RELATIONSHIP BETWEEN PRINCIPALS' EMOTIONAL INTELLIGENCE AND STUDENTS' LEARNING ACHIEVEMENTS IN PUBLIC SECONDARY SCHOOLS IN NAIROBI COUNTY, KENYA

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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

I dedicate this thesis to my parents Julius M'Anampiu and Rael Kairu for the sacrifice they made in order to bestow me the gift of education. I will always be grateful to them for the confidence they constantly instilled in me and the trust they have always had in me.

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ABBREVIATIONS AND ACRONYMS

B.A	-	Bachelor of Arts
B.Ed.	-	Bachelor of Education
BOG	-	Board of Governors
DPs	-	Deputy Principals
ECI 2.0	-	Emotional Competency Inventory
E I	-	Emotional Intelligence
FPE	-	Free Primary Education
GPA	-	Grade Point Average
HODs	-	Heads of Departments
ICT	-	Information and Communication Technologies
ISLLC	-	Interstate School Leaders Licensure Consortium
I Q	-	Intelligence Quotient
KCPE	-	Kenya Certificate of Primary Education
KCSE	-	Kenya Certificate of Secondary Education
KESI	-	Kenya Education Staff Institute
KIE	-	Kenya Institute of Education
KNEC	-	Kenya National Examinations Council
M.A	-	Master of Arts
MBTI	-	Myers-Briggs Type Indicator
M.Ed.	-	Master of Education
MOE	-	Ministry of Education
MSTW	-	Middle Schools to Watch
MSCEIT	-	Mayer-Salovey-Caruso Emotional Intelligence Test
PTA	-	Parents Teachers Association

SAQ	-	Self Assessment Questionnaire
USA	-	United States of America
WLIS	-	Wong & Law Emotional Intelligence Scale

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ABSTRACT

Studies in the business field indicate a positive relationship between emotional intelligence of heads of institutions and performance of such institutions. Few studies though, have been conducted to examine the role of emotional intelligence in the field of education The main objective of this study was to establish the relationship between the principals' emotional intelligence and students' learning achievements in public secondary schools in Nairobi County, where learning achievements included performance in academic and co-curricular activities. A correlation design was used. The independent variable in the study was emotional intelligence of principals while the dependent variables were achievements in the academic and co-curricular activities of the students. Purposive sampling was used. The institutions sampled include national and county public schools in Nairobi. The sample of the study was 294, made up of 35 principals, 35 deputy principals and 224 heads of departments. Data was collected using adapted Emotional Competence Inventory questionnaire whose average reliability is .63 and has high validity. Students' performance in Kenya Certificate of Secondary Education and co-curricular activities were collected from the sampled schools and verified with records from the Kenya National Examinations Council and the Ministry of Education, respectively. The data collected was analyzed using both descriptive and inferential statistics such as standard deviations, t-test, Spearman correlation and Pearson product moment correlation. The findings of the study indicated that there is a statistically significant relationship between emotional intelligence of principals and students' academic achievements in national schools and in co-curricular activities. The other findings were that there is statistically significant relationship between emotional intelligence of principals and involvement of members of Board of Governors and parents in students' learning achievements. The findings did not show statistically significant relationship between emotional intelligence of principals and students' academic achievements in county secondary schools. In addition, the findings did not indicate statistically significant relationship between the emotional intelligence of principals and their gender, professional qualification and length of service. In conclusion, there were gaps identified in some emotional intelligence competencies of principals that need to be enhanced. Considering the inter-play between emotional intelligence of principals and learning achievements of students, the researcher recommends that the concept be incorporated in the in-service courses for serving and aspiring principals, criteria for identification of principals and deputy principals and in the school and post school curricular for all levels of education Further research is recommended in the area of emotional intelligence of principals and other stakeholders in schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Parrott (2001) defines an emotion as a mental and physiological state associated with a variety of feelings which is outside an individual's conscious control. According to Eaton and Johnson (2007) however, one need not be a slave to emotions because they can be regulated through reflection and conscious control, by applying emotional intelligence.

Information on historical development of the concept of emotional intelligence is necessary in definition of the term. Following the development of scientific methodologies in research, psychological researchers such as Thorndike and Stein (1937) began to describe and evaluate social intelligence. Wechsler (1940) saw non-cognitive aspects of intelligence such as psychological skills that relate to attitude, behaviour and change, to be important for adaptation and success. He recognised that the developers of intelligence tests could not be expected to measure total intelligence, until the tests were designed to include some aspects of non-cognitive elements such as affective, personal and social factors.

In pursuit of the same concept, there were early attempts in the 1940s and 1950s to establish a substantial relationship between achievement and non-interactive factors such as personality. These attempts did not meet much success because when early psychologists began to write and think about intelligence, they focused on cognitive aspects such as memory and problem

solving. One of the psychologists who contributed in this field is Erickson (1950, 1959). He theorized that emotional skills and competencies develop throughout human growth and development. He clarified that during each of the eight psychosocial stages of development, individuals move freely from one stage to another depending on their situations. An understanding of each stage therefore helps individuals to understand their emotional health as they meet life's challenges. Consequently growth and development of the emotional skills during each stage are critical to achieving success in life and work (Erikson, 1950, 1959).

Later, Barton, Dielman and Cattell (1972) conducted a study in the same field to assess more fully, the relative importance of both cognitive ability and personality variables in the prediction of academic achievement. One of the conclusions they arrived at was that intelligence quotient (IQ) together with the personality factor, which they called conscientiousness, predicted achievement in all areas.

In spite of the focus of those psychologists, the concept of emotional intelligence did not attract much attention until when Gardner (1983) broadened and popularised the construct of intelligence through publication of his theory of multiple intelligence. He argued that success in life was not dependent on intelligence quotient alone. He explained that there were seven different types of intelligence namely linguistic, logical, spatial, musical, kinesthetic, intrapersonal and interpersonal intelligence. He elaborated that interpersonal and intrapersonal intelligence are as important as the type of intelligence typically measured by

intelligence quotient. Later, the term emotional intelligence was coined by Salovey and Mayer (1990) which they defined as ability to monitor one's and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions.

However, the term emotional intelligence entered the mainstream only with Goleman (1995) who is said to be the founder of emotional intelligence. He defined emotional intelligence as the capacity to recognise our own feelings and those of others, motivate us, and manage emotions well in ourselves and in our relationships (Goleman, 1998). Cooper and Sawaf (1998) added to Goleman's definition of emotional intelligence by describing it as the ability to sense, understand and effectively apply the power and acumen of emotions as a source of human energy, information and influence. They emphasised that emotional intelligence emerges from the workings of the human heart.

Kierstead (1999) looked at the concept of emotional intelligence as an umbrella term that captures a broad collection of individual skills and dispositions. He described these skills as soft skills or inter and intra-personal skills, that are outside the traditional areas of specific knowledge, general intelligence and technical or professional skills. Goleman, Boyatzis and McKee (2001) identified competencies in emotional intelligence based on domains of self-awareness, self-management, social awareness, and relationship management, which enable leaders to be aware of their own emotional make-up.

This awareness in turn makes leaders sensitive and inspiring to others in dealing with emerging issues. In support of this, Hay Group (2004) explained that emotional intelligence includes both understanding people and doing something with that understanding. Freshman and Rubino (2002) clarified that for centuries, philosophical and religious texts have been attempting to focus humanity on the importance of developing awareness and monitoring behavior. They further added that interpersonal and intrapersonal skills such as compassion, empathy, trust, self-knowledge, observation and contemplation have been reflected on throughout written history.

Over the past several years, numerous studies in the business sector have focused on the effect of emotional intelligence on leadership. Goleman (2001) points out that research on leadership, strongly suggests that the emotional intelligence of leaders matters twice as much as that of their cognitive abilities such as intelligent quotient (IQ) or technical expertise. Other research findings indicate that leaders who were primarily strong in emotional intelligence were more likely to succeed than those who were stronger in either relevant previous experience IQ (Cherniss, 2003). While making a contribution in the same field, Bradberry and Greaves (2003) stated that leaders who had high emotional intelligence were 20% more productive than those with low emotional intelligence. Unlike IQ, emotional intelligence can be enhanced through training (Slaski, & Cartwright, 2003). In the field of education, Goleman (2004) elaborates that a principal's ability to understand, identify and empathise with

educators' emotions and then react appropriately, are integral factors which could help foster a feeling of job satisfaction amongst educators.

The heavy investment in secondary school education by both the Government and the public is justified by the anticipated benefits. In particular, Denison (1962) in his study associated the "residual factor" in economic growth of nations with education. Later, Psacharopoulos (1973, 1985), underscored the vital role of education in individual improvement and national development. He clarified that the documented benefits of education have ranged from its role in promoting economic growth, enhancing productivity, reducing poverty and increasing individual earnings. The average years of secondary and higher schooling are significantly related to subsequent economic growth across a section of countries (World Bank 1995, 2002).

At the individual level, education assists the learners to develop mentally, socially, morally, physically and spiritually. This development enhances understanding and respect for own and other people's cultures. For an individual, learning is further expected to promote positive environmental and health practices, build a firm foundation for further education and training and develop ability for enquiry, critical thinking and rational judgment (KIE, 2002).

Students' learning achievements include ability in academics, co-curricular activities such as sports, games and clubs, as well as social relations with each other and significant others. This approach addresses a holistic development of an individual and gives room for identification of various talents in individual students. There is high value attached to secondary school

education by both the Government and the public in Kenya as this level of education prepares learners for advanced studies, further training and the world of work.

It is for this reason that the Government has progressively been increasing access to secondary education. Among the remarkable Government contributions is the decision in 1989 to convert the former community schools built on self-help basis, to public schools (Onsomu, Mungai, Dramane, Sankale & Mujidi, 2004).This entailed provision of teachers to all public schools which considerably reduced the cost of education to individual households and increased access to secondary education. All along, communities have been supplementing the Government's effort in this endeavour by providing physical facilities, learning resources, students' uniforms and meals. In recognition of the importance of secondary education, the Government declared this level of education part of basic education through Sessional Paper No.1 (Republic of Kenya, 2005). With introduction of free tuition in secondary schools in 2009, the transition rate from primary to secondary level of education has risen. This increase is anticipated to be on an upward trend following promulgation of the Constitution in August 2010, which entrenches the right to free and compulsory basic education as a human right. Moreover, revision of secondary school curricular to equip learners with relevant skills is one of the flagship projects in Kenya Vision 2030 (Republic of Kenya, 2007). The expected output from the colossal investment in education is learners' achievements.

In the past decades, researchers and educators have conducted many studies and experiments to determine the factors that affect student achievements either negatively or positively. House (2002) observed that such factors are many and include students' characteristics; their living and learning environments; instructional activities; influence by parents, guardians, teaching staff and non-teaching staff and major social, economic and political factors. Besides, the ability of the principal as the school administrator to coordinate all the stakeholders and create a conducive learning environment cannot be underscored in facilitating learning.

The principal is the Chief Executive Officer of her/his school. All the learning activities in the school are coordinated by the principal. This means that the capacity of a principal is a critical variable in improving instructional quality and students' achievements. These sentiments are echoed by Griffin (1995) who described a principal as a pilot of a school system on whose shoulders the ultimate responsibility of the whole school rests. Principals have a crucial role to play in keeping student unrests at bay and to facilitate learning. The adage that a school is as good as its Head is based on this assumption, because the stability of any school depends on the quality, commitment, competence and dedication of the principal. The school principal is therefore an integral part of a school, and in part, the success or failure of that school depends on the effectiveness of her/him (McCown, Arnold, Miles & Hargadine, 2000). Research has further confirmed that effective leadership by school principals results in successful schools and increases student achievement (Hessel & Holloway, 2002;

DeFranco & Golden, 2003; Waters, Marzano, & McNulty, 2003). Leadership has an influence on and is a necessary aspect of effective reform at the school level, at the teacher level, and at the student level (Marzano, 2003).

While the crucial role of school principals in facilitating student's learning is appreciated, these principals do not receive any specific special training prior to their appointments, to prepare them for the tasks they are expected to undertake. To bridge the skills' gap**,** the Ministry of Education (MOE) through Kenya Education Staff Institute (KESI), exposes principals to workshops and seminars meant to enhance their leadership skills. These capacity building programmes mainly focus on management and administrative aspects of a school through an academic approach. However, there is no emphasis on interpersonal and intrapersonal intelligence, which has been found to be effective in managing business enterprises. The effectiveness of these in-service training programmes are still questionable since majority of the schools continue to experience frequent students' unrests; dismal academic performance; incidents of drug and substance abuse and other forms of indiscipline, which negatively impact on learning achievements. This trend is worrying considering the amount of resources invested in this sector by stakeholders.

