

**LEADERSHIP PRACTICES AND ACADEMIC
PERFORMANCE OF CITY PUBLIC PRIMARY
SCHOOLS IN KENYA**

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**Leadership Practices and Academic Performance of City Public
Primary Schools in Kenya**

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the Degree of Doctor of Philosophy in Leadership & Governance of
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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

This Thesis is dedicated to my late parents; Michael Katayi Muchilwa and Rodah Omuyoyi Katayi, my children; the one and only precious Batshelmelech Sheila and my loving sons Steve and Jeff. Your love, patience, encouragement, understanding, support and prayers were of great help in the success of this academic journey. May God bless you always.

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ABBREVIATIONS AND ACRONYMS

BOM	Board of Management
EdQual	Quality Education
FPE	Free Primary Education
KCPE	Kenya Certificate of Primary Education
KEMI	Kenya Education Management Institute
KNEC	Kenya National Examination Council
MOE	Ministry of Education
NACOSTI	National Council for Science, Technology and Innovation
NCLB	No Child Left Behind
NSCC	National School Climate Council
PA	Parents Association
PIMRS	Principal Instructional Management Rating Scale
SMCs	School Management Committees
TPAD	Teacher Performance Appraisal and Development
TSC	Teachers Service Commission
UNESCO	United Nations Educational, Scientific and Cultural Organization.
UNICEF	United Nations International Children’s Emergency Fund
UPE	Universal Primary Education

DEFINITION OF TERMS

- Academic Performance** The outcome of learning, prompted by the teaching activity by the teacher and produced by the pupil. It involves meeting goals, achievements and objectives set in the program or course that a pupil attends and is expressed through grades which are the result of an assessment that involves passing or not certain tests, subjects or courses (Lamas, 2015).
- Goal Setting** The process of consciously deciding on clear and practical targets or objectives, that an individual or organization aims to achieve within a specified time frame (Moeller, Theiler & Wu, 2012).
- Head teacher/Principal** The leading professional in the school, who is answerable to **the** governing body and is responsible for providing vision, direction and leadership for the school and ensures that the school is well managed and organized to meet its purposes and objectives (Tomlinson, 2013).
- Informal Settlement** These are residential areas that do not conform to local authority requirements for conventional (formal) townships. They are usually unauthorized and invariably located upon land that has not been declared for residential use (Alder, 1995).
- Leadership** This is ability to set up agreed-upon and worthwhile directions for an organization and doing whatever it takes to influence, motivate and direct others to move in those directions in order to attain desired objectives (Louis, Dretzke & Wahlstrom., 2010).
- Monitoring of Pupil Learning** This entails systematically collecting, analyzing and evaluating data to make judgement that guide decisions and actions for enhanced academic performance (Elliot & Clifford, 2014).

Practices	A collection of activities exercised by a person or groups of persons which shows the specific conditions in which they discover themselves and with a number of common result (s) (Leithwood, 2012).
Professional development	The process whereby an individual acquires or enhances the skills, knowledge and/or attitudes for improved practice (Mitchell, 2013).
Public school	A school maintained or assisted out of public funds (Education Act Chapter 211, Revised Edition 2012).
Pupil	A person enrolled as a pupil or student in a school (Education Act Chapter 211, Revised Edition 2012).
Staff Commitment	This is a psychological state that characterizes the employees' relationship with the organization and has implications on the decision to continue membership in the organization (Allen & Mayer, 1997).
Supportive Learning Environment	This refers to the degree to which the school surroundings promote pupil safety and school health which may include aspects like the physical plant, available school-based health facilities, well managed classrooms and a clear fair disciplinary policy (Zais, 2011).

ABSTRACT

In recent years, performance in Kenya Certificate of Primary Education (KCPE) examinations by public schools has been on a steady decline. Studies have revealed that, school leaders, especially head teachers, have a critical role to play in setting high expectations and monitoring the learning outcomes which ultimately translates to improved academic performance. This study sought to examine the influence of specific leadership practices namely: goal setting, staff professional development, promotion of supportive learning environment and monitoring of pupil learning on academic performance of city public primary schools in Kenya. The study was guided by four theories; goal setting theory, transformational leadership theory, humanistic learning theory and instructional leadership theory. The study adopted a concurrent embedded mixed methods research design. The target population was drawn from 924 public primary schools in Nairobi, Kisumu and Mombasa with a total of 14025 teachers. The sample size comprised of 330 teachers, calculated using Kathuri and Pals (1993) formula and 30 head teachers obtained by census, making a total of 360 respondents. The study employed proportionate and stratified random sampling to select five Sub-Counties and 30 schools that participated in the study. Questionnaires and semi-structured interviews were used to collect primary data while secondary data was collected through document analysis. Descriptive and inferential statistics were used to analyze quantitative data whereas qualitative data was analyzed thematically. Multiple regression analysis was used to test the null hypotheses. The study findings showed that each of the four identified leadership practices; goal setting, staff professional development, supportive learning environment and monitoring of pupil learning had a positive and significant influence on school academic performance. The study recommended that, head teachers in public primary schools should: Work together with other education stakeholders in setting goals that can improve academic performance; encourage participation of all teachers in professional development programs; collaborate with other stakeholders to promote supportive learning environment in schools; frequently monitor the teaching and learning process for improved academic performance. There is also need for the government to ensure that all head teachers in public primary schools are trained on effective leadership practices that improve academic performance as evidenced by this study.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The debate on the extent to which leadership influences school outcomes and pupils' academic achievement has been on for a long time (Louis, Leithwood, Wahlstrom & Anderson, Michlin & Mascall, 2010). Practitioners as well as parents have long noted the significant role school leaders play in establishing direction and creating productive school cultures that enhance staff motivation and commitment needed to promote quality teaching and learning (Day & Sammons, 2013). Despite the fact that to a large extent, head teachers are not directly involved in the actual day to day teaching process, education policy makers, researchers as well as the community believe that, the type of leadership provided by the head teacher is critical to the success of a school.

According to Bush and Glover (2013), successful leaders establish a vision for their schools centered on their individual and professional values. They communicate this vision at every occasion and persuade their staff and other education stakeholders to share the vision. Day and Sammons (2016) established that, head teachers in performing schools directly and indirectly promote school performance through combining both instructional and transformational leadership strategies. These authors argue that, the ability of a school to improve depends on the head teacher's capacity to identify the school's needs and apply clearly articulated and institutionally shared educational values and strategies sensitive to the school context.

Various scholars have attempted to establish the kind of leadership that would enhance pupil learning outcomes. However, the most recent reviews of empirical literature on school leadership appear to confirm that general leadership models such as Transformational, Path- goal and Situational theories, do not capture the type of leadership required to improve pupil's academic achievement (Heck & Hallinger, 2010; Leithwood, 2010). These reviewers suggest that successful school leadership

includes a core of leadership practices that may be termed as educational, instructional or pupil centered.

Arokiasamy, Abdullah, Ahmad and Ismail (2016) assert that, principals who employ transformational leadership positively influence teachers' job satisfaction, which in turn leads to improved school academic performance. Kurland, Peretz and Hertz-Lazarowitz (2010) assert that, head teachers in high performing schools employ transformational leadership style that enables them to shape the school's vision and build a friendly culture that promotes teacher commitment. Robinson (2011) adds that, educational leadership is no longer measured simply in terms of a head teacher being able to develop a cohesive culture, have strong communication channels with staff and pupils and monitor and evaluate instruction but rather it entails doing all those things in a manner that improves the teaching and learning process.

The conviction in head teacher leadership and its influence on school performance crosses the border of nations and cultures (Adeyemo, 2012; Olaleye, 2013). In Nigeria, Usman (2015) found that head teachers' instructional leadership, which include; regular checking of pupils' note- books, classroom supervision, checking of teachers' lesson plans and records has a significant correlation with teacher performance and pupils' academic achievement. Similarly, Adeyemi (2013) found a significant relationship between autocratic leadership style employed by head teachers and pupils' academic performance. Mpaata and Mpaata (2019) observed that, democratic or consultative leadership styles are the best in improving school academic performance in Uganda. These authors established that head teachers in successful schools besides focusing on pupils' academic performance, they also attempted to incorporate other strengthening characteristics such as appreciation, improving conditions of service, confidence building, staff compensation and gender sensitivity.

In Kenya, a head teacher is the leader in a school, the pivot around which many aspects of the school revolve, and the person in charge of both academic and administrative programs in the school (Musungu & Nabongo, 2008). Head teachers are appointed by the Teachers Service Commission (TSC) a body charged with

employment and deployment of teachers in the country. Besides providing institutional leadership, head teachers are also responsible for education policy implementation, management of the school curriculum, management of the school's human and financial resources and provision of supportive learning environments in schools.

Waweru and Orodho (2014) assert that the head teacher's leadership style is of extreme importance in the performance of the school. They contend that the head teacher is responsible for providing direction and exerting influence on the staff in order to attain the objectives of the school. Wachira, (2017) argue that, head teachers apply various leadership styles in an effort to promote academic performance. They assert that, supportive leadership style affects teacher performance which leads to enhanced pupil achievement. Mwamuye and Mulambe (2012) observed that head teachers in performing schools frequently monitor the teaching and learning process. These authors suggest that it is important for head teachers to be trained on monitoring skills and to encourage parental participation in school activities.

However, despite a number of studies having been conducted in Kenya on the association between leadership and academic performance, majority of these studies have largely focused on head teachers' leadership styles without unpacking the actual practices or activities a head teacher could employ to improve academic performance. This study attempts to fill that research gap by examining the relationship between specific leadership practices namely: goal setting, promotion of staff professional development, creation of supportive learning environment and frequent monitoring of pupil learning and academic performance of city public primary schools in Kenya.

The study was guided by Leithwood and Jantzi's (2006) 'basics of successful school leadership framework, which identifies four domains of successful school leadership. These include: *Setting directions*, which entails building school vision, developing specific goals and priorities and holding high expectations; *Developing people* which refers to providing intellectual stimulation, offering individualized support and modelling desirable professional practices and values; *Redesigning the organization*,

which includes developing a collaborative school culture, creating structures to foster participation in school decisions and creating productive community relationships and *Managing the instructional program* which refers to the establishment of stable routine, structures and procedures to support change.

These leadership domains are further divided into specific leadership practices. For instance; goal setting practice, is a specific leadership practice under the setting direction domain. Staff professional development is a specific leadership practice under the developing people domain. Supportive learning environment is a specific leadership practice under the redesigning the organization domain while monitoring of pupil learning is a specific leadership practice under managing the instructional program domain. It is from the aforementioned leadership domains; that, the independent variables (leadership practices) for the study were drawn.

1.1.1 Academic Performance of City Public Primary Schools

There are four cities in Kenya, namely; Nairobi which is also the capital city, Mombasa, Kisumu and Nakuru. The introduction of Free Primary Education (FPE) in 2003 led to a remarkable increase in enrolments in public primary schools within the aforementioned cities, as more children especially from poor backgrounds were given an opportunity to attend school. Despite the increase in enrolments, studies have shown that a number of children in informal settlements are unable to access primary education due to their parents' inability to afford other hidden costs associated with schooling such as; uniforms, books and supplies. Maoulidi (2008) asserts that, majority of city public primary schools were built before the country got independence in 1963, which means that in terms of infrastructure these schools lack appropriate facilities. While the introduction of Free Primary Education policy in 2003, was received with a lot of praise, its implementation has faced numerous challenges, which include; inadequate physical infrastructure, facilities, and teachers. This has led to overcrowded classrooms and overburdened teachers thereby compromising on quality (Ogola, 2010). This was affirmed by observations made by the Mombasa County Government (2013) that the high number of enrolments in

public schools continues to exert pressure on the existing inadequate infrastructure and human resource.

In terms of performance in national examinations, city public primary schools have on average posted inferior results compared to the non-public schools (private and complementary schools). The continued and consistent dominance of private schools in Kenya Certificate of Primary Education (KCPE) performance has raised concerns about the rising disparity in the quality of education between public and private schools in the country. Given that majority of primary schooling pupils attend public schools, designing policies that would address the achievement gaps in public primary schools would greatly benefit pupils from disadvantaged backgrounds who may not be able to afford private schools (Chuck, 2009). A few of the public schools that persistently do well in national examinations were found to have institutionalized the culture of performance, high parental participation in school activities, sufficient teachers and other personnel, maintained a motivated human resource, maintained an effective reward system and had superior physical facilities. On the contrary, schools associated with poor performance had low stakeholder participation, weak leadership and inadequate infrastructure (Nairobi City County Taskforce on Education Report, 2014).

Although, there are many factors that make schools successful, all these factors are shaped and developed by the leadership characteristics of the head teacher (Ndiritu, 2012). Ndiga (2014), found a positive correlation between the head teachers' transformational leadership and school academic performance in Nairobi City. Similarly, Mwamuye and Mulambe (2012) found a positive relationship between the head teachers' instructional leadership and school academic performance in Mombasa city. The current study sought to examine the influence of specific leadership practices on academic performance in city public primary schools in Kenya.

1.1.2 Concept of Performance

Scholars have continuously argued that there is no uniform or standard definition of performance. Bates and Holton as cited in Armstrong (2014) assert that performance

is a multi-dimensional construct, the measurement of which differs according to a variety of factors. Samsonowa (2011) asserts that, despite the different definitions of performance, they are all associated with two terms: effectiveness and efficiency. The author describes effectiveness as an indicator of the degree of goal achievement and efficiency as an indicator of resources that were consumed to reach the level of accomplishment. Muda, Rafiki, and Harahap (2014) state that, performance refers to a given task measured against preset known standards of precision, totality, cost, and speed. Almatrooshi, Singh and Farouk (2016) argue that, the performance of any organization depends to a large extent on the level of expertise its leaders possess when it comes to implementing policies. They also assert that performance of an organization relies on staff members, who form the team that works toward achieving the organization's objectives. Tomal and Jones (2015) add that leaders employ various abilities to improve organizational performance, these include: influencing, problem solving, negotiating, coaching and motivating employees.

Academic performance refers to the extent to which a person has achieved specific goals that were the focus of activities in instructional environments specifically, in school, college and university (Steinmayr, Meißner, Weideinger, & Wirthwein, 2014). Babineau (2017) argues that in majority of countries, academic performance is basically measured by pupils' academic achievement in standardized tests. The author observes that, although measuring pupils' academic performance is important, focusing exclusively on standards based on academic testing can lead to misrepresentation of pupil/school performance. The author recommends that schools need to also consider various personal, contextual, and environmental factors that contribute to pupils' academic engagement and wellbeing. These researchers concur that, performance is a multi-dimensional construct of behavior, cognitive abilities and task performance.

In developing countries like Kenya, academic performance in national examinations plays an important role in determining whether one will continue with his/her education since admission of pupils to secondary schools depends on their performance in KCPE (Reche, Bundi, Riungu, & Mbugua, 2012). This study is therefore quite timely given the rising concerns amongst education stakeholders over

the poor performance in national examinations, particularly by public schools (Obama, 2015; Odhiambo, 2010; Oketch & Ngware, 2012). The study considered school academic performance from a broader perspective, whereby, in addition to analyzing records on school KCPE mean scores for a five- year period (2017-2021), the study also examined the presence of well constituted and functional school management bodies, community involvement in school activities, pupil progression and status of school infrastructure and facilities.

1.2 Statement of the Problem

Despite efforts made by the government of Kenya to provide Free Primary Education (FPE), performance in Kenya Certificate of Primary Education (KCPE) examinations by public primary schools has been unsatisfactory (Gakure, 2013). In particular, the performance of pupils in public primary schools has lagged behind that of pupils in private schools. In 2013 KCPE results, for instance, only two public schools had their candidates among the top 10 best performing schools in the country. Furthermore, in 2017 KCPE results, only seven public primary schools made it to the list of the top 100 best performing schools nationally. This trend was however interrupted in 2020, when public schools triumphed over their private counterparts, by taking 10 out of the 15 top positions, although many pupils from private schools still managed to score 400 marks and above (Wanjiru & Orodho, 2014; Daily Nation, April, 2021). The continued and consistent dominance of private schools in KCPE performance has raised concerns about the rising disparity in the quality of education between public and private schools (Shibo, 2016). A number of scholars have argued that, besides inadequate funds and lack of infrastructure, poor leadership is one of the factors contributing to pupils' low achievement in national examinations (Ratego; 2015; Wamalwa, Mugusia & Sugut, 2019; Muchiri, 2022). Majority of studies done in Kenya on the influence of leadership on school academic performance have however, predominantly focused on head teacher leadership styles without unpacking the actual leadership practices that head teachers employ to improve academic performance (Gakenia, Katuse & Kiriri, 2017; Kinyanjui & Orodho, 2014; Ndiritu, Gikonyo & Kimani (2015). The current study, therefore, sought to examine

the influence of specific leadership practices namely: goal setting, staff professional development, promotion of supportive learning environment and frequent monitoring of pupil learning on academic performance of city public primary schools in Kenya.

1.3 Objectives of the Study

The study was guided by two broad objectives; a general objective and five specific objectives

1.3.1 General Objective

To explore the relationship between leadership practices and academic performance of city public primary schools in Kenya.

1.3.2 Specific Objectives

1. To establish the relationship between goal setting and academic performance of city public primary schools in Kenya.
2. To determine the relationship between staff professional development and academic performance of city public primary schools in Kenya.
3. To examine the relationship between supportive learning environment and academic performance of city public primary schools in Kenya.
4. To examine the relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya.
5. To evaluate the moderating role of staff commitment on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

1.4 Research Hypotheses

The study was guided by the following hypotheses:

- H0₁:** There is no significant relationship between goal-setting and academic performance of city public primary schools in Kenya.
- H0₂:** There is no significant relationship between staff professional development and academic performance of city public primary schools in Kenya.

H03: Supportive learning environment has no significant relationship with academic performance of city public primary schools in Kenya.

H04: There is no significant relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya.

H05: Staff commitment has no significant moderating role on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

1.5 Significance of the Study

This study utilized the reviewed literature on effective school leadership to highlight the leadership practices of head teachers and their influence on academic performance in city public primary schools in Kenya. Consequently, the study had implications for various stakeholders, namely: School administrators, school managers, education management stakeholders, parents, community and the general public as well as future researchers.

For school administrators who include; head teachers, deputy head teachers and heads of departments (HODs), the study findings would offer guidance on some of the leadership practices that successful schools employ to improve academic performance. It is hoped that the administrators would utilize these practices to improve academic performance in their respective schools. As for school managers, the results of the study would enable them to strategically allocate resources to key areas that are essential for academic performance such as, ensuring that teachers attend in-service training programs and that, school facilities are well maintained. The improved performance outcomes would lead to increased pupil enrolments and enable schools to attract quality teachers.

The findings would enable policy makers in the Ministry of Education to monitor patterns of academic performance between schools and this would inspire them to look for innovative ways of improving academic performance of all public primary schools in the country. The Ministry of Education would also utilize the findings to train head teachers and their deputies on specific leadership practices that influence academic performance. The findings of the study would contribute to a more

objective criteria to be used by the Teachers Service Commission for the appointment, promotion and deployment of head teachers. The specific leadership practices found to be critical for improved academic performance, such as; goal setting, promotion of staff professional development, creation of supportive learning environment and monitoring of pupil learning could be incorporated in the evaluation tool for head teachers. Kenya Education Management Institute (KEMI) could utilize the findings of this study to create a closer synergy between good leadership approaches and improved academic performance. Thus, besides being trained on how to effectively manage school resources, head teachers could also be trained on effective goal setting procedures, strategies for enhancing supportive learning environments, training needs assessment and effective monitoring skills for pupil learning. All these aspects would lead to enhanced academic performance.

The results of the study would provide parents with the means by which they could realize returns on their investments. This is because, majority of parents spend their meager resources on educating their children, due to the perception that, education is the key for a better future. It is for this reason that parents become concerned when schools fail to perform well especially in national examinations. By embracing the leadership practices identified in this study, such as: goal setting and promotion of supportive learning environment, head teachers would be able to improve school academic performance. This would in turn enable more pupils to proceed on with secondary education, which is a desire for most parents.

When a school performs well academically, it becomes a source of pride, to the entire community and many community members tend to identify themselves with the school. Pupils, who excel from such schools and later become successful, empower the community by investing in projects that improve the community's well-being. A performing school can also become a focal point for economic stimulus by encouraging all year-round activities, such as providing a venue for senior clubs, non-profit and volunteer organizations and sports teams to meet, which in-turn creates job opportunities for the local community.

Performing schools are not only beneficial to parents, and the local community, but they are also beneficial to the general public. A performing school becomes an attraction to people from beyond the community. An employee in a business organization, for example, would only accept a position or transfer, if he/she is sure of the kind of schools that are available for his/her children and performance is usually the yard stick used to determine the choice of schools. Furthermore, when schools perform well, they enhance the education outcomes which boost employment opportunities leading to an improved economy and wellbeing of all citizens. In addition, many countries, especially those in the developing world spend huge amounts of resources to provide quality education in schools; this large expenditure could only be justified by improved academic performance.

In terms of future researchers, this study made an effort to address some of the existing gaps in literature on the relationship between leadership practices and academic performance. Despite, a number of studies having been done in this area, majority of them have focused on different leadership styles such as; Transformational, authoritative or instructional leadership, without identifying the actual leadership practices that influence school academic performance such as goal setting, promotion of staff professional development, creation of supportive learning environment and frequent monitoring of pupil learning. This study therefore, forms a foundation upon which further knowledge could be developed on specific leadership practices that head teachers could employ to enhance academic performance in their schools.

1.6 Scope of the Study

The study was conducted in public primary schools in three Kenyan cities, namely: Nairobi, Mombasa and Kisumu. The cities were selected due to a number of reasons. The first reason was that public schools in cities vary in economies, enrolments and academic performance. Consequently, the cities provide a diverse sample of schools, which makes it an ideal location to conduct primary school research. Secondly, schools in informal settlements within the cities have characteristics that are similar to schools located in rural areas thus making it easier for the study findings to be

implemented in all public primary schools in the country. The study focused on the specific leadership practices that head teachers employ to influence academic performance in city public primary schools in Kenya. The specific leadership practices considered were; goal setting, staff professional development, promotion of supportive learning environment and frequent monitoring of pupil learning. Respondents included; teachers and head teachers from the sampled schools. The study also confined itself to only four theories, namely; Goal setting theory, Transformational leadership theory, Humanistic learning theory and Instructional leadership theory respectively.

1.7 Limitations of the study

The study had a number of limitations, for instance; the responses to interviews for head teachers may have been influenced by their prejudice and personal points of view. Zohrabi (2013) states that, the best way to address this limitation is by using diverse types of methods of gathering data and acquiring information through different sources in order to increase the validity and reliability of the data collected. Thus, the researcher used questionnaires for teachers to complement and validate the credibility of the data collected. Furthermore, since teachers were expected to give their opinions on the head teacher's leadership, some of them may have been afraid of victimization. To encourage full disclosure, the researcher assured teachers that, the collected data was strictly confidential and anonymous.

In some of the schools, teachers felt lethargic, having completed several questionnaires from different researchers; this led to a delay in submission of completed questionnaires. To address this problem, the researcher contacted the respective Sub-County Directors of Education and head teachers, who were able to convince the teachers of the value this study could have in promoting academic performance in schools.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents an overview of the theoretical and conceptual framework of the study, a review of literature on the variables, empirical review of the findings on similar past studies, a critique of existing literature, research gaps and a summary.

2.2 Theoretical Review

Even though leadership models and theories provide a conceptual coherence that help in building understanding, no existing individual theory or model captures a sufficient proposition of what head teachers actually do to improve academic performance. In other words, effective head teacher leadership practices as a whole do not align themselves with any specific leadership model or theory. However, they do reflect most of the practices found in the current models of both ‘instructional’ and ‘transformational’ leadership, commonly referred to as an ‘integrated’ model (Printy, Marks & Bowers, 2009). This integrated model aims to capture the leadership practices of successful head teachers that improve the teaching and learning standards in their schools as well as their efforts to create organizational conditions which enable and support those improvement efforts. In an attempt to explain the association between academic performance and leadership practices in city public primary schools in Kenya, the researchers focused on four competing normative leadership theories as debated by numerous scholars, namely: Goal Setting theory, Transformational leadership theory, Humanistic learning theory and Instructional leadership theory.

2.2.1 Goal Setting Theory

The goal setting theory developed by Locke and Latham (1990) stipulates that goal setting enhances job performance. Studies have shown that individuals perform better when given goals that are clear, specific and challenging rather than vague and unchallenging (Locke & Latham, 1990; Rainey & Jung, 2014). In addition, goal

clarity helps individuals to know what is expected of them and what behavior is effective for attaining the goals (Davis & Stazyk, 2014). Thus, by setting clear concise goals, the head teacher is able to assist teachers in focusing their attention and efforts on activities that enhance school academic performance. Robinson (2011) concurs that, goals provide a sense of purpose and priority in a school environment where a multitude of tasks can seem equally important and overwhelming.

