree 2. A - Agree 3. N -Neutral 4. D - Disagree 5.S.D-Strongly Disagree

6. To examine the effects of availability of teaching/learning resources on teachers' performance

s/n	**Statement**	**1**	**2**	**3**	**4**	**5**
a	It is sufficient to rely on textbooks					
B	Access to Information Sources					
C	The classroom projectors are in good working order.					
D	Electronic materials are made available to students at school.					
E	Teachers now have access to an abundance of online materials.					
F	The majority of lessons in my school include teachers demonstrating concepts to students.					
G	Teachers plan lessons with the kids in mind.					

7. The principals availed teaching and learning resources to teachers

Yes [ ] No [ ]

8. To examine the effects of teaching work load on the effectiveness of Kitui County, Kenya's public secondary school teachers.

s/n	Statement	1	2	3	4	5
A	Teachers have high teaching workload					
B	No ample time for lessons preparations					
C	Have ample time to prepare students assessments					
D	Adequate time is provided for marking assessments					
E	Teachers carry out student's role modelling effectively					
F	Teachers give formative assessment and feedback					
G	Teachers provide consistent and constructive feedback to the learners					
H	Teachers motivate learners to learn					
I	Teachers outline learning objectives					
J	Teachers develop the introduction for the lesson					
K	Teachers create a realistic timeline for class activities					
L	Teachers give informal assessment and feedback					
M	Teachers give formal assessment and feedback by use of report cards					
N	Teachers give summative assessment and feedback					
O	Teachers allow learners to do self-assessment and feedback					

9. Does teacher's workload has an effect on their performance?

Yes [ ] No [ ]

10. To investigate the relationship between principal's leadership behaviour and teacher performance in public secondary schools in Kitui County.

s/n	Statement	1	2	3	4	5
A	Principal creates rapport with teachers					
B	Principal delegates duties to teachers					

s/n	Statement	1	2	3	4	5
C	Principal recognizes and celebrates the contributions of school community members to school improvements efforts					
D	Principal demonstrates effective group process and consensus building skills in school improvement efforts					
E	Principal mentors' teachers on career progression					
F	Principal shares student data with all shareholders					
G	Principal nurtures and develops the leadership capabilities of others					

11. Is the principal supportive to teachers?

Yes [ ] No [ ]

12. To find out the influence of team building on teacher performance in public secondary schools in Kitui County.

s/n	Statement	1	2	3	4	5
A	Teachers consult on matters concerning student's welfare					
B	Teachers work together to innovate new ideas					
C	Teachers consult with parents on matters concerning students					
D	Teachers are actively involved in benchmarking to improve standards					
E	Teachers do not help the principal in monitoring and evaluation					
F	Teachers absent themselves from duty due to work related issues					
G	Teachers being involved in creating children friendly environment					

13. Does the principals encourage teachers to work as a team?

Yes [ ] No [ ]

Thank you for your cooperation

Appendix III: Interview Schedule for Principals.

Dear Sir/Madam,

You are requested to respond to the interview on school climate as a determinant of teacher performance in Kitui Central County. The questionnaires are based on the four objectives of the study namely: availability of resources, teachers' workload, principal's leadership behaviour and teambuilding. This study is part of the requirements for the award of a Doctor of Philosophy (PhD) degree in Education Administration of Maasai Mara University, Kenya. The information you give will be used exclusively for academic purposes and shall be held confidential. Please help and give the right information that applies to your experiences in your school.

Appendix IV: Interview Schedule for Principals.

OBJECTIVE 1

1 The impact of teachers' access to instructional materials on student achievement.

(i) Are there adequate text books in your school?

……
……
……

(ii) Do you have enough reference materials?

……
……
……

(i) Are there E resources in your school for teachers?

……
……
……

(ii) Does the school have functional projectors?

……
……
……

(iii) Which teaching methods do teachers commonly use, child centre or demonstration methods?

……
……
……

OBJECTIVE 2

The influence of workload on teacher performance

(i) How is the teaching workload for teachers in your school?

……
……
……...……

(ii) Do teachers have ample time for lesson preparation?

……
……
……

(iii) Are teachers given enough time for marking assessments?

……
……
……

(iv) Do teachers implement formative and summative assessments?

……
……
……

(v) Do the teachers give consistent and constructive feedback?

……
……
……

(vi) Do Teachers allow learners to do self-assessment and feedback?

……
……
……

OBJECTIVE 3.