Most secondary school principals possess a minimum of a university degree, implying that their intelligence quotient is at least average if not above average. However, these qualifications are not sufficient to enable them decipher and handle the emotions of adolescents in secondary schools. Since emotional intelligence has been used successfully to produce the desired results in business

related institutions, it is possible that the same construct has implications on learning achievements in a school situation. This study therefore will explore the relationship between the emotional intelligence of principals and students' learning achievements.

1.2 Statement of the Problem

The Government, parents and other stakeholders invest heavily in secondary school education but the outcome of this investment in terms of students' learning achievements does not seem to correspond with the input. Principals of secondary schools, who are the Chief Executives, play a pivotal role in influencing the learning achievements of students. These principals face tremendous pressure from stakeholders to have students achieve the best academic results and performance in co-curricular activities. In addition, they have to deal with challenges such as substance abuse, shortage of learning and teaching resources and students' and teachers' indiscipline.

These principals, however, take on responsibilities of heading institutions before gaining appropriate exposure and orientation on their new roles and responsibilities. The management styles of principals vary and some are autocratic while others adopt a laissez-faire approach that does not incorporate team work. Some of them have poor interpersonal and intrapersonal skills, which result in poor relationship with both teachers and students whom they are supposed to lead. Lack of preparation for headship may account for some of the many errors principals make in the course of their duties. Their personal characteristics are also likely to influence their leadership styles. These

personal characteristics include gender, intelligence quotient, educational level, professional qualifications and emotional intelligence.

Leadership studies such as that of Burbach (2004) have recently begun to consider the importance of a leader's emotional intelligence especially in management of business institutions. However, there has been limited research in the field of education such as the one by Cook (2006), who found that emotional intelligence of principals and students' performance in academic subjects at middle school level were positively correlated. Another research in the area of principals and their performance was undertaken by William (2008) who studied leadership characteristics of outstanding urban and typical principals. He identified emotional and social intelligence competencies as the characteristics that were associated with performing urban principals. In the same field Maulding, Townsend, Leonard, Sparkman, Styron and Styron (2010) explored the relationship between emotional intelligence of principals and students' academic performance. They found out that there was no relationship between emotional intelligence of principals and students' academic achievements.

While some studies established a relationship between emotional intelligence of principals and students' academic achievements others did not find any relationship between the two variables. In view of the contradicting findings in these studies which were undertaken in the West, the current study explored the relationship between emotional intelligence and students learning achievements in Kenya. Most of the studies on relationship between emotional

intelligence of principals and students' learning achievements have addressed only academic achievements and have not explored other aspects of learning such as the psychomotor domain. In addition, while some studies have shown positive relationship between emotional intelligence of leaders of institutions and performance of those institutions, no study has been done in Kenya to address the relationship between emotional intelligence of principals and students' learning achievements in both academic and co-curricular field. In the present study, the researcher set out to examine the relationship between emotional intelligence of principals and both academic and co-curricular achievements of students.

1.3 Purpose of the Study

The purpose of this study was to examine how the emotional intelligence of secondary school principals relates to students' learning achievements. The study also sought to identify key emotional competencies required by school administrators to enhance learning achievements of students.

1.4 Objectives of the Study

The objectives for the study were:

i) To establish the level of emotional intelligence among the principals.

ii) To establish gender differences in emotional intelligence among principals

iii) To explore the relationship between the emotional intelligence of principals and their highest professional qualifications.

iv) To explore the relationship between emotional intelligence of principals and their length of service.

v) To explore the relationship between emotional intelligence of principals and students' academic achievement.

vi) To explore the relationship between emotional intelligence of principals and students' co- curricular activities.

vii) To examine the relationship between emotional intelligence of principals and the level of involvement of Board of Governors (BOG) members in in students' learning achievements.

viii) To examine the relationship between the emotional intelligence of principals and involvement of parents in students' learning achievements.

1.5 Research Questions

The researcher endeavoured to answer the following questions:

i) What are the levels of emotional intelligence among principals?

ii) Are there gender differences in the levels of emotional intelligence among principals?

iii) What is the relationship between the emotional intelligence of principals and their highest professional qualifications?

iv) What is the relationship between the emotional intelligence of principals and their length of service?

v) What is the relationship between the emotional intelligence of principals and students' academic achievements?

vi) What is the relationship between the emotional intelligence of principals and students' achievements in co- curricular activities?

vii) What is the relationship between the emotional intelligence of principals

and involvement of BOG members in students' learning achievements?

viii) What is the relationship between the emotional intelligence of principals and involvement of parents in students' learning achievements?

1.6 Research Hypotheses

The following research hypotheses guided the study:

Ha_1: There are gender differences in emotional intelligence among principals.

Ha_2: There is a relationship between emotional intelligence of principals and their highest professional qualifications.

Ha_3: There is a relationship between the emotional intelligence of principals and their length of service.

Ha_4: There is a relationship between emotional intelligence of principals and students' academic achievements.

Ha_5: There is a relationship between emotional intelligence of principals and students' co -curricula achievements.

Ha_6: There is a relationship between emotional intelligence of principals and involvement of BOG members in students' learning achievements.

Ha_7: There is a relationship between the emotional intelligence of principals and involvement of parents in students' learning achievements.

1.7 Significance of the Study

The information gathered by the study may inform institutions, practitioners and researchers on the interplay of emotional intelligence of principals and learning achievements among secondary school students. This study may also assist employers in the process of identification, recruitment and placement of principals through inclusion of the construct of emotional intelligence in criteria for identification and placement of principals. In addition, it may provide guidance to service providers on programmes to be incorporated in pre-service and in-service training for principals. The study was also intended to add to the body of knowledge and stimulate further research in the area under study.

1.8 Delimitations

The study focused on academic and co-curricular activities in the students' learning achievements. The study therefore explored the cognitive and psychomotor domains of learners. The co-curricular activities which were considered in this study included ballgames, athletics, music, drama and science congress. The study was also conducted in public schools. In addition, the study was carried out in Nairobi County. The results of the study might therefore have limited generalizability.

1.8.1 Limitations

The personal characteristics of the principals that were considered in the study were only gender, academic qualifications and length of service. The dependent variables included students' achievements in Kenya Certificate of

Secondary Education examination and participation in co-curricular activities at school, county and national level. The only stakeholders who were involved in the study were members of Boards of Governors and parents.

1.9 Assumptions of the Study

In carrying out the study, several assumptions were made. One of these assumptions was that principals of schools are aware that they are in control of all the activities that take place in a school and that, those activities that lead to students' learning achievements take priority over all others. Another assumption was that since leaders in other fields such as business related enterprises, who have high emotional intelligence, produce outstanding results, the variable of emotional intelligence among principals also impacts positively on learning achievements of students. The other assumption was that the participants provided honest responses to the questions in the data collection instrument.

1.10 Theoretical Framework

The theoretical underpinnings of this study fall within Goleman's Mixed Model of Emotional Intelligence (2001) and the Social Learning Theory of Bandura (1977).

1.10.1 Mixed Model of Emotional Intelligence

Emotional Intelligence theoretical paradigm considers emotional intelligence from the perspectives of either ability or mixed model. Goleman proposed a mixed model in terms of performance, integrating an individual's abilities and personality and applying their corresponding effects on

performance in the workplace (Goleman, 2001). The model was found appropriate in the current study because the researcher expects principals to apply competencies of emotioal intelligence in their performance of duty. The model outlines four main emotional intelligence domains of self-awareness, self-management, social awareness and relations management.

Self-awareness, is the ability to read one's emotions and recognize their impact while using gut feelings to guide decisions. Self-management involves controlling one's emotions and impulses to adapt to changing circumstances. Social awareness, includes the ability to sense, understand, and react to other peoples' emotions while comprehending social networks. Relationship management, entails the ability to inspire, influence, and develop others while managing conflict (Goleman, 1998). The four domains were considered relevant in the current study because duties of a principal involve coodinating all stakeholders in a school.

Goleman (2001) further advocates that if a person is not in tune with her his own feelings, then they are oblivious to the feelings of others. Leaders who lack emotional self-awareness are less empathic to the emotions of others. By being attuned to how others feel, a leader can say and do what is appropriate, whether that means calming fears, assuaging anger, or joining in good spirits. Therefore being in tune with others' emotions allows a leader to sense the shared values and priorities of the group. A leader who lacks empathy and is self-absorbent is out of tune with the group and can unwittingly act in ways that set off negative reactions. It is for this reason that, emotionally intelligent

leaders build resonance by tuning into people's feelings and their own and are expected to guide others in the right direction. A principal is expected to understand her/his emotions and manage them well in order to understand emotions of others and deal with them appropriately.

Goleman includes a set of emotional competencies within each domain of emotional intelligence. According to this model there are 18 comptencies. Emotional competencies are not innate talents, but rather learned capabilities that must be worked on and developed for one to achieve outstanding performance. Goleman posits that individuals are born with a general emotional intelligence that determines their potential for learning emotional competencies. The organization of the competencies under the various domains is not random. They appear in synergistic clusters or groupings that support and facilitate each other (Boyatzis, Goleman, & Rhee, 1999). The current study explored the 18 emotional intelligence competencies in this model because they were considered applicable to all leaders of institutions incuding principals of secondary schools.

Goleman acknowledges that cognitive intellect plays a significant role in effective leadership and regards intellect and clear thinking largely as the characteristics that get someone in leadership position. However, he concurs that intellect alone will not make a leader because leaders execute a vision by motivating, guiding, inspiring, listening, and persuading through creating resonance. The current study considered emotional intelligence of principals of secondary schools while appreciating that their IQ is average and above average.

The fact that best leaders are able to orchestrate thought and feeling was considered by the researcher in adapting this theory.

Goleman believes that the four emotional intelligence domains of self-awareness, self-management, social awareness and relationship management are the basic ingredients of effective primal leadership of resonance. Goleman's subsequent mixed model of emotional intelligence which combines both emotional intelligence abilities and emotional intelligence competences flows from this assertion, and has greater resonance for school leaders because of its message of hope and relevance in terms of good practice in the workplace.

Potentially, the quickest way to increase emotional intelligence competencies in members of an organization, is to select when recruiting, individuals who already demonstrate those competences and behaviours. However, human resources selection processes tend to focus on what appears on the applicant's curriculum vitae which captures education, skills and experience. Therefore, Goleman acknowledges that the best way is for organizations to develop and maintain emotional intelligence in their present employee population, but that the commitment to develop emotional intelligence must be made at the top.

The mixed model of emotional intelligence sits well with the aim of this research study which had its roots in developing and sustaining effective school leaders through heightened understanding of the relationship between emotional intelligence and effective leadership in schools. The notion of leaders creating 'resonance' so that others choose to follow as advocated in this model is

thought-provoking for school leaders. This in turn has an impact on students' learning achievements. Therefore, in pursuing Goleman's mixed abilities practice-driven model of emotional intelligence, it was necessary to explore in more detail what the literature says about emotionally competent leadership in the 21st century workplace and ground this in the secondary school setting.

1.10.2 Social Learning Theory

Bandura (1977) explains that most human behaviour is learnt observationally through modeling. The process involves observation followed by formation of an idea of how new behaviours are performed and on later occasions, this coded information serves as a guide for action. The theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural and environmental influences. The theory was found relevant to this study because the environment has an impact on students' learning. The researcher considered the principal of a secondary school as the main model for the students. Other models are provided by the significant others in and outside the school. The school principal is the one to provide a conducive learning environment.

There are several guiding principles behind this theory. The observer will, for example, imitate the model's behaviour if the model possesses characteristics the observer finds attractive or desirable, such as talent, intelligence, power, good looks or popularity. The researcher in the current study considered that the students would imitate the principal's behavior.

Principals who have competencies of emotional intelligence are likely to provide appropriate models for learners to imitate.

In addition, the observer will react to the way the model is treated by others and mimic the model's behaviour. When the model is rewarded, the observer is more likely to reproduce the rewarded behaviour but if the model is punished, the observer is less likely to reproduce the same behaviour. Another principle is that a distinction exists between an observer acquiring a behaviour and performing a behaviour. Through observation, the observer can acquire behaviour but not perform it immediately but later, in situations where there is an incentive to do so, or when conditions are favourable, to display the behaviour.

According to this theory, four separate processes of attention, retention, production and motivation are involved. Attention and retention account for acquisition or learning of a model's behavior, while production and motivation control the performance. Human development reflects the complex interaction of the person, the person's behaviour, and the environment. A person's cognitive abilities, physical characteristics, personality, beliefs and attitudes influence both one's behaviour and environment, but these influences are reciprocal. However, a person's behaviour can affect her or his feelings about themselves and their attitudes and beliefs about others. While the current study considered students' learning achievements in relation to emotional intelligence of principals, the researcher was aware of other factors that have an impact on students' learning such as the ones enumerated in this theory.