The relevance of the goal setting theory to the present study is in line with the works of Locke and Latham (2002) which suggest that, there are four features that link goals to performance. The first feature is that, goals ought to be specific. This is due to the fact that, specific goals enable teachers to know what to aim for and facilitates them to monitor and evaluate their individual progress. Secondly, goals ought to be difficult but achievable. Bandura (1997) asserts that a major factor in goal accomplishment is self-efficacy which refers to an individual's internal belief in their level of competency and capability. Thus, the author argues that it is important for head teachers to encourage teachers' self-efficacy. Thirdly, goals ought to be accepted by the teachers. Lezotte (2010) states that one way of ensuring goal acceptance in schools is by allowing teachers to participate in the goal setting process. The author further asserts that, participation in the goal setting process makes teachers own the process and become committed to the set goals. Lastly, head teachers ought to provide feedback on goal attainment. The Robinson (2011), asserts that, feedback allows teachers to rate their teaching capability and to make the necessary changes required for improved performance. The study objective on the relationship between goal setting and academic performance of city public primary schools in Kenya was anchored on the goal setting theory.

2.2.2 Transformational Leadership Theory

Transformational leadership theory has its origins in Max Weber's theory (Ndiritu, 2015). The interest in transformational leadership was later advanced by Burns (1978) in his attempt to distinguish between transformational and transactional leadership. Burns (1978) asserts that, transformational leadership occurs when a person or group of individuals engage with one another in such a way that, leaders

and followers elevate each other to greater levels of inspiration and morality. Burns' concept of transformational leadership was later reviewed and developed further by Bernard Bass in 1985. Bass and Avolio (1997) proposed, that transformational leadership could be identified by four distinct behavioral constructs or attributes also known as the 'four Is'. These four constructs are: Idealized influence (conduct), Inspirational motivation, Intellectual stimulation and Individualized consideration. The first behavioral construct idealized influence depicts leaders who are excellent role models for affiliates while the second construct inspirational motivation refers to leaders who inspire supporters to commit to the organization's purpose and objectives. Intellectual stimulation, which is the third construct portrays leaders who promote novelty and ingenuity through challenging the typical thinking or views of a party and individualized consideration which is the fourth construct, describes leaders who act as instructors and mentors to their followers.

Transformational leadership focuses on developing a positive school culture in order to promote the quality of teaching and learning while at the same time enhancing staff professional development (Shatzer, Caldarella, Hallam & Brown, 2014). These authors assert that, transformational head teachers, establish and share the school vision, motivate members of the school community to implement the vision and support staff to undergo professional development programs. Leithwood (2010) argues that, transformational leadership approaches viewed as a composite construct have significant indirect and direct impacts on pupil achievement. A study by Finnigan and Stewart (2009) found transformational leadership approaches to be more evident in successful schools, which led to the assumption that, transformational leadership was the most effective style of leadership. Moolenaar, Daly and Slegers (2010) noted that, transformational leadership was positively associated with teachers' perception of their school culture.

Despite the fact that transformational leadership has been found to be effective in improving pupil outcomes, various scholars have highlighted a number of this theory's limitations. For instance, Bush and Glover (2014) argue that head teachers could use transformational leadership to manipulate or control teachers to support

their own vision and objectives. Secondly, Lee (2014) asserts that transformational leadership suffers from heroic leadership bias where leaders are perceived as ‘great men’ who are perfect and flawless and thus it could result into blind trust from followers. The study objective on the relationship between staff professional development and academic performance of city public primary schools in Kenya was guided by the Transformational leadership theory.

2.2.3 Humanistic Learning Theory

The humanistic theory of learning is derived from Abraham Maslow’s theory of human needs and motivation developed in the 1900s. The theory primarily assumes that people are motivated by five levels of needs which include; physiological needs, safety needs, love and belonging needs, self-esteem and self-actualization needs. Jingna (2012) asserts that, for a human being to survive, it is critical that the aforementioned needs are fulfilled. The author further argues that, physiological needs are the most essential needs given that, all the other needs are subordinate to them. The humanistic learning theory describes learning in terms of personal growth and the development of a human’s potential not only intellectually but also psychologically, emotionally, socially and physiological (Johnson, 2014).

Head teachers in schools that ascribe to this theory ensure that, the school has large classrooms that allow quality air circulation, clean drinking water, adequate lighting in classrooms as well as comfortable temperatures. Cheryan, Ziegler, Plaut and Meltzoff (2014) observed that, school buildings and classroom conditions greatly impacted pupils’ academic achievement. Garran and Rasmussen (2014) found that a safe and orderly classroom environment promotes the teaching and learning process thereby enhancing school performance. The humanistic learning theory also emphasizes the importance of positive relationships which in turn boosts pupils’ self-esteem and promotes their learning. Osher, Cantor, Berg, Steyer and Rose (2018) observed that, warm caring and supportive pupil-teacher relationships were associated with improved school performance, greater emotional control and social development.

Jingna (2012) asserts that, humanistic theory of learning encourages group work among pupils through which they are able to observe, learn from each other and develop interpersonal relationships. The theory also advocates for schools to have personalized spaces that enable pupils to develop and nurture individual talents, leading to self-actualization. Lastly, Rostami and Khadjooi (2010) assert that, humanistic learning theory emphasizes the need for school environments to cater for all pupils equally, including those with special needs in order ensure that their self-esteem is not affected. Causton, Tracy-Bronson and MacLeod (2015) observed that, pupils with special needs gain from positive school environments, due to the fact that, they feel included and appreciated by teachers as well as other pupils, which promotes their well-being, and enhances their academic engagement. The humanistic theory of learning guided the study objective on the relationship between supportive learning environment and academic performance of city public primary schools in Kenya.

2.2.4 Instructional Leadership Theory

Instructional leadership came to prominence in the United States of America as a model for school leadership and administration in the 1980s. The growing emphasis on administering teaching and learning as the central activities of educational institutions gave rise to ‘instructional leadership’ also referred to as learning centered leadership being given priority. Instructional leadership usually assumes that the critical focal point for attention by leaders is the conduct of teachers as they take on actions directly touching on the growth of pupils (Hallinger, 2011; Leithwood, 2010). According to Day *et al.* (2016), instructional leadership centers on pupils’ academic progress. They assert that, instructional leadership entails: creating clear educational goals, supervising the curriculum and assessing the quality of teaching and learning. This implies that, head teachers should focus their efforts on improving pupil achievement through quality classroom teaching and learning. Although several models of instructional leadership were proposed during the 1980s, the one most conceptualized in empirical investigations is the proto-type anticipated by Hallinger (2003). This representation proposed three features for the instructional

leadership which include; establishing the school's mission, supervising the teaching program and encouraging a positive school learning climate. These three aspects of instructional leadership were further delineated into specific leadership functions.

Firstly, defining the school mission, which entails; framing and communicating the school objectives. Secondly, managing the curriculum implementation process which includes; supervising and evaluating the learning and teaching process as well as regularly monitoring pupils' progression. Thirdly, encouraging a productive learning climate which entails; shielding teaching time, supporting professional development and motivating both teachers and pupils. Head teachers that, utilize instructional leadership skills have been found to be goal oriented, take the lead in defining a clear direction for their schools and personally coordinate efforts towards increasing pupil achievement. They also use coordination and control to align the school's academic mission with strategy and action. Thus, instructional oriented head teachers, focus not only on leading but also on organizing. Instructional leadership is among the earliest established concepts connecting leadership and learning.

Despite its fame and prolonged existence, instructional leadership has been faulted on two bases. To begin with, it is apparent that, it is mostly interested in teaching rather than learning (Bush & Glover, 2013). Hong and Loeb (2010) questioned the practicality of such model in today's educational reality, where the demands and expectations on the role of head teachers are already overwhelming. The second criticism of this theory is that, it suggests that, head teachers are the embodiment of knowledge, power and influence thus neglecting or minimizing the role of other leaders, such as deputy head teachers, heads of departments and senior teachers (Hallinger & Heck, 2010). Dong and Cravens (2011) argue that, instructional leadership is comprised of six major components that have been found to be greatly effective in enhancing pupil learning and achievement. These include; having high expectations for pupil performance, quality teaching, a strong culture of learning and professional conduct as well as effective community participation.

Further studies on instructional leadership (Shatzer *et al.*, 2014; Robinson, 2011), have concluded that, instructional leadership can improve pupil achievement, basically, through promoting staff working conditions and enhancing a positive school culture. Cruickshank (2017) argues that, head teachers' instructional leadership has a greater significant effect on pupil achievement compared to transformational leadership, mainly due the fact that instructional leadership predominantly focuses on the quality of teachers and their performance in the classroom. The objective on the relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya was aligned to the Instructional leadership theory.

2.3 Conceptual Framework

Yamauchi, Ponte, Ratliffe and Traynor (2017) assert that, a conceptual framework is a system of concepts, principles, anticipations and theories that inform and support research. Berman (2013) states that, conceptual framework presents a representation of associations between variables that may or may not entail a specific theoretical perspective, with the aim of explaining phenomenon. The researcher further adds that, a conceptual framework graphically describes the main factors, variables or concepts in the study and the supposed connections among them. There were three composite variables in this study which were categorized as independent variable, dependent variable and the moderating variable. The independent variable comprised of leadership practices employed by head teachers at the school level to influence academic performance. The dependent variable was school academic performance while staff commitment was the moderating variable.

The measure of the independent variable included the following: Goal-setting, staff professional development, supportive learning environment and monitoring of pupil learning. The measure of the moderating variable was staff commitment. In this study, the researcher focused on affective commitment in which the staff had emotional ties with the school (Meyer & Allen, 1997). The dependent variable, school academic performance was measured using the following indicators: School

management and community involvement, pupils' progression, status of school infrastructure and pupils' academic achievement based on the school's KCPE mean scores (2017-2021). The relationship between the three variables was diagrammatically illustrated in Figure 2.1.

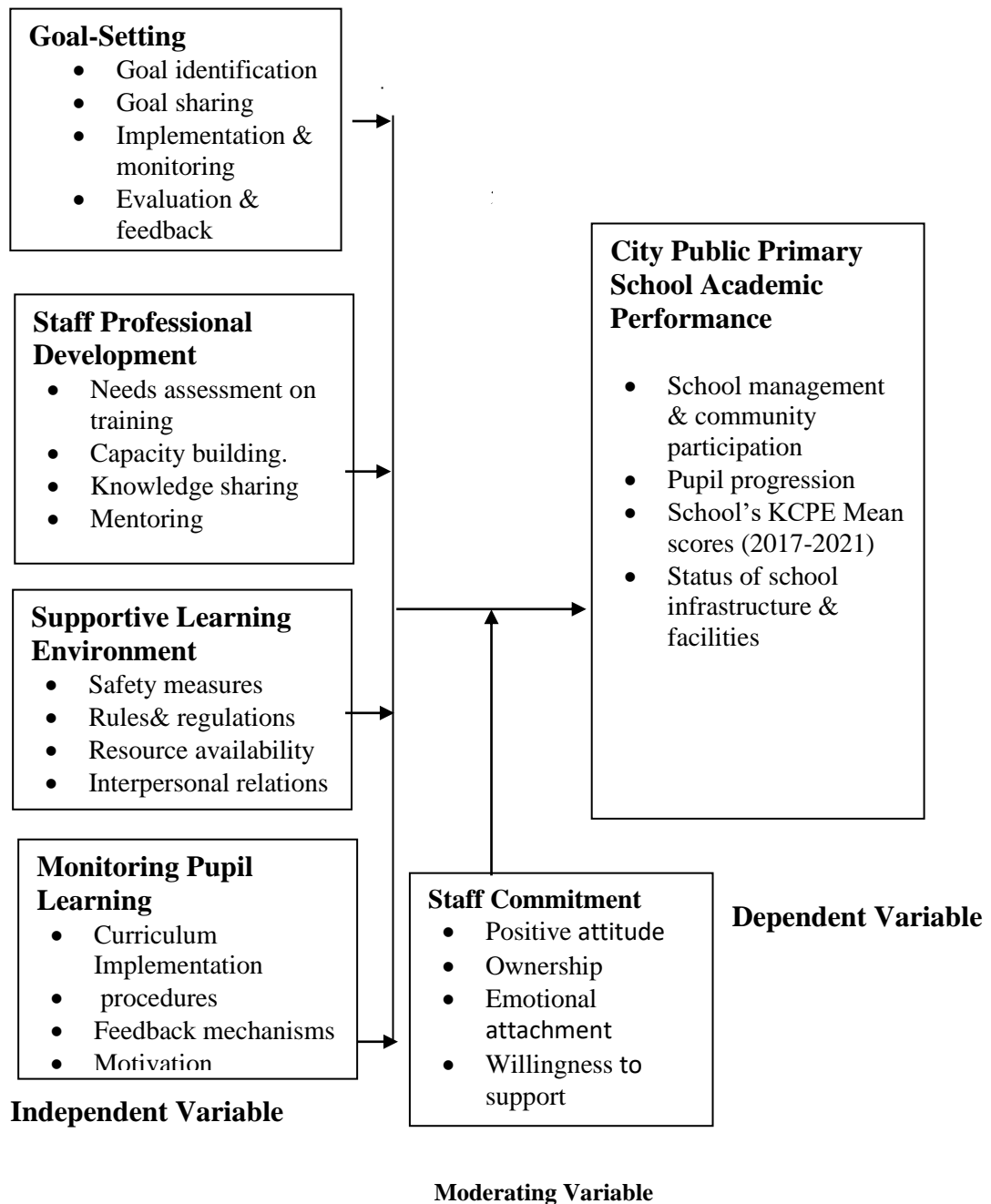


Figure 2.1: Conceptual Framework

2.3.1 Goal Setting and School Academic Performance

As indicated in the Conceptual Framework, to enhance academic performance, an effective head teacher sets performance goals and develops strategies to be followed in attaining the set goals. Locke and Latham (1990) describe goals as observable or measurable results that are to be accomplished within a specific time frame. Subsequently, these researchers describe goal setting as the process of consciously

deciding on clear and practical targets or objectives, that an individual or organization aims to accomplish within a specific time frame (Moeller, Theiler & Wu, 2012).

Research on the head teacher's instructional leadership emphasizes on his/her responsibility to set high standards and expectations for pupils and teachers. Dotson (2016) states that, it is important that the head teacher communicates these standards to both teachers and pupils. The researcher further asserts that, once the goals have been identified the head teacher should monitor the goal implementation process and provide feedback to teachers as regards goal attainment. Such leadership practice would be in line with the goal setting theory developed by Locke and Latham (1990) which largely assumes that goal setting enhances job performance.

Studies have shown that individuals perform better when given goals that are clear, specific and challenging rather than vague and unchallenging goals (Locke & Latham, 1990; Rainey & Jung, 2014). In addition, goal clarity helps individuals to know what is expected of them and what behavior is effective for attaining the goals (Davis & Stazyk, 2014). Thus, by setting clear concise goals, the head teacher is able to assist teachers in focusing their attention and efforts on activities that enhance academic performance. Robinson (2011) concurs that, goals provide a sense of purpose and priority in a school environment where a multitude of tasks can seem equally important and overwhelming. Clear goals focus attention and effort and enable individuals, groups and organizations to use feedback to regulate their performance. In a study that examined goal setting and student achievement in a high school Spanish language classroom, Moeller, Theiler and Wu (2012) found a statistically significant relationship between goal setting process and language achievement. Similarly, Idowu, Chibuzoh and Madueke (2014) found that, academic performance in successful schools increases partly due to the head teacher's ability to establish and set goals that alter how teachers conduct themselves in the classroom. Lezotte (2010) adds that, the process of setting, committing to and accomplishing school goals builds credibility, trust, and a spirit of community and corporation within the school. The researcher further adds that, teachers who engage in open and

honest dialogue, and whose suggestions are appreciated and cherished, are prone to follow the direction set by their leader.

Teo and Low (2016) also noted the importance of building a vision and setting directions as one of the core practices in successful leadership. Likewise, Louis *et al.* (2010) observes that, while head teachers play the central role in school leadership, high performing schools benefit from the active participation of other key stakeholders such as teachers, parents and the neighboring community. These researchers argue that, this cohesive and collaborative success can only be achieved through the head teacher's ability to develop clear goals, and to motivate the relevant stakeholders in working together. Ambrose, Bridges, Dipietro, Lovett and Norman (2010) found that goals are essential in improving pupil achievement and motivation. These authors claim that, effective goal utilization is one of the most important instructional interventions for increasing pupil academic success. Abu Bakar, Yun, Keow and Li (2014) established that, teachers' clear understanding of the goal setting principles greatly improves the teaching and learning activities, leading to enhanced academic performance.

Harkin, Webb, Chang, Prestwich, Conner, Kellar and Sheeran (2016) established that monitoring goal process was a crucial exercise between goal setting and goal attainment. These authors assert that, the monitoring of progress towards a goal, rather than just the formulation of it, tends to motivate people towards, such specific attainment. Dotson (2016) observes that, the most important factor in establishing performance goals is to ensure that, they are time sensitive, attainable, measurable and relevant. Furthermore, the researcher asserts that, goals must be supported by specific action plans to ensure maximum success. Seijts and Latham (2011) conclude that, when people have the capability to perform a task and the task requires them to exert effort, the setting of and commitment to a specific high goal leads to higher performance.

2.3.2 Staff Professional Development and School Academic Performance

Staff professional development is described by Mitchell (2013) as, all training, certification and education that an employee requires to excel in his/her career advancement. Abou-Assali (2014) asserts that professional development of any individual who has a profession or career is generally supposed to mean the improvement and development in the role and duties this individual performs in his/her position. Nabunya, Tusiime and Kyaligonza (2018) state that, in a school set up, the head teacher has the responsibility of organizing, executing and ensuring that the knowledge and skills acquired from staff development programs are effectively utilized to improve academic performance. Opfer and Peddler (2011) established that, staff professional development enhances teachers' skills and knowledge and assists them in achieving school goals and objectives. Bayar (2014) adds that, effective teacher development is significant for any education system to remain competitive and relevant.

Odden (2011) states professional development activities such as, study groups, teacher networks and other corporate efforts positively affect teachers' practices and classroom teaching. However, the researcher laments that, pre-service teacher training programs fall short in preparing teachers adequately for the classroom, which leaves schools with an urgent need that can only be fulfilled through professional development programs. Lu, Loyalka, Shi, Chang, Liu and Rozelle (2017) assert that, in the current age of accountability, professional development should no longer be seen as a process of merely exposing teachers to new concepts or providing them with basic knowledge on teaching methodology, but it should aim at changing teachers' classroom practice for enhanced pupil achievement. These authors further argue that, the one-time workshops organized for professional development programs are insufficient in building the capacity of teachers to develop pupil knowledge and skills. Wei, Darling-Hammond and Adamson (2010) also observed that, professional development that is short, periodic and disconnected from practice has less impact in comparison to well-planned professional development that enhances pupil achievement.

Darling-Hammond and McLaughlin (2011) suggest that, professional development should also provide occasions for teachers to critically reflect on their practice and to develop new knowledge and attitude in regard to content, pedagogy and pupils' learning. Similarly, Liu (2011) asserts that, for teachers to improve their performance, it is important for them to evaluate their practices, identify and analyze their classroom problems and look for alternatives. The author further asserts that, it is vital for teachers to identify their strengths, weaknesses and shortcomings in order to improve their performance and pupils' academic achievement. Abou-Assali (2014) argues that, contrary to the traditional teacher training programs that did not have links with actual classroom experiences, teachers were passive learners, and the content was irrelevant to their teaching practice; the new professional development programs have emphasized the role of schools as learning inquiry and professional communities. Werner and DeSimone (2012) suggest five features of professional development that are known to improve teacher's knowledge and skills and lead to enhanced pupil achievement. These features include: duration, content focus, active learning, coherence and collective participation. Subsequent reviews of the literature on professional development have drawn on this framework and added other aspects (Darling-Hammond, Hylar & Gardner, 2017).

Carrillo, Maassen van den Brink and Groot (2016) observed that, professional development programs were more effective if attention is placed on teaching techniques rather than subject content. These authors established that, teaching techniques led to better results on reading while subject content had more effect on mathematics. Likewise, Liang, Zhang, Huang, Shi, and Qiao (2015) found a positive correlation between teachers' participation in professional development and increased pupil achievement in Mathematics. Mizell (2010) asserts that, high-quality teaching does not occur by accident. The researcher argues that, although some teachers may be more gifted than others, all effective teaching is a consequence of study, practice, reflection and hard-work. The author further argues that, professional development is the only mechanism through which, a teacher can understand important aspects such as: how a pupil learns, what impedes the pupil's learning and how the teacher's practice can improve pupil achievement.

Oyedele (2016) suggests that teachers should continuously participate in professional development programs since it is one of the cornerstones for teacher effectiveness and efficiency. Marsick (2009) found that, a high degree of collaboration and mutual support within individual subject departments was an influential factor in promoting learning opportunities. The author highlighted the significance of organizational factors such as: culture, systems and practices, in inspiring opportunities for informal learning. Desmone (2011) asserts that professional development activities are more likely to influence teachers' knowledge and skills if they are made to be a coherent part of a wider set of opportunities for teacher learning. The author states that, dimensions of coherence include professional learning that is built on teachers' prior knowledge and on content aligned with national standards, curriculum and assessments.

2.3.3 Supportive Learning Environment and School Academic Performance

To ensure the existence of a supportive environment that would spur school performance, an effective head teacher would formulate policies that would promote accessibility to sufficient and suitable learning and teaching resources, strengthen positive interpersonal relations, improve safety measures and develop clear and practical school rules and norms. According to Zais (2011) a supportive school environment refers to the degree to which the school surroundings promote pupil safety and school health which may include aspects like the physical plant, available physical and mental health services and support, academic environment and fair and adequate disciplinary measures in accordance with the relevant guidelines.

Hightower (2015) asserts that, in order to improve pupils' academic achievement, schools must reduce distractions and engage pupils in effective learning activities, which calls for a safe and orderly environment that promotes the teaching and learning process. Osher, Cantor, Berg, Steyer and Rose (2018), observed that warm, caring, supportive pupil-teacher relationships were associated with enhanced school performance and participation, greater emotional control, social aptitude and a readiness to take on challenges. Shonkoff, Richmond, Levitt, Bunge, Cameron, Duncan and Nelson (2016) noted that, well-built relationships have biological as well as emotional importance. They argue that, brain structural design is developed by the

presence of warm, reliable, accustomed relationships; constructive experiences; and positive impressions of these experiences. Such relationships assist in building up the cognitive, affective, behavioral and social competencies essential to learning. Darling-Hammond, Flook, Cook-Harvey, Barron and Osher (2019) argue that, for effective learning to occur, pupils need to feel physically and psychologically safe, since fear and anxiety weaken cognitive capacity and affects the learning process. Steele and Cohn-Vargas (2013) add that, pupils learn better when they can relate their school experiences to their cultural contexts, when their teachers are responsive to their needs and when they feel valued and a sense of belonging.

Studies have also revealed a significant correlation between the quality of physical infrastructure and pupil achievement. Cheryan *et al.* (2014) found that buildings structural facilities greatly influenced pupil learning. Noise, lighting, high temperatures and low air quality in the classroom are considerably associated with poor pupil achievement. These authors also claim that, a classroom's symbolic characteristics, which include; objects and wall furnishings, influence pupil learning and achievement. To demonstrate the importance of the symbolic classroom, Guardino and Fullerton (2011) rearranged desks in a fourth- grade classroom and created separate areas for individual and group work, planted plants, added inspirational posters and reorganized items, making them more reachable. Following this intervention, pupils showed sustained improvements in participation and reduced troublemaking manners. Fisher, Godwin and Seltman (2014) assert that, far from being trivial details, symbolic features affect classroom culture, influence performance and shape pupil aspirations.

The other aspects that affect the school environment are rules and norms. According to Thapa, Cohen, Guffey and Higgins-D'Alessandro (2013), schools in which rules are efficiently enforced or those with proper discipline management systems have lower cases of pupil victimization and pupil delinquency. Gregory *et al.* (2010) asserts that, constant enforcement of school rules and availability of caring adults, which they refer to as 'structure and support' enhances school safety. Eliot, Cornel, Gregory and Fan (2010) observe that, structure and support are associated with lower rates of suspension and an increased pupil willingness to ask for assistance in cases

of bullying. Cohen and Geier (2010) claim that, school environment is linked to factors that promote safety, healthy interpersonal relationships, participative teaching and learning, and academic improvement efforts. Astor, Guerra and Van Acker (2010) found that, in schools that lack supportive norms, rules, and relationships, pupils are more likely to experience persecution, peer pressure and violence which often lead to increased levels of absenteeism, and declining academic performance. Higgins-D'Alessandro and Sakwarawich (2011) established that, pupils with special needs benefit from positive school environments, because they feel included and appreciated by teachers as well as other pupils, which shows the significant role of peer relationships in the well-being of pupils.

2.3.4 Monitoring of Pupil Learning and School Academic Performance

Monitoring of pupil learning entails systematically collecting and analyzing data to make judgment that guide decisions and actions for enhanced improvement. Effective head teachers frequently monitor the school's curriculum to ensure that, there is alignment between the particular academic standards and curricular coverage. They also monitor, evaluate and document pupils' progress to ensure that all pupils including those with special needs have adequate opportunities to learn the specific content in all academic subjects (Ko & Sammons, 2013). This could be achieved through conducting formative and summative evaluations. The results from the evaluations would facilitate the head teacher together with the staff to prepare mentorship programs, like remedial teaching to address areas of weakness in the learning process (Elliot & Clifford, 2014).