Principals' leadership behaviour on teacher's performance

(i) How do you ensure there is good rapport with your teachers? Explain

……
……
……

(ii) Do you delegate duties to your teachers? Explain

……
……
……

(iii) Principal recognizes and celebrates the contributions of the school community members to school improvement efforts. Do you agree? Explain how

……

……
……

(iv) Principal demonstrates effective group process and consensus building skills in school improvement efforts. Explain how

……
……
……

(v) Do you mentor teachers on career progression? If yes explain how
……
……
……

(vi) Do you share students' data with all the stakeholders?
……
……
……

(vii) How do you nurture and develop leadership capabilities of others?
……
……
……

OBJECTIVE 4.
Teamwork on teacher performance

(i) Do teachers consult on matters concerning the students' welfare?
……
……
……

(ii) Principal encourages teamwork on teacher performance. Explain how
……
……
……

(iii) Teachers work together to innovate new ideas. Explain
……
……
……

(iv) Do teachers help the principals in monitoring and evaluations?
……
……
……

(v) Teachers are involved in bench marking to improve standards Explain how
……

……
……

Thank you for your cooperation

Appendix V: Number of Teachers Per School

Sub-county	Number of schools	Number of Teachers
1.Lower Yatta	27	122
2.Mwingi Central	37	130
3.Nzambani	15	115
4.Kisasi	16	102
5.Kitui West	32	298
6.Mumoni	20	85
7.Matinyani	18	155
8.Kitui Central	34	255
9.Katulani	19	178
10.Migwani	42	269
11.Ikutha	28	111
12.Kyuso	18	124
13.Mutomo	33	147
14.Mutitu	21	100
15.Mwingi East	29	116
16. Tseikuru	11	110
TOTAL	**400**	**2417**

Appendix VI: Kitui County KCSE Examination Analysis from 2018-2020 for Public Secondary Schools

3 YEAR - KCSE ANALYSIS					
SCHOOL	**CATEGORY**	**2020**	**2019**	**2018**	**Mean**
Kitui School	National	9.151	8.588	7.632	8.46
Muthale G.	National	8.105	8.102	*7.895*	8.03
Yambyu Girls	Extra County	4.700	4.520	4.250	4.49
Chuluni Girls Sec	Extra County	6.381	5.940	5.930	6.08
Ikutha Boys	Extra County	6.271	5.904	6.426	6.20
Katheka Boys	Extra County	6.634	5.908	*5.770*	6.10
Kimangao Girls	Extra County	6.493	7.300	6.500	6.76
Kisasi Boys	Extra County	7.474	8.467	6.672	7.54
Kyondoni Girls	Extra County	7.400	6.491	6.126	6.67
Kyuso Boys	Extra County	6.609	5.900	6.088	6.20
Maliku Girls	Extra County	6.991	6.308	6.076	6.46
Matinyani Boys	Extra County	7.939	7.667	6.931	7.51
Mbitini Girls	Extra County	7.050	6.978	7.028	7.02
Mulango Girls	Extra County	7.050	6.879	7.138	7.02
Mutomo Girls	Extra County	5.837	5.397	4.745	5.33
St. Angelas-Mutune	Extra County	7.460	6.989	7.020	7.16
St Charles Lwanga, Kitui	Extra County	8.350	7.690	8.098	8.05
St Peter's Nzambani	Extra County	5.402	5.955	5.700	5.69
Itoloni Girls	Extra County	5.900	4.900	4.700	5.17
Kyamboo Secondary	Extra County	6.700	7.340	6.890	6.98
Migwani Boys	Extra County	6.643	6.720	6.211	6.52
Thitani Girls	Extra County	6.870	6.280	6.265	6.47
Ikanga Boys	County	6.800	7.000	4.960	6.25
Kalitini Sec	County	4.510	4.681	4.208	4.47
Kanyangi Girls	County	4.922	2.027	4.380	3.78
Kauma	County	4.954	4.691	4.088	4.58
Kimangao Boys	County	5.314	3.590	4.790	4.56
Lower Yatta Girls	County	4.678	4.400	3.890	4.32
Masavi Girls'	County	5.021	5.225	4.654	4.97
Nguuku	County	4.580	4.438	4.328	4.45
Nuu Sec	County	5.000	6.333	6.000	5.78
Usueni	County	4.050	3.295	4.490	3.95
Voo	County	5.768	5.542	4.814	5.37