Likewise, much of what a person knows comes from environmental resources such as media and authority. Environment affects behaviour. What a person observes can powerfully influence his or her behaviour and also influence their environment. This is contrary to the behavioural theorists who essentially emphasize that one's environment causes one's behaviour and not vice versa. This theory also recognizes that learning is not only determined by one's cognitive ability. Bandura further considered personality as an interaction between environment, behaviour and one's psychological processes. This theory bridges behaviourism and cognitive learning theories because it encompasses attention, memory and motivation.

For students to get appropriate models, the principal requires to employ competencies of emotional intelligence for her or him to be the desired model and to influence the significant others to provide desirable models for students to imitate. Consequently, the emotional intelligence of a principal provides a conducive environment in school, its neighborhood and at home, which is essential to students' performance in both academic and co-curricular activities.

1.11 Conceptual framework

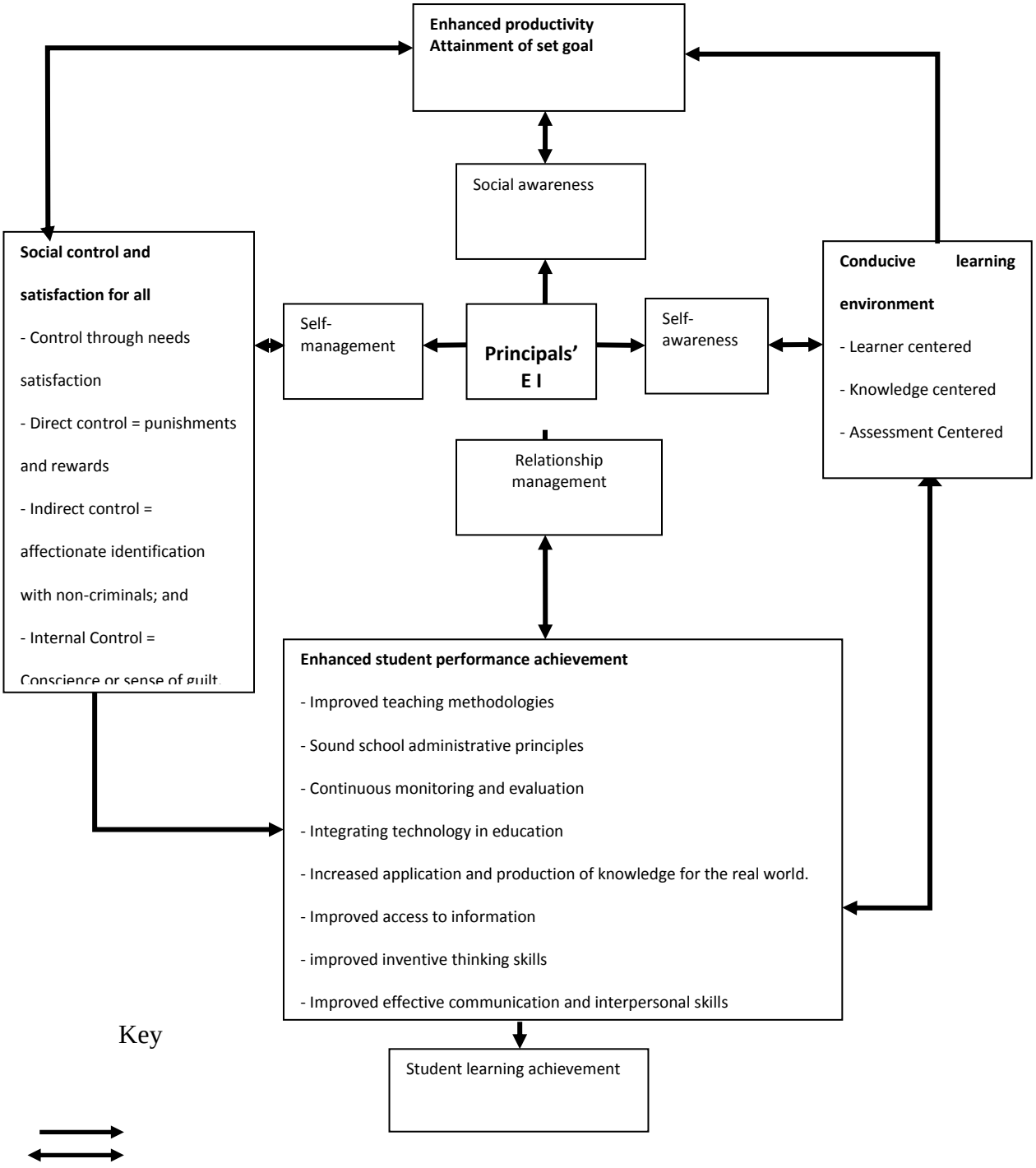
In this conceptual model the researcher postulates that the emotional intelligence of a principal has 4 domains which are self-awareness, self-management, social awareness and relations management. This categorisation was proposed by Goleman (2001). Pivotal contribution of the principal's emotional intelligence results in both intrapersonal and interpersonal skills. The study conceptualises that the principal is a central figure in a school, who

coordinates all the stakeholders in the school. These stakeholders include students, teachers, parents and school management board.

The ability of principals to understand and effectively handle their own emotions and those of others creates a psychological, social and physical conducive learning environment. This environment is learner, knowledge and assessment centred which in turn, enhances productivity and attainment of school goals. Principals' emotional intelligence further contributes to social control and satisfaction for the school community. Consequently, students are assisted to deal with factors that may interrupt learning, such as indiscipline and lack of commitment to work.

The study also conceptualises that emotional intelligence of principals would enhance students' performance through improved teaching methodologies, sound school administrative principals and continuous monitoring and evaluation. In addition, schools will integrate technology in learning, apply increased production of knowledge for the real world of work and improve access to information. The students would further develop innovative thinking skills and improve effective communication. The conceptual framework in Figure 1.1 represents the emotional intelligence of a principal in relation to holistic development of learners.

Figure 1.1: Emotional intelligence conceptual framework



Indicate the direction of interaction between the different study variables
Source: Researcher 2010

1.12 Operational definitions of terms

Academic achievement: Mean score obtained by students in a school in

subjects examined by KNEC. The highest scores in academic performance that a student can attain in KCSE is 12.

BOG involvement: Availability of the BOG members to attend meetings and make useful contributions which provide a conducive learning environment for students.

Categories of schools: These are national and both county boarding and day secondary schools. National schools admit KCPE best performing students from every district in Kenya, while county boarding schools admit the best students mainly from the county who do not get admitted to national schools. The rest of students are admitted to day schools.

Co-curricular activities: Activities that were considered were athletics, ballgames, drama, music and science congresses. Performance in co-curricular activities is rated on the basis of level of participation. Students compete at school level to select teams which participate at county level. The best performers at county level proceed to the national level.

Emotional Intelligence: A set of competencies based on four domains namely, self-

awareness; self-management; social awareness; and relations management; which enable an individual to function effectively across a variety of settings.

Intra-personal intelligence: Capacity to understand oneself and one's thoughts and feelings and to use such knowledge in planning and directing one's life.

Interpersonal intelligence: Ability to understand and interact effectively with others.

Learning achievements: Mean scores obtained by students in school in academic subjects in KCSE and in co-curricular activities.

Parent involvement: This was measured by the number of meetings parents attend in a year as a group and their contribution to students' learning achievements during those meetings.

Regular school: A school attended by students who have no identified delinquent behaviour.

Relationship management: Ability to influence, guide and handle other people's emotions.

Self-awareness: Ability of an individual to understand her or his own feelings and to recognise the impact that these feelings have on others.

Self-management: Ability to keep negative emotions and impulsive behaviour under control**,** stay calm and focused, even under stressful situations.

Social awareness: Ability to read or sense other people's emotions and how they impact on a situation of interest or concern.

Social intelligence: Person's ability to understand and manage other people, and to engage in adaptive social interactions.

Stakeholders: Those (partners) who have an interest in a school. They include teachers, students, parents, guardians, external members of the school community, sponsors, education officers and the Government.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter covers a review of literature on levels of emotional intelligence. Literature was also reviewed on impact of gender, professional qualifications and length of service on emotional intelligence. In addition, literature was reviewed on emotional intelligence of principals and students' academic achievements, involvement of stakeholders in school activities and impact of co-curricular activities on learning achievements of students. Literature on relationship between emotional intelligence and both leadership roles and job performance was also reviewed. In addition literature was reviewed on measurements of emotional intelligence.

2.1 Level of Emotional Intelligence

Many studies have been done in the field of emotional intelligence. Marshall (2010) decided to explore the relationship between emotional intelligence of school principals and their effectiveness as leaders. He used a sample of 48 principals from West Indies and adopted a survey design. Data were gathered through the use of 'How Do You Lead Questionnaire'. The results indicated that the leadership styles of the principals were quite similar and were eclectic in the approach to leadership. The emotional intelligence scores of the principals were also low, reflecting a need for further development of the construct. There was no statistically significant difference in the leadership or emotional intelligence scores of male and female principals. There

was also no relationship found between principal leadership and emotional intelligence. These findings were inconsistent with those of other researchers such as Cook (2006). In the current study the research was keen to establish the levels of emotional intelligence of principals in Kenyan situation, given that different countries have different approaches for preparing and developing principals.

Recent literature has also shown that the number of employers who recognize the importance of emotional intelligence in the workplace is on the increase. Emotional intelligence is the ability to sense, understand, and effectively use the power of emotions to guide, motivate, and even persuade others. Emotional outbursts in the workplace can negatively affect the organization in terms of productivity, representation, and profitability. In an attempt to explore the impact of emotional intelligence of leaders on productivity at the work place, Ishak, Mustapha and Mahmud (2006) explored domains and sub domains of emotional intelligence specific to the Malaysian context, and the relationship among the domain of emotional intelligence of Malaysian teachers and their implications on workplace productivity.

The study sample was 820 teachers who were selected using a stratified random sampling method. Data were collected using interviews and Malaysian Emotional Quotient Inventory. Results of the study suggested consideration of additional competencies of spirituality, maturity, intention, interest, compassion, and helping others that describe emotional intelligence of the Malaysian teachers. The study covered the teachers and not school principals. The current

study therefore explored what pertains among principals on their levels of emotional intelligence.

Krishnanveni & Deepa, (2011) noted that the rapid expansion of the information technologies industry in India has considerable impact on the health of its employees and also poses many emotional challenges to them. In an attempt to get more information in this field, the two researchers studied emotional intelligence levels of employees in major information technologies hubs of South India. The sample of the study was 533 and data was collected by use of a tool which the researchers developed specific to India. The findings indicated that information technologies workforce had high emotional intelligence. The study addressed the levels of emotional intelligence of the workers and did not explore relationship between that emotional intelligence and performance of duty. The study also covered employees who did not have administrative responsibilities such as those vested on school principals in the current study.

In an attempt to add knowledge to the field of emotional intelligence, Michele (2011) investigated emotional intelligence competencies of principals of high achieving middle schools. The purpose of the study was to determine whether these principals score higher in certain emotional intelligence competencies. He used a correlational research design. The sample of the study consisted of 280 principals from national Middle Schools to Watch (MSTW) principals in 14 states in USA. ECI 2.0 was used to collect data. The findings indicated that national MSTW principals exhibited high levels of emotional

intelligence, and there was no common set of emotional intelligent competencies shared by this group of MSTW principals. The sample in the study covered middle schools but the current study explored the level of emotional intelligence in secondary schools.

On realizing that benefits of demonstrating high frequency of emotional intelligence in the work place is vast, especially in service based professions such as teaching ,Kumar and Muniandy (2012) undertook a study in this area. They explored the level of emotional intelligence among lecturers from a polytechnic in Northern Malaysia. A survey design was adapted and data was collected through the use of Genos Emotional Intelligence Inventory from 162 respondents. The findings of the study were that the mean value for level of emotional intelligence was 3.37 which they categorized as average emotional intelligence. Since roles of principals of schools are different from those of lecturers, the current study investigated the levels of emotional intelligence among the former.

In seven studies undertaken in various settings on emotional intelligence, Schutte, Malouff, Bobik, Coston, Greeson, Jedlicka, Rhodes and Wendorf (2001) found high correlations between emotional intelligence and self-monitoring, being empathetic, social adeptness and inter-personal cooperation. The finding further revealed higher scores for closeness and affection in interpersonal relations. Overall, these findings suggest that individuals with high levels of emotional intelligence are more likely to act in considerate and socially adaptable ways. Thus emotional intelligence offers

invaluable advantages to organizations experiencing continuous change. These findings were supported by those of Cherniss (2003) who found that emotional intelligence significantly influences the performance of a leader. He added that a leader who has a high level of emotional intelligence will have a greater effect on an organization than a leader with a low level of emotional intelligence. The findings of that study are supported by those of Mayer, Salovey and Caruso (2004) who found that people who have high levels of emotional intelligence are able to manage their emotions successfully. In addition, they are successful at solving emotional problems, stress management and they relate well with people who show constructive and positive reaction in family and social relationships.