Research on instructional leadership shows that, head teachers must possess an array of skills and competencies in order to lead schools effectively towards the accomplishment of educational goals and one of these skills is monitoring the curriculum and instruction (Mafuwane, 2011). The head teacher must have the ability to collect, collate, analyze and evaluate data pertaining to pupil learning achievements. The author further asserts that, while carrying out this exercise the main focus should be on curriculum implementation, evaluation procedures, feedback mechanisms and staff motivation. This would allow the head teacher and

teachers to make judgment and draw verifiable conclusions on levels of learning so as to formulate appropriate policies and programs for academic improvement.

Goss and Sonnemann (2018) argue that, monitoring of pupil learning provides information on how much the same cohort of pupils has improved from one level to the next. It also shows the value the school has added since it measures what takes place in the classroom. Lezotte (2010) affirms that in effective schools, pupil learning progress on essential objectives is regularly considered and monitored and the results of these assessments are used to improve individual pupil's behavior and performance as well as improve the curriculum as a whole. Hamilton, Halverson, Jackson, Mandinach, Supovitz and Wayman (2009) claim that, the use of pupil achievement data obtained through frequent monitoring enable head teachers to assess what pupils learn and the progress made towards achieving the school goals. Monitoring of pupil learning also helps teachers to make informed decisions and adjust their teaching approaches leading to enhanced pupil academic achievement.

According to Accardo and Kuder (2017) formative assessment is one of the best methods for monitoring pupil learning. Kingston and Nash (2011); Madison-Harris and Muoneke (2012) observed that formative assessment is effective in improving pupil performance including those pupils with learning disabilities. Similarly, Gersten, Chard, Jayanthi, Baker, Morphy and Flojo (2009) in a review of effective ways of teaching mathematics to pupils with learning disabilities affirmed that formative assessment along with its feedback contributed to improved pupil achievement. Gurley, Anast-May, O'Neal and Dozier (2016) conclude that, even though effective leadership may not warrant successful school transformation, school improvement is rarely found without active, expert, instructional leadership from head teachers and teachers.

Hallinger and Murphy (2013) established that, instructional leadership enables head teachers to identify the school's mission, motivate teachers, and coordinate the teaching and learning process aimed at increasing pupil achievement. Instructional leadership also allows head teachers to regularly review classroom instruction through various methods such as; formal and informal classroom observations,

lesson plans and pupils' work records. According to Elliot and Clifford (2014) instructional leadership actions of head teachers include: teacher evaluation and feedback, establishment of a school mission, as well as management of teaching and learning resources. May and Supovitz (2011) likewise observed that, instructionally focused or learning centered leadership is critical for head teachers engaged in school improvement efforts.

Soehner and Ryan (2011) state that, as an instructional leader, the head teacher is responsible for ensuring that teachers are well informed about new techniques and strategies needed to promote effective learning. These researchers maintain that, head teachers who strive to be instructional leaders work closely with other education stakeholders in order to achieve the goals and objectives of their schools. Hallinger and Murphy (2013) established that, while school leaders play a crucial role in setting high standards for pupil achievement, it is important that, these standards are translated into the academic content, and translated in the school curriculum. These authors argue that it is important for head teachers to be well-informed and deeply involved in the schools' curricular progress while at the same time providing feedback to teachers, for improved academic performance.

2.3.5 Staff Commitment

Staff Commitment as defined by Meyer and Allen (1997) is 'a psychological state that characterizes an employee's relationship with the organization and has implications on his/her decision to continue working as a member of that organization. Meyer and Allen (1997) suggested three dimensional models of commitment, namely: Affective, Normative, and Continuance. According to these authors, Affective Commitment is based on how much an individual desires to continue working in the institution. Continuance Commitment on the other hand, refers to the awareness of the costs related to leaving the institution, while Normative Commitment reflects a feeling of obligation to continue working for that organization. According to Altun (2017) staff commitment is a driving force that inspires teachers to spend extra time and energy in promoting pupil achievement. The author asserts that, teachers' increased levels of motivation enable pupils to actively engage in learning activities which enhances their academic performance.

Hamid, Nordin, Adnan and Sirun (2013) also claim that, teacher commitment is one of the most significant factors in promoting education for the future, given that, teachers are directly involved in the education process and are responsible for not only equipping pupils with knowledge and skills but also teaching them good morals and behavior.

Similarly, Hulpia, Devos and VanKeer (2011) established that teacher organizational commitment is a significant indicator of a positive school culture which is an important variable for pupil learning and increased academic achievement. Ling and Ibrahim (2013) found a positive correlation between transformational leadership and teachers' commitment towards the school, the teaching profession and pupil achievement. Selamat, Nordin and Adnan (2013) also noted a positive and significant relationship between transformational leadership approaches and staff commitment. Aydin (2013) affirms that, transformational leadership positively influences teachers' job satisfaction and institutional commitment. Similarly, Chowdhury (2014) in a study on the impact of leadership styles on employee commitment and motivation established that, transformational leadership was positively correlated with increased levels of employee commitment.

Leithwood, Harris and Strauss (2010) observed that, through transformational leadership, the head teacher is able to inspire teachers by acknowledging their strengths and weaknesses, and encouraging them to work hard in order to optimize their potential. The authors emphasized that this concern by the head teacher in turn, motivates teachers and enhances their commitment not only to the school but to the teaching profession as well. They further argue that, a transformational head teacher would be able to not only connect the staff's sense of identity to the vision and mission of the school but also to the institution's culture. Aydin (2013) agrees that, for the head teacher's leadership practices to have a significant effect on academic performance, it is important for the staff to be committed to the school's principles. Such commitment, according to the author would be manifested through prudent resource utilization, upholding of school ethos, promotion of positive interpersonal relationships and adherence to school rules and norms. Likewise, Imo and

Ekpenyong (2018) established that, the head teacher's transformational leadership practices positively influenced organizational commitment and teacher efficacy.

In a study to determine the degree of employee commitment and loyalty and their influence on employee performance, Brown, McHardy, McNabb and Taylor (2011) observed that, employee commitment and loyalty were positively associated with higher levels of performance. Folorunso, Adewale and Abodunde (2014) also established that, organizational commitment positively affected employees' performance among academic staff of Oyo State owned tertiary institutions in Nigeria. Kiboss, (2014), considered the correlation between leadership styles of principals and teachers' job satisfaction in Nandi, South District, Kenya. The study findings revealed that head teacher's style of leadership had a significant impact on a school's working atmosphere, which in turn influenced teachers' job satisfaction. Hallinger and Heck (2010), assert that, lack of teacher commitment could lead to enormous challenges for school administrators and leaders. These authors claim that, lack of staff commitment is likely to manifest through negative behavior such as physical or mental abuse of pupils. Larkin (2015) concludes that, organizational commitment is vital for attracting and retaining well qualified staff since only committed employees would be willing to exert their energy and efforts towards achieving organizational goals.

2.3.6 School Academic Performance

A number of studies which include: Osei-Owusu, 2012; Nzoka & Orodho, 2014; Epstein, 2011 and Gross, 2015) suggest that, in order to enhance academic performance of a school, it is vital that, the head teacher spearheads the leadership practices that focus on achieving high academic performance. These practices would involve the head teacher ensuring that, the school has; a well constituted and operational School Management Committee (SMC) and Parents' Association (PA); developed mechanisms for engaging community participation; adequate, appropriate and quality infrastructure and facilities; and developed strategies for monitoring pupil progression at different grades. These authors further argue that, these leadership activities if effectively articulated, would lead to improved academic

performance which would translate into high pupil achievements in national examinations.

Schmidt-Davis and Bottoms (2011) however, points out that, although the head teacher plays a significant role as a leader and manager in a school, he/she alone cannot improve academic performance. These authors argue that, it is important for head teachers to work together with teachers, parents and school management bodies in order to realize overall school academic performance. Msila (2011) suggest that, it is essential for head teachers to lead their schools within a framework of collaboration and shared decision making with teachers and other stakeholders. Osei-Owusu (2012) in a study that considered the effect of School Management Committees (SMCs) in promoting the quality of teaching and learning in Ashanti Mampong Municipal basic schools, found that, even though SMCs were not able to assist teachers to improve the learning and teaching process, they helped in enhancing school community participation.

Nzoka and Orodho (2014) in a study that considered the relationship between school management and academic performance in Embu North district, Kenya, established that, SMCs employed various strategies to enhance academic performance. According to the authors, these strategies include: coordinating guidance and counseling services, providing an orderly environment and monitoring student progress. Epstein (2011) asserts that goals for pupil academic success are best achieved through cooperation and support of schools, families and communities. The researcher further argues that, parental involvement in pupils' learning enhances their academic achievement, intellectual skills, and motivation to study. The author further adds that, parental involvement decreases disciplinary issues, lowers absenteeism and improves pupils' overall self- image. In this study the researcher considered the leadership and governance role of the school management committees and their effects on school academic performance.

Community engagement in school activities is another vital component for pupil achievement (Anderson, Houser, & Howland, 2010; Bryk, 2010). According to Willems and Gonzales-DeHass (2012), school-community partnerships refer to the

connections that are created between the community and schools to enhance pupils' social, emotional and intellectual development. Gross (2015) asserts that, school factors that lead to powerful community partnerships include: effective school leadership, teacher commitment to pupil achievement, supportive learning environment, communication and cooperation among partners. Likewise, Furco (2013) emphasizes the importance of establishing democratic partnerships that are based on mutually beneficial and meaningful activities developed through mutual respect, shared morals and trust. Hamdan (2013) established a positive association between community participation and three indicators of education, namely; access, retention and attendance. Similarly, Milondzo (2009) in a study of selected secondary schools in Botswana found that, teachers in schools that involved community participation, were highly effective and positively influenced their pupils' academic performance.

Another important indicator for school academic performance is pupil progression from grade to grade within the school system. A study conducted by UNESCO Institute of Statistics (2012), established that, in many developing countries, pupils who fail to meet promotion requirements or minimum school attendance are retained in the same grade for an extra year. In a study on the effect of grade retention on Spanish pupil achievement, García-Pérez, Hidalgo-Hidalgo and Robles-Zurita (2014) observed that grade retention had a negative effect on educational outcomes. Xia and Kirby (2009) argue that, most of the studies on grade retention have revealed a negative relationship between retention and consequent academic achievement. These authors further assert that, retained pupils have a higher risk of ultimately dropping out of school.

Manacorda (2012) argues that, the practice of retaining pupils affects both the individual as well as the school. According to this author, a repeater has similar effects on school resources as enrolling an additional pupil at that grade and subsequent grades. In addition, the author asserts that, retention of pupils' results in large class sizes which puts pressure on public finances through demand for additional teachers, classrooms, desks and other inputs. In Kenya, despite it being

against the government policy, most under-performers are mandated to repeat a class so that they can improve their academic performance. Tott (2014) argues that, the practice is still common in many schools because of the pressure on teachers to deliver good academic results. The researcher suggests that, to discourage grade repetition, an effective head teacher would initiate remedial programs to cater for pupils with learning difficulties. In addition, the head teacher ought to provide information on the strengths and challenges of pupils to parents to enable them support pupils at home. Ogola (2010) suggests that, remedial programs could be more effective if the remedial teachers were accountable to School Management Committees (SMCs).

School academic performance can also be assessed in terms of the adequacy and suitability of school infrastructure and facilities. Recent research indicates that pupils' academic achievement improves in schools with enhanced physical facilities. Barrett, Treves, Shmis, Ambasz and Ustinova (2019) established that, quality school infrastructure is strongly correlated with increased learning achievements. According to Baker and Bernstein (2012) risks to pupils' safety in schools can be a consequence of both inside and outside status of the school buildings. The author asserts that, schools whose structures have electrical wires uncovered, glass windows broken and bathrooms contaminated could be quite distressing to pupils, teachers as well as parents. Furthermore, the author argues that, school buildings which are susceptible to flooding during heavy rains can disrupt the teaching and learning process which in turn leads to poor academic performance. Similarly, Ekundayo (2012) in a study to determine the correlation between school facilities and pupil's achievement in Nigeria, established a significant relationship between school facilities and pupil learning.

This study also considered academic performance in relation to pupils' academic achievement in Kenya Certificate of Primary Examinations (KCPE) by examining the Mean scores for the sampled schools for a five-year period (2017-2021). According to Henry, Nyaga and Oundo (2014), the Kenyan education system is directed by examination-aligned teaching, in which qualifying in national

examinations is the only point of reference for school performance. These authors further argue that, admission to secondary school depends on the mean score obtained by pupils in KCPE in standard eight. Shibo (2016) in a study that compared the influence of head teacher's management styles on pupils' KCPE performance in public and private primary schools in Kenya, observed that, in public primary schools, the dominant management styles used by head teachers were, democratic and participatory. The author also found that, head teachers in private primary schools mainly used autocratic management style which positively influenced pupils' academic achievement. Similarly, Nyamboga, Gwiyo, Njuguna, Waweru, Nyamweya and Gongera (2014) in a study that analyzed the impact of principals' leadership styles on students' performance in national examinations in Kenya, observed that, autocratic leadership style had a significant positive correlation with students' performance in national examinations.

2.4 Empirical Review

The researcher conducted an empirical review of the variables in the study.

2.4.1 Goal Setting and School Academic Performance.

There are many studies that demonstrate the broad impact of goal setting practice on academic performance. Moeller, Theiler and Wu (2012) conducted a 5-year quasi-experimental study that examined goal setting and student achievement in high school Spanish language classroom. By using a hierarchical linear model, these researchers analyzed the relationship between goal setting and student achievement across time at both student and teacher levels. A correlation analysis of goal setting process and language proficiency score revealed a statistically significant relationship between goal setting practice and language achievement. Similarly, Morisano, Hirsh, Peterson, Pihl and Shore (2010) in a study that examined the impact of a rigorous, online goal-setting program for low performing university students established significant improvements in academic performance among students who had participated in the goal setting intervention contrary to the control group.

Sides and Cuevas (2020) in a study that examined the impact of goal setting on motivation, self-efficacy and performance in mathematics for elementary students, found that students that set goals and self-monitored their achievement had an increase in their mathematics performance. The author established that, students who set goals had significantly superior achievement compared to those students that did not set goals, indicating that goal setting influenced student achievement.

Schippers, Morisano, Locke, Scheepers, Latham and de Jong (2020) in a study on the impact of goal setting on student academic performance in Netherlands, established that, goal setting positively influenced students' academic performance. Likewise, Rowe, Mazzotti, Ingram, and Lee (2017), in a study that investigated the effect of goal setting instruction on academic engagement for middle school students at risk for academic failure, in Austin, Texas, found a positive relationship between goal setting instructions and student academic engagement.

Idowu, Chibuzoh and Madueke (2014) examined the effectiveness of goal setting skills among senior secondary students' performance in English language in Enugu Metropolis, Enugu State, Nigeria. The study established that, performance in English language was higher among students exposed to goal-setting intervention contrary to those in the control group. Similarly, Dotson (2016) in a study to determine the effect of reading growth of elementary students in Carter County school, Kentucky found that, out of the 328 pupils that participated in the study, 69% made sufficient improvement after goal setting intervention as compared to only 60% before the implementation of goal setting practice. Abu Bakar *et al.* (2010) in a study that examined the implementation of the goal setting principle in the classroom in Johor Bahru schools in Malaysia, observed that goal setting principle if well understood by teachers, positively influenced their teaching practice, leading to improved student academic performance. Similarly, Ng'ang'a and Mwaura (2018) in a study that examined the correlation between student achievement and goal orientation among secondary school students in Kenya, observed that, goal orientation had a positive significant correlation with students' academic achievement.

2.4.2 Staff Professional Development and School Academic Performance

Liang (2015) in a comparative study to determine the influence of professional development and student achievement using the Instructional evidence data from Trends in International Mathematics and Science Study (TIMSS), in Colorado, observed that, teachers' participation in professional development positively correlated with higher student achievement in Mathematics. This cross-national study, provided empirical evidence on the importance of investing on teacher professional development to promote student achievement. Laura (2012) in a study on the effects of teacher professional development program on the mathematics achievement of middle school students in Tennessee, found that students' test scores in mathematics, increased with teacher participation in the professional development program. Likewise, Byrd (2013) in a study on the impact of professional development on student achievement as measured by Mathematics and Science Curriculum based Assessments in Texas, established that teacher professional development in curriculum and instruction increased students' chances of scoring above the district median on Curriculum Based Assessments (CBAs). Wolbers (2017) in a three-year study on the impact of professional development on teacher knowledge and classroom implementation of strategic and interactive writing instruction noted significant improvements with each year of professional development. The study also observed that, those teachers who participated in the program for three consecutive years received the highest ratings on knowledge and instruction.

Gore, Maxwell, Bowe, Hywel and Lubans (2017) conducted a study on the effects of professional development on the quality of teaching, using results from a randomized controlled trial of Quality Teaching Rounds. The study tested a pedagogy-based, collaborative professional development approach for effect in the quality of teaching. A group randomized controlled trial entailing eight teachers at each of the 24 schools, noted significant positive effects on teaching quality, independent of the type of school (primary/secondary), school location (rural/ urban) and years of teaching experience. Similarly, Ratts (2015) in a study that examined

the influence of teacher professional learning communities on student achievement in Elementary schools in Georgia found a positive correlation between student achievement on standardized assessments and the practice of teachers working together to review and discuss students' work.

Oyedele (2016) examined factors that affect professional development and teacher efficacy in Chipinge district high schools, Zimbabwe. The study established a significant positive relationship between teacher professional development and teacher efficacy. The study observed that, continuous teacher professional development composed of in-service training, workshops, seminars, and induction promoted teacher effectiveness and efficiency leading to increased pupil achievement. Similarly, Ono and Ferreira (2010) in a case study of continuing teacher professional development through lesson study in South Africa established that, teachers who participated in the lesson study improved their lessons, and enhanced pupil engagement and achievement.

2.4.3 Supportive Learning Environment and School Academic Performance

Kraft, Marinell and Shen-Wei Yee (2016) in a study that investigated the relationships between school organizational contexts, teacher turnover and student achievement in New York middle schools established that, improvement in school safety positively correlated with increased student achievement. Gietz and McIntosh (2014) in a study on the relationship between student perceptions of their school environment (in terms of safety, inclusion and clear guidelines on behavior) and their academic achievement noted that, students' perceptions of school environment were significantly associated with academic success. In another study that determined the impact of school climate on academic achievement, Maxwell, Reynolds, Lee, Subasic and Bromhead (2017) established that, students' perception of the school environment significantly influenced their achievement in writing and numeracy.

In Florida, Duszka (2015) carried out a study on the effects of safety on school performance, in which 359 public schools in the Miami-Dade school district were analyzed for a period of over three years. Using a panel random effects model, it was

established that, in Elementary schools; a 1 percent increase in the schools' mean safety score led to 18 percent on average increase in a school's Florida Comprehensive Assessment Test (FCAT) score. Gregory, Cornell, Fan, Sheras, Shih and Huang (2010) undertook a study to determine students' achievement gap and their discipline gap. Using hierarchical linear modeling and state-wide sample of over 7,300 ninth grade students and 2,900 teachers randomly selected from 290 high-schools, the study showed that consistent enforcement of school discipline and availability of supportive teachers were associated with school performance. Higgins-D'Alessandro and Sakwarawich, (2011) conducted a study which demonstrated that, pupils with special needs could only benefit from positive school environments if they felt included and respected by other pupils, indicating the critical role of peer relationships in the well-being of pupils with special needs. Esike (2018), in a study that investigated the relationship between classroom environment and academic interest as correlates of achievement in senior secondary school in Nigeria, established significant relationships between classroom environment, students' academic interest and achievement in Chemistry.

In another study that examined environmental variables that affect students' academic achievement, in agricultural science in Nigeria, Nsa, Offiong, Udo and Ikot (2014) observed a significant relationship between availability of laboratory facilities and student performance in agricultural science. The study also found a strong relationship between availability of farming facilities and students' academic achievement. Similarly, Shamaki (2015) in a study on the influence of learning environment on students' academic achievement in Mathematics in secondary schools in Yobe State, Nigeria, observed significance difference between the mean performance of students taught in a model learning environment and that of students taught in a boring learning environment.

Makewa (2011) in a study on school environment and academic performance in high and low achieving schools in Nandi central district, Kenya, noted that school environment had a significant influence on academic performance of students. Likewise, Mwangi, Ileri and Mwaniki (2017) in a study that investigated the effect of

school climate on pupils' academic performance in public primary schools in Kenya established that, physical environment significantly contributed to students' academic achievement. Similarly, Okongo, Ngao, Rop and Nyongesa (2015) in a study on the effect of availability of teaching and learning resources and its impact on the implementation of inclusive education in Kenya, found that, lack of teaching and learning materials and inadequate physical facilities had a negative influence on pupils' academic performance.

2.4.4 Monitoring of Pupil Learning and School Academic Performance

Studies have shown that there is a relationship between monitoring of pupil learning progress and academic performance. Lezotte (2010) investigated factors that differentiate performing public schools from non-performing ones. The author discovered that; successful schools had seven unique characteristics which were associated with student success. These included: clear school mission, high expectations for success, instructional leadership, opportunity to learn and time on task, safe and orderly environment, positive home-school relations and frequent monitoring of student learning progress. Chappellear and Price (2012) in a study that examined the relationship between teachers' perceptions of principal's monitoring of student progress and student achievement found a positive significant correlation between teachers' perceptions of principals' monitoring of student progress and student achievement. The study revealed that, principals that effectively monitored the teaching and learning activities achieved better outcomes in terms of staff motivation and increased pupil performance. Similarly, May and Supovitz (2011) using data from principal web logs and teacher surveys, established that the degree of principal's instructional leadership was directly associated with the number of instructional changes reported by teachers. These findings support the view that principals who focus attention on academic improvements significantly influence the teaching and learning process.

Studies indicate that, in most countries, formative assessment is used as the major form of monitoring pupil learning progress. In a study that examined the influence of monitoring student learning and their performance in Algebra (Accardo, 2017)

observed that, frequent monitoring of student learning enhanced their performance. The author asserts that, continuous use of formative assessment and evidence based instructional practices enable teachers to assess pupils' understanding of concepts, procedures and to monitor pupil progress over time. Ozan (2018) in a study that examined the effects of formative assessment on academic achievements, attitudes toward the lesson and self-regulation skills, also observed that, the experimental group in which the formative assessment practices were administered had higher academic achievement levels and better attitudes toward the class compared to the students in the control group. Likewise, Kondri (2015) conducted a study that examined the effect of formative assessment on students' academic achievement. The study which compared students' performance before and after the administration of formative assessment found that, the application of formative assessment had a positive impact on students' achievement.

Kinyua (2013) in a study that investigated the influence of monitoring and evaluation on the teaching and learning process in primary schools in Gatanga Sub-County, Murang'a County in Kenya, established that, monitoring and evaluation led to effective teaching and learning process. Furthermore, the author argues that this practice helps teachers to identify and improve weak areas in the curriculum, enhance curriculum delivery and improve overall academic performance. In another study on instructional improvement of secondary school teachers through effective academic supervision by deputy principals (Adawale, 2014), established that, internal supervision of the curriculum was an effective method of enhancing the quality of teaching and maintaining higher standards of performance. The author argues that, this was because deputy head teachers could easily access the relevant documents such as schemes of work, lesson plans and pupil's records of work. Furthermore, the author asserts that, majority of deputy head teachers had cordial working relationships with teachers which facilitated the monitoring, correction, innovation and sharing of ideas. Similarly, Nzoka, and Orodho (2014) in a study that explored the effectiveness of strategies employed by school management to improve performance in secondary schools in Embu North District, Embu County, Kenya,

observed that, effective school managers employed various strategies, among them was monitoring and evaluation of the teaching and learning process.

2.5 Critique of Literature

Day, Gu, and Sammons (2016) investigated the correlation between principals' effectiveness and student performance, based on national examinations and assessment results in schools in England. The 3-year study involved a critical review of relevant literature, accompanied with a national survey that examined principals' staff's perceptions of school improvement policies, and actions that they believed had assisted in promoting student achievement. This was supplemented by multi-perspective in-depth case studies of a sub-sample of 20 schools. The results of the study provided new empirical evidence on how effective principals directly and indirectly accomplish and maintain school improvement through combining both transformational and instructional leadership approaches. The study further revealed that, the school's ability to improve in performance does not depend primarily on the principals' leadership styles but rather on the principals' perception and analysis of the schools' needs and their application of shared institutional values. Whereas the study moved beyond the analysis of leadership in general to consider the relative impact of different types of leadership, these findings are very abstract and school leaders could still perform them in ways that do or do not capture the qualities that really make a difference to student outcomes. Furthermore, the study involved only 20 schools, which means that care is needed before generalizing the findings to larger populations.

Leithwood (2012) explored the link between school leadership and student learning. The author collected data from a wide range of respondents in 9 states, 3 school districts and 180 elementary, middle and secondary schools. The researcher used quantitative and qualitative methods to gain certain advantages associated with multiple methods researches. After six years of research, the study revealed that leadership was second to classroom instruction in influencing student learning. Despite the fact that the results of this study agree with the findings of the current

study, there is need for caution before generalizing the results to other populations, considering that, the study was conducted in a western country, whose dynamics and challenges in the primary education sector might not be the same as those found in a developing country such as Kenya.