Appendix VII: Critical r Table

	2-tailed testing			1-tailed testing		
df /n	***α*=.1**	***α*=.05**	***α*=.01**	***α*=.1**	***α*=.05**	***α*=.01**
5	0.805	0.878	0.959	0.687	0.805	0.934
6	0.729	0.811	0.917	0.608	0.729	0.882
7	0.669	0.754	0.875	0.551	0.669	0.833
8	0.621	0.707	0.834	0.507	0.621	0.789
9	0.582	0.666	0.798	0.472	0.582	0.75
10	0.549	0.632	0.765	0.443	0.549	0.715
11	0.521	0.602	0.735	0.419	0.521	0.685
12	0.497	0.576	0.708	0.398	0.497	0.658
13	0.476	0.553	0.684	0.38	0.476	0.634
14	0.458	0.532	0.661	0.365	0.458	0.612
15	0.441	0.514	0.641	0.351	0.441	0.592
16	0.426	0.497	0.623	0.338	0.426	0.574
17	0.412	0.482	0.606	0.327	0.412	0.558
18	0.4	0.468	0.59	0.317	0.4	0.543
19	0.389	0.456	0.575	0.308	0.389	0.529
20	0.378	0.444	0.561	0.299	0.378	0.516
21	0.369	0.433	0.549	0.291	0.369	0.503
22	0.36	0.423	0.537	0.284	0.36	0.492
23	0.352	0.413	0.526	0.277	0.352	0.482
24	0.344	0.404	0.515	0.271	0.344	0.472
25	0.337	0.396	0.505	0.265	0.337	0.462
26	0.33	0.388	0.496	0.26	0.33	0.453
27	0.323	0.381	0.487	0.255	0.323	0.445
28	0.317	0.374	0.479	0.25	0.317	0.437
29	0.311	0.367	0.471	0.245	0.311	0.43
30	0.306	0.361	0.463	0.241	0.306	0.423
40	0.264	0.312	0.403	0.207	0.264	0.367
50	0.235	0.279	0.361	0.184	0.235	0.328
60	0.214	0.254	0.33	0.168	0.214	0.3
80	0.185	0.22	0.286	0.145	0.185	0.26
100	0.165	0.197	0.256	0.129	0.165	0.232
120	0.151	0.179	0.234	0.118	0.151	0.212
140	0.14	0.166	0.217	0.109	0.14	0.196
160	0.13	0.155	0.203	0.102	0.13	0.184
180	0.123	0.146	0.192	0.096	0.123	0.173
200	0.117	0.139	0.182	0.091	0.117	0.164
300	0.095	0.113	0.149	0.074	0.095	0.134
400	0.082	0.098	0.129	0.064	0.082	0.116
500	0.074	0.088	0.115	0.057	0.074	0.104

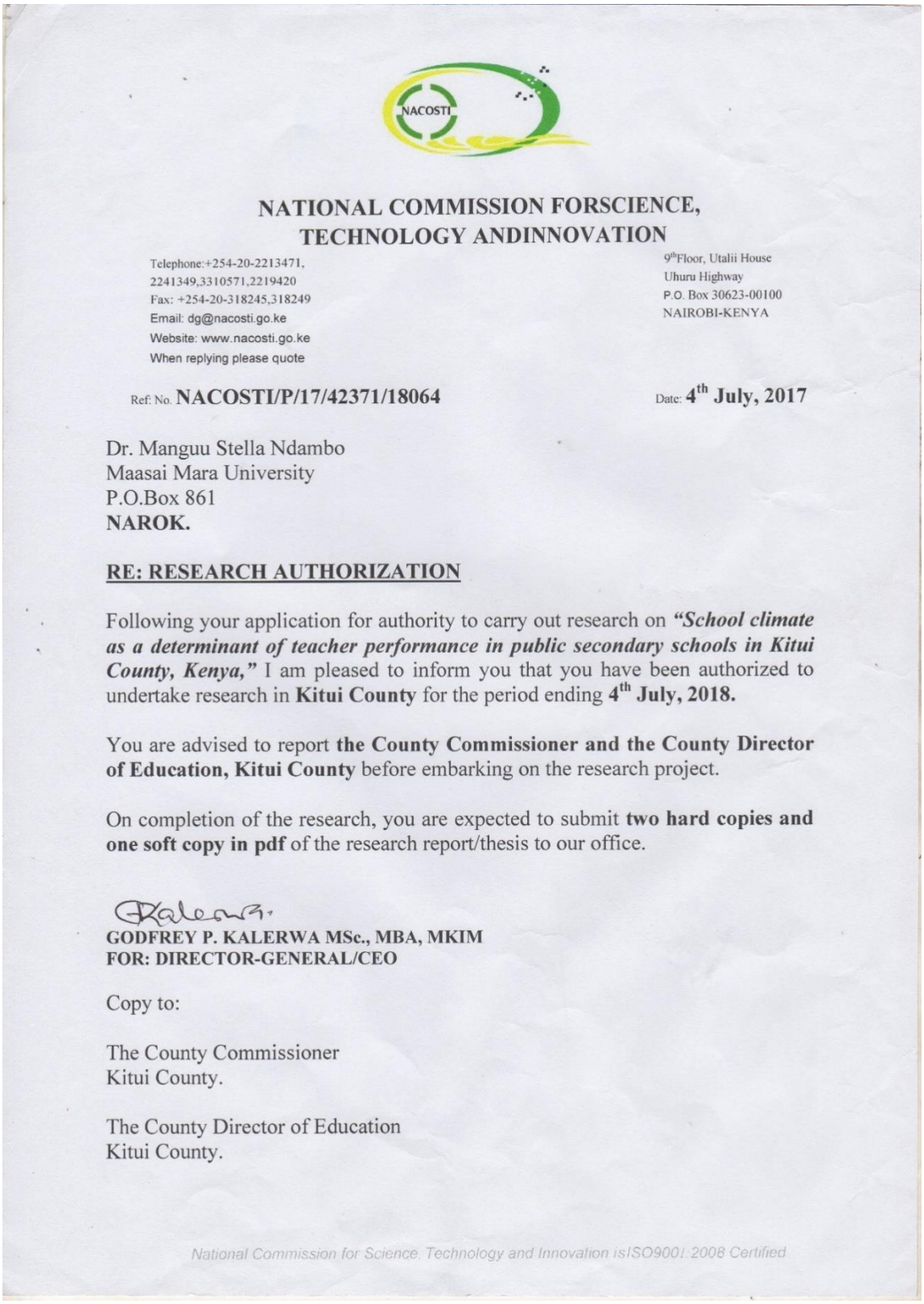
Note: df = n-2; n = sample size; *a* = alpha level