2.2 Emotional Intelligence and Gender

Findings of research studies on emotional intelligence vary in regard to differences between males and females. While authors like Goleman (1998) disagree that women have higher emotional intelligence than males, he accepts that gender might be proficient in particular emotional intelligence competencies. Other research studies have shown that women score higher on measures of emotional intelligence while men sometimes score higher on specific traits.

A study by Bar-On (2000) explored the relationship between emotional intelligence and gender, age and ethnicity by using a sample of 3831. The findings of the study indicated that there were no significant differences in emotional intelligence between males and females regarding overall emotional and social competence, but there are some gender differences for a few factorial

components of the construct. He theorised that females appear to be more aware of emotions, demonstrate more empathy, relate better with people and act more socially responsible than men. Men, on the other hand, appeared to have better self-regard, cope better with stress, solve problems better and are more independent, flexible and optimistic than women. The study concluded that, when overall ratings of men and women are considered, far more similarities exist than differences regarding their emotional intelligence. Thus, in terms of total emotional intelligence, no gender differences exist.

A related study on comparison of emotional intelligence competencies among genders was undertaken by Cruz (2004). The study is founded on the premise that the gender role dynamics affect emotional intelligence behavior differently for men and women and that the degree and features of the difference are primarily affected by cultural factors. The analysis reveals that women display higher levels of emotional competencies at home and men at work. The findings were in line with the gender role dynamics and the cultural characteristics of the sample. A correlational analysis revealed that the difference in behavior is related to the masculinity or femininity dimension of culture and human values in the case of women.

Some literature however suggests that gender may have some influence on emotional intelligence. An example of such a study is that done by Petrides, Furnham and Frederickson (2004). They investigated gender differences in relation to self-esteem in England, involving 261 participants in a correlational study. Correlations between measured and self-estimated scores were generally

higher for males than females and a regression analysis, indicated that gender was a significant predictor of self-estimated emotional intelligence.

A related study by Katyal and Amwasthi (2005) revealed different findings. They conducted a study involving 150 adolescent students made up of 75 boys and 75 girls. These students were randomly selected from 10th grade in three Government model senior secondary schools in Chandigah, India. Emotional Intelligence Test by Codaty (2001) was used for data collection. Percentage distributions and 't' test were used for data analysis. The findings revealed that girls had higher emotional intelligence than boys.

Allegations such as stereotype of women being the more 'emotional' sex (Greral & Salovey, 2006) prompted Nunez, Berrocal, Montannes, & Latorre (2008) to carry out a review of the different emotional socialisation patterns used by parents on the basis of their children's gender. The review considered the impact that socialisation has on differential development of emotional competencies and compared these with the findings of studies conducted in the field of emotional intelligence. The findings of the review indicated that there are no significant differences in self-reported emotional intelligence between men and women, but women turn out to be more skillful at directing and handling their own and others' emotions than men. Some studies such as that by Austin, Evans, Goldwater and Potter (2005) indicate that women are better at attention and empathy, while men are better at regulating emotions.

In addition, studies such as that of World Health Organization (2008) undertaken within corrective institutions indicate a relationship between low

self-report and emotional intelligence levels, measured through depression, anxiety and adjustment scales. The study revealed that more women than men tend to have worse health indices for these disorders. The findings implied that women have lower levels of emotional intelligence than men.

Those findings were supported by Khalili (2009) who undertook a study of 112 employees made up of 56 men and 56 women, of a Consulting Engineers Company in Iran, for assessment of gender differences in emotional intelligence. Data was collected using the emotional intelligence appraisal which is designed to assess behavior demonstrative of emotional intelligence skills. The instrument used to collect data had 28 performances based items to assess four emotional intelligence domains defined by Goleman (2001). The four domains are self-awareness, self-management, social awareness and relations management. The findings showed that men have higher levels of emotional intelligence than women.

The findings of the reviewed literature indicate varied conclusions on the relationship between gender and emotional intelligence. The findings are not conclusive on the relationship between gender and emotional intelligence. These findings suggest further research on emotional intelligence and gender. It is for this reason that the current study explored gender differences in emotional intelligence, among principals.

2.3 Emotional Intelligence and Highest Professional Qualifications

Considering the emphasis placed on professional qualifications in recruitment of workers into various positions across professions, it was

important to find out what existing literature says regarding emotional intelligence and professional qualifications of principals. A study in this field was carried out by Keshni (2010). The study explored emotional intelligence of principals as an essential component in leadership of a functional school. The study was conducted in two neighbouring schools, consisting of the same external and internal environment; political, social and technological environments; and educators who were similarly qualified and experienced. The principals of both schools possessed teaching diplomas and had similar number of years of experience.

In spite of the enumerated similar learning environment, the students' performance in the two schools was found to be very different. One of the schools was rated as functional while the other was rated as dysfunctional, based on students' performance in the common examination, written by all learners in public schools after a 12 year schooling experience. The findings of the study showed that the principal of the functional school was found to be highly emotionally intelligent whilst the dysfunctional school principal hardly possessed any of the competencies in emotional intelligence. The findings did not indicate statistically significant relationship between emotional intelligence of the service providers and their academic qualifications.

Kumar and Muniandy (2012) carried out a study on influence of demographic profiles on emotional intelligence among polytechnic lecturers in Malaysia. The sample was 162. They used The Genos Emotional Intelligence Inventory (Concise version). The findings were that academic qualification and

emotional intelligence were positively correlated. A Kruskal - Wallis test on the effect of academic qualification towards the level of emotional intelligence revealed a statistically significant difference between the academic qualifications of the lecturers. The lowest median score was recorded by those with Diploma qualification (Md = 3.23) followed by Degree (Md = 3.26), Masters (Md = 3.38) and Doctoral (Md = 4.00). Therefore the level of emotional intelligence in the study increased with increment in academic qualification.

A related study on relationship between the emotional intelligence and the academic achievement of the prospective teachers was undertaken by Muhammad, Aijaz and Saira (2011). Wong & Law Emotional Intelligence Scale (WLIS) was used on a sample of 200 student teachers enrolled in B.Ed. program at Government College for Elementary Teachers Gujrat. The findings of the study revealed that there is a significant correlation between academic achievement and relationship management in terms of the prospective teachers holding the degrees of B.A and M.A as their previous qualification. However there was no significant relationship found between the other dimensions of emotional intelligence and academic achievement of the prospective teachers as far as their previous qualification was concerned.

Results of the reviewed literature on relationship between emotional intelligence and professional qualifications reveal that in some cases a relationship was found between the two variables while in others there was no such relationship established. In view of the varied findings in the same field of study, the researcher in the current study decided to explore the relationship

between the two variables among principals in Kenyan public secondary schools.

2.4 Emotional Intelligence and Length of Service

Augusto-Land, Lopez-Zafra, Berrios-Martos, and Aguilar-Luzon (2008) carried out a study which involved 180 nurses in a general public hospital in Spain, on the relationship between emotional intelligence, occupational stress and health of nurses. A survey design was used in the study. The findings indicated a positive relationship between age, length of service and stress, with younger nurses and those with a shorter length of service experiencing less stress. However, emotional intelligence and health were not related to age or to length of service.

Another study in the same field of emotional intelligence and length of service was conducted by Aremu and Tejumola (2008) who assessed emotional intelligence among Nigerian Police. The study involved a sample of 285 police officers and an ex-post facto method was used. The study found no relationship between emotional intelligence of police officers and their length of service. In addition the findings indicated that the level of emotional intelligences of police officers was low. The researchers concluded that Nigerian police were in need of a good education on emotional intelligence, which should start from the training of police recruits in police colleges, and be extended to cover cadet officers in police academies.

In a related study Min (2010) explored the relationship between demographic variables, such as gender, age, education, and marital status and

emotional intelligence of tour guides. In addition, he explored work variables such as primary languages used and work experience with tour guides' emotional intelligence. A survey design was used on a sample of 380 tour guides in Taiwan. The results indicated that there were differences between the individuals' emotional intelligence in relation to the variables of gender and length of service. The findings did not support those of Rohana, Kamaruzaman and Zanariah (2009), who reported that age group, length of service, position and experience, did not have an impact on the level of emotional intelligence.

Some of the reviewed studies on emotional intelligence and length of service reported a relationship between the two variables while others did not establish such a relationship. In the current study the researcher set out to establish the level of emotional intelligence of principals of secondary schools and whether or not it had any relationship with their length of service.

2.5 EI of Principals and Students' Academic achievement

Principals of schools are the Chief Executives of the institutions they head and are required to provide leadership in all matters related to the running of schools. The Interstate School Leaders Licensure Consortium (ISLLC) formed in the USA in 1949, provides a framework that can guide a principal in creating a school environment in which all students succeed. It is made up of many of the major stakeholders in educational leadership, which include 30 states and numerous professional associations. ISLLC examined 3 areas when developing the standards. They relied heavily on research that linked productive schools with educational leadership, noting the trends in society that would have an

effect on educational leadership in the future. In addition they visited schools to assess what they could forecast about the leadership skills needed by school administrators.

The central theme throughout the development of the standards was success of the students, informed by the fact that effective leadership by school principals increases students' achievement. Assessment showed that successful schools have a clear sense of direction and are supported by principals who are effective instructional leaders. The standards developed focused on the principal as an educational leader in promoting the success of all students through collaboration with all stakeholders in education and implementation of learning programmes.

Several researchers have undertaken studies to find out the relationship between emotional intelligence of school principals and students' academic achievements. They include Andrews and Soder (1987) who evaluated the relationship between principals' leadership and students' academic achievement in Seattle, Washington. The sample consisted of 67 elementary and 20 secondary school principals. The study was a longitudinal one that took two years. The findings of the study were that students' test scores in both reading and mathematics, were significantly higher in schools where the principals had high levels of emotional intelligence. The study explored the relationship between emotional intelligence of principals in reading and mathematics. The current study considered performance of students in all the academic subjects

offered in a public secondary school in Kenya and selected co-curricular activities.

Newmann, King, and Youngs (2000) are among other researchers in the field of emotional intelligence. They undertook a two year study among seven elementary schools in Michigan State to address the main aspects of school capacity. Data collection involved observation of significant professional development activities and classes, interviews and examination of pertinent documents. Analysis of the data revealed that at the heart of school capacity is the principal's leadership that focuses on the development of teachers' knowledge and skills, professional community, program coherence and technical resources. The study concluded that emotional intelligence is related to the effectiveness and advancement of managers in today's organizations, including schools. The study was however undertaken in elementary schools while the current study considered secondary schools.

On realizing the need to study the significant relationship between school leadership and students' achievement, DeFranco and Golden (2003) researched the characteristics of effective school administrators in Oregon. They reviewed both academic literature and reports from educational organizations. From the study, they developed a specific set of nine standards that articulated the knowledge and skills demanded of today's school leaders. The standards include leadership attributes, visionary leadership, community leadership, instructional leadership, data-driven improvement, organization to improve student learning, and organization to improve staff efficacy, cultural

competence, and education management. The standards developed include some of the emotional intelligence competencies required by school leaders to enhance success of students. It is for this reason that the present study explored the impact of emotional intelligence competencies of principals on students' learning achievements.

In support of competencies that a school principal requires, Leithwood, Seashore, Anderson and Wahlstrom (2004), formulated an instructional leadership model following their five year study in Minnesota. The aim of the study was to investigate the relationship between leadership and improvement of students' learning. The study included case studies from 36 schools, survey data from 8,391 teachers, and in-depth interviews with teachers, administrators and state personnel. It examined school and district practices that influence student achievement and how successful leadership practices directly and indirectly influence the quality of teaching and learning. It comprised three sets of leadership dimensions. These involve defining the school's mission, managing the instructional program and promoting a positive learning climate, within which specific leadership practices are delineated.

The study found out that principals have the greatest impact on student achievement when they share leadership with teachers and create a professional learning climate in which instruction and improvement in institutions are clear priorities. These findings are in line with competencies within relations management domain of emotional intelligence. The study addressed mainly academic performance, but the current study explored the relationship between

the emotional intelligence of a principal and both academic and co-curricular achievements of students.

In a related study William (2004) explored characteristics that distinguish outstanding urban principals and typical principals. The study was an exploratory one involving 12 outstanding and eight typical principals in Ohio. He examined the relationship between emotional intelligence and problem-solving competencies, emotional intelligence and role perceptions, and emotional intelligence and environmental adaptation, in Ohio. He found significant differences in all the three areas of inquiry. He then concluded that outstanding principals demonstrate a broad and deep repertoire of competencies for managing self and others, which are critical to the development of enabling structures and open interpersonal processes in schools. These are variables that are presumably related either directly or indirectly, to emotional intelligence and problem solving. The study compared emotional intelligence of principals and a few competencies of the same construct. The study did not address the relationship between the principals' emotional intelligence and students' learning achievements. To fill that gap, the current study addressed emotional intelligence of principals in all the 18 competencies and the relationship that has in students' learning achievements.