In addition, the researchers assumed that leadership practices are the same in elementary, middle and secondary schools which is not the case as shown by (James, Connolly, Brammer, Ferting, James & Jones, 2014). Boampong, Obeng-Denteh, Issaka and Mensah (2016) conducted a study on the effects of leadership styles of head teachers on academic performance at Seniagya-Effiduase Sekyere East in the Ashanti region, Ghana. The study used triangulation approach that combined both qualitative and quantitative research methods. 60 out of 63 junior high schools in the Sekyere East District (Effiduasi) were selected to participate in the study and the respondents were teachers, students, parents, head teachers, circuit supervisors, subject coordinators and a district director of education. Results revealed that, majority (60%) of the respondents believed that head teachers' leadership styles influenced academic performance of students. Considering that, the study concentrated only in one district limits the findings of the study. Furthermore, among the respondents in the study were students and parents who might not have had adequate knowledge on the type of leadership styles used by head teachers in schools. Thus, care ought to be taken before generalizing the findings of the study.

Kinyanjui and Orodho (2014) carried out a study on the influence of head teachers' leadership styles on pupils' performance in the Kenya Certificate of Primary Education Examinations (KCPE) in Dagoretti District, Kenya. The study sample of 126 respondents comprised of 104 teachers and 22 head teachers. The findings of the study revealed that, although head teachers employed various leadership styles, the most frequently used were democratic and laissez fair styles. Democratic leadership style was found to be prevalent in top performing schools where it was reported that, head teachers often involved teachers in the decision-making process. However, it is important to note that, this study focused on the head teachers' leadership styles without un-packing the actual activities that the styles entail, a situation that could

pose a challenge to some head teachers in terms of application. Furthermore, the small number of respondents limited the degree of statistical analysis of the results.

Similarly, Obama, Eunice and Orodho (2015) investigated the effects of principals' leadership styles on student's performance in public secondary schools in Homa-Bay County, Kenya. Using a sample of 252 respondents, comprised of 36 principals and 216 teachers, the study established that there was a significant relationship between leadership styles employed by principals as perceived by teachers and students' academic performance. The study findings revealed that, schools in which principals embraced democratic and participatory leadership styles, encouraged team work and collaboration among teachers, performed better than those schools where principals used autocratic leadership styles. However, it is important to note that, the study was carried out in a single district, which means that, care needs to be applied before generalizing the study findings.

In another study, Mwamuye and Mulambe (2012) assessed the role of leadership on performance of primary schools in Kenya: A case of Mombasa district. A cross sectional research design was employed in which 33 public schools in Mombasa district participated in the study. The respondents were teachers, head teachers, parents and school prefects. The study findings revealed that, staff monitoring and parental participation correlated with pupils' academic performance. Although the research findings correspond to the findings in the current study, caution ought to be applied before generalizing the results, considering that; the study focused only on public primary schools in Mombasa district, thus restricting the findings of the study. In addition, the author used parents as respondents whose knowledge on the leadership role of the head teacher in a school could have been limited.

2.6 Research Gaps

Leadership models and styles described in literature suggest a common set of competencies and skills across countries. This could be due to researchers using similar designs of leadership (instructional, transformational and distributed

leadership styles) based on the international evidence, without introducing new elements pertinent to the local context. There is need for future research to further explore effective leadership beliefs and practices that are sensitive to contextual differences. Furthermore, research on school principals and their work in developing countries has a tendency of dealing with issues concerning their limited authority, autocratic style of leadership, principals' role in teacher evaluation, and lack of instructional leadership functions and capacity. Few studies have explored elements that prevent principals from employing more effective practices in their schools on their own or in response to principal training initiatives. In addition, most of the researches done in developing countries on school leadership have considered leadership in its adjective form (transformational, instructional, and situational), without identifying specific leadership practices a head teacher can employ to improve school academic performance.

This study sought to address this gap by investigating the relationship between leadership practices and performance of city public primary schools in Kenya. The other gap the study considered was in regard to school performance. Majority of studies have examined academic performance, based only on pupil academic achievement in national examinations, which should not be the case. In this study, academic performance encompassed a broader range of items that characterize a performing school. These included: School management and community involvement; pupil progression from grade to grade; status of school infrastructure and facilities and pupil's academic achievement in terms of school's KCPE mean scores from 2017-2021.

2.7 Summary of the Literature Review

From the literature review, it is clear that leadership practices influence school academic performance. Head teachers in successful schools employ a core of leadership practices which include; goal setting, promotion of staff professional development, creation of supportive learning environment and frequent monitoring of pupil learning all of which enhance pupils' academic achievements leading to

enhanced school academic performance. The review of literature on the identified leadership practices showed that, they contribute significantly to school academic performance in the following ways:

Goal setting plays a significant role in promoting school academic performance. Goal setting entails setting clear, specific and challenging goals that assist teachers and pupils to focus their attention and efforts on activities that enhance school academic performance. Moeller, Theiler and Wu (2012) in a study that examined the relationship between goal setting and student achievement in a Spanish language classroom, established a statistically significant relationship between goalsetting process and language achievement. Effective head teachers set performance goals for their schools and develop strategies to be followed in the attaining the set goals.

Staff professional development also plays a significant role in influencing school academic performance. Staff professional development enhances teachers' skills and knowledge, which in turn influence their classroom practice leading to improved school academic performance. Mizell (2010), found staff professional development to be the only mechanism through which a teacher can understand important aspects such as; how a pupil learns, what impedes pupils' learning and how the teacher can improve pupils' academic achievement.

Supportive learning environment similarly has a positive influence on school academic performance. To promote supportive learning environments, effective head teachers formulate policies that promote availability of suitable learning and teaching resources, strengthen positive interpersonal relationships amongst members of the school community, improve school safety and develop clear practical school rules and regulations. Darling-Hammond *et al.* (2019) established that, for effective learning to occur, pupils need to feel physically and psychologically safe, since fear and anxiety weaken cognitive capacity and affects the learning process.

Monitoring of pupil learning likewise significantly improves school academic performance. Effective head teachers frequently monitor the teaching and learning

process to ensure that the school's curriculum is in alignment with particular academic standards. They also assess and document pupils' academic progress to ensure that all pupils including those with special needs have adequate opportunities to learn the specific content in all subjects (Ko & Sammons, 2013).

This chapter on literature review thus provides a description and critique of the available literature on the relationship between leadership practices and school academic performance. The chapter also provides a theoretical framework, consisting of four theories namely: Goal setting theory, transformational leadership theory, humanistic learning theory and instructional leadership theory. In addition, the chapter provides a conceptual framework of the variables of the study, their empirical review and critique as well as research gaps in the surveyed literature.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology of the study. The chapter underlines the research design, location of the study, target population, sample size and sampling procedures, research instruments, pre-testing of the instruments for validity and reliability, data collection and data analysis, assumptions of the study and hypotheses testing.

3.2 Research Philosophy

Research philosophy refers to the development of knowledge, the nature of that knowledge and comprises important assumptions about the way in which researchers view the world (Mugenda, 2008). The practice of academic research is basically compelled by an epistemic imperative or the quest for the establishment of knowledge. Epistemology originates from episteme, the Greek word for “knowledge” or “how we come to know”. Epistemology refers to the assumption that the best technique to study the world is either by using a subjective or an objective approach to study social reality (Bhattacharjee, 2012). In addition, a scientific inquiry involves the pursuit of knowledge which seeks to close an estimation of truth as much as possible (Remenyi, Pather & Klopper, 2011). Bryman and Bell (2007) assert that epistemology is characterized as descriptive whereby one describes the philosophical position that can be determined in research. This study was intended to define the philosophical position about leadership practices and their influence on school academic performance and by doing so add knowledge on what informs relationship between the two. Bryman and Bell (2007) argue that there are three epistemological positions: positivism, realism and interpretivism.

The term positivism was derived from a French philosopher Auguste Comte (1798–1857) the founder of the discipline of sociology. The author attempted to merge empiricism and rationalism in a new code termed positivism; and further suggested

that theory and observations have circular dependence on each other. Whereas theories may be created through reasoning, they are only true if they can be confirmed through observations. The emphasis on verification led to the separation of modern science from philosophy and metaphysics and further development of the “scientific method” as the primary means of validating scientific claims. Comte’s ideas were expanded by Emile Durkheim in his development of sociological positivism (positivism as a foundation for social research) and Ludwig Wittgenstein in logical positivism (Bhattacharjee, 2012). Positivism supports the application of natural sciences to the study of social reality and beyond. The anti-positivists in the early 20th century, rejected positivism by equating it to quantitative research methods such as experiments and surveys and without any explicit philosophical commitments while anti-positivism employed qualitative methods such as unstructured interviews and participant observation (Bhattacharjee, 2012).

Cohen, Manion and Morrison (2007) explain that positivism cannot be applied to the study of human behavior where immense complexity of human nature and elusive and intangible quality of social phenomena contrast extremely with the order and regularity of the natural world. The anti-positivists emphasized that social actions must be studied through interpretive means based upon an understanding of the meaning and purpose that individuals attach to their personal actions, which inspired Georg Simmel’s work on symbolic interactionism, Max Weber’s work on ideal types, and Edmund Husserl’s work on phenomenology (Bhattacharjee, 2012). By use of both qualitative and quantitative methods in this study, qualitative data provided respondents with an opportunity to provide information on their views and perception (philosophical commitment). Interpretivism is a term given to a contrasting epistemology to positivism. The term incorporates the views of writers who have been critical on applications of scientific model and are influenced by different intellectual traditions. Realism is a conviction that the natural and social sciences can and should start with collection of data explanation, commitment, and view that there is an external reality to which scientists direct their attention in other

words. Positivism entails an element of deductivism, which maintains theories and hypotheses that aim at data collection (Bryman & Bell, 2007).

In the current study, analysis of data was interpreted and compared with theoretical evidence in order to make conclusions. The study was conducted based on positivism paradigm. This perspective is characterized by a belief theory before research is statistically justified by testing hypothesis (Cooper & Schindler, 2011). The study is an empirical analysis of the influence of leadership practices on academic performance of city public primary schools in Kenya that was guided by theories and empirical literature. The theories used in the study were to explain what informed the choice of leadership practices; goal setting, staff professional development, supportive learning environments and monitoring of pupil learning. The study was essentially geared towards establishing possible correlation between leadership practices and school academic performance and evaluating the strength of such relationships if they existed.

3.3 Research Design

According to Van Wyk (2012) research design involves the entire plan for connecting the conceptual research problems to the relevant empirical study. Consequently, the authors emphasize that, research design expresses the type of data required and the methods to be utilized for collecting and analyzing the aforementioned data. According to Eyisi (2016) there are various types of research designs and therefore while carrying out a social science study the researcher needs to decide early on whether to utilize quantitative methods, qualitative methods or a combination of both. Johnson and Christensen, (2012) identified quantitative, qualitative and mixed research as the three principal models of research designs in educational research. Similarly, Ponce and Pagán-Maldonado (2015) assert that, while conducting research in the field of education, employing a mixed method approach enables researchers to capture and elucidate the intricacy of the teaching–learning process.

Correspondingly, Creamer (2016) argues that, recent modifications in educational policies across the globe have led to a mounting presence of projects that are structured in a manner that require a mixed methods research approach. Consequently, in this study the researcher adopted a mixed research methodology. Molina (2016) states that, the term “mixed methods” refers to an emerging methodology of research that promotes the systematic integration of both quantitative and qualitative data within a single empirical study. Similarly, Schoonenboom and Johnson (2017) describe mixed methods research as a research methodology that requires collecting, analyzing and integrating of both quantitative and qualitative data.

Queirós, Faria and Almeida (2017) suggest that, in order for a research study to be adequately considered as scientific, it is essential for the researcher to implement both quantitative and qualitative research methodologies. The authors assert that this is predominately due to the fact that, a qualitative approach usually tends to gravitate towards elucidating on a complex reality such as the connotation of human behavior within a given context whereas; a quantitative approach focuses essentially on acquiring precise and consistent data that allows statistical analysis. Doyle, Byrne and Brady (2009) carried out a meta-analytic study on the mixed methods approach and the findings of the study confirmed that by adopting both quantitative and qualitative research methods, the investigator gains a relatively deeper understanding of the subject matter, while at the same time, counterbalancing the weaknesses inherent to employing each approach independently. Malina, Norreklit and Selto (2011) assert that employing a mixed method approach, expands the scope of the study to offset the weaknesses of either qualitative or quantitative methods when used independently. Consequently, the authors argue that by adopting a mixed method approach the researcher is likely to attain study finding that are both valid and reliable.

Correspondingly, Zheng (2015) conducted a meta-analytic study of the mixed method approach and the findings of the study established that by adopting a mixed method approach the investigator is able to improve both the reliability and validity

of a scientific research through the triangulation of results. Triangulation entails the use of quantitative and qualitative methods in an effort to obtain convergence of research findings (Tashakkori & Creswell, 2007). This study is classified as a concurrent embedded mixed methods research design given that, the researcher emphasized more on the quantitative data analysis phase, yielding a quantitative-dominant mixed analysis.

Quantitative data was analyzed through descriptive and inferential statistics that were generated and regression analysis was done to test the null hypotheses using F test at 5 percent level of confidence. The qualitative strands of data were analyzed independently through thematic analysis. The study utilized Braun and Clarke's (2006) six step framework for thematic data analysis. The six steps entail the researcher first acquainting himself or herself with the data collected, identifying preliminary codes, conducting an interpretive analysis of the organized codes, reviewing the emerging themes and lastly defining and naming the themes.

3.4 Target Population

Asiamah, Mensah and Oteng-Abayie (2017) defined target population as the group of people or participants with the exact characteristics of interest and relevance. Banerjee and Chaudhury. (2010) assert that, the target population is the group of elements to which the researcher wishes to make inferences. The target population for the study comprised of all public primary schools in Nairobi, Kisumu and Mombasa cities of Kenya. The cities had a total population of 924 public primary schools with 14025 teachers. The city public primary schools were selected due to a number of reasons. Firstly, public schools in cities vary in economies, enrollments and academic performance. Consequently, cities provide a diverse sample of schools making it an ideal location to conduct primary school research. Secondly, schools in informal settlements within the cities have characteristics that are similar to schools located in rural areas which makes it easier for the study findings to be implemented in all public primary schools countrywide. Table 3.1 shows the distribution of the target population.

Table 3.1: Distribution of the Target Population

Cities	No. of Sub-Counties	No. of p/p schools	No. of teachers
Nairobi	9	210	5962
Kisumu	7	618	6341
Mombasa	4	96	1722
Total	20	924	14025

Source: Ministry of Education (2021)

As shown in Table 3.1, there were 924 public primary schools in the three cities, of which 210 were in Nairobi, 618 were in Kisumu and 96 were in Mombasa. The total number of teachers in schools within the cities was 14025 of which, 5962 were in Nairobi, 6341 in Kisumu and 1722 in Mombasa. Each of the cities consisted of a number of Sub-Counties. Nairobi city had 9 Sub-Counties, namely: Dagoretti, Embakasi, Kamukunji, Kasarani, Langata, Madaraka, Njiru, Starehe and Westlands. Kisumu had 7 Sub-Counties, namely: Kisumu Central, Kisumu East, Kisumu West, Seme, Nyando, Muhoroni and Nyakachi while Mombasa had 4 Sub-Counties: Changamwe, Kisauni, Mvita and Likoni.

Proportionate random sampling was used to choose a few Sub-Counties from each city that participated in the study. Kothari (2004) states that, proportionate sampling is a sampling strategy used when the population is comprised of several subgroups that are vastly different in quantity. The number of participants to be selected from each subgroup was determined by their number relative to the entire population (Psychology Glossary, 1998-2019). Simple random sampling was then applied to select the particular Sub-Counties that participated in the study from each city. This type of sampling is also identified as chance sampling or probability sampling in which each and every item in the population has an equal chance of being included in the sample (Kothari, and Garg, 2014). The Sub-Counties that were sampled include: Langata, Starehe, Kisumu Central, Kisumu East and Mvita. Table 3.2 shows the distribution of the accessible population.

Table 3.2: Distribution of Accessible Population

Sub-County	No. of p/p schools	No. of teachers
Langata	21	287
Starehe	27	383
Kisumu Central	29	764
Kisumu East	45	1218
Mvita	25	348
Total	147	3000

Source: Ministry of Education (2021)

Table 3.2 shows that, there were 147 regular public schools in the five sampled Sub-Counties, of which 21 were in Langata, 27 in Starehe, 25 in Mvita, 29 in Kisumu Central and 45 in Kisumu East. The total number of teachers in the 5 sampled Sub-Counties was 3,000, of which 287 were in Langata, 383 in Starehe, 764 in Kisumu Central, 1,218 in Kisumu East and 348 in Mvita.

3.5 Sampling Frame

West (2016) defines a sampling frame as formal or informal lists of units or cases from which a sample is drawn. In this study, the sampling frame was obtained from the Ministry of Education (MOE, 2021). It comprised of a list of public primary schools, in the three cities, their enrolments and number of teachers per school. Sharma (2017) asserts that, sampling is a technique used by a researcher to select a relatively small number of individuals, objects or items from a pre-defined population to serve as subjects for observation or experimentation in accordance to the objectives of the study.

3.5.1 Sample Size

Alvi (2016) defines a sample as a set of relatively smaller number of individuals selected from a population for research purposes. According to Kadam and Bhalerao (2010) a sample size is basically the number of participants or individuals in a sample. These authors argue that, it is a basic statistical principle for a researcher to define the sample size before starting the study in order to avoid bias when interpreting the results. Singh and Masuku (2014) affirm that, sample size is an important aspect of any study that aims to use the sample to make inferences about

the population. The use of a sample rather than the population helps in making the study economical both in terms of money and time.

Taherdoost (2016) asserts that, for a researcher to be able to generalize the findings from a random sample and avoid biases or sampling errors, it is vital to have an adequate sample size. Gill, Johnson and Clark (2010) argue that, whereas, the common rule in research is to use the largest sample possible to avoid biases, it is important for the researcher to ensure a balance between the sample size and the study resources. Hashim (2010) on the other hand, asserts that, adequate sample size for a study depends on the type of research being conducted, that is, whether the study is descriptive, experimental or correlational. The author maintains that, for descriptive research, 10% of the population is adequate but if the population is small then 20% may be required, while for correlational research, at least 30 units are required to establish a relationship. This study, considered a sample of 30 schools which was (20%) of the 147 public primary schools in the 5 Sub-Counties selected for the study. To determine the sample size of teachers to participate in the study from a total of 3000 teachers in the 5 Sub-Counties, the researcher adopted a formula by Kathuri and Pals (1993) for determining a sample size n , from a known population size, N as shown below:

$$n = \frac{\chi^2 NP (1-P)}{d^2 (N - 1) + \chi^2 P (1 - P)}$$

Where:

n = required sample size

N = the given population size of teachers in the 30 public primary schools in the sample.

P = Population proportion, assumed to be 0.50

d^2 = the degree of accuracy whose value is 0.05

χ^2 = Table value of chi-square for one degree of freedom, which was 3.841

Substituting these values in the equation, estimated sample size (n) was:

$$n = \frac{3.841 \times 3000 \times 0.50 (1-0.5)}{(0.05)^2 (3000-1) + 3.841 \times 0.5 (1-0.5)}$$
$$n = 340.6$$

Therefore, $340.6/30 = 11.35$ approximately 11 teachers per school and with a sample of 30 schools: $11 \times 30 = 330$ teachers. The sample size for the study therefore, comprised of 330 teachers and 30 head teachers selected by census to make a total of 360 respondents. Examples of researchers that have used Kathuri and Pals (1993) formula to obtain a sample size include: Kang'ahi, Indoshi, Okwach and Osodo (2012); Kyalo and Chumba (2011); Ali-Olubandwa, Odero-Wanga, Kathuri and Shivoga (2010).

3.5.2 Sampling Techniques

In this study a total of 147 public primary schools in the 5 Sub-Counties were stratified into three strata, namely; high income, middle income and low-income schools. Subsequently a pair of schools was randomly chosen from each stratum to make a total of 6 schools per Sub-County that participated in the study. Thus, the total number of schools sampled was 30. Since the schools selected from each stratum were based on simple random sampling, the whole process, which comprised of stratification followed by simple random sampling, is known as stratified random sampling (Kothari & Garg, 2014). Considering that, some Sub-Counties had more teachers than others, proportionate random sampling was applied to obtain the number of teachers per Sub-County. Therefore, the number of teachers that participated in the study per Sub-County included; 32 teachers in Langata, 42 teachers in Starehe, 84 teachers in Kisumu Central, 134 teachers in Kisumu East, and 38 teachers in Mvita, making a total of 330 teachers. Table 3.3 shows the sampling matrix.

Table 3.3: Sampling Matrix

Sub-County	No. of Teachers	Sample Population for Teachers
Langata	287	$287/3000*330=32$
Starehe	283	$283/3000*330=42$
Kisumu Central	764	$764/3000*330=84$
Kisumu East	1218	$1218/3000*330=134$
Mvita (Mombasa)	348	$348/3000*330=38$
	Sample size of teachers: 330 teachers	

To obtain the number of teachers that participated from each school the researcher divided the sampled number of teachers in each Sub-County by the number of schools selected in that Sub-County. For example, in Langata Sub-County where 32 teachers were required from the 6 selected schools, 5 teachers were selected per school. Starehe Sub-County where 42 teachers were required; 7 teachers were selected per school. Kisumu Central, 14 teachers per school, Kisumu East 22 teachers per school and Mvita 6 teachers per school. Simple random sampling was used to select individual teachers that participated in the study. Studies that have utilized proportionate random sampling in Kenya include: Luvai and Maende (2014), Okemwa (2016) and Ogola (2017).

3.6 Research Instruments

In social science research, the most commonly used instruments are questionnaires, interview schedules, observational forms, and standardized tests (Zohrabi, 2013). Akinci and Saunders (2015) describe a questionnaire as a well-established research tool used for collecting information on participants' social features, present and past conduct, standards of attitudes or behavior, their viewpoint and grounds for action with respect to the subject under inquiry. In this study, the main instruments for data collection were; questionnaires for teachers and structured interview questions for head teachers. The teacher questionnaire comprised of six parts; Part 1-IV adopted from 'The Principal Instructional Management Rating Scale (PIMRS)-Teachers' version (Hallinger & Murphy, 1985).

Part I of the questionnaire collected information on particulars of the school, number of years of service under the current head teacher and the number of years of service in the teaching profession. Part II to IV of Questionnaire comprised of Likert Scales that sought answers on teachers' perception of the leadership practices that head teachers employed in line with the stated objectives of goal setting, promotion of staff professional development, creation of supportive learning environment and monitoring of pupil learning. Part V of the Questionnaire had questions that captured the teachers' level of commitment to their schools. The questions used were adopted from Meyer and Allen's (1997) Model of Affective Commitment measuring scale. Part VI of the questionnaire collected data on academic performance. The questions used were adopted from the 'MOE (2010) Quality index: Guidelines for Quality Assurance and Standards Assessment of schools in Kenya'. Questions in this section of the questionnaire sought answers on teachers' views concerning head teachers' role in relation to the following indicators of school performance: School management and community participation; Pupil progression from grade to grade; Status of school infrastructure and facilities; and School's KCPE mean scores from 2017 to 2021.

Besides the teacher questionnaire, there were interview questions for head teachers. Alshenqeeti (2014) states that, an interview is an extendable conversation between partners, whose aim is to obtain in-depth information regarding a certain topic or subject, and through which a phenomenon could be explained in relation to the meanings interviewees bring to it. Mason (2012) asserts that, interview techniques can take several forms such as face-to-face verbal exchanges, group conversations and telephone surveys. The author argues that, face-to-face or personal interviews despite being very labor exhaustive are the best method of obtaining high quality data. The researcher further suggests that, in cases where all the participants are accessible through telephone and the interview questions are short, telephone interviews is an effective and economical way of collecting qualitative data. Ryan, Coughlan and Cronin (2009) add that face-to-face interviews enable the researcher to analyze non-verbal cues through observation of body language. The authors argue

that this observation is critical as it may assist the interviewer to explore and discover latent meanings to what is being communicated.

3.7 Pilot Study

Before the actual data collection, a pilot study was conducted in a sample of three schools that met the criteria (were registered city public primary schools). Blatch-Jones, Pek, Kirkpatrick and Ashton-Key (2018), define a pilot study as a miniature version of the main study. Wolfe (2013) asserts that, a pilot study helps the researcher to assess implementation issues associated with the study design and procedures, such as: recruitment plans, sample accessibility, adequacy of measures, feasibility and suitability of procedures, test of concepts, data collection and analysis. The pilot study sample selected was 10% of the sample projected for the main study. Whitehead, Julious, Cooper and Campbell (2016) assert that, a pilot study sample of 10% of the sample projected for the main study is adequate for descriptive studies. The sample size for the pilot study comprised of 33 teachers and 3 head teachers, making a total of 36 respondents. The return rate for the pilot study was 100%.

3.7.1 Reliability of the Research Instruments

Ghazali (2016) suggests that, reliability is the measure of stability or internal consistency of an instrument in measuring certain concepts. Tavakol and Dennick (2011) affirm that, reliability of an instrument is concerned with its ability to measure consistently. In this study reliability of the instruments was assessed using Cronbach's alpha reliability tests. Tavakol and Dennick (2011) state that, alpha was developed by Lee Cronbach in 1951, to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. These authors further assert that, there are various reports about the acceptable value of alpha, ranging from 0.70 to 0.95. They argue that, a low value of alpha could be due to a fewer number of questions, poor inter-relatedness between items or heterogeneous constructs. Taber (2018) affirms that, Cronbach's alpha value of 0.70 and above is sufficient.