Appendix VIII Table 50: Effects of workload on teacher performance

	Base	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Teachers have high teaching workload	488 100%	6 1%	61 13%	17 3%	96 20%	308 63%
No ample time for lessons preparations	488 100%	2 0%	117 24%	24 5%	247 51%	98 20%
Have ample time to prepare students assessments	488 100%	41 8%	244 50%	7 1%	120 25%	76 16%
Adequate time is provided for marking assessments	488 100%	76 16%	141 29%	39 8%	106 22%	126 26%
Teachers carry out student's role modelling effectively	488 100%	0 0%	0 0%	16 3%	344 70%	128 26%
Teachers give formative assessment and feedback	488 100%	0 0%	0 0%	12 2%	260 53%	216 44%
Teachers provide consistent and constructive feedback to the learners	488 100%	0 0%	12 2%	0 0%	380 78%	96 20%
Teachers motivate learners to learn	488 100%	0 0%	24 5%	12 2%	344 70%	108 22%
Teachers outline learning objectives	488 100%	12 2%	0 0%	11 2%	345 71%	120 25%
Teachers develop the introduction for the lesson	488 100%	24 5%	12 2%	0 0%	332 68%	120 25%
Teachers create a realistic timeline for class activities	488 100%	0 0%	12 2%	0 0%	380 78%	96 20%
Teachers give informal assessment and feedback	488 100%	0 0%	12 2%	0 0%	392 80%	84 17%
Teachers give formal assessment and feedback by use of report cards	488 100%	24 5%	60 12%	0 0%	320 66%	84 17%
Teachers give summative assessment and feedback	488 100%	12 2%	24 5%	12 2%	404 83%	36 7%
Teachers allow learners to do self-assessment and feedback	488 100%	12 2%	12 2%	0 0%	404 83%	60 12%
Teachers use different assessment methods such as checklist, a rubric, portfolio and observation schedules	488 100%	36 7%	12 2%	0 0%	392 80%	48 10%

The mean score and standard deviation for the above ratings is as indicated below in table 10.

Appendix VI: Research Authorization



NATIONAL COMMISSION FORSCIENCE,
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NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/42371/18064**

Date: **4th July, 2017**

Dr. Manguu Stella Ndambo
Maasai Mara University
P.O.Box 861
NAROK.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"School climate as a determinant of teacher performance in public secondary schools in Kitui County, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Kitui County** for the period ending **4th July, 2018.**

You are advised to report **the County Commissioner and the County Director of Education, Kitui County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

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 isISO9001:2008 Certified

Appendix VII: Research Permit

THIS IS TO CERTIFY THAT:
DR. MANGUU STELLA NDAMBO
of MAASAI MARA UNIVERSITY,
1427-90200 KITUI,has been permitted
to conduct research in *Kitui County*
on the topic: *SCHOOL CLIMATE AS A DETERMINANT OF TEACHER PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KITUI COUNTY, KENYA*
for the period ending:
4th July,2018

Permit No : NACOSTI/P/17/42371/18064
Date Of Issue : 4th July,2017
Fee Recieved :Ksh 2000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

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CONDITIONS: see back page

Appendix VIII: A Map of Kitui County sub-counties.