In an attempt to add to the body of knowledge in the same area, Burbach (2004) undertook a study at Maryland Middle School on a sample of 240 school principals, to find out the relationship between emotional intelligence of principals and success of schools. The study used a correlational design and it

rendered valuable information which indicated that various components of a middle school principal's emotional intelligence level were closely related to school success. These provide justification for educational leadership programs to include emotional intelligence theory as a component for reform. The study by Burbach addressed emotional intelligence of principals and success of a middle school. The researcher in the current study endeavored to find out whether or not emotional intelligence of principals has any relationship with learning achievements of students in secondary schools. In addition, since the study was done outside Kenya, the present study investigated the relationship between emotional intelligence of principals and students' achievements in this country.

A related study was carried out by Malgas (2005) who explored the value of emotional intelligence as a strategy for effective school management. The sample of the study was made up of 241 teachers, heads of departments and deputy principals from 20 secondary schools in Western Cape, South Africa. A questionnaire was used in quantitative research to investigate the perceptions of the respondents concerning the value of emotional intelligence for principals in effective management.

Both descriptive analysis and statistical hypotheses testing were employed in data analysis. The researcher found that there was a significant statistical relationship between emotional intelligence of a principal and effective management of schools as shown by competencies such as effective communication, conflict management and management of interpersonal

relations. The study explored emotional intelligence of principals and management of schools in general. The current study considered the same construct and students' learning achievements. In the same field, Waters, Marzano, and McNulty (2005) conducted a meta-analysis of 69 studies involving 2,802 schools over more than three decades of research. The purpose of the study was to find the effects that leadership practices had on students' academic achievements. The findings indicated a substantial relationship between leadership and students' achievement. They concluded that successful schools have a clear sense of direction and are supported by principals who are effective instructional leaders.

A related study was conducted by Cook (2006), in Montana, to determine the effects of emotional intelligence on elementary principals' leadership performance. The measure of emotional intelligence was an appraisal of self-awareness, self-management, social awareness, relationship management and overall emotional intelligence. Analysis of the data indicated that emotional intelligence, as defined by Goleman (1998), had a strong effect on the nine standards of leadership defined by DeFranco and Golden (2003). The results indicated that emotional intelligence has a positive effect on principals' leadership performance. This supports the body of research that emotional intelligence has a positive effect on leadership performance. The researchers concluded that since effective leadership requires a wide range of skills, school principals must be acquainted with competencies related to emotional intelligence, as they strive to effectively meet the needs of students. The study

addressed principals' emotional intelligence and their performance but not students' learning achievements which include both academic and co-curricular achievements. The current study endeavoured to fill the gap by examining the relationship between emotional intelligence of principals and students' learning achievements.

Williams (2008) further studied the leadership characteristics of urban principals that were identified as outstanding. Twelve outstanding principals and eight typical principals were identified by peers, central office and the unions. Data from interviews, open ended questions and a variety of assessments were used in this mixed method research. The researcher identified emotional and social intelligence competencies that significantly differentiated outstanding principals from typical principals. These competencies which are also competencies in emotional intelligence, were self-confidence, self-control, consciousness, achievement oriented, initiative, organizational awareness, developing others, influence, analytical thinking, leadership, teamwork, collaboration, influence, change catalyst and conflict management.

Maulding, Townsend, Leonard, Sparkman, Styron and Styron (2010) undertook a survey of 261 public schools in Mississippi to explore the relationship between emotional intelligence of principals and students' performance. Data in the study was gathered through the use of the Bar-On EQ-1:125 instruments. The composite scales that were scored were both intrapersonal and interpersonal. The researchers set out to find if a relationship exists between self-regard, self-actualization, interpersonal, social responsibility,

interpersonal relationship, adaptability, flexibility and problem solving subscales of principals, in either low-performing or high performing schools. Analysis of variance was used to compare the school performance level to the total emotional intelligence score. Findings indicated that emotional intelligence was not shown to be related to student achievement as designated by school performance level in reading, language skills and mathematics. The study considered academic achievements of students in a few subject areas and did not consider co-curricular achievements. The current study attempted to fill the gap by examining the relationship of emotional intelligence of principals and students' co-curricular activities.

In a more recent study, Cliffe (2011) attempted to reduce the gap on the interplay of intelligent use of emotions and school leadership. He undertook a longitudinal study of seven female secondary school principals from schools spread across England. The objective of the study was to explore the relationship between emotional intelligence and educational leadership. The findings indicated positive correlation that these sampled principals had been able to make intelligent use of their emotions. The study considered only female principals. The current researcher considered both female and male principals in the study.

Most of the reviewed literature in the field of emotional intelligence of principals and students' learning achievements has shown a positive correlation. A few studies among those reviewed indicated that emotional intelligence of principals has no impact on students' learning achievements. In addition, the

studies reviewed covered only the academic achievements of students and did not include their co-curricular activities. The current study considered the relationship between emotional intelligence of principals and holistic development of learners, by exploring both academic performance and co-curricular activities.

2.6 Co-curricular Activities and Student Learning Achievement

Co-curricular activities are extensions of the regular instructional program into areas of competition, skill demonstration and performance outside the regular classroom during or after class time. They are non-academic activities, which are approved and supervised by the school. In co-curricular settings, students develop and practice artistic, musical and psychomotor talents, leadership skills and future career and occupational skills (Haensly, Lupkowsky & Edlind, 1985/1986).

Studies have revealed that co-curricular activities are essential parts of the educational development of students. Rubin, Bommer, and Baldwin (2002) noted that co-curricular activities at high school, aim at enhancing formation of values, cognitive, affective and psychomotor competencies of students. The competencies acquired by students through co-curricular activities are applied in different areas of learning and programs that involve the community. The findings of the study were that students who held a leadership position in a club or organisation were perceived as having better interpersonal skills than students who did not hold leadership positions.

An example of research on the relationship between co-curricular and academic achievements of students is the case study of Malaysian schools, undertaken by Rashid and Sasidhar (2005). In this study which involved 392 teachers, the researchers used a field survey to assess the teachers' perception of the correlation between the participation of students in both co-curricular and competency skills. One of the findings of the study is that students' involvement in co-curricular activities enhances competencies in communication, cognitive and self-management skills which in turn, contribute to their learning achievements including excellent academic achievements. The other finding is that when students are active outside the classroom, they perform better in all school activities due to a higher sense of student satisfaction, self-concept, and academic persistence. The results of the study revealed benefits of participation in co-curricular activities towards holistic development of the learner. However, the study did not explore the relationship between emotional intelligence of principals and students' achievement in co-curricular activities. This was a gap in the study considering that principals coordinate all the learning activities in schools. To fill this gap, the current study addressed the relationship between emotional intelligence of principals and students' co-curricular activities.

The findings of Rashid and Sasidhar (2005) are collaborated by Kimiko (2005) who carried out a research on the effects of co-curricular activities on academic performance. The sample involved 52 junior high school students of Walnut Creek Christian Academy during the 2004-2005 school years. The purpose of this study was to determine whether or not the activities in which

junior high school students choose to participate in, have an effect on their academic performance. A survey method was adapted. The findings revealed that playing, sports, watching television and participating in community service improves academic performance, while playing a musical instrument does not improve academic performance. Therefore, it was concluded that co-curricular activities affect academic performance and that the effect depends on the specific activities in which the student is involved.

Involvement in co-curricular activities at secondary school level has an impact on future performance of students. This was found out by Jamalis and Fauzee (2007) in a study in which the main objective was to investigate students' intrinsic and extrinsic motivations and benefits accrued in participating in compulsory co-curricular activities. The study also examined the implications of co-curricular activities towards students' academic performance.

The study employed a qualitative interview approach with 15 University Putra students, who during their time in high school had been involved in co-curricular activities. The findings suggested that co-curricular activities do not have a negative implication on students' academic work as long as students manage their study timetable effectively. Indeed, co-curricular activities are likely to have a largely positive and lasting effect on their academic work. They found out that co-curricular activities are an extension of, and not a diversion from, a good educational programme. Co-curricular activities support the academic mission of a school. Students who participate in co-curricular programmes tend to have higher grade point averages, better attendance records,

lower dropout rates and fewer discipline problems than students who do not participate in such programmes.

Other facets of students who participate in co-curricular activities, which are positively developed, are self-esteem, self-confidence, social cooperation and leadership skills. The researchers further clarified that skills that foster positive character traits such as vigilance, patience, persistence in the face of setbacks, cooperation and teamwork, personal sacrifice for group and empathy are also enhanced. These qualities benefit young people in their studies, jobs and personal lives as well as helping them become responsible and successful adults. Development of a learner's body and brain demand proper nurturing of both its physical and intellectual qualities. It is for this reason that modern approaches to education emphasize all-round development of a learner. One approach of achieving this is through participation in academic and co-curricular activities.

To further explore the relationship between academic and co-curricular activities, Ara and Rakhsi (2008) studied five public and five private schools located in Peshawar region in Pakistan, to gauge the real state of affairs on co-curricular activities in those schools. The sample for the study included 10 students from public and 10 students from private schools, aged between 12 and 16.

The findings indicated that co-curricular activities such as physical training and sports were not included in the school timetable in both public and private schools. Further, it was found that, while co-curricular activities build up a student's character and personality as well as facilitate academic

achievement, there was a tendency for most schools to over-emphasize cognitive learning at the expense of co-curricular activities (Ara & Rakhsi, 2008). The researchers recommended a reversal of this trend in view of the importance of co-curricular activities for development of cognitive, affective and psychomotor domains of the learners.

The reviewed studies indicated positive correlation between co-curricular activities and academic achievements. It was further noted that the relationship between emotional intelligence of principals and students' co-curricular activities has not been explored. In the present study therefore the researcher decided to examine the relationship between the emotional intelligence of principals and both the academic and co-curricular achievements of students.

2.7 Involvement of Stakeholders (BOGs and Parents)

Most parents readily volunteer their time to provide service to schools. Although getting parents involved in the schools their children attend is a great challenge for educators, research shows that educators can do a great deal to ensure greater parental involvement. Dauber and Epstein (1993) in their study on parents' attitudes and practices of involvement in inner-city elementary and middle schools in New York found that many parents respond to encouragement from educators. In their study of 2,317 inner-city elementary and middle school students, the study found out that the best predictor of parent involvement was what the school did to promote it. Attitudes and actions of school leaders were more important than parents' income, educational level, race, or previous school-

volunteering experience, in predicting whether the parent would be involved in the school or not. It is the principal's capacity to communicate effectively with parents that enhances their involvement in school activities.

Those findings are supported by Sanders, Epstein and Connors (1999), who explored whether particular types of activities that parents got involved in influenced their attitude at the high school level in Maryland. A survey of 423 parents was used in the study. The dependent variables in the study were parents' attitudes towards the school, parents' involvement at home and parents' involvement at school. Independent variables were gauged by scales that measured parents' reports of school activities in parenting, communication, learning at home and decision making, frequency of requests for volunteering and school support for parents' involvement.

The findings indicated that the school had not contacted 75% of the surveyed parents who were involved in school activities such as volunteering, fund raising or participation in committee activities. In addition, 80% of the parents needed more information about how to help their children at home. Parents who were involved in any type of activity in school and those whose children were doing well in school, tended to have positive attitudes towards the school. The study concluded that students' academic performance was a significant predictor of family involvement in school and at home. The gap that was noted in this study is that it did not explore the role of principals in parental attitude and involvement in school activities. In particular the study did not investigate the relationship between emotional intelligence of principals and

involvement of parents in school activities that relate to students learning achievements. The current study addressed that gap.

Trusty (1999), while noting that not much research has been undertaken on effects of parental involvement beyond high school, set out to investigate the ways home and school based involvement relate to students' educational expectations, two years after high school. He analysed data from 10,000 participants. He controlled for the influence of family income, occupation and education on students' plan. During the follow up, two years after high school, students were asked about the highest level of education that they expected to attain. The researcher then examined the influence of parental involvement at eighth grade in the follow-up data.

The findings indicated that if students felt that their parents communicated to them and supported their learning when they were in high school, they were more likely to have plans to continue with post high school education. This is because for students, families are a continuing presence, while schools are short-term resources. The researcher challenged schools to focus beyond their boundaries and recognise the importance of parents in students' school activities.

In an attempt to add to the body of knowledge on involvement of parents at secondary school level, Simon (2000) conducted a study in which he used a sample of 11,000 students drawn from a large, long-term national database. He made follow-ups in 1990 and 1992, to explore how high schools, families and communities connect to support students' achievements. Family involvement

was measured by family, school administrators' and students' responses to questions about parents' involvement in their activities at home and in school. Students' achievements measures included test scores and grades in English and Mathematics, number of course credits, absences, school behavior and school preparedness. Through a series of a regression analyses, the researcher tested how parents' reports on their high schools' outreach activities predicted involvement in parenting, volunteering and learning activities at home. He further tested how administrators' reports of schools' outreach programmes predicted their ratings of family involvement in parenting, volunteering and decision-making practices. The study explored academic achievements of students in only English and Mathematics. Achievement in co-curricular activities was not explored. This was a gap that was noted in that study which the current study attempted to address.