3.7.2 Validity of the Research Instruments

According to Mohajan (2017) validity in quantitative research determines whether the research instrument measures that which it is intended to measure or the extent to which results obtained from the examination of the data actually represent the variables of the study. Burton and Mazerolle (2011) suggest four general procedures for demonstrating the validity of an instrument. These include: face validity, content validity, criterion validity and construct validity. These authors assert that, face and content validity are determined through a team of experts who critique the survey's appearance, significance and representativeness of its components. The researchers assert that, the team of experts is usually comprised of individuals with expertise in the field of study. Masuwai and Saad (2017) state that, face and content validity play an important role in establishing the accuracy and association among the questions asked and the variables considered.

Taherdoost (2016) asserts that, it is important for the researcher to establish the instrument's criterion-related validity and construct validity before utilizing the quantitative analyses. The researcher explains that, criterion-related validity test determines the accurateness of the instrument by comparing it to an earlier established and valid instrument while construct validity provides the researcher with confidence that the instrument has the ability to actually measure what it is intended to measure. This study assessed validity of the research instruments using content and construct validity. Content validation is employed when it seems likely that test users would wish to draw references from observed test scores to performances on a larger domain of tasks similar to items on the test. Typically, it involves asking expert judges to examine test items and judge the extent to which these items sample a specified performance domain. To ensure content validity the questionnaire was subjected to thorough examination by three independent resource persons, from the Ministry of Education, Kenya Institute of Curriculum Development (KICD) and the Teachers Service Commission (TSC) who evaluated the statements in the questionnaires and confirmed that they were relevant, meaningful and clear.

Saunders, Lewis and Thornhill (2007) explain construct validity as the extent to which the measurement questions actually measure the presence of those constructs one intended to measure. To measure construct validity in this study, the questionnaire was divided into several sections to ensure that each section assessed information for a specific objective, and also to ensure that the same is closely tied to conceptual framework of the study. Construct validity which sought to measure whether an instrument accurately measures the study phenomena was tested using factor analysis test of sampling adequacy and Sphericity. Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was used to establish the construct validity of study variables. This enabled the study to identify whether the items were appropriate for further analysis. Bartlett's Test of Sphericity was used to analyze if the samples were from populations with equal variances in order to indicate the degree of sampling adequacy. Williams, Onsmann and Brown (2010), state that KMO test results with values above the threshold of 0.7 can be verified as valid.

3.8 Data Collection Procedure

Prior to data collection, an introductory letter was obtained from Jomo Kenyatta University of Agriculture Technology (JKUAT). The letter enabled the researcher to get a research permit from the National Council for Science, Technology and Innovation (NACOSTI), to carry out the study. The researcher contacted schools through the County Commissioners, County Education Directors and Sub-County Directors of Education in the sampled Sub-Counties. The study utilized self-administered questionnaires for teachers and interviews for head teachers, which were administered by the researcher in person. The researcher had planned to complete the data collection process in one month but due to logistical problems, the process took two months. Letters to the sampled schools were delivered in time explaining the purpose of the study. Respondents were assured of strict confidentiality. The questionnaires were delivered to schools by the researcher (one city at a time) and collected two weeks later.

3.9 Data Processing and Analysis

Bell, Bryman and Harley (2018) define data analysis as the procedure of examining, cleaning, adapting and exhibiting data, with the aim of establishing essential information and proposing recommendations that influence decision making. These authors assert that, data analysis comprises three main phases namely: data reduction, data presentation and interpretation of the findings. Kothari and Garg (2014) assert that, given that the collected data is usually raw, it is essential for it to be revised, coded, tabulated and classified. These authors state that, the editing process typically entails the assessment of the collected data in order to identify mistakes and omissions and to make appropriate amendments; coding on the other hand entails designating numbers or other symbols to responses in order for them to be placed into fewer classes or categories. Lastly, tabulation refers to the act of summarizing the raw data and presenting it in statistical tables for a more profound evaluation.

The study generated both quantitative and qualitative data. Quantitative data was analyzed using descriptive analysis techniques. Descriptive statistics were generated using Statistical Package of Social Science (SPSS) version 21, Word Office Excel and R statistical package. Correlation analysis and regression analysis were conducted for each independent variable against the dependent variable and for the multiple regression model. Qualitative data were analyzed through thematic analysis using Braun and Clarke's (2002) six-step framework. The model involves, familiarizing oneself with the data, generating codes and searching for themes.

3.10 Regression Model Assumptions

Regression assumptions were considered in order to validate the regression equation and reduce the probability of type 1 and II errors. The researcher therefore conducted a number of diagnostic tests that were required for successful regression. These included: Normality, Linearity, Auto-correlation and multi-collinearity. Normality refers to the assumption that the set of data being analyzed is normally distributed and can be graphically represented in a bell-shaped curve. According to Ahad, Yin, Othman and Yaacob (2011) there are four techniques for testing normality. They

include: Kolmogorov-Smirnov test (Kolmogorov 1956; Smirnov 1936), Anderson-Darling test (Anderson & Darling 1952), Cramer-von Mises test (Anderson 1962) and Shapiro-Wilk test (Shapiro & Wilk, 1965). In this study, normality was tested using Kolmogorov-Smirnov and Shapiro Wilk at 10% level of significance scales.

Linearity is a statistical method for calculating the value of a dependent variable from an independent variable. It is a modelling technique where a dependent variable is predicted based on one or more independent variables. Obtaining a p-value smaller than 0.05 means that there is a statistically significant relationship between these variables (Kumari & Yadav, 2018). Auto-correlation was tested by Durbin-Watson statistics. Durbin-Watson is used to test auto-correlation, a condition whereby the independent variables replicate themselves or manipulate each other and cannot adequately predict the dependent variable. Chen (2016) asserts that testing auto-correlation assists in detecting the distribution of data errors. The Durbin-Watson statistics value ranges from 0 to 4. An ideal value of 2 indicates a non-auto-correlation; a value closer to 0 indicates a positive auto-correlation, whereas values closer to 4 indicate a negative auto-correlation. This implies that coefficient values that range from 1.5 to 2.5 indicate no presence of auto-correlation while values above 2.5 indicate a positive auto-correlation.

Multicollinearity test was done to verify the presence of redundant variables. Vatcheva, Lee, McCormick and Rahbar (2016) argue that multicollinearity occurs when at least two predictors that are highly correlated are concurrently assessed in a regression model. The main problem associated with multicollinearity relates to unstable and biased standard errors that could lead to unstable p-values for determining the statistical significance, which could result in unrealistic and unobtainable interpretations. The presence of multicollinearity is indicated by a tolerance of less than 0.1 or a Variance Inflation Factor (VIF) of over 10. Variance of Inflation Factor (VIF) is a statistic measure used to predict the possibility of multicollinearity amongst independent variables.

3.10 Statistical Model

The t-test statistics was used to test the significance of the relationships between leadership practices (independent variables) and school academic performance (dependent variable). A multiple regression equation was used to identify any relationship between the dependent variable and four independent variables as described below;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y represents the dependent variable (School Academic Performance)

α represents intercept

X_1 represents goal setting

X_2 represents staff professional development

X_3 represents supportive learning environment

X_4 represents monitoring of pupil learning

β_1, β_4 Slopes coefficients representing the influence of the associated independent variables over the dependent one.

ε represents error term

To draw conclusions on the moderating influence of staff commitment on the relationship between leadership practices and school academic performance, a moderated multiple regression model (MMR) was fitted and tested for significance. The model included interaction variables of the moderating variable (staff commitment) and the independent variables (leadership practices). The change statistics (R-square change and F-statistic change) were calculated on a step wise regression to determine the effect of addition of the interaction variables on the equation. The hypothesis on the moderating variable was based on the significance of change statistics as the MMR model equation was given by;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_m MV + \beta_{1m} X_1 * MV + \beta_{2m} X_2 * MV + \beta_{3m} X_3 * MV + \beta_{4m} X_4 * MV + \varepsilon$$

Where:

Y represents dependent variable (school performance)

α represents intercept

X₁ represents goal setting

X₂ represents staff professional development

X₃ represents supportive learning environment

X₄ represents monitoring of pupil learning

MV represents staff commitment (moderating variable)

X_i *MV represents interaction variable between staff commitment and independent variable

{=1, 2, 3, 4}

$\beta_1 - \beta_4$ slopes coefficients representing the influence of the associated independent variables over the dependent one.

β_m -slope coefficient representing the influence of the moderating variable

β_{im} - slope coefficient representing the influence of interaction term moderating variable

ϵ represents error term

The researcher had developed the null hypothesis and the study utilized the t-test to analyze the relationship between the variables, based on the evidence from the sample. If the null hypothesis is rejected, this contrasted with the research hypothesis that there is no relationship between the variables in the population from which the sample was drawn. The selected alpha level for the analysis was 0.05 ($\alpha=0.05$). The deciding rule was that; if the exact probability is less than the critical alpha level ($p < \alpha$), the finding is significant and the null hypothesis was to be rejected. If the probability is greater than the critical alpha ($p > \alpha$), the finding was to be significant

and the study would fail to reject the null hypothesis. Table 3.4 shows the model description.

Table 3.4: Model Description

Variable	Hypothesis	Model
Goal Setting (independent variable)	H0 ₁ : There is no significant relationship between goal setting and academic performance	$Y = \alpha + \beta_1 X_1 + \varepsilon$
Staff professional Development (independent variable)	H0 ₂ : There is no significant relationship between staff professional development and academic performance	$Y = \alpha + \beta_2 X_2 + \varepsilon$
Supportive learning environment (independent variable)	H0 ₃ : There is no significant relationship between supportive learning environment and academic performance	$Y = \alpha + \beta_3 X_3 + \varepsilon$
	H0 ₄ : There is no significant relationship between monitoring of pupil learning and academic performance	$Y = \alpha + \beta_4 X_4 + \varepsilon$
Staff commitment (Dependent variable)	H0 ₅ : Staff commitment has no significant moderating role on the relationship between leadership practices and academic performance	$Y = \alpha + \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_1 X_1 MV + \beta_2 X_2 MV + \beta_3 X_3 MV + \beta_4 X_4 MV + \varepsilon$

3.11 Operationalization of Variables

Table 3.1 shows the relationship between the independent and dependent variables used in the study.

Table 3.5: Operationalization of Variables

Objectives	Type of Variables	Scale	Analysis	Tools of analysis
Objective One	Goal setting (independent variable)	Ordinal	Descriptive, Analytical, Inferential	Frequency table analysis, Mean, Standard deviation and regression analysis
Objective Two	Staff professional development (independent variable)	Ordinal	Descriptive, Analytical, Inferential	Frequency table analysis, Mean, Standard deviation and regression analysis
Objective Three	Supportive learning environment (independent variable)	Ordinal	Descriptive, Analytical, Inferential	Frequency table analysis, Mean, Standard deviation and regression analysis
Objective Four	Monitoring of pupil learning (independent variable)	Ordinal	Descriptive, Analytical, Inferential	Frequency table analysis, Mean, Standard deviation and regression analysis
Objective Five	Staff commitment (moderating variable)	Binary, Discrete	Descriptive, Analytical, Inferential	Frequency table analysis, Mean, Standard deviation and regression analysis
	School performance (Dependent variable)	Ordinal	Descriptive	Frequency table analysis, Mean, Standard deviation and regression analysis

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents an analysis of data that was collected, interpretations and discussion of the research findings. The study employed statistical techniques both descriptive and inferential statistics to determine the relationship between head teacher leadership practices and academic performance of city public primary schools in Kenya. The findings relate to the research objectives that guided the study, namely to; examine the relationship between goal setting practice and academic performance, determine the relationship between staff professional development and academic performance, examine the relationship between supportive learning environment and academic performance and determine the relationship between monitoring of pupil learning and academic performance. The study also explored the moderating role of staff commitment on the relationship between leadership practices and academic performance.

4.2 Response Rate

A total of 330 questionnaires were self-administered to teachers in public primary schools in Langata, Starehe, Kisumu Central, Kisumu East and Mvita Sub-Counties within the three cities of Kenya. Out of the 330 questionnaires, 294 questionnaires were dully filled and returned by the respondents translating to a response rate of 89.09%. The higher response rate of 90% facilitated in gathering sufficient data that could be generalized to determine the relationship between head teacher leadership practices and academic performance of city public primary schools in Kenya. This was in line with Orodho (2012) who asserts that, a response rate of above 50% contributes towards obtaining sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. Similarly, Mugenda and Mugenda (2012) suggest that a response rate of 50% is

sufficient, 60% is good and above 70% is excellent. The response rate is presented in Table 4.1.

Table 4.1: Response Rate

Sample size	Frequency	Percent (%)
Dully filled and returned	294	89.1
No response	36	10.9
Total	330	100

4.3 Pilot Study Test Results

A pilot test was conducted where data from the questionnaire was collected from three schools (10%) of the intended sample size with the aim of determining the reliability and validity of the data collection instrument. The pilot test results for the instrument validity involved the use of factor analysis which was the basis for testing that the instrument construct validity.

4.3.1 Factor Analysis

Factor analysis is a statistical technique used for dimension reduction. In cases where variables are measured using many unobserved indicators, factor analysis is adopted to reduce the dimensions of the many observed indicators into few unobserved latent variables. Exploratory factor analysis was used for dimension reduction of the indicators measured based on the theoretical grouping of indicators. Factor analysis was thus performed for each variable and its indicators. From factor analysis, factor loadings were extracted and used as the basis of retaining or expunging observed indicators. An indicator is retained and said to belong to the variable if it loads the component by a factor loading greater than 0.4. All the indicators measured had factor loadings greater than 0.4 and were retained except one indicator for the dependent variable which had a loading of 0.267 that is less than 0.4. The indicator was thus expunged and not considered in computation of the latent variable school academic performance. The results of the factor loadings are presented in Table 4.2.

Table 4.2: Factor Analysis Results

Item	Composite measures	Dropped measures	Retained measures
Goal setting	4	0	4
Staff Professional Development	4	0	4
Supportive learning Environment	4	0	4
Monitoring of pupil learning	4	0	4
School performance	5	1	4
Staff commitment	4	0	4

4.3.2 Reliability of Constructs

The research instrument was tested for reliability by computation of Cronbach alpha statistics of reliability. Table 4.3 indicates that all the variables had Cronbach's alpha coefficients that were greater than 0.7 threshold thus confirming the reliability of the instrument. The results show that all the indicators for the variables used in the study were reliable measurements and thus the questionnaire was suitable to collect data for the study and provide consistent results.

Table 4.3: Reliability Test Results

Variable	No of Items	Cronbach's alpha coefficient	Status
Goal setting	4	0.969	Accepted
Staff professional development	4	0,979	Accepted
Supportive learning environment	4	0.980	Accepted
Monitoring of pupil learning	4	0.976	Accepted
Academic performance	4	0.922	Accepted
Staff commitment	4	0.906	Accepted
All constructs combined	24	0.982	Accepted

4.3.3 Validity Test Results.

Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was used to establish the construct validity of study variables. This enabled the study identify whether the items were appropriate for further analysis. Bartlett's Test of Sphericity was used to analyze if the samples were from populations with equal variances in order to indicate the degree of sampling adequacy. Table 4.4 shows results for Kaiser-Meyer-Olkin (KMO) and Bartlett's Tests of sampling adequacy and Sphericity.

Table 4.4: Validity Results

Variable		
Academic Performance		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.796
Bartlett's Test of Sphericity	Approx. chi-Square	319.146
	df	28
	Sig.	.000
Goal Setting		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	198.113
	df	10
	Sig.	.000
Staff Professional Development		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.893
Bartlett's Test of Sphericity	Approx. Chi-Square	246.028
	df	10
	Sig.	.000
Supportive Learning Environment		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.893
Bartlett's Test of Sphericity	Approx. Chi-Square	237.058
	df	10
	Sig.	.000
Monitoring of Pupil Learning		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.921
Bartlett's Test of Sphericity		210.941
		10
		.000
Staff Commitment		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.798
Bartlett's Test of Sphericity	Approx. Chi-Square	180.365
	df	28
	Sig.	.000

4.4 Background Information

This section presents demographic information of the respondents who participated in the study. The information included number of years teachers had served under the current head teacher and years of experience as trained teachers. This was to help the researcher ascertain whether the respondents had adequate knowledge of the head teacher's leadership practices and to determine the extent to which their responses could be relied upon to make conclusions on the study problem. Table 4.5 shows the number of years teachers had worked under the current head teacher whereas Table 4.6 indicates their years of experience in the teaching profession.

Table 4.5: Number of Years Worked under the Current Head teacher

No. of Years	Frequency	Percentage (%)
Below 1 year	46	15.6
2-4 Years	129	43.9
5-7 Years	55	18.7
Above 7 Years	64	21.8
Total	294	100.0

As presented in Table 4.5 majority (43.9%) had served between 2-4 years, 18.7% between 5-7 years and 21.8% had served for over 7 years. Only 15% of those who responded had been working under their current head teacher for less than 1 year. These findings indicate that most of the respondents were qualified to understand the nature of the research problem. This demonstrated that most of teachers were qualified professionals with technical knowledge and skills on the study problem and thus provided the study with reliable information on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

Table 4.6: Years of Experience as a Trained Teacher

Period	Frequency	Percentage (%)
Below 1 Year	4	1.4
2-5 Years	37	12.6
6-10 Years	76	25.9
Above 10 Years	177	60.2
Total	294	100.0

From the findings in Table 4.6; (60.2%) of teachers, indicated they had experience of above 10 years, 25.9% had 6-10 years, 12.6% had 2-5 years and only 1.4% of those who responded had an experience of below 1 year. This indicates that over 60% of the respondents had taught in public primary schools for over 10 years and understood technical issues on the relationships between leadership practices and academic performance of public primary schools in Kenya. These findings were in line with Braxton (2008) who asserts that respondents with a high working experience assist in providing reliable data on the study problem since they have experience with the problem being studied.

4.5 Descriptive Analysis of the Study Variables

Descriptive statistics are used to describe the basic features of the data in a study. Creswell (2014) asserts that, descriptive statistics provide simple summaries about the sample and the measures through mean, standard deviation, mode and median. Furthermore, together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. This study used descriptive statistics to present the mean, standard deviation and percentages of the gathered data on the relationship between leadership practices and school performance in city public primary schools in Kenya. The study adopted a likert scale of 1-5 (1=strongly Disagree,2= Disagree,3= Neutral,4=Agree,5=Strongly Agree). The key variables rated by respondents included; Goal setting practice, staff professional development, supportive learning environment, monitoring of pupil learning, staff commitment and school academic performance. The broad objective of the study was to examine the relationship between leadership practices and academic performance of city public primary

schools in Kenya. The influence of leadership practices was tested by analyzing the relationship between each leadership practice and academic performance using quantitative analysis of data for the four leadership practices; goal setting, staff professional development, supportive learning environment and monitoring of pupil learning.

4.5.1 Goal Setting

The first objective of the study was to determine the influence of goal setting on academic performance of city public primary schools in Kenya. To measure the goal setting practice, respondents were asked to indicate the extent to which they agreed or disagreed with statements relating to goal setting practice using a 5-point Likert Scale. The Mean of each item as well as the standard deviations were computed as summarized in Table 4.7.

Table 4.7: Teachers' Level of Agreement with Statements for Goal Setting

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Deviation
Head teacher identifies performance goals to be achieved.	32.0%	52.7%	7.8%	6.1%	1.4%	1	5	4.08	0.873
Identified goals are shared among the teaching staff and school community	32.3%	45.9%	11.9%	7.2%	2.7%	1	5	3.98	0.988
Goals are fully implemented and monitored	42.5%	43.2%	8.2%	4.8%	1.3%	1	5	4.21	0.883
Goals are regularly evaluated and feedback on goal accomplishment provided.	26.9%	46.9%	15.3%	7.5%	3.4%	1	5	3.84	0.979
Grand Mean =								4.026	
Valid N (Listwise) =								294	

As indicated in Table 4.7 respondents were requested to indicate whether head teachers identify performance goals to be achieved; 32.0% of the respondents strongly agreed, 52.7% agreed, 7.8% were neutral, 6.1% disagreed while 1.4% strongly disagreed. The average score for this indicator was found to be 4.08 with standard deviation of 0.873. This implies that on average there was an agreement in the perception that head teachers identify performance goals to be achieved in city public primary schools in Kenya. This finding was in line with Idowu, Chibuzoh and Madueke (2014) who found that academic performance in successful schools increases partly because of the head teacher's ability to establish and set goals that determine how teachers conduct themselves in the classroom. Similarly, Lezotte (2010) established that, the process of setting, committing to and accomplishing school goals builds credibility, trust and a spirit of community and corporation within the school, all of which are essential for improved academic performance.

Respondents were also asked whether the identified goals were shared among the teaching staff and school community; 32.3% strongly agreed, 45.9% agreed, 11.9% were neutral, 7.2% disagreed and 2.7% strongly disagreed. The average score for this indicator was 3.98 with standard deviation of 0.988. This implies that majority of respondents (78.2%) were in agreement that the identified goals were shared among the teaching staff and school community. On whether the goals were fully implemented and monitored; 42.5% of respondents strongly agreed, 43.2% agreed, 8.2% were neutral, 4.8% disagreed and 1.3% strongly disagreed. The average score for this indicator was 4.21 with standard deviation of 0.883. This implies that majority of respondents (85.7%) were in agreement that the set goals are fully implemented and monitored. This finding was in agreement with Lezotte (2010) who found that teachers who engaged in open and honest dialogue and whose contributions were appreciated and valued were likely to follow the direction set by their leader.

Respondents were asked to indicate whether goals were regularly evaluated and feedback on goal accomplishment communicated to the rest of the school community; 26.9% strongly agreed, 46.9% agreed, 15.3% were neutral, 7.5%

disagreed and 3.4% strongly disagreed. The average score for this indicator was found to be 3.84 with standard deviation of 0.979. This implies that on average there was a general consensus that goals were regularly evaluated and feedback on goal accomplishment communicated to the rest of the school community. This in turn, led to a harmonious working relationship that had a positive impact on pupils' academic performance. Paine and McCann (2009) assert that, since stakeholders who include parents and the community have a vested interest in the success of their local schools, their perspective on the school's vision, mission and goals should be taken into consideration during decision making processes.

4.5.2 Staff Professional Development

The second objective of the study was to determine the influence of staff professional development on academic performance of city public primary schools in Kenya. To measure staff professional development respondents were asked to indicate the extent they agreed or disagreed with statements relating to staff professional development using a 5-point Likert Scale. The Mean of each item was computed as well as the standard deviation as shown in Table 4.8.

Table 4.8: Teachers' Level of Agreement with Statements for Staff Development

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Deviation
The head teacher conducts training needs assessment	34.3%	42.5%	28.6%	10.9%	3.7%	1	5	3.53	0.990
Teachers are encouraged to attend training programs	30.3%	41.2%	18.7%	7.5%	2.3%	1	5	3.89	0.998
Sharing of knowledge and skills attained is encouraged	29.6%	47.6%	11.9%	7.2%	3.7%	1	5	3.84	0.979
Teacher mentoring programs are in place	21.8%	46.6%	20.4%	7.8%	3.4%	1	5	3.76	0.992
Grand Mean =	3.755								
Valid N (Listwise)	= 294								

As indicated in Table 4.8 teachers were asked to state whether head teachers regularly conducted training needs assessment; 34.3% of the respondents strongly agreed, 42.5% agreed, 28.6% were neutral, 10.9% disagreed and 3.7% strongly disagreed. The average score for this indicator was found to be 3.53 with standard deviation of 0.990. This implies that on average there was agreement that head teachers regularly conducted training needs assessment to determine the in-service programs required to improve academic performance. Liu (2011) asserts that training needs assessment helps to identify the specific knowledge and skills that teachers need to become productive, efficient and innovative in their teaching, which enables schools to achieve their strategic goals and improve in academic performance.

Respondents were asked to indicate whether all teachers were encouraged to participate in professional training programs; 30.3% strongly agreed, 41.2% agreed, 18.7% were neutral, 7.5% disagreed and 2.3% strongly disagreed. The average score for this indicator was found to be 3.89 with standard deviation of 0.998. This implies that on average there was agreement that head teachers encouraged all teachers to participate in significant professional training programs. On whether head teachers encouraged teachers to share knowledge and skills attained with other teachers; 29.6% of the respondents strongly agreed, 47.6% agreed, 11.9% were neutral, 7.2% disagreed and 3.7% strongly disagreed. The average score for this indicator was found to be 3.84 with standard deviation of 0.979. This implies that on average there was agreement that head teachers promoted teachers' utilization of knowledge and skills gained from in-service training to improve pupil learning. Guerriero (2014) noted that the ability of teachers to make good pedagogical decisions is based on the quality of pedagogical knowledge and skills the teachers possess.

Respondents were also asked to indicate whether mentoring programs for teachers were in place; 21.8% of the respondents strongly agreed, 46.6% agreed, 20.4% were neutral, 7.8% disagreed and 3.4% strongly disagreed. The average score for this indicator was found to be 3.76 with standard deviation of 0.992. This implies that on average there was agreement that head teachers supported teachers and other staff through mentorship programs. Wasonga, Wanzare and Dawo (2015) found that both

formal and informal mentoring of teachers improved service delivery to pupils leading to quality education. Alabi (2017) argues that mentoring is one of the best reforms in the education system as it is not only cost effective but more importantly it empowers teachers to improve in their teaching methods and practices.

4.5.3 Supportive Learning Environment

The third objective of the study was to examine the influence of supportive learning environment on academic performance of city public primary schools in Kenya. To measure supportive learning environment respondents were asked to indicate the extent to which they agreed or disagreed with statements relating to supportive learning environment using a 5-point Likert Scale. The Mean of each item was computed as well as the standard deviation as summarized in Table 4.9.

Table 4.9: Teachers’ Level of Agreement with Statements on Supportive Environment

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Dev
Head teacher has created safe school environment	43.2%	39.8%	11.2%	4.1%	1.7%	1	5	4.19	0.910
School has rules and regulations for teachers and pupils	34.0%	45.9%	13.6%	5.1%	1.4%	1	5	4.06	0.895
Teaching & learning resources are available	28.6%	46.6%	17.7%	5.8%	1.3%	1	5	3.95	0.904
There are positive relations among Stakeholders	34.0%	39.8%	16.0%	7.1%	3.1%	1	5	3.95	0.904
Grand Mean =								4.038	
Valid N (Listwise) =								294	

As shown in Table 4.9 teachers were asked to indicate whether head teachers had created safe working environments in the school; 43.2% of the respondents strongly agreed, 39.8% agreed, 11.2% were neutral, 4.1% disagreed and 1.7% strongly disagreed. The average score for this indicator was found to be 4.19 with standard

deviation of 0.910. This implies that on average there was agreement that head teachers had created safe working environments in schools which enhanced the teaching and learning process. Peckham, Baker, Camp, Kaufman and Seixas (2017) assert that school safety is vital for the protection of both pupils and staff from abuse or any other kind of violence.

On whether head teachers had established school rules and regulations that governed pupils' and teachers' conduct; 34.0% of the respondents strongly agreed, 45.9% agreed, 13.6 % were neutral, 5.1% disagreed and 1.4% strongly disagreed. The average score for this indicator was found to be 4.06 with standard deviation of 0.895. This implies that on average there was agreement that head teachers had established school rules and regulations that guided the behavior of both pupils and teachers leading to order and discipline in schools. Simba, Agak and Kabuka (2017) found that, pupils were positive about school rules and regulations and recognized their intrinsic value in enhancing discipline. Gregory *et al.* (2010) observed that, the manner in which rules are enforced, meaning the extent to which they are consistently and fairly enforced, is a factor that determines how safe both pupils and staff feel within a school environment.

On whether head teachers ensured availability of teaching and learning resources in schools; 28.6% of the respondents strongly agreed, 46.6% agreed, 17.7% were neutral, 5.8% disagreed and 1.3% strongly disagreed. The average score for this indicator was found to be 3.95 with standard deviation of 0.904. This implies that on average there was agreement that head teachers ensured availability of teaching and learning resources in schools for enhanced academic performance. Makori and Onderi (2014) found that, poor syllabus coverage was linked to lack of adequate teaching and learning resources. These authors assert that, lack of text books affects the rate and number of assessments teachers can give to pupils which in turn slows down the teaching and learning process and in the end impacts negatively on syllabus coverage. Similarly, Okongo, Ngao, Rop and Nyongesa (2015) in a study on the effect of availability of teaching and learning resources and its impact on the implementation of inclusive education in Kenya, found that, lack of teaching and

learning materials and inadequate physical facilities had a negative effect on pupils' academic achievement.

On whether head teachers promoted positive relations amongst stakeholders to promote the learning process; 34.0% strongly agreed, 39.8% agreed, 16.0% were neutral, 7.1% disagreed and 3.1% strongly disagreed. The average score for this indicator was 3.95 with standard deviation of 0.904. This implies that on average there was agreement that head teachers promoted positive relations amongst the various stakeholders which positively impacted school academic performance. Roffey (2012) noted that, positive relationships in schools are essential to the wellbeing of both pupils and teachers and underpins an effective learning environment.

4.5.4 Monitoring of Pupil Learning

The fourth objective of the study was to examine the influence of monitoring of pupil learning on academic performance of city public primary schools in Kenya. To measure the influence of monitoring of pupil learning on academic performance, respondents were asked to indicate the extent they agreed or disagreed with statements relating to monitoring of pupil learning using a 5-point Likert Scale. The Mean of each item was computed as well as their standard deviations as summarized in Table 4.10.

Table 4.10: Teachers' Level of Agreement with Statements for Monitoring Pupil Learning

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Deviation
Systems in place for effective curriculum implementation	52.0%	38.4%	6.8%	1.8%	1.0%	1	5	4.39	0.775
Assessment procedures available	34.7%	47.6%	10.9%	6.1%	0.7%	1	5	4.10	0.869
Teachers given feedback for improvement	21.8%	51.0%	16.7%	6.8%	3.7%	1	5	3.80	0.979
Strategies in place for teacher motivation	25.9%	52.7%	12.9%	6.8%	1.7%	1	5	3.94	0.901
Grand Mean = 4.058									
Valid N (Listwise) = 294									

As shown in Table 4.10 respondents were requested to indicate whether head teachers had put systems in place to ensure effective curriculum implementation; 52.0% of respondents strongly agreed, 38.4% agreed, 6.8% were neutral, 1.8 disagreed and 1.0% strongly disagreed. The average score for this indicator was found to be 4.39 with standard deviation of .775. This implies that on average there was agreement that head teachers had put in place systems to ensure effective curriculum implementation. This finding is in agreement with Ko and Sammons (2013) who observed that head teachers in performing schools frequently monitor, evaluate and document pupils' progress to ensure that all pupils including those with special needs have the opportunity to learn the specific content in all academic subjects.

Respondents were also asked to indicate whether head teachers had ensured assessment procedures were available to evaluate the effectiveness of the curriculum; 34.7% of the respondents strongly agreed, 47.6% agreed, 10.9% were neutral, 6.1% disagreed and 0.7% strongly disagreed. The average score for this indicator was found to be 4.10 with standard deviation of 0.869. This implies that on average there was agreement that head teachers had ensured assessment procedures were available to evaluate the effectiveness of the curriculum. Elliot and Clifford (2014) assert that, discussion of results from evaluations facilitate head teachers to evaluate the assessment procedures that are already in place to address areas of weakness in the teaching and learning process. On whether head teachers gave feedback to teachers to help them improve their teaching performance; 21.8% of respondents strongly agreed, 51.0% agreed, 16.7% were neutral, 6.8% disagreed and 3.7% strongly disagreed. The average score for this indicator was found to be 3.80 with standard deviation of 0.979. This implies that on average there was agreement that head teachers often gave feedback to teachers which enabled teachers to improve their teaching skills leading to enhanced academic performance.

Respondents were asked to indicate whether their schools had strategies for motivating teachers and pupils as a way of promoting effective learning; 25.9% of the respondents strongly agreed, 52.7% agreed, 12.9% were neutral, 6.8% disagreed

and 1.7% strongly disagreed. The average score for this indicator was found to be 3.94 with standard deviation of .901. This implies that on average there was agreement that schools had strategies for motivating teachers and pupils as a way of promoting effective teaching and learning.

4.5.5 Staff Commitment

The fifth objective of the study was to examine the moderating role of staff commitment on the relationship between leadership practices and academic performance of city public primary schools in Kenya. To measure staff commitment, respondents were asked to indicate the extent they agreed or disagreed with statements relating to staff commitment using a 5-point Likert Scale. The statements were adopted from Allen and Meyer (1997) measuring scale for staff commitment. The Mean of each item and as well as their standard deviations were computed as summarized in Table 4.11.

Table 4.11: Teachers’ Level of Agreement with Statements on Staff Commitment

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Deviation
I am happy being a staff member of this school	41.5%	34.4%	15.3%	5.1%	3.7%	1	5	4.05	1.054
I do feel a strong sense of belonging to my school	31.9%	50.0%	13.3%	3.8%	1.0%	1	5	4.08	0.829
I do feel emotionally attached to this school	23.8%	41.4%	28.1%	5.2%	1.4%	1	5	3.81	0.908
I am willing to go an extra mile for this school	25.9%	52.7%	12.9%	6.8%	1.7%	1	5	3.94	0.901
Grand Mean = 3.970									
Valid N (Listwise) = 294									

As indicated in Table 4.11 respondents were requested to indicate whether they were happy being staff members of the school; 41.5% strongly agreed, 34.4% agreed, 15.3% were neutral, 5.1% disagreed and 3.7% strongly disagreed. The average score for this indicator was found to be 4.05 with standard deviation of 1.054. This implies that on average respondents agreed that they were happy as staff members of their schools. Respondents were also asked to indicate whether they felt a strong sense of belonging to the school; 31.9% strongly agreed, 50.0% agreed, 13.3% were neutral, 3.8% disagreed and 1.0% strongly agreed. The average score for this indicator was found to be 4.08 with standard deviation of 0.829. This implies that on average teachers felt a strong sense of belonging to the school.

Requested to indicate whether they felt emotionally attached to the school; 23.8% of respondents strongly agreed, 41.4% agreed, 28.1% were neutral, 5.2% disagreed and 1.4% strongly disagreed. The average score for this indicator was found to be 3.81 with standard deviation of 0.908. On whether teachers were willing to go an extra mile for their school'; 25.9% of respondents strongly agreed, 52.7% agreed, 12.9% were neutral, 6.8% disagreed and 1.7% strongly disagreed. The average score for this indicator was found to be 3.94 with standard deviation of 0.901.

4.5.6 School Academic Performance

School academic performance was the dependent variable in the study. The aspects of school academic performance that were measured include; minutes of School Management Committees (SMCs) and Parents Association (PA) meetings, records of community participation, records of pupil progression between grades, status of school infrastructure and facilities and the pupils' academic achievement as reflected by KCPE mean scores for five years (2017-2021). Data on academic performance was determined using descriptive analysis. To measure school academic performance respondents were asked to indicate the extent they agreed or disagreed with statements relating to academic performance using a 5-point Likert Scale. The Mean of each item was computed as well as their standard deviations as shown in Table 4.12.

Table 4.12: Teachers' Level of Agreement with Statements on Academic performance

Statement	SA	A	N	D	SD	Min	Max	Mean	Std. Deviation
School has a functional SMC and PA	42.2%	36.4%	15.0%	4.8%	1.6%	1	5	4.13	0.950
Systems are in place for monitoring pupil progression	11.2%	20.1%	20.1%	34.7%	13.9%	1	5	2.80	1.233
School has demonstrated improvement in KCPE performance in the last five years (2017-2021)	16.7%	20.4%	15.3%	32.3%	15.3%	1	5	2.91	1.343
School buildings are well maintained with adequate T/L facilities	26.9%	40.8%	19.0%	6.8%	6.5%	1	5	3.75	1.120
Grand Mean = 3.398									
Valid N (Listwise) = 294									

As shown in Table 4.12 respondents were asked to indicate whether their schools had School Management Committees (SMCs) and Parents Associations (PAs) that met regularly; 42.2% strongly agreed, 36.4% agreed, 15.0% were neutral, 4.8% disagreed and 1.6% strongly disagreed. The average score for this indicator was found to be 4.13 with standard deviation of .950. This implies that on average city public primary schools had functional SMCs and PAs that regularly met to discuss school matters. On whether the school had effective systems in place for monitoring pupil academic progression; 11.2% strongly agreed, 20.1% agreed, 20.1% were neutral, 34.7% disagreed and 13.9% strongly disagreed. The average score for this indicator was 2.80 with standard deviation of 1.233. This implies that on average city public primary schools lacked effective systems for monitoring pupils' academic progression. When requested to indicate whether they felt that their schools had

demonstrated improvement in KCPE examinations for the last 5 years (2017-2021); 16.7% strongly agreed, 20.4% agreed, 15.3% were neutral, 32.3% disagreed and 15.3% strongly disagreed. The average score for this indicator was 2.91 with standard deviation of 1.394. This implies that on average city public primary schools had generally not performed well in KCPE examinations during the indicated period.

On whether the school buildings were well maintained with adequate teaching and learning; 26.9% strongly agreed, 40.8% disagreed, 19.0% were neutral, 6.8% disagreed and 6.5% strongly disagreed. The average score for this indicator was 3.75 with standard deviation of 1.120. This implies that on average buildings in city public primary schools were well maintained which promoted the teaching and learning process.

4.6 Qualitative Data Analysis Results.

This section presents, the thematic analysis results for the qualitative data in the study. The study sought to explore the relationship between leadership practices and academic performance of city public primary schools in Kenya. Semi-structured interview questions were utilized to collect qualitative data from head teachers. The interview questions were in line with the study objectives. Braun and Clarke's (2006) six step framework was adopted for analyzing qualitative data for the study. The steps include: Step 1-becoming familiar with data, step 2-generating initial codes, step 3-searching for themes, step 4- reviewing the themes, step 5-defining themes and step 6-the write up of the report. From the analysis, five main themes were identified, namely: Importance of goal setting, influence of staff professional development, promotion of supportive learning environments, importance of monitoring pupil learning and promotion of staff commitment.

Theme 1: Importance of Goal Setting

Interviews demonstrated that head teachers in city public primary schools regarded goal setting to be an important aspect in promoting pupils' academic achievements. They indicated that, goals gave teachers direction, motivated them to work harder

and enabled them to adequately manage their time, leading to improved academic performance: *The following were the responses obtained;*

'Goals give teachers direction and act as a road map towards which, they can plan their activities'

'Goals motivate teachers, enhance competition and also increase responsibility'

'Goals enable teachers to monitor and assess teaching progress along the way'

'Goals enable teachers to review their programs and set pace'

These findings are in conformity with the results of other studies conducted by scholars such as: Moeller, Theiler and Wu (2012); Cao and Nietfeld (2007); Rowe, Mazzotti, Ingram, Lee (2017), Ngángá and Mwaura (2018); Odindo, Odinga, Onditi and Monari (2020), who found a strong relationship between goal setting practice and pupils' academic achievement. These scholars established that academic performance in high performing schools increases significantly as result of the head teacher's ability to set goals that change the way teachers perform in the classroom. Lezotte (2010) asserts that, the process of setting, committing to and accomplishing school goals builds credibility, trust, and a spirit of community and corporation within the school.

Theme 2: Influence of Staff Professional Development

Interviews revealed that head teachers considered staff professional development to play a vital role in influencing teacher performance. They argued that, staff professional development, had enabled teachers to gain more knowledge and skills in their teaching subjects, enhanced their competence in the use of ICT and increased awareness on child rights, and children with special needs. All these aspects led to improved academic performance. The following were the responses obtained;

'They have enabled teachers to acquire a lot of skills and knowledge on how to teach mathematics and the languages'

'Teachers can now use ICT in the teaching and learning processes'

'The training programs have enlightened teachers on child rights'

'Has helped teachers to embrace inclusive learning, specifically handling the girl child with disability'

These findings are in line with results of earlier studies that found a positive correlation between staff professional development and school academic performance. The studies include: Opfer and Peddler (2011), Odden (2011), Liang (2015), Oyedele (2016), Nabunya, Tusiime and Kyaligonza (2018). These scholars further established that, staff professional development activities such as; study groups, teacher networks and other corporate efforts positively influence teacher performance leading to improved pupil learning.

Theme 3: Promotion of Supportive Learning Environment

Interviews demonstrated that head teachers in city public primary schools regarded supportive learning environment to be an important element in promoting pupils' academic achievements. They indicated that, they had promoted supportive learning environments in their schools by putting in place several mechanisms, which included; providing adequate teaching and learning materials, encouraging teamwork, reinforcing discipline and promoting positive relations amongst the various stakeholders. The following were the responses obtained;

'We ensure that the teaching and learning materials are available when needed'

'I encourage teamwork and collaborative teaching'

'We maintain discipline by re-enforcing school rules'

'We promote good working relationships between teachers, pupils and parents.'

These findings are in line with similar studies such as: Kraft *et al.* (2016), Astor *et al.* (2010), Gietz and McIntosh (2014), Causton *et al.* (2015) and Nsa, Offiong, Udo and Ikot (2014). These scholars established that, positive school environments promote cooperative learning, group cohesion, respect and mutual trust, all of which have been shown to directly impact academic performance.

Theme 4: Importance of Monitoring Pupil Learning

Interviews revealed that head teachers considered monitoring of pupil learning to play a vital role in influencing pupils' academic achievements. They indicated that, monitoring of pupil learning enhanced teacher motivation and commitment. Furthermore, it enabled teachers to identify weak areas for improvement and to effectively cover the syllabus, leading to improved academic performance. The following were the responses obtained;

'It does keep pupils and teachers on toes'

'It reminds teachers of weak areas, and this makes them improve'

'It ensures that the syllabus has been well covered and systematically followed'

'It makes teachers and pupils committed and up to date in their performance'

Similar studies that have found a strong relationship between monitoring of pupil learning and school performance include: Lezotte (2010), May and Supovitz (2011), Omogbehin (2013) and Accardo (2017). These authors further established that, besides frequent monitoring, evaluating and documenting pupil learning, effective head teachers, also provide feedback to teachers and support them to improve in their teaching performance.

Theme 5: Promotion of Staff Commitment

Interviews demonstrated that head teachers considered staff commitment to play a vital role in influencing pupils' academic achievements. They indicated that they enhanced staff commitment through various measures such as; motivating both teachers and pupils, encouraging teamwork, strengthening guidance & counselling and delegating duties to the rest of the staff. The following were the responses obtained;

'My school has a system where we give awards for good performance'

'I promote unity among staff members'

'We have strengthened guidance and counselling in our school'

'I involve other members of staff through delegation of duties'

Similar studies that have found a strong relationship between staff commitment and academic performance include: Aydin (2013, Ling and Ibrahim (2013), Selamat, Nordin and Adnan (2013); Imo and Ekpenyong (2018). The results of thematic data analysis including initial codes, and themes extracted from the data are presented in appendices IV and V.

4.7 Regression Assumption Test Results

The following test of assumptions of the study variables were tested to ascertain whether regression analysis was suitable.

4.7.1 Test for Normality Distribution on Indicators used to measure Academic Performance

To ensure successful subsequent data analysis, the dependent variable was exposed to normality test to determine whether the data collected was normally distributed or not. The normality test was assessed using Kolmogorov-Smirnov and Shapiro-Wilk (K-S & S-W) (Drezner, Turel & Zerom, 2010). Table 4.12 shows the computed values of the normality for both Kolmogorov-Smirnov and Shapiro-Wilk. By utilizing Kolmogorov-Smirnov and Shapiro-Wilk at 10% level of significance scales, results shown in table 4.13 indicate a significant statistic (p-value of 0.005 and $0.047 < 0.05$) respectively. This meant that the variables had a normal distribution design.

Table 4.13: Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
School academic performance	0.113	88	0.005	0.970	88	0.047

Figure 4.1 shows the graphical distribution of academic performance. Srivastava, Shenoy and Sharma (2005) assert that; normal distribution is the most frequently used probability model for constant random variables. The bell-shaped curve shows a symmetrical nature of distribution of variables with two parameters mean and standard deviation. The distribution was 3.68 with a standard deviation of 0.602.

This implies that the items used to measure school academic performance were closely related and therefore consistent and reliable.

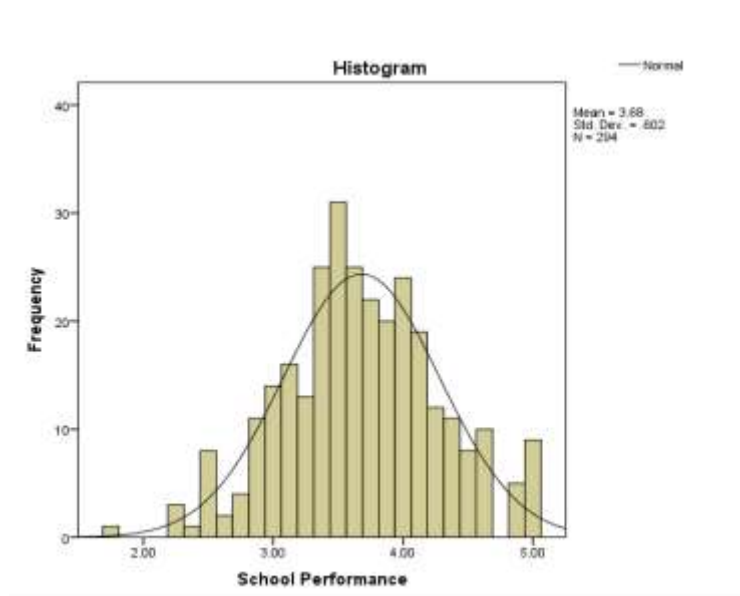


Figure 4.1: Normality Test

4.7.2 Linearity Test Results

The variables were subjected to linearity test to check for linear relationship between two variables. Whilst there are a number of ways to check whether a linear relationship exists between two variables, in this study scatter plot was used to check for linearity. The figure shows the data behaved in a linear manner.

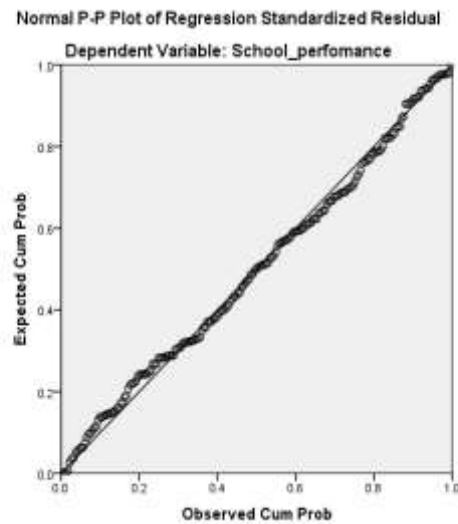


Figure 4.2: Linearity Test

4.7.3 Autocorrelation Test Results

Table 4.14 shows the analysis of autocorrelation of Durbin-Watson ‘d’ coefficients extracted.

The results of autocorrelation analysis as shown in the table range from 1.743 to 1.860. This implies that the variables did not have a serious problem of autocorrelation, thus, they were appropriate for further analysis.

Table 4.14: Autocorrelation Test of Independent Variable

Variable	R	R²	Durbin-Watson
Goal setting	0.540	0.291	1.743
Staff Prof. development	0.477	0.228	1.860
Supportive learning environment	0.574	0.330	1.895
Monitoring of pupil learning	0.510	0.260	1.773

The results of autocorrelation analysis in Table 4.14 indicate that all the leadership practice determinants (Goal setting, Staff professional development, Supportive learning environment and Monitoring of pupil learning) had no presence of autocorrelation.

4.7.4 Multicollinearity Test Results

The results from Multicollinearity analysis in Table 4.15 confirmed that there were no serious cases of multicollinearity among the independent variable (leadership practices) determinants. The results further indicated that all the tolerance values were higher than 0.1 while all the variance inflation factors were below 10. This therefore implied that there were no consequences of multicollinearity amongst independent variables.

Table 4.15: Test of Multicollinearity of Leadership Practice Determinants

Model	Collinearity Tolerance	Statistics VIF
Goal setting	0.273	3.681
Staff Professional Development	0.191	5.112
Supportive Learning Environment	0.220	4.413
Monitoring of Pupil Learning	0.225	4.413

4.8 Inferential Analysis and Hypothesis Testing

This section forms the basis for drawing conclusions for the objectives. The study sought to examine the relationship between leadership practices and academic performance of city public primary schools in Kenya. The inferential analysis entailed the determination and checking on whether any relationship existed between the independent variables; goal setting, staff professional development, supportive learning environment and monitoring of pupil learning and school academic performance. Inferential analysis also involved the estimation of models to determine the influences of the independent variables on the dependent variable (school academic performance).

4.8.1 Correlation Analysis

To determine the relationship between the independent variables and the dependent variable, correlation coefficients were computed. Pearson Correlation Coefficient was used as the latent variables generated for inferential analysis were on a

continuous scale. The correlation coefficients were computed and 2-tailed test p-values used for testing significant relationships at the 5% level of significance.

4.8.2 Correlation Analysis of Goal Setting on Academic Performance

The Pearson correlation analysis was used to determine the relationship that existed between goal setting and school academic performance. Table 4.16 shows the correlation between goal setting and academic performance.

Table 4.16: Correlation Analysis of Goal Setting and Academic Performance

Variable		Goal setting	School performance
Goal setting	Pearson Correlation	1	.540**
	Sig. (2-tailed)		.000
	N	294	294
Academic performance	Pearson Correlation	.540**	1
	Sig. (2-tailed)	.000	
	N	294	294

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

Table 4.16 shows a positive and significant correlation between goal setting and school academic performance ($r = 0.540$, $p\text{-value } 0.000 < 0.05$). This implies that academic performance is influenced by goal setting. The influence of goal setting on academic performance is confirmed by the fact that ($p\text{-value is significant } 0.000 < 0.05$).

4.8.3 Correlation Analysis of Staff Professional Development on Academic Performance

The relationship between staff professional development and academic performance was tested using a correlation analysis model. The respondents were asked to indicate whether staff professional development influenced academic performance. Table 4.17 shows the correlation between staff professional development and school academic performance.