There are three main ecologies that learners interact with. These include the home, school and community. It is in realization of this that Sheldon (2004) undertook a longitudinal study to find out the effects of family and community involvement by school administrators, in activities that reduce indiscipline among the students and ensure a school climate that focuses on learning. The findings indicated that the more family and community involvement activities were implemented, the fewer the number of students, with discipline problems regardless of schools' prior rates of indiscipline. Activities related to parenting and volunteering, were most predictive in reducing the percentages of students who were subject to indiscipline. Participation of family members and school

community in school activities is dependent on the initiative of school principals.

Several studies have been undertaken by educational psychologists on factors that determine academic outcomes of the learner. An example of these studies is one by Aremu and Tella (2006) on relationship among emotional intelligence, parental involvement, and academic achievement of 500 senior secondary school students in Ibadan, Nigeria. Using Pearson product moment correlational coefficient and multiple regression statistics, results showed that both emotional intelligence and parental involvement could predict academic achievement. Similarly, there was significant positive relationship between emotional intelligence and academic achievement and between parental involvement and academic achievement.

The Board of Governors (BOGs) is legally mandated by the Ministry of Education to manage secondary schools in Kenya. Kindiki (2009) set out to investigate effectiveness of the BOGs in curriculum implementation. He sampled 150 respondents made up of principals, teachers and BOG members from Keiyo District in Kenya. A survey research design was adopted and findings indicated that training of BOG members was directly related to the implementation of curricular through handling of teachers, workers, and students' discipline and provision of infrastructure. The study recommended that schools should strive to provide pre-requisite training to BOG members and to involve them in the daily running of the schools.

Findings of the literature reviewed indicated that parents involve themselves in school activities when invited to do so by school administrators. In addition there is a positive correlation between their involvement and students' academic achievements. Parental involvement however takes place when it is initiated by principals of schools. The reviewed studies did not address the relationship between emotional intelligence of principals and parental involvement. These studies did not also explore parental involvement and students' co-curricular activities.

In the current study, the researcher examined the extent of parental involvement in management of schools and students' achievements in both academic and co-curricular achievements. A principal needs competencies of collaboration and team work, which are aspects of emotional intelligence, to effectively involve the parents and other critical stakeholders in school activities. It is in view of this that the present study explored the extent of principals' involvement of Board of Governors and parents as critical stakeholders in management of schools.

2.8 Emotional Intelligence and Job Performance

Several studies have revealed that emotional intelligence contributes significantly to success in job performance. An example is the Sommerville study, a 40 year longitudinal investigation of 450 boys who grew up in Sommerville, Massachusetts. While their intelligence quotient was below 90, their childhood abilities, such as ability to handle frustration, control emotions

and get along with others, enabled them succeed at work and in other spheres of their lives (Snarey &Vaillant, 1985).

Another example is a study of 80 PhD holders in Science who underwent a battery of personality tests, intelligence quotient tests and interviews in the 1950s when they were graduate students at Berkeley. Forty years later, when they were in their early seventies, they were tracked and estimates were made of their success based on resumes, evaluations by experts in their own fields and sources like American Men and Women of Science. It turned out that social and emotional abilities were four times more important than intelligence quotient in determining professional success and prestige (Feist & Barron,1996).

Cavallo and Brienza (2002) made a contribution in this field through their study to determine whether any specific leadership competencies were significantly different between high performers and average performers. The study involved 358 managers across the Johnson & Johnson Consumer & Personal Care Group globally. They found that the high performers had significantly more emotional competencies than did low performers.

In the area of education, Lyons and Schneider (2005) examined the relationship of ability based emotional intelligence facets with performance under stress. The sample consisted of 126 undergraduates who performed mental mathematics and videotaped speech tasks. The findings indicated that certain dimensions of emotional intelligence were related to more challenge and enhanced performance.

Some studies have shown that emotional intelligence is important in a wide range of settings, including education and business and is related to achievement, productivity, leadership, personal health and job performance. An example of such a study is the one by Cote and Miners (2006), which examined the relationship between emotional intelligence, intelligent quotient and job performance among 175 managerial, administrative and professional full-time employees of Toronto University. Emotional intelligence was measured using Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), while job performance was assessed using supervisory ratings based on a 5 item scale.

The findings of the study were that intelligence quotient moderated the association between emotional intelligence and job performance. However, emotional intelligence became a stronger predictor of job performance as intelligence quotient decreased. The findings suggest that using intelligence quotient tests alone to predict performance entails risk because employees with low intelligence quotient can perform effectively if they have high emotional intelligence.

A more recent study was undertaken by Kathungu, (2010) on the relationship between emotional intelligence and job performance among service providers in rehabilitation schools in Kenya. In the study she explored the relationship between emotional intelligence of 63 providers in rehabilitation schools in Kenya and their professional qualifications. A correlational research design was used in the study. Emotional intelligence was assessed using an adapted version of items borrowed from the tests of emotional intelligence

developed by Wood and Tolley (2003). Product moment correlation was used to test the relationship between emotional intelligence and job performance. One way ANOVA was used to test for differences across demographic variables which included their academic qualifications, emotional intelligence and job performance.

The findings of the study revealed that there was no significant difference in emotional intelligence across various demographic variables namely age, gender, educational qualifications and length of service. The study however found a significant, moderate and positive relationship between emotional intelligence and job performance among service providers in rehabilitation schools. In addition, the study revealed that some dimensions of emotional intelligence such as motivation and social scales were significantly related to job performance, while the empathy dimension was significantly related to team work dimension of job performance.

The reviewed studies on emotional intelligence and job performance did not include principals of secondary schools. However the results of the studies revealed that emotional intelligence has a positive impact on job performance. The current study explored emotional intelligence among principals and how it impacts on students' learning achievements.

2.9 Emotional Intelligence and Leadership

Many studies have been undertaken to investigate the relationship between emotional intelligence and success in leadership. One of the researchers in this field is Collins (2001), who undertook a study at Nebraska to examine the

effect of emotional intelligence as a predictor of leadership success. Utilizing a personality-based measure and an ability-based measure of emotional intelligence, he hypothesized that emotional intelligence would be predictive of leadership success as measured by ratings on multi-rater feedback, position and salary. The analyses were conducted on data collected from 91 executives and included personality, emotional intelligence, and multi-rater feedback assessments. The primary hypotheses were not supported in the analyses and there was no significant role for either ability or personality measurement approach to emotional intelligence, over and above cognition and personality traits.

Following the general analyses, more detailed analyses were undertaken based on research supporting the impact of gender on both emotional intelligence and multi-rater feedback, as well as the strong effect of conscientiousness in the study. These additional analyses suggested a possible relationship between personality-based emotional intelligence and leadership success through self-ratings. A relationship between ability-based emotional intelligence and leadership success was also suggested through subordinate ratings. After controlling for gender and conscientiousness, personality-based emotional intelligence appeared to influence the prediction of success through self-ratings, while ability-based emotional intelligence appeared to influence prediction of success through perceptions of others (Collins, 2001). The results of the study were supported by Gardner and Stough (2002) who studied 110 senior managers and found strong correlations between emotional intelligence

and transformational attributes. The study also found laisséz faire managers demonstrated lower levels of emotional intelligence.

In a related study, Schulte (2003) examined correlation and prediction of the construct of emotional intelligence in relation to transformational leadership style. He used a total of four test instruments on 194 respondents and analysed them using descriptive statistics, correlations and multiple linear regressions. Emotional intelligence was well predicted by general cognitive ability and personality. The study however showed that identifying emotional intelligence competencies in individuals did not necessarily aid in the prediction of transformational leadership.

The relationship between emotional intelligence competencies in a leader and an organization's climate has also been widely researched. Hay Group (2004) analyzed data on 3,781 executives from different institutions in London. The purpose of the study was to find out if there was a relationship between the working climate of employees and their perception of their leaders. The climate surveys of participants revealed correlation between the employees' perception of working climate and the emotional intelligence characteristics of the leaders. Research drawing on that same database sheds light on the role of emotional intelligence competencies in leadership effectiveness. Visionary, affiliative, democratic, and coaching leadership styles generally drive climate in a positive direction. Coercive and pacesetting leadership tend to drive climate downward, particularly when leaders overuse them, although either of these two can have positive impact if applied in appropriate situations.

In a study to further explore the relationship between emotional intelligence and full-range leadership as moderated by cognitive style and self-concept, Burbach (2004), collected data from 146 self-identified leaders and 649 raters in Nebraska. He used field study and examined the effect of an ability-based measure of emotional intelligence as a predictor of full-range leadership style. The moderating effects of leaders' cognitive style and direction of self-concept on the relationship between emotional intelligence and full-range leadership style were also examined. Data analysis revealed a significant predictive relationship between emotional intelligence and laissez-faire leadership and outcomes of leadership from raters' perceptions. A significant interaction was also found between direction of self-concept and emotional intelligence, while predicting transformational leadership, contingent reward leadership and outcomes of leadership from raters' perceptions.

The reviewed literature implies that integrated concept of emotional intelligence offers a theoretical structure for leadership style that is linked to leadership behavior and job performance. Transformational leadership style has been shown to relate to emotional intelligence in general and positively correlated with specific, resonant managerial styles, and negatively correlated to specific dissonant leadership styles. The concept of transformational leadership is applicable to learning institutions such as secondary schools, hence the need in this study to explore the level of emotional intelligence of principals who are expected to offer that leadership and direct students' learning programmes.

Studies have also revealed that emotional intelligence has been closely associated with improved workers' performance and job satisfaction. One of the studies that support this is the one undertaken by Sy, Tram and O'Hara (2006) who investigated the relationship among employees' emotional intelligence, their managers' emotional intelligence, employees' job satisfaction and employees' job performance in the food service industry. The sample was made up of 187 food service employees from 9 different locations of the same restaurant franchise.

The findings of the study were that employees' emotional intelligence was positively associated with job performance and satisfaction. In addition, managers' emotional intelligence had a stronger positive correlation with job satisfaction for employees with low emotional intelligence than for those with high emotional intelligence. A similar pattern was found for job performance. These findings suggest that managers' emotional intelligence makes a positive difference to employees who possess low emotional intelligence. These findings are supported by the study of Rego, Sousa, Cusha, Correla and Saur (2007), who examined the relationship between leaders' emotional intelligence and creativity of their teams. The researchers used a sample of 138 top and middle managers from 66 organizations operating in the European Union. Their findings suggest that emotionally intelligent leaders behave in ways that stimulate the creativity of their teams.

The study did not cover the leadership roles of principals in relation to their team building competencies. Yet teamwork in a school situation is

instrumental to success in implementation of school programmes. Principals of schools who are team leaders at their work places are required to embrace team building skills. In the current study, the researcher endeavored to fill this gap.

A study on Emotional Intelligence, New Critical Competence by Turknett Leadership Group retrieved from http://www.turknett.com/sectionr/eqforweb.pdf stated in their studies that emotional intelligence can be improved. They explained that managers who develop high levels of emotional intelligence have the relationship building skills that can create an organization that moves fast and solves problems quickly, and whose employees are committed and energized. Managers with high emotional intelligence think before acting. They are able to understand the needs of others, to read emotional reactions and to motivate through what is important to the other person. They are able to motivate themselves to achieve, and can inspire commitment and hard work from others even in difficult times. The studies referred to managers but secondary school principals were not covered in the studies. The current study explored the emotional intelligence of principals because of their leadership roles in schools.

2.10 Measurement Issues and Emotional Intelligence

Researchers and scientists see the intelligence quotient, as fixed, meaning that it does not change throughout one's lifetime. This is unlike emotional intelligence, which can be improved through a combination of life experiences, maturity, conscious thought, and perseverance (Goleman, 2004). Measures of emotional intelligence fall within either the ability or mixed models

and can take the form of either self-report, other-report or performance measures.

Self-report measures ask people to indicate the extent that a certain statement describes them. The accuracy of self-report depends on a person's self-understanding and self-concept. If the person's self-concept is inaccurate, a self-report measure may, in fact, be measuring the self-concept and not the true thoughts, behaviours, and attitudes of the individual (Mayer, Salovey Caruso, 2000). Other-report measures are also referred to as other-rater or informant measures. In other-report formats, individuals who are familiar with a person are asked to specify the extent that a certain statement describes that person. These measures are advantageous over the self-report measures because they are not a measure of self-concept. However, other-report measures have been criticized as a measure of a person's reputation and not their true self. They have also been found to be much less accurate when judging internal cognitive styles and capacities (Funder & Dobroth, 1987). Others believe that while self-report measures of emotional intelligence do provide a less direct measure, they avoid the inherent reliability and scoring problems associated with performance measures (Roberts, Zeidner & Matthews, 2001).