Table 4.17: Correlation between Staff Development and Academic Performance

		Staff development	Academic performance
Staff professional development	Pearson Correlation	1	.477**
	Sig. (2-tailed)		.000
	N	294	294
Academic performance	Pearson Correlation	.477**	1
	Sig. (2-tailed)	.000	
	N	294	294

Table 4.17 shows a positive and significant correlation between staff professional development and school academic performance (0.477, p-value 0.000 < 0.05). This implies that staff professional development influenced school academic performance. Better trained teachers were well equipped to teach and therefore improved academic performance. The influence of staff professional development on academic performance is confirmed by the fact that p-value is significant 0.000 < 0.05.

4.8.4 Correlation Analysis of Supportive Learning Environment on Academic Performance

Correlation analysis model was used to assess the influence of supportive learning environment on school academic performance. The respondents were asked to indicate whether supportive learning environment influenced school academic performance. Pearson Correlation analysis was used to test the type of relationship existing between supportive learning environment and academic performance. Table 4.18 shows the correlation between supportive learning environment and school academic performance.

Table 4.18: Correlation Analysis of Supportive Environment and Academic Performance

Variable		Supportive learning environment	Academic performance
Supportive learning environment	Pearson Correlation	1	.574**
	Sig. (2-tailed)		.000
	N	294	294
Academic performance	Pearson Correlation	.574**	1
	Sig. (2-tailed)	.000	
	N	294	294

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

Table 4.18 shows a positive correlation between supportive learning environment and school academic performance (0.574). The relationship between the variables is also significant as confirmed by the p-value $0.000 < 0.05$. This implies that supportive learning environment contributed to academic performance. Thus, when pupils are provided with supportive learning environments their academic performance tends to improve.

4.8.5 Correlation Analysis for Monitoring of Pupil Learning

Using Correlation analysis, the variation of data on monitoring of pupil learning and school academic performance was assessed. The respondents were asked to indicate whether monitoring of pupil learning affected school academic performance. Pearson Correlation was used to test the type of relationship existing between monitoring of pupil learning and academic performance. Table 4.19 shows the correlation between monitoring of pupil learning and school academic performance.

Table 4.19: Correlation Analysis for Monitoring of Pupil Learning and Academic performance

Correlation test	Monitoring Learning	Academic Performance
Pearson Correlation	1	.510**
Sig. (2-tailed)		.000
N	294	294
Pearson Correlation	.510**	1
Sig. (2-tailed)	.000	
N	294	294

Table 4.19 shows a positive correlation between monitoring of pupil learning and school academic performance (0.510). The relationship between the variables is also significant as confirmed by the p-value $0.000 < 0.05$. This implies that monitoring of pupil learning contributed to school academic performance. When the management of a school puts in place monitoring systems to track learning, the performance of pupils tends to improve significantly. Table 4.20 shows the overall correlation analysis.

Table 4.20: Overall Correlation Analysis

	School academic performance	Goal setting	Staff development	Supportive environment	Monitoring pupil learning
School academic performance	1				
Sig. (2- tailed)	294				
N					
Goal setting	.540**	1			
Sig. (2- tailed)	0.000				
N	294				
Staff development	.477**	.542**	1		
Sig. (2- tailed)	0.000	0.000			
N	294	294			
Supportive environment	.574**	.587**	.600**	1	
Sig. (2- tailed)	0.000	0.000	0.000		
N	294	294	294		
Monitoring pupil learning	.510**	.472**	.488**	.502**	1
Sig. (2- tailed)	0.000	0.000	0.000	0.000	
N	294	294	294	294	
Staff Commitment	.151**	.168**	.177**	.203**	.218**
Sig. (2- tailed)	0.000	0.000	0.000	0.000	0.000
N	294	294	294	294	294

As indicated in Table 4.20 all the relationships were found to be positive at $p < 0.05$ level of significance. In addition to the correlation analysis, the researcher conducted regression analyses to determine the influence that each independent variable had on school academic performance. This involved fitting linear regression models using ordinary least squares (OLS) techniques to estimate the parameters of the models.

The study first fitted bivariate analyses between each independent variable and the dependent variable.

4.8.6 Regression of Goal Setting on School Academic Performance

To determine the influence goal setting has on school academic performance, a linear regression model was fitted with goal setting as the independent variable. Table 4.21 shows the model summary of the bivariate model fitted. The R and R² of the fitted model are 0.540 and 0.291 respectively. The R shows the level of relationship between the variables while R-square is the coefficient of determination that shows the explanatory power of the model. The R-square of 0.540 implies that 54% of the variation in school academic performance in the model is explained by the variation in the independent variable (goal setting). Other factors not included in the study contributed to 46% of the variation in school academic performance.

Table 4.21: Model Summary for Goal Setting

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.540	0.291	0.291	0.507

a. Predictors (Constant), Goal Setting

Analysis of variance for regression tests the general significance of the regression model fitted. In a bivariate regression model with only one coefficient, the ANOVA tests whether the estimated coefficient is not equal to zero. Table 4.22 shows the ANOVA for the bivariate regression of goal setting on school academic performance. As illustrated in p-value of the ANOVA, F-statistic was obtained as 0.000 which is less than 0.05. Therefore, the model is statistically significant in predicting the influence of goal setting on school academic performance, implying that goal setting has a significant effect on school academic performance.

Table 4.22: Analysis of Variance for Goal Setting

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	30.929	1	30.929	120.048	0.000 ^b
1 Residual	75.230	292	0.258		
Total	106.158	293			

a. Dependent Variable: School Academic Performance. Predictors: (Constant), Goal Setting.

The study further computed the coefficient's estimates for the regression model fitted. Table 4.23 shows that goal setting has a positive effect on school academic performance ($\beta = 0.408$, $t = 10.957$ $p\text{-value} = 0.000$). The p -value of the coefficient estimated is less than 0.05 level of significance. This implies that the effect of goal setting on school academic performance is statistically significant. The equation formulated by the results of the model is given by;

$$Y = 2.050 + 0.408X_1 + \varepsilon$$

This model shows that increasing goal setting activities by one unit would in turn improve school academic performance by 0.408 units. The findings obtained in the study agree with the findings of Moeller, Theiler and Wu (2012); Idowu, Chibuzoh and Madueke (2014), that found a positive significant relationship between goal setting and school academic performance.

Table 4.23: Regression Coefficients for Goal Setting

Model	Unstandardized coefficients	Std. Error	T	Sig.
1 (Constant)	2.050	.152	13.529	.000
Goal setting	.408	.037	10.957	.000

a. Dependent Variable: School academic performance

4.8.7 Regression of Staff Professional Development on School Academic Performance

To address the second objective which sought to determine the influence of staff professional development on school academic performance, the researcher also fitted a bivariate OLS model for staff professional development and school academic performance. Table 4.24 is the model summary of the model fitted. The table shows

that the model has an R-square of .477. Other factors not included in the study contribute to 52% of the variations in school academic performance.

Table 4.24: Model Summary for Staff Professional Development

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.477	.228	.226	0.202

a. Predictor (Constant), Staff professional development

For the bivariate model estimating the effect of staff professional development on school academic performance, the ANOVA as shown in Table 4.25 also shows that the model was significant. The p-value of the F statistic is 0.000 which is less than 0.05 level of significance, implying that, the coefficient of staff professional development in the model is significantly, not equal to zero.

Table 4.25: Analysis of Variance for Staff Professional Development

Model	Sum of Squares	Df	Mean Squares	F	Sig.
1	21.180	1	24.180	86.129	.000 ^b
Regression					
Residual	81.978	292	.281		
Total	106.158				

a. Dependent variable: School academic performance

The findings on the estimated beta coefficient of the model indicated that staff professional development had a significant effect on school academic performance ($\beta = 2.360$, $t=9.281$, $p\text{-value} = 0.000$). The results for the coefficients of the model are shown in Table 4.26. The p-value of the t-statistic of the coefficient staff professional development in the model is less than 0.05 level of significance. This implies that with 95% confidence, staff professional development influences school academic performance. A unit increase in staff professional development activities results into an increase in school academic performance by 0.349 units. The resulting equation from the estimated parameters of the model is given by;

$$Y = 2.360 + 0.349X_2 + \varepsilon$$

The results are in line with the findings of Opfer and Peddler (2011); Odden (2011) and Mizell (2010), who found a positive and significant relationship between the two variables.

Table 4.26: Regression Coefficients for Staff Professional Development

Model	Unstandardized Coefficients	Std. Error	T	Sig.
1 (Constant)	2.360	.145	16.223	.000
Staff professional Development	.349	.038	9.281	0.000

a. Dependent variable: School academic performance

4.8.8 Regression of Supportive Learning Environment on School Academic Performance

The third objective of the study sought to determine the influence of supportive learning environment on school academic performance. A bivariate regression model was fitted as analysis for the relationship. The model summary statistics for the model are presented in Table 4.27. The analysis found that the variation in supportive learning environment activities explained 57.4% of the variance in school academic performance in the model. This is explained by the R square statistic that was found to be 0.574. The results imply that other factors not included in the study account for 43% of the variance in school academic performance.

Table 4.27: Model Summary for Supportive Learning Environment

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.574	.330	0.329	.493

a. Predictors: (Constant), Supportive learning environment

Table 4.28 is the ANOVA table for the regression model of supportive learning environment on school academic performance. The p-value of the ANOVA F-statistic was found to be 0.000 which is less than 0.05. This shows that the model is statistically significant in predicting the influence of supportive learning environment on school academic performance.

Table 4.28: Analysis of Variance for Supportive Learning Environment

Model	Sum of Squares	Df	Mean Squares	F	Sig.
1 Regression	35.026	1	35.026	143.782	.000 ^b
Residual	71.132	292	.244		
Total	106.158	293			

- a. Dependent variable: Academic performance,
b. Predictor (Constant): Supportive Environment

The findings shown in the coefficients in Table 4.29 indicate that supportive learning environment had a positive influence on school academic performance. According to the results, supportive learning environment had a significant influence on school academic performance with coefficients of ($\beta = 1.858$, $t=11.991$, $p\text{-value}=0.000$) indicating a positive effect on school academic performance. The p-value of the estimated coefficient was found to be 0.000 which is less than 0.05 level of significance. The significance of the coefficient estimate implies that supportive learning environment has a significant influence on school academic performance. Increasing one unit of supportive learning activities would result into a 0.452 unit increase in school academic performance. These findings are in support of similar studies by; Hightower (2015); Osher, *et al.* (2018) and Okongo *et al.* (2015) who found a positive significant relationship between supportive learning environments and school academic performance. The equation formulated from the analysis is given by; $Y = 1.858 + 0.452X_3 + \varepsilon$

Table 4.29: Regression Coefficients for Supportive Learning Environment

Model	Unstandardized Coefficients	Std. Error	T	Sig.
1 (Constant)	1.858	.155	12.018	.000
Supportive learning environment (X_3)	.452	.038	11.991	.000

- a. Dependent variable: School academic performance

4.8.9 Regression of Monitoring of Pupil Learning on School Academic Performance

A bivariate analysis was carried out to determine the influence of monitoring of pupil learning and school academic performance. Table 4.30 shows the model summary of the bivariate model fitted. The R square of 0.510 implies that 51% of the variation in school academic performance in the model is explained the variation in in the dependent variable (monitoring of pupil learning). Other factors not included in the study contributed to 49% of the variation in school academic performance.

Table 4.30: Model Summary for Monitoring of Pupil Learning

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.510	.260	.259	0.519

Table 4.31 shows the ANOVA for the regression model for estimating the influence of monitoring of pupil learning on school academic performance. ANOVA regression was used to test the general significance of the model. The p-value of the computed F statistic was found to be 0.000 which is less than 0.05 indicating that the predictor model of monitoring of pupil learning on school academic performance was generally significant implying that monitoring of pupil learning has a significant influence on school academic performance.

Table 4.31: Analysis of Variance for Monitoring of Pupil Learning

Model	Sum of Squares	Df	Mean Squares	F	Sig.
1 Regression	27.577	1	27.577	102.473	.000
Residual	78.581	292	.269		
Total	106.158	293			

a. Dependent variable: School academic performance

b. Predictor (Constant), Monitoring of pupil learning

The findings indicated in Table 4.32 show that monitoring of pupil learning had a positive and significant influence on school academic performance. From the results, monitoring of pupil learning had a significant influence on school academic

performance with the coefficients ($\beta = 1.933$, $t = 10.123$, $p = 0.000$), indicating a positive effect of monitoring of pupil learning on school academic performance. These findings are in support of earlier findings of Lezotte (2010), Kinyua (2013), Accardo (2017) and Ozan (2018) that post a positive significant relationship between monitoring of pupil learning and school academic performance. The equation formulated from the analysis is given by; $Y = 1.933 + 0.429X_4 + \varepsilon$

Table 4.32: Regression Coefficients for Monitoring Pupil Learning

Model	Unstandardized Coefficients	Std. Error	T	Sig.
1 (Constant)	1.933	0.175	11.042	.000
Monitoring of pupil learning	0.429	0.042	10.123	.000

a. Dependent variable: School performance

4.8.10 Combined Effect of Leadership Practices on School Academic Performance

Regression analysis was conducted to test the relationship between leadership practices (predictor variables) and school academic performance (dependent variable). A multiple regression model was fitted to determine the combined influence of leadership practices (goal setting, staff professional development, supportive learning environment and monitoring of pupil learning on school academic performance. The regression model fitted adopted the use of OLS to estimate the parameters of the model. The model summary Table 4.33 indicates that R square for the multiple model is 0.565 implying that up to 56.5% of the variation in the dependent variable (school academic performance) is explained by variation of the independent variables in the model. This shows that the multiple regression model has a high explanatory power. Only 43.5% of the variance in school academic performance remains unexplained in the model.

Table 4.33: Multiple Regression Model Summary

Model	R	R square	Adjusted R Square	Std. Error of Estimate
1	0.606	.565	0.564	0.171

- a. Predictors: (Constant), Goal setting, Staff professional development, Supportive learning environment, Monitoring of pupil learning.

The ANOVA for regression is used to test the general significance of the model. In multiple regression, ANOVA tests the null hypothesis that the coefficient estimates of the model are jointly equal to zero.

From the results of the study shown in the ANOVA Table 4.34, the p-value for the F statistic was found to be 0.000, implying significance at level 0.05. The null hypothesis is rejected and conclusion drawn that at least one of the estimated coefficients of the model is significantly not equal to zero. That means that leadership practices have a significant influence on school academic performance.

Table 4.34: Multiple ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	80.31	4	21.234	292.218	000 ^b
Residual	7.38	292	0.026		
Total	87.71	296			

- a. Dependent variable: School performance

- b. Predictors: (Constant), Goal setting, Staff professional development, Supportive learning environment, Monitoring of pupil learning.

In addition to the ANOVA, the study estimated the beta coefficients of the predictors as indicated in Table 4.35. The coefficients of goal setting, staff professional development, supportive learning environment and monitoring of pupil learning were found to be 0.152, 0.20, 0.284 and 0.109 respectively with t- statistics 2.553, 2.299, 3.498 and 2.697 respectively. All the estimates had p-values less than 0.05 implying significance with 95% confidence. The results suggest that all the predictors have significant influence on school academic performance. The resulting equation from the model is given by,

$$Y = 1.572 + 0.152X_1 + 0.020 X_2 + 0.284 X_3 + 0.109 X_4$$

Table 4.35: Multiple Regression Coefficients

Model	Unstandardized Coefficients	Std. Error	T	Sig.
1 (Constant)	1.572	.171	9.191	.000
Goal setting	.152	.060	2.553	.000
Staff Professional development	.020	.054	2.299	.001
Supportive learning environment	.284	0.65	3.498	.000
Monitoring of pupil learning	.109	.061	2.697	.003

a. Dependent variable: School academic performance

4.8.11 Hypothesis Testing

After establishing that the multiple regression fitted well the assumptions of OLS as used for the estimation, the study proceeded to use the results of the multiple regression in Table 4.33 to test the hypotheses and draw conclusions on the objectives.

H₀₁: There is no significant relationship between goal setting and academic performance of city public primary schools in Kenya.

From the model, t-statistic for this variable was found to have a p-value of 0.000. With the p-value of 0.000 being less than 0.05, the null hypothesis was rejected and the alternative hypothesis accepted; and a conclusion drawn that there is indeed a significant relationship between goal setting and academic performance of city public primary schools in Kenya.

H₀₂: There is no significant relationship between staff professional development and academic performance of city public primary schools in Kenya.

From the model, t-statistic for this variable was found to have a p-value of 0.001. With the p-value of 0.001 being less than 0.05, the null hypothesis was rejected; and the alternative hypothesis accepted; and a conclusion drawn that indeed there is a significant relationship between staff professional development and academic performance of city public primary schools in Kenya.

H0₃: There is no significant relationship between supportive learning environment and academic performance of city public primary schools in Kenya.

From the model, t-statistic for this variable was found to have a p-value of 0.000. With the p-value of 0.000 being less than 0.05, the null hypothesis was rejected and the alternative hypothesis accepted; and a conclusion drawn that there is a significant relationship between supportive learning environment and academic performance of city public primary schools in Kenya.

H0₄: There is no significant relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya.

From the model, t-statistic for this variable was found to have a p-value of 0.000. With the p-value of 0.003 being less than 0.05, the null hypothesis was rejected and the alternative hypothesis accepted; and a conclusion drawn that there is a significant relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya.

4.8.12 Moderating Effect of Staff Commitment

To test the moderating effect of staff commitment, a moderated multiple regression (MMR) was conducted, through a hierarchical analysis by fitting 3 models. The first model entailed estimating the effect of independent variables (leadership practices) on school academic performance (dependent variable). The second test involved the addition of the moderating variable (staff commitment) into the model as an additional independent variable. The third test involved the inclusion of interaction variables between each independent variable and the moderator into the model. The final model sought to determine the moderating effect of staff commitment on the relationship between leadership practices and academic performance by determining the first level interaction effect between staff commitment and each of the independent variables on academic performance. This entailed first generating transformational interaction variables as the interaction between the moderator and each independent variable.

Table 4.36 shows the model summary of the fitted models. Considering the R square statistics that show the explanatory power of each model, all the models have high R-squares implying high explanatory power. The R square increases from model 1 to model 2 to model 3. The addition of staff commitment for model 2 and the interaction variables in model 3 improves the explanatory power of the models as shown by the positive R square change statistics. The p-value for the F change statistics are all less than 0.05. The R square change for model 2 and model 3 are 0.002 and 0.021 respectively. This implies that the R square changes are significant. The significant change in the R square from model 2 to model 3 implies that the interaction variables cause a significant improvement on the explanatory power; which means that, staff commitment has a moderating effect on the relationship between leadership practices and school academic performance.

Table 4.36: MMR Model Summary

Model	R	R square	Adjusted R square	Std. Error	R square change	F change	Df1	Df2	Sig. F change
1	.606 ^a	.565	.564	0.171	0.565	292.218	4	297	0.000
2	.607 ^b	.567	.566	0.170	0.002	6443	1	296	0.001
3	.620 ^c	.588	.586	0.132	0.021	31.098	4	292	0.000

- a. Predictors: (Constant), Goal setting, Staff professional development, Supportive learning environment, Monitoring of pupil learning
- b. Predictors: (Constant), Goal setting, Staff professional development, Supportive learning environment, Monitoring of pupil learning, Staff commitment
- c. Predictors: (Constant), Goal setting, Staff professional development, Supportive learning environment, Monitoring of pupil learning, staff commitment, goal setting Interaction staff commitment, staff professional development Interaction staff commitment, supportive learning environment Interaction staff commitment, monitoring of pupil learning interaction staff commitment
- d. Dependent variable: school academic performance

Table 4.37 presents the regression coefficients of the MMR models with leadership practices (goal setting, staff professional development, supportive learning environment and monitoring of pupil learning) as the independent variables, staff commitment as the moderator variable and school academic performance (dependent

variable). The table gives the coefficients and the significance test statistics at 0.05 level of significance. The model 1 coefficients are significant with p values less than 0.05. Model 2 entailed the inclusion of the moderator variable staff commitment as an independent variable. The added variable staff commitment was also found to have a significant influence on school academic performance ($\beta = 0.163$, $t=2.604$, $p =0.010<0.05$).

The resulting equation for model 2 is given by;

$$Y = 1.572 + 0.152X_1 + 0.020 X_2 + 0.284 X_3 + 0.109 X_4 + 0.163MV$$

The results for the third model show that two added interaction variables have significant influences on school academic performance as shown in Table 4.36. Interaction variable (X_1MV) was found to have significant influence on school academic performance ($\beta = 0.044$, $t=2.264$, $p =0.024<0.05$). (X_3MV) was also found to have a significant influence on school academic performance ($\beta = 0.089$, $t=4.174$, $p =0.000<0.05$). The final model generated an equation given by;

$$Y = 1.572+ 0.152X_1 + 0.020 X_2 + 0.284 X_3 + 0.109 X_4 + 0.163MV+ 0.44X_1MV+ 0.006 X_2MV+ 0.089 X_3MV+0.035 X_4MV+ 0.076MV$$

Table 4.37: MMR Regression Coefficients

Model 3	Unstandardized Coefficients B	Std. Error	Standardized coefficients Beta	T	Sig.
Constant	3.686	.163		22.660	.000
X_1MV	.044	.019	.262	2.264	.024
X_2MV	.006	.018	.034	.314	.753
X_3MV	.089	.021	.535	4.174	.000
X_4MV	.035	.021	.202	1.701	.090
MV	.076	.011	.206	1.625	.003

The results in Table 4.37 show that staff commitment has a significant effect on the relationship between goal setting and school academic performance. The effect is positive and significant as shown by the p value of the t-statistic which was found to be $0.024 <0.05$. This implies that promoting staff commitment would increase the level of influence that goal setting has on school academic performance. Staff

commitment was also found to have a positive significant influence on the relationship between supportive learning environment and school academic performance as shown by the p value of the t statistic which was $.000 < 0.05$. This implies that enhancing staff commitment in schools would raise the level of influence that supportive learning environment has on school academic performance. On the contrary, the effect of staff commitment on the relationship between staff professional development and school academic performance was found to be insignificant as shown by the p value of the t-statistic of $.753 > 0.05$. Similarly, the effect of staff commitment on the relationship between monitoring of pupil learning and school academic performance was found to be insignificant as shown by the p value of the t- statistic of $.090$.

4.8.13 Hypothesis Testing for Moderation Effect

The results from the MMR model were used to test the hypothesis on the moderating effect of staff commitment and draw conclusions on the fifth objective.

H0₅: Staff commitment has no significant moderating role on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

The change in R square was found to be significant with p value of the F statistic for the third model being 0.000 which is less than 0.05 as shown in Table 4.34. The null hypothesis was thus rejected and a conclusion drawn that, staff commitment significantly moderates the relationship between leadership practices and academic performance of city public primary schools in Kenya.

4.9 Discussion of Results

The results were discussed in line with the study objectives.

4.9.1 Goal Setting and Academic Performance

To achieve the first objective, analysis of both qualitative and quantitative data was done. Results from qualitative data analysis confirmed that, goal setting practice influences school academic performance. Equally, the quantitative data analysis

results also confirmed that goal setting affects academic performance. Thus, the findings from the study confirmed that goal setting practice positively influenced academic performance of city public primary schools in Kenya. The results indicate that by setting clear goals, the head teacher is able to direct the attention and efforts of teachers towards activities that are relevant to the goals and away from those activities that are goal-irrelevant. Goal setting as evidenced in this study can serve as an effective tool for promoting self-regulation among teachers. The head teacher's role in goal setting include; goal identification, goal sharing, goal implementation & monitoring, evaluation and feedback. Similar studies that have found a strong relationship between goal setting practice and pupil achievement include: Moeller *et al.* (2012); Wilson (2014); Rowe, Mazzotti, Ingram, and Lee (2017) and Lezotte (2010).

These findings are in support of the goal setting theory (Locke & Latham, 1990), which basically assumes that, by setting goals, the performance of any task increases remarkably. The relevance of the goal setting theory to the current study is in line with the works of Locke and Latham (2013) which suggest that, there are four features that link goals to performance. These authors assert that, goals should be; specific, difficult but attainable, accepted by teachers and feedback on goal accomplishment provided to teachers for improvement. By setting clear concise goals, the head teacher is able to assist teachers in focusing their attention and efforts on activities that enhance academic performance. Thus, effective head teachers ought to have an array of skills and competencies in order to not only set clear educational goals but also to lead schools effectively towards the achievement of those goals.

In conclusion, the findings from this study provided evidence on the relationship between goal setting practice and academic performance of city public primary schools in Kenya. It is therefore important for education stakeholders to recognize that goal setting practice enhances academic performance and there is need for head teachers of all public primary schools in the country to be trained on effective goal setting skills that could yield positive results and improve school academic performance.

4.9.2 Staff Professional Development and Academic Performance

To achieve the second objective, analysis of both quantitative and qualitative data was done. Results from quantitative data analysis confirmed that, staff professional development influences academic performance. In the same way, the qualitative data analysis results also confirmed that staff professional development influences academic performance. Thus, both quantitative and qualitative analyses acknowledged staff professional development as an essential leadership practice for enhancing academic performance. The aspects of staff professional development that were analyzed in the study comprised of: Head teacher's assessment records on the training needs, targeted in-service skills, records of in-service activities attended, minutes of staff meetings on the impact of the training and mentorship programs.