A third approach involves ability or performance measures. For example, to assess how well people perceive emotions in others, they might be shown faces of people who are experiencing various emotions and be asked to identify the emotion being experienced. Ability and performance measures are preferred by some researchers (Mayer et al, 2000).

Several validated assessment tools of emotional intelligence are mentioned in literature. One of them is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). It measures emotional intelligence as an array of abilities which include facilitating thought, perceiving understanding and managing emotions. The authors of the MSCEIT assert that the instrument is objective, ability-based, correlates with existing intelligences, and scores increase with age (Mayer & Geher, 1996).

The MSCEIT provides an overall emotional intelligence score as well as subscale scores for perception, facilitation, understanding and management. The advantage of using an ability measure of emotional intelligence, which is found in the MSCEIT, is the inability of a participant to fake or out-guess the instrument (Mayer et al, 2000). Another benefit of an ability measure is that it operationalises the concept of emotional intelligence, which places it at the same level with other intelligence measures.

Goleman (2000) has also developed a similar assessment based on his mixed-model known as the Emotional Competency Inventory (ECI 2.0) (Boyatzis, Goleman, & Hay McBer, 1999). The ECI 2.0 is a 360-degree tool designed to assess the emotional competencies of individuals and organizations. It is based on emotional competencies identified by Goleman (1998) and on competencies from Hay-McBer's Generic Competency Dictionary (1996) as well as Boyatzis's Self-Assessment Questionnaire (SAQ).

The ECI 2.0 measures 18 competencies organised into four domains of self-awareness, self-management, social awareness, and relationship

management. It takes approximately 30-45 minutes to complete the questionnaire. Internal consistency reliability of the instrument has been found to be good for others' ratings. The reliabilities range from .68 on transparency to .87 on emotional self-awareness, with an overall average reliability of .78. The reliabilities of the "self" rating ranged from .47 on conflict management to .76 on inspirational leadership, with an overall average reliability of .63.

Research shows the ECI 2.0 is related to outcomes such as an individual's life success (Sevinc, 2001), department performance (Nel, 2001), perceptions of leadership in a group (Humphrey, Sleeth & Kellet, 2001), sales performance (Lloyd, 2001), firefighting performance (Stagg & Gunter, 2002), softball coaches win or loss record (VanSickle, 2004) and parishioner satisfaction (Brizz, 2004). The ECI 2.0 scores measured individual emotional intelligence as reported by others resulting from observing actual behaviors practiced by leaders (Sala, 2002). These observations occur in the context of organizational and relational ambiguities and conflicts found in real work settings. Evaluation of emotional intelligence by others may be a more objective determination of competencies related to leadership than ability or self-scored instruments, as followers are the arbiters of a leader's effectiveness (Drucker, 1996).

The ECI 2.0 also shows good construct validity and is related to measures such as the Myers-Briggs Type Indicator (MBTI) sensing or intuiting and thinking or feeling dimensions, but not the introversion/extraversion and judging or perceiving dimensions as expected (Burckle, 2000). The ECI 2.0 is

correlated with affiliative and coaching leadership styles but not coercive and authoritative styles (Carulli & Com, 2003 as cited in Hay Group, 2004). Other research shows the ECI 2.0 is related to group emotional intelligence (Stubbs, 2005), and negatively related to irrational beliefs as hypothesized (Welpe, Tumasjan, Stich, Spörrle & Försterling, 2005). Byrne (2003) conducted an overall validity study of the ECI 2.0 using the self-scored version. He concluded that the instrument shows good construct, discriminant and criterion validity. In the current study, the researcher adapted and used ECI 2.0 instrument because of its high levels of reliability and validity.

2.11 Summary of literature reviewed

The reviewed literature indicated that emotional intelligence of leaders adds value to organizations including learning institutions. The findings of most of the reviewed literature were that there was a positive relationship between emotional intelligence of principals and students' academic achievements. However, none of the studies reviewed had addressed the relationship between emotional intelligence of principals and students' learning achievements in Kenya. While some studies revealed gender differences have an impact on emotional intelligence, results of others were that differences are not skewed to one gender. Reviewed literature also indicated that there was a positive relationship between emotional intelligence of principals and both their length of service and highest professional qualification while other studies did not reveal such a relationship. The reviewed literature indicated active participation of stakeholders in school issues. Results of the reviewed literature indicated that

self-rating of emotional intelligence yields higher scores than rating by others and therefore the need to combine the two types of rating in the current study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the research methodology that was used to generate and analyse data in the study. It details the research design, variables, population, sampling, instrumentation, data collection techniques, data analysis and logistical and ethical considerations. The chapter concludes with a summary of the statistical tests used in data analysis.

3.1 Research Design

This study adopted a correlational research design. Creswell (2002) defined correlational design as a statistical test to establish patterns for two variables. Correlational research method, examines the differences between the two characteristics of the study group. Bold (2001) noted that the purpose of a correlational design is to establish whether two or more variables are related. The design was used to establish relationships among the main variables in this study.

3.1.1 Research Variables

Emotional intelligence of the principals was treated as the independent variable. It has four main domains namely, self-awareness, self-management, social awareness and relations management. These domains consist a total of 18 competencies and each competence has 4 items which makes a total of 72 items.

Dependent variables included students' academic and co-curricular achievements. The participating schools were categorised into national, county

boarding and county day schools. Academic achievement was measured by examining the mean grades in KCSE for the sampled schools in 2008 and 2009. At the time of this study, the highest mean score according to rating by Kenya National Examinations Council (KNEC) was 12. Performance in co-curricular activities was assessed from records available in the participating schools and the Ministry of Education, in sports, games, music, drama and science. Schools that had participated at the school level only were assigned a score of one for each activity they participated in, while a score of three was assigned for each activity a school participated in at county level. A school that participated at national level was assigned a score of five for each activity that such a school participated in.

The other dependent variables that were addressed were principals' gender, length of service and professional qualifications. Length of service of principals was quantified in number of years that one had served as principal. The relationship between the emotional intelligence of principals and involvement of both the BOG members and parents' in students' learning achievements was also examined. Involvement of the BOG members was assessed by the number of meetings attended in a year and the activities they participated in, while the involvement of parents was assessed by the number of meetings they attended as a group and the activities they participated in.

3.2 Location of the Study

The study was carried out in Nairobi County, which was previously Nairobi Province. The choice of Nairobi County was informed by the fact that it is the capital city of Kenya. The cosmopolitan nature of the county attracts a population of principals, teachers and students of more diverse backgrounds and wider representation of all types of secondary schools in Kenya than any other county. In addition, a similar study had not been undertaken in the County.

3.3 Research population

The research population refers to the entire group a researcher is interested in and the one about which the researcher wishes to draw conclusions. The population of this study was made up of all the principals, deputy principals and heads of department, except those in charge of boarding in public secondary schools in Nairobi County, during the time of the study. Principals of public schools were the only ones targeted for this study because of uniformity in their identification and management of those schools, as compared to what pertains in private schools. The heads of departments in charge of boarding were not considered because some of the schools in the study were day schools and therefore did not have heads of department for boarding. The breakdown of the population was 71 principals, 71 deputy principals and 497 heads of departments at the time of the study.

3.3.1 Sampling Techniques

Purposive sampling was used to select Nairobi County because it is the county that attracts principals, teachers and students from most parts of Kenya.

According to Cohen and Manion (1994) in purposive sampling, researchers handpick the cases to be in the sample on the basis of their judgments of their typicality. Through this method, researchers build up a sample that is satisfactory to their specific needs.

In the current study, the researcher obtained a list of schools from the County education office, indicating the number of years each principal had served at the station. All the principals in public secondary schools in Nairobi, who had served in their current schools for a minimum period of four years in the post of principal, were eligible for the study. However, in order to raise the sample size the researcher included the principals who had served for a minimum period of two years. The deputy principals in all the sampled schools were sampled to act as other raters in scoring the emotional intelligence competencies of the principals. The deputy principals were considered on the basis of their close interaction with the principals and their involvement in students' affairs and the other stakeholders.

During the time of this study, secondary schools had a maximum of eight heads of departments. Seven out of eight heads of departments from each of the sampled schools were selected to serve as other raters in scoring the emotional intelligence competencies of principals. The heads of departments were considered appropriate for the study on the basis of the key positions they hold and because they interact with the principals more often than the other teachers. The departments that were considered were Languages; Sciences; Mathematics; Humanities; Technical and Creative Arts; Guidance and

Counseling; and Games, Clubs and Societies. The seven departments are directly related to students learning achievements unlike the department of Boarding which is applicable to boarding schools only.

Table 3. 1:

Sampling frame

	Population	**Sample Size**
Principals	71	35
Deputy Principals	71	35
Heads of departments	497	224

3.3.2 Sample Size

The size of the target or survey populations is not the most important question in determining sample size (Russell, 2002). Instead, the critical issue is the degree of precision needed in order to answer the question the researcher is asking. If the researcher is trying to determine the difference between two subpopulations, then the sample size will depend on the subtlety of the distinction and the level of significance and power. If the distinction between null and alternative hypotheses being tested is slight, sample size must be high. If the difference between null and alternative hypotheses is large, sample size can be smaller. In addition, the higher the statistical significance level and the higher the statistical power sought, the higher the sample must be (Rosner, 2000). If the researcher is trying to estimate a proportion based on a sample, then the sample size depends on the confidence level at which the researcher is estimating the proportion.

The sample size in the current study included 35 principals who had served in their current stations at the time of this study for a minimum of two years. The sample also included 35 deputy principals and 224 heads of departments from the same schools as the sampled principals. The total sample was 294.

3.4 Instrumentation

Adapted version of items from Emotional Competence Inventory (ECI 2.0) questionnaire by Goleman (2000) was used to assess the level of emotional intelligence of the principals. ECI 2.0 is a 360-degree tool designed to assess the emotional competencies of individuals and organizations. It is based on emotional competencies identified by Goleman (1998). The researcher was granted authority by the Hay Group to use ECI 2.0. The items were customized from the adapted questionnaire for principals, deputy principals and heads of departments. The three versions of the questionnaires were used as follows.

3.4.1 The Principals' Questionnaire

The identifying information in the principals' questionnaire captured the KCSE mean scores of the school in 2008 and 2009 (See Appendix I). The information obtained from the principals on academic achievements was verified with data from Kenya National Examination Council (KNEC). Information was also obtained from KNEC on performance of all public secondary schools in Nairobi County in 2008 and 2009. The researcher devised a criteria for categorizing the performance of the schools as below average, average and above average. This information is presented in table 3.2.

Table 3. 2:

KCSE performance rating

Category of School	Below average	Average	Above average
National schools	Below 8	8-9	9+
County Boarding schools	Below 6	6-7	7+
County Day schools	Below 5	5 -6	6+

According to table 3.2, the rating indicated that mean scores of below 5, 6 and 8 were regarded below average in county day, county boarding and national schools, respectively. Mean scores of between 5 and 6, 6 and 7 and 7 and 8 were categorized as average in county day, county boarding and national schools, respectively. The mean scores that were considered to be above average were 6+ for county day schools, 7+ for county boarding schools and 9+ for national schools.

The principals' questionnaire was for self- assessment of their emotional intelligence competencies and to also capture data on other administrative aspects of the school (See Appendix I). Data on gender of the principals, years of service as principals and highest level of professional qualifications, were extracted from their bio-data in part I of the same instrument. Information on categorization of schools under study into national, county boarding and county day schools was also obtained from the same part 1 of the instrument.

Part II of the same instrument had a total of 72 items that covered the four domains that were investigated in this study. These four domains are self-awareness, self-management, social awareness and relations management. The four domains consist of a total of 18 competencies and each competency has 4

items. The competencies included emotional self-awareness, accurate self-assessment, self-confidence, self-control, transparency, adaptability, achievement, initiative, optimism, empathy, organizational awareness, service, influence, transformational leadership; developing others, change catalyst, conflict management and teamwork and collaboration.

Each of the items on emotional intelligence competencies had five responses on a 5 point likert scale: never =1, rarely =2, sometimes=3, often=4, consistently = 5. Self-awareness and social awareness domains had three competencies each and each competence had four items with a maximum score of five for each item. Therefore the highest score for each of the domains of self-awareness and social awareness was 60. Self-management and relationship management had six competencies and each of the six competencies had 4 items with a maximum score of five for each item. Therefore self-management and relations management domains had a maximum of 120 each.

The ECI 2.0 technical manual (Hay Group, 2005) provides guidelines on how to rate the different emotional intelligence domains. Once all the items were scored, emotional intelligence levels of principals were rated as below average, average or high, based on the ECI 2.0 technical manual guidelines presented in table 3.3.