The findings from the study confirmed that staff professional development positively influences academic performance of city public primary schools in Kenya. Staff professional development, enables teachers to gain more knowledge and skills and this in turn helps them to improve their classroom practices, leading to improved pupil achievement. The results indicate that head teachers play a vital function in promoting staff professional development. Similar studies that found a strong relationship between staff professional development and pupil achievement include; Opfer and Peddler (2011), Odden (2011), Liang (2015), Oyedele (2016) and Gore *et al.* (2017).

Relating the findings of this study to Transformational leadership theory (Leithwood & Jantzi, 2006), there is a general convergence that promoting staff professional development in schools improves the teachers' knowledge and skills which in turn leads to enhanced pupil learning. Mizell (2010) asserts that, professional development is the only mechanism through which a teacher can understand important aspects such as; how a pupil learns, what impedes the pupil's learning and how the teacher's practice can improve pupil achievement. Transformational leadership focuses on developing a positive school culture in order to promote the quality of teaching and learning while at the same time enhancing staff professional development (Shatzer., *et al.*, 2014).

The results from the analysis show that there is a significant relationship between staff professional development and academic performance. Despite many studies indicating that professional development programs have a positive effect on teachers' teaching knowledge, recent research has revealed that, they may not have a significant effect on teachers' teaching performance in the classroom (Lu Zhang & Wu, 2017). These new findings have led authors to conclude that, the professional development programs could be enhancing the teaching knowledge for teachers, but teachers may not be applying what they learnt to improve the learning process in the classroom.

In conclusion, this study provides evidence on the relationship between staff professional development and academic performance of city public primary schools in Kenya. It is evident that staff professional development positively influences academic performance. However, it is important for head teachers to conduct training needs assessment before investing in staff development programs and to ensure that the knowledge and skills attained by teachers from these programs are applied in the classroom to improve pupil learning and overall school academic performance.

4.9.3 Supportive Learning Environment and Academic Performance

To achieve the third objective, analysis of both qualitative and quantitative data was done. Results from qualitative data analysis confirmed that, supportive learning environment influences academic performance. Correspondingly, the quantitative data analysis also confirmed that supportive learning environment affects academic performance. Thus, both qualitative and quantitative analyses acknowledged promotion of supportive learning environment as an essential practice for enhancing academic performance. The findings from the study show that supportive learning environment enhances academic performance of city public primary schools in Kenya. Effective head teachers formulate policies that promote availability of appropriate teaching and learning resources, foster positive interpersonal relations, put in place safety measures and develop clear and practical school rules and regulations. Similar studies that have found a significant relationship between supportive learning environment and pupil achievement. These include; Kraft,

Marinell and Shen-Wei Yee (2016), Astor *et al.* (2010), Gietz and McIntosh (2014), Higgins-D'Alessandro and Sakwarawich, (2011), and Offiong, Udo and Ikot (2014). These scholars established that, a positive environment promotes cooperative learning, group cohesion, respect, and mutual trust, all of which have been shown to directly impact on school academic performance.

These findings are in concurrence with the humanistic learning theory, which primarily assumes that people are motivated by five levels of needs which include, physiological needs, safety needs, love and belonging needs, self-esteem and self-actualization needs. Head teachers in schools that ascribe to this theory, ensure that, the learning environment provides these basic needs for pupils. For instance, such schools would have large classrooms that allow quality air circulation, clean drinking water, adequate lighting in classrooms and positive interpersonal relationships amongst members of the school community. Such schools focus on orderliness, safety and civility as an essential prior stage before leaders can pay attention to the curriculum and teacher professional development (Hallinger, 2011). In conclusion, this study provides evidence on the relationship between supportive learning environment and academic performance of city public primary schools in Kenya. It is apparent that supportive learning environment positively influences school academic performance and therefore efforts should be made to sensitize parents, and other stakeholders on the importance of having supportive learning environments in schools as a pre-requisite to enhanced academic performance.

4.9.4 Monitoring of Pupil Learning and Academic Performance

To achieve the fourth objective, analysis of both qualitative and quantitative data was done. Results from qualitative data analysis confirmed that, monitoring of pupil learning influences academic performance. Likewise, the quantitative data analysis also confirmed that monitoring of pupil learning affects school academic performance. Thus, both qualitative and quantitative analyses acknowledged monitoring of pupil learning as an essential practice for enhancing school academic performance. The findings from this study show that monitoring pupil learning enhances academic performance of city public primary schools in Kenya. To

effectively monitor pupil learning for enhanced academic performance, the head teacher should have the ability to collect, collate, analyze and evaluate pupils' achievements. The head teacher mainly focuses on curriculum implementation, assessment procedures, feedback mechanisms and staff motivation. Similar studies that have found a strong relationship between monitoring of pupil learning and academic performance include: Lezotte (2010), May and Supovitz (2011), Omogbehin (2013) and Accardo (2017). These studies established that, effective head teachers, aside from monitoring, evaluating and documenting pupil learning, they also provide feedback to teachers and support them to improve in their teaching performance.

The findings of this study are in line with the Instructional leadership theory (Hallinger, 2003). One of the main dimensions of Instructional leadership theory is for the head teacher to be able to manage the curriculum implementation process in the school, which entails; supervising curriculum implementation, evaluating the curriculum and frequently monitoring pupils' progress. Effective head teachers monitor the school's curriculum, ensuring alignment between the particular academic standards and curricular coverage. They also monitor pupil learning progress to ensure that all pupils have adequate opportunities to learn the particular content in all academic subjects (Lezotte, 2010; Hallinger & Murphy, 2012). In conclusion, this study provides evidence on the relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya. It is evident that monitoring of pupil learning positively influences academic performance and therefore efforts should be made to train head teachers on effective monitoring and evaluation skills. Head teachers should also be encouraged to provide written feedback to teachers on corrective measures that could promote academic performance.

4.9.5 Moderating role of Staff Commitment on the relationship between Leadership Practices and Academic Performance

To achieve the fifth objective of determining the moderating influence of staff commitment on the relationship between independent variables and academic performance a moderated multiple regression (MMR) was conducted through fitting a hierarchical analysis for fitting 3 models. The analysis involved determining the first level interaction influence between staff commitment and each of the independent variables on academic performance. The influence of the moderating variable on the relationship between independent variables on academic performance was found to be significant only in regard to goal setting and supportive learning environment. This implies that increasing staff commitment would significantly increase the level of influence that goal setting has on academic performance. Similarly, increasing staff commitment would significantly increase the level of influence that supportive learning environment has on academic performance.

The results from the MMR Model were to test the hypothesis that, ‘Staff Commitment has no significant moderating role on the relationship between leadership practices and school academic performance’. The change in R square was found to be significant with p value of the F statistic for the third model being 0.000 which is less than 0.05. The null hypothesis was thus rejected and a conclusion drawn that, staff commitment significantly moderates the relationship between leadership practices and academic performance of city public primary schools in Kenya. The findings are in agreement with Day *et al*'s (2016) argument that, if leadership has to influence school outcomes, it is paramount that it should improve teacher performance. Teacher performance is a function of teacher motivation, commitment, capacities (skills and knowledge) and their work conditions. Similar studies that have utilized the moderating effect of staff commitment on the relationship between independent and dependent variables include: Yin-Lin Tsai (2014); Butali (2016); Kariuki and Kiambati (2017).

4.9.6 School Academic Performance

Results from the analysis of school KCPE Mean scores (2017-2021) revealed that, majority of city public primary schools had performed averagely over the five-year period, with Mean scores ranging between 250-299 marks. Although a few of these pupils could have managed to secure good County schools, many of them are likely to have ended up in Sub-County secondary schools. There was also a large number of schools that had a mean score of (200-249) which is below the average mark of 250. This means that, many of these pupils may have found it difficult to access quality secondary schools and are likely to have ended up enrolling in low cost private secondary schools. It is worth noting that, a few schools had obtained a mean score of below 200 marks in the period under review, which raises a lot of concern, since it means that, these pupils could only end up in poorly managed private secondary schools that do not care about the mean score but are more interested in the fees a parent is willing to pay.

These findings are in line with earlier studies by scholars such as: Wamalwa, Mugusia and Sugut (2019), Gakure (2013) and Reche *et al.* (2012), who have noted that, Kenya's education sector faces a major problem in regard to the skewed pupils' academic achievements with few schools posting excellent performance while a majority perform dismally. In conclusion, this study provides evidence on the declining performance in KCPE examinations by city public primary schools in Kenya. The low KCPE mean scores imply that, majority of pupils end up joining Sub-County and County schools, most of which lack appropriate facilities, have insufficient number of teachers and there is little academic competition (Makori, 2015). Parents desire their children to join better schools with a track record in academic excellence, schools with adequate teaching and learning facilities and where learners are challenged and motivated academically. In essence, parents prefer schools that perform well academically and enable pupils to join institutions of higher learning.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the major summary of the findings, conclusions and recommendations of the study for action and future research on school leadership in Kenya.

5.2 Summary of Findings

The study sought to explore the relationship between leadership practices and academic performance of city public primary schools in Kenya. The study had the following specific objectives: To examine the relationship between goal setting and academic performance of city public primary schools in Kenya; to determine the relationship between staff professional development and academic performance of city public primary schools in Kenya; to examine the relationship between supportive learning environment and academic performance of city public primary schools in Kenya; to determine the relationship between monitoring of pupil learning and academic performance of city public primary schools in Kenya and finally to assess the moderating role of staff commitment on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

As earlier pointed out, majority of studies done in Kenya on the relationship between school leadership and pupils' academic achievements, have considered leadership in its adjective form without unpacking specific leadership practices that head teachers could employ to improve academic performance. This study therefore, sought to address this gap by examining the relationship between specific leadership practices and academic performance of city public primary schools in Kenya. The study employed a concurrent embedded mixed method design in which the researcher used both quantitative and qualitative methods but emphasized more on the quantitative data analysis phase, yielding a quantitative – dominant mixed analysis. Questionnaires and semi structured interviews were used to collect primary data

whereas secondary data was collected through document analysis. Descriptive and inferential statistics were used to analyse quantitative data while qualitative data was analysed thematically.

The study findings revealed a positive and significant relationship between goal setting and school academic performance. It was noted that, goals give teachers direction and enable them to focus on activities that promote pupil learning, leading to enhanced academic performance. The finding on staff professional development and school academic performance, showed that, staff professional development had a positive and significant influence on academic performance. Staff professional development enables teachers to acquire knowledge and skills that enhance their classroom practice, which in turn improves the overall school academic performance. On supportive learning environment and academic performance, the study established a positive and significant relationship between the two variables. Supportive learning environment which comprised of; adequate teaching and learning resources, effective disciplinary and safety measures as well as positive interpersonal relationships was found to enhance school academic performance. On monitoring of pupil learning and academic performance, the findings also revealed a positive and significant relationship between the two variables. Frequent monitoring of pupil learning, which includes; checking on pupils' work records and teachers' professional records was found to significantly influence school academic performance. On assessment of the moderating role of staff commitment on the relationship between leadership practices and academic performance, the study revealed that staff commitment had a positive and significant moderating role on the relationship between leadership practices and academic performance of city public primary schools in Kenya.

5.3 Conclusions

Based on the empirical evidence derived from this study, a number of rational conclusions were made as indicated below:

The positive and significant correlation between goal setting practice and school academic performance suggests that, head teachers could influence the academic performance of their schools by ensuring that they establish clear, concise goals to improve academic performance and by effectively communicating the goals to teachers. The results of this study have confirmed that there indeed exists a positive correlation between goal setting practice and academic performance. This implies that, an improvement in the goal setting practice would have a statistically positive effect on academic performance of city public primary schools in Kenya.

The findings from the study also showed that, staff professional development enables teachers to acquire new knowledge and skills that help them to improve their teaching. Furthermore, the study findings indicated that staff professional development, enable schools to establish professional learning communities where teachers share knowledge, exchange ideas and network. However, before schools invest in staff professional development activities, it is important for the school to identify the existing gaps in teachers' knowledge and skills in order to develop relevant training programs that would effectively enhance the teaching and learning process. In addition, considering the large costs incurred by schools and the government in providing in-service training programs for teachers, it is of essence that monitoring mechanisms are put in place by the school management to ensure that teachers utilize the knowledge and skills attained to improve classroom teaching and overall academic performance.

The findings further revealed that supportive learning environment significantly influenced academic performance. The activities used to promote supportive learning environment included: availability of safety measures, school rules and norms, adequate teaching and learning resources and positive interpersonal relationships among stakeholders. Results from the study showed that, majority of city public

primary schools did not have adequate teaching and learning resources. It was evident that, while the introduction of Free Primary Education (FPE) in Kenya had increased enrolments in primary schools, lack of adequate and appropriate teaching and learning facilities in majority of schools was compromising the quality of education offered.

Furthermore, the study findings showed that, monitoring of pupil learning significantly influenced academic performance. The measures for monitoring pupil learning included: teachers' schemes of work, and lesson plans, pupils' work records, minutes of staff meetings, records of pupils' assessments and class observations. Results from the study indicated that, the Teacher Performance Appraisal and Development tool (TPAD) had guidelines that assisted head teachers to monitor pupil learning in their schools.

As regards, the moderating role of staff commitment, the findings of the study showed that staff commitment had a significant moderating influence on the relationship between leadership practices and academic performance of city public primary schools in Kenya. The measures for staff commitment included: teachers' positive attitude, ownership, intention to stay, emotional attachment and willingness to support. Results from the study indicated that staff commitment was low in some of the schools due to lack of staff motivation which in turn negatively affected academic performance.

From the analysis of documents on KCPE Mean scores, the study revealed that majority of city public primary schools had performed averagely in KCPE over the five-year period (2017-2021). The measures for school academic performance included: presence of functional school management bodies (SMCs and Pas), pupils' progression from grade to grade, status of school infrastructure and facilities and KCPE school mean scores (2017-2021). Results from the study indicated that performance in some of the schools was low due to a number of factors, which included: incompetent school management bodies, lack of parental involvement in

school activities, repetition of pupils within grades and poor status of school infrastructure and facilities.

5.4 Recommendations

The recommendations were made in line with the study objectives. Since the study findings indicate that goal setting practice significantly influences academic performance, the following recommendations were made: School Management Committees (SMCs), Parents Associations (PAs) and the school leadership should be encouraged to work together in establishing goals that provide clear direction and keep teachers and pupils focused on activities that promote academic performance. Furthermore, head teachers in all public primary schools should be trained on effective goal setting skills that enhance academic performance.

The results from the study indicate that staff professional development improves teachers' knowledge and skills which in turn enhance their efficiency and effectiveness. The study therefore made the following recommendations; The Ministry of Education, Teachers' service Commission and other education providers should ensure that the staff development programs offered, focus on assisting teachers to improve their instructional practices so as to have a direct measurable impact on pupil learning. They should also ensure that the professional development programs assist in enhancing teacher collaboration, strengthen peer teaching and promote effective teacher learning communities.

Results from the study indicate that, supportive learning environments positively influence pupil learning, leading to enhanced school academic performance. Therefore, the following recommendations were made: Schools should work together with stakeholders to ensure that they have healthy, safe and supportive learning environments for both pupils and teachers. Head teachers should ensure that schools have clear policies and procedures for pupil and staff conduct. Finally, education stakeholders need to work together to ensure that schools have adequate learning and teaching resources which are essential components for improved academic performance.

The results of the study indicated that monitoring pupil learning had a positive influence on school academic performance. It was also revealed that, the Teachers Service Commission (TSC) had developed clear guidelines contained in the TPAD to enable head teachers to effectively monitor pupil learning progress in public primary schools in Kenya. Thus, the study made the following recommendations: The Ministry of Education (MOE) in liaison with the Teachers Service Commission (TSC) should ensure that, head teachers adhere to the guidelines and use them to regularly monitor pupil learning and regularly provide feedback to teachers for academic improvement. Head teachers should allocate time to participate in the teaching and learning process as this would keep them informed of what happens in the classroom. Furthermore, the Ministry of Education (MOE) and the Teachers Service Commission (TSC) should develop training programs for head teachers on instructional leadership with special focus on monitoring of teaching and learning process.

The results of the study indicated that staff commitment had a significant moderating influence on the relationship between leadership practices and academic performance. Thus, the study recommended the following: The TSC should enhance teacher commitment by ensuring that teachers are well remunerated. The TSC should also ensure that there is fairness in the promotion process for teachers based on merit, skills and experience. Lastly, school management and other stake holders should promote teacher commitment through motivation which could be in monetary or non-monetary terms.

The results of the study revealed that majority of city public primary schools had obtained an average mean score of between 250-299 marks over the five-year period (2017-2021), which denied many pupils from these schools the opportunity to secure vacancies in national or top County secondary schools. The study recommends that, MOE should ensure that, school management bodies (SMCs & PAs) make pupils' academic performance a priority in their board discussions. In addition, there is need for MOE in liaison with other stakeholders to mobilize funds that could enable schools to repair and maintain school infrastructure and facilities.

5.5 Policy Implications

The findings of the study revealed that, despite the fact that a significant number of head teachers in city public primary schools were applying some of the identified leadership practices, most of them were oblivious of the impact of these practices on academic performance. This implies that, there is need for the government to develop training programs in which all head teachers in public schools countrywide can be trained on the specific leadership practices that enhance academic performance as evidenced by the findings of this study. Secondly, there is also need for the government to re-enforce, the policy that discourages pupils from repeating grades.

Lastly, from the research findings, there seems to be a disconnect between the knowledge obtained by teachers through professional development programs and the application of this knowledge in the classroom setting. Therefore, there is need for the government to establish mechanisms through which these knowledge and skills can be utilized in the classroom to enhance pupil learning achievements. One of the ways would be for head teachers to attend some of the training programs with their teachers. This would enable head teachers to understand the subject content and assist them in monitoring the teaching and learning process.

5.6 Implications of the Research Findings on the Theories Adopted

The study adopted four theories namely; Goal setting theory, Transformational leadership theory, Humanistic learning theory and Instructional leadership theory. The findings of the study were aligned to the relevant theory as illustrated in chapter four.

5.7 Areas for Further Research

Given that this study mainly focused on city public primary schools in Kenya, there is need for further investigations to determine whether the identified leadership practices have the same influence on academic performance in public primary schools in other regions of the country. There is also need for further research to establish the existence of any relationships between head teachers' demographic

factors (age, gender, level of education and professional experience) and their capacity to employ the identified leadership practices. Lastly, there is need for further research to determine reasons as to why, staff professional development programs are not impacting teachers' overall classroom performance.

The study revealed that although various education stakeholders are in agreement that the identified leadership practices are vital in promoting academic performance; actual implementation of these practices in schools was lacking. There is therefore need for further research to establish factors that could be undermining the implementation of these leadership practices. The study also revealed that, some head teachers fail to release their teachers to participate in staff professional development activities. This is despite efforts made by both government and non-governmental organizations to provide such opportunities at affordable costs. There is therefore need for future research to determine factors that contribute to head teachers' reluctance in supporting these initiatives.

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APPENDICES

Appendix 1: Letter of Introduction



I. Goal-Setting Practice

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The head teacher identifies performance goals to be achieved					
The identified goals are shared among the teaching staff and school community					
The goals are fully implemented and monitored					
Goals are regularly evaluated and feedback on goal accomplishment provided					

II. Staff Professional Development

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The head teacher regularly conducts training needs assessment					
All teachers are encouraged to participate in professional training programs					
The head teacher encourages sharing of knowledge and skills attained amongst the teachers					
Mentoring programs for teachers are in place					

III. Supportive Learning Environment

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The head teacher has created a safe working environment in the school					
The school has well established rules and regulations for teachers and pupils					
The head teacher ensures availability of teaching and learning resources					
The head teacher promotes positive relations amongst stakeholders					

IV. Monitoring of Pupil Learning

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
Systems are in place to ensure effective curriculum implementation					
Assessment procedures are available to evaluate the effectiveness of the curriculum					
The head teacher provides feedback to teachers for improvement					
The school has strategies for motivating teachers and pupils					

V. Staff Commitment

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
I am very happy being a staff member of this school					
I do feel a 'strong sense' belonging to my school					
I do feel 'emotionally attached' to this school					
I am willing to go an extra mile for this school					

VI. Academic Performance

a) Management and Community Involvement

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The school has a school management committee and a Parents Teachers Association that meets regularly					
The head teacher encourages community participation in school activities					

b) Pupil Progression and KCPE Performance

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The school has systems for monitoring pupil progression					
The school has demonstrated improvement in KCPE examination performance in the last five years (2017-2021)					

d) Infrastructure and School Facilities

STATEMENT	5 SA	4 A	3 N	2 D	1 SD
The school buildings well maintained					
The school has adequate teaching and learning facilities					

THANK YOU

Appendix III: Interview Questions for Head Teachers.

1. Do you think that it is important to set performance goals for your school?
Explain
2. Name 2 professional development programs your teachers have attended in the last 2 years and explain how the training has influenced their performance?
3. How do you promote a supportive learning environment in your school?
4. What mechanisms do you have in your school for effectively monitoring the teaching and learning process?
5. What are some of the strategies used by your school to enhance staff commitment?

Appendix IV: Initial Coding Framework

Interview Transcript	Initial coding framework
<p>Interviewer: Do you think it is important to set performance goals for your school? Explain.</p> <p>Head teachers: ‘Yes, goals give direction and keep teachers focused. Goals motivate teachers to work harder. Goals enable teachers to manage their time well. Goals enable teachers to monitor the learning process.’</p>	<p>Importance of goal setting</p>
<p>Interviewer: How have the professional courses attended by your teachers influenced their teaching?</p> <p>Head teachers: ‘They have enhanced their knowledge and skills in teaching languages. Improved competency in ICT. Made it easier to teach Mathematics and Science. Created awareness on child rights and children with special needs.’</p>	<p>Influence of Staff Professional development</p>
<p>Interviewer: How do you promote a supportive learning environment in your school?</p> <p>Head teachers: ‘By providing adequate teaching and learning resources. Encouraging team work. Strengthening discipline. Promoting positive relations among stakeholders’</p>	<p>Promotion of Supportive learning environment</p>
<p>Interviewer: ‘Do you think it is important to monitor the learning process? Explain.</p> <p>Head teachers: Yes, it motivates teachers. Enables them to identify weak areas for improvement. Improves syllabus coverage. Enhanced teacher commitment.’</p>	<p>Importance of monitoring pupil learning.</p>
<p>Interviewer: ‘How do you promote teacher commitment in your school?</p> <p>Head teachers: Through motivation. Encouraging team work. Strengthening guidance and counseling. Delegation of duties.’</p>	<p>Promotion of Staff Commitment</p>

**Appendix V: Final Coding Framework after reduction of the categories in the
initial framework**

Final Coding Framework	Initial Coding Framework
1.Importance of goal setting	Direction Motivation Time management Monitoring
2.Influence of staff professional development	Promotes knowledge and skills Improves competency in ICT. Improves teaching of Mathematics and Science Creates awareness on child rights and children with special needs
3.Promotion of Supportive Learning Environment	Provision of teaching/learning resources Encouraging teamwork Strengthening discipline Promoting positive interpersonal relations
4. Importance of monitoring pupil learning	Motivation Identification of areas of weakness Improved syllabus coverage Enhanced teacher commitment
5. Promotion of Staff Commitment	Motivation Teamwork Guidance and Counselling Delegation of duties

Appendix VI: Exploratory Factor Loading for Indicators of School Academic

Performance

Indicators of school performance	Factor Loading
The school has a school management committee and a Parents' Association that meet regularly	.565
The head teacher encourages community participation in school activities	.586
The school is compliant with the Ministry of Education curriculum regulations and guidelines	.658
The performance assessment methods used in the school effectively assess students' performance	.540
The school has generally performed well in KCPE exams in the last three years	.862
The school has effective systems for monitoring pupil progression	.815
The school buildings are well maintained	.761
The school has adequate teaching and learning facilities	.726
I do not feel a 'strong sense' of belonging to my school	.267
The school has a school management committee and a Parents' Association that meets regularly	.552
The head teacher encourages community participation in school activities	.616
The school is compliant with the Ministry of Education curriculum regulations and guidelines	.699
The performance assessment methods used in the school effectively assess students' performance	.612
The school has generally performed well in KCPE exams in the last three years	.861
The school has effective systems for monitoring pupil progression	.816
The school buildings are well maintained	.792
The school has adequate teaching and learning facilities	.753

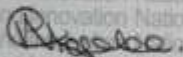
Appendix VII: Research Permit from NACOSTI


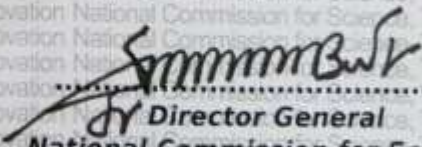
THIS IS TO CERTIFY THAT:
MS. CONNIE OKWISA MOGAKA
of JOMO KENYATTA UNIVERSITY OF
AGRICULTURE AND TECHNOLOGY, 0-200
Nairobi, has been permitted to conduct
research in Kisumu , Mombasa ,
Nairobi Counties

Permit No : NACOSTI/P/17/37363/15549
Date Of Issue : 13th February, 2017
Fee Received :Ksh 2000

on the topic: RELATIONSHIP BETWEEN
HEAD TEACHER LEADERSHIP PRACTICES
AND PERFORMANCE OF CITY PUBLIC
PRIMARY SCHOOLS IN KENYA.

for the period ending:
11th February, 2018


.....
Applicant's
Signature



.....
Director General
National Commission for Science,
Technology & Innovation