Table 3. 3:

Emotional intelligence score sheet guideline

Emotional Domain	**Below average**	**Average**	**High**
Self-awareness	0-29	30 – 45	46-60
Self-management	0-53	54 – 71	72-120
Social awareness	0-29	30 – 45	46-60
Relationship management	0-53	54 – 71	72-120

Part III of the principals' questionnaire captured responses on the frequency, support and involvement of the BOG members and the parents in school activities. There were eight items to capture the involvement of BOG members and another eight items for parents' involvement. Involvement in each item was rated five. The total score for the BOG involvement was 40 and so was the score of parents' involvement. The levels of involvement were scored and rated by the researcher as low, average or high. A score of 20 and below was regarded low while that of between 21 and 30 was considered average and the one above 30 was considered high.

Information on participation in co-curricular activities at national, county and school level was extracted from part IV of the principals' instrument and verified with records provided by the Ministry of Education. The researcher assigned scores based on the level of participation. Every activity that a school participated in at school level was assigned a score of one while participation in an activity at county level was assigned a score of three. A school which participated at national level in co-curricular activities was assigned a score of five per activity. In assigning the scores, the researcher considered that,

participation at national level requires more effort than participation at school and county levels. The researcher rated the participation as low, average or high. The total score for involvement was 40. A score of 20 and below was regarded low while that of between 21 and 30 was considered average and the one above 30 was considered high. The annual performance of each school for the last two years preceding the study provided an indication of improvement or decline index in co-curricular achievements of students.

Each of the items in self- awareness was assigned the lowest score of one and highest score of five. The four items in each competence were assigned a maximum score of 20 and minimum score of four. The maximum score for self-awareness domain was 60 while the lowest score was 12.

3.4.2 Deputy Principals' Questionnaire

The deputy principals filled the instrument which contained items for evaluating the principals' level of emotional intelligence (See Appendix II). They served as other raters. The instrument also contained items on involvement of BOG members and parents. The deputy principals filled the questionnaire to provide comparative information on data provided by the principals on school administration.

3.4.3 Heads of Departments' Questionnaire

The heads of departments also served as other raters. They filled the customized instrument to assess the level of emotional intelligence of principals in their schools (See Appendix III).

3.5 Pilot Study

Kiambu County was purposely sampled for piloting because the county is adjacent to Nairobi County. The research used pilot schools that were not in Nairobi County so as not to reduce the research sample of 35. Piloting was carried out in two public schools which were identified by use of simple random sampling. These schools did not form part of the research sample because they are not in Nairobi County which was the scope of the study. The pilot sample was made up of two principals, two deputy principals and 14 heads of departments. The main purpose of the pilot was to test and enhance reliability and validity of the research instruments. The piloting also served to check administrative logistics such as timing.

3.5.1 Reliability

According to Mugenda and Mugenda (1999) reliability refers to the degree to which a particular measuring procedure gives equivalent results over a number of repeated trials. Thus reliability deals with the stability and consistency with which the instrument yields the same information over different trials. This is an important aspect to resolve when dealing with an abstract construct, because the ability of any empirical indicator to measure such a concept is hardly ever perfect (Orodho, 2005). The average reliability rating of ECI 2.0, which is provided in the technical manual of the instrument, is .63 but since the instrument was adapted, it was piloted to inform the researcher on the reliability of the adopted instrument. Test re-test reliability procedure to test consistent capacity of each of the three versions of the instrument for the study

was done during piloting. The instruments were administered to the same pilot sample twice in an interval of two weeks. The researcher decided on the two weeks interval to avoid the impact of repetition and disuse by respondents. The two sets of scores obtained were used to calculate correlation coefficient which was .756 (See Appendix VII).

3.5.2 Validity

According to Orodho (2005), validity is concerned with the degree to which an empirical measure accurately measures what it purports to measure. Byne (2003) conducted an overall validity study of the EC1-2.0 using self-scored versions and concluded that the instrument shows good construct, discriminant and criterion validity. In the current study, all the 72 items in the ECI 2.0 were retained in the adapted version of the instrument. The adoption involved slight changes in wording to clarify the items without changing the meaning. Validity was further enhanced during piloting by the pilot respondents who provided valid comments and feedback on the wording of each of the items in the questionnaires after discussing with the researcher. The researcher then revised each of the items and worded them appropriately so that they would provide the required responses. Appropriate adjustments were made on the items in the ECI 2.0 instrument before it was administered to the research sample.

3.6 Data Collection Techniques

The researcher made arrangements with principals of the sampled schools and visited those schools to distributed questionnaires to the principals, deputy principals and heads of departments. The respondents were requested to

complete the questionnaires which were to be collected two weeks later. The period of two weeks was meant to give the respondents time to complete the questionnaires. The researcher visited the schools after two weeks and collected the completed questionnaires. The response rate was 100%. The researcher obtained records on the mean grade performance of the schools under study, in national examinations in the past two years, from Kenya National Examinations Council. In addition, information on performance of the schools in co-curricular activities at the national and county level were obtained from the Ministry of Education headquarters.

3.7 Data Analysis

Both qualitative and quantitative data was collected from the research instruments. Descriptive and inferential statistical procedures were used to analyse the data. Descriptive statistics such as means, percentages and standard deviation, were used to describe sample characteristics and were presented in frequency tables and figures. The inferential statistics used in data analysis were t-test, Spearman rank and Pearson moment correlation coefficient.

3.8 Null Hypotheses

The following hypotheses were tested at $p>0.05$:

Ho_1: There are no significant gender differences in emotional intelligence among principals. **Test: t –test for independent samples**.

Ho_2: There is no significant relationship between emotional intelligence of principals and the level of their academic qualifications.

Test: Spearman rank correlation

Ho_3: There is no significant relationship between emotional intelligence of principals and their length of time of service. **Test: Pearson product moment correlation**

Ho4: There is no significant relationship between emotional intelligence of Principals and students' academic achievements: **Test: Pearson product moment correlation**

Ho5: There is no significant relationship between emotional intelligence of principals and students' co-curricular achievements; **Test: Pearson product moment correlation**

Ho6: There is no significant relationship between emotional intelligence of principals and involvement of Board of Governors in students' learning achievements; **Test: Pearson product moment correlation**

Ho7: There is no significant relationship between emotional intelligence of principals and parents involvement in students' learning achievements; **Test: Pearson product moment correlation**

3.9 Logistical and Ethical Considerations

The researcher sought written authority from the National Council for Science and Technology, to visit and collect data from the schools. Once

authority was granted, written consent was sought from the respondents. The respondents were briefed on what the study entailed and the procedures to be followed. It was clarified to them that participation in the research was to be free from any coercion or benefits. The respondents were also assured of anonymity and confidentiality regarding all information given in the study.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter contains the findings of the study on the relationship between the emotional intelligence of principals and students' learning achievements in Nairobi County. It is divided into four sections. The first section deals with category of schools while the second section covers demographic information of the principals on gender, length of service as principals and their highest professional qualifications. Section three covers findings on the level of emotional intelligence of the principals under study. Section four covers findings on variables of students' academic and co-curricular achievements and involvement of both Boards of Governors and parents. The section also covers testing of the stated hypotheses.

4.1 School Category by Gender

The principals were asked to indicate the category of their schools. From their responses, the schools were categorized into national, county boarding and county day schools as shown in table 4.1.

Table 4. 1:

Category of Schools by Gender

	School category							
	National	%	County boarding	%	County day	%	Total	%
Boys	2	5.7	2	5.7	7	20.0	11	31.4
Girls	2	5.7	8	22.9	4	11.4	14	40.0
Mixed	0	0.0	1	2.9	9	25.7	10	28.6
Total	4	11.4	11	31.5	20	57.1	35	100.0

N=35

The study involved 35 secondary schools of which 4 (11.4%) were national, 11 (31.4%) county boarding and 20 (57.1%) county day. Majority of the schools, 20 (57.1%) involved in the study were county day schools. Most secondary schools in Nairobi County are day schools. This may be attributed to the fact that day schools are easily accessible due to good road network in the city and proximity of the schools to residential areas. It is further noted that out of the 11 (31.4%) county boarding schools under the study, 8 (22.9%) were girls' schools and only 2 (5.7%) were boys' schools. There was only one mixed boarding secondary school under study. The schools under study were made up of 11 (31.4%) boys', 14 (40%) girls' and 10 (28.6%) mixed schools.

4.2 Demographic Information of Principals

The researcher sought to find out general information from principals on their gender, age, length of service and professional qualifications.

4.2.1 Principals' Age by Gender

The respondents were asked to indicate their age and gender. The results are presented in table 4.2.

Table 4. 2

Principals' Age by Gender

Age in years	Male	%	Female	%
36- 40	-		1	2.9
41 - 45	4	11.4	2	5.8
46- 50	4	11.4	9	25.7
51- 55	7	20.0	6	17.1
56 and above years	0	0.0	2	5.8
Total	15	42.8	20	57.1

N=35

The principals under this study were made up of 20 (57.1%) females and 15 (42.8%) males. The higher number of females in the study compared to males was a reflection of the staffing situation in Nairobi County, where there are generally more female teachers than male teachers. In addition there were more girls' than boys' secondary schools in Nairobi. The information also indicates that all the male principals were aged between 41 and 55 years, with the highest number made up of 7 (20%) in the 51 to 55 age bracket. It was noted that 15 (42.8%) of the female principals were aged between 46 and 55 years, while only 2 (5.8%) were aged above 55 years.

The findings showed that female teachers took up leadership responsibilities when they were older than their male counterparts. The delay may be attributed to time taken to attend to family chores such as bearing and raising children. None of the male principals were in service after attaining the

age of 55. This may be attributed to the fact that male teachers usually change their careers, taking up other careers that remove them from the classroom situation. Most female teachers on the other hand, advance their careers in the school environment until they attain retirement age, and beyond.

4.2.2 Principals' Length of Service

The principals were asked to indicate the number of years they had served as principals. Their responses are presented in table 4.3.

.Table 4. 3:

Length of Service of Principals

Length of service	Frequency	%
1 – 5	13	37.1
6 – 10	13	37.1
11- 15	5	14.3
16 -20	3	8.6
21- 25	0	0.0
26- 30	0	0.0
31- 35	1	2.9
Total	35	100.0

N= 35

The results indicate that 13 (37.1%) of the sampled principals had served in the position of principal for a maximum period of five years. It is only 8 (25.9%) principals who had served for more than 10 years and 1 (2.9%) who had served for more than 30 years. The results were a pointer that most principals do not serve in the capacity of principal beyond 15 years. A possible explanation for this is that the schools are much fewer than those aspiring to be appointed principals. It therefore take long for one to be appointed principal and one might not have long to serve before attaining retirement age.

4.2.3 Principals Length of Service at Current Station

The researcher was also interested in the number of years each of the sampled principals had served at their current station. The principals were asked to provide information on their length of service in the capacity of principals in their current stations. The results are presented in table 4.4.

Table 4. 4

Principals Length of Service at Current Station

Number of years	Frequency	%
2	11	31.4
3	3	8.6
4	4	11.4
5	4	11.4
6	3	8.6
7	4	11.4
8	2	5.7
10	1	2.9
11	1	2.9
12	1	2.9
19	1	2.9
Total	35	100.00

N=35

The results in table 4.4 indicate that all the principals under study had served for at least two years in their current station. It is also noted that 21 (68.6%) of the principals had served for more than three years in their current station. From the findings, it is noted that most principals under study, had not served in their current station for more than four years. The results indicated high mobility rate among principals of the secondary schools under study.

4.2.4 Principals Highest Professional Qualifications

The researcher sought to find out from principals, their highest professional qualifications. Their responses are presented in table 4.5.

Table 4. 5:

Highest Professional Qualification of Principals

Highest professional qualification	Male	Female	Total	%
Diploma	0	1	1	2.9
B.Ed.	11	9	20	57.1
M.Ed.	4	10	14	40.0
Total	15	20	35	100

N=35

The results indicated that majority of the principals 20 (57.1%) had a Bachelor of Education (B.Ed.) while 14 (40.0%) had a Master of Education (M.Ed.) degree. However it is worth noting that more female principals had a M.Ed. compared to male principals. A plausible reason for this is that females are taking advantage of the awareness on equal opportunities in job allocation and are keen to improve their skills.

4.3 Levels of Emotional Intelligence among Principals

The main research question for this study was to find out the levels of emotional intelligence among the principals. In this study, emotional intelligence variable consisted of four domains namely, self-awareness, self-management, social awareness and relationship management. The Emotional Competence Inventory (ECI2.0) by Boyatzis, Goleman, and Hay/McBer (1999), was adopted and used by the principals to self-rate themselves while deputy principals and heads of department rated the principals. The principals were

asked to indicate their competencies on a five point likert scale. Deputy principals and heads of departments also evaluated the principals on the same scale.

The researcher scored and categorized the levels of emotional intelligence within the four domains as shown in table 3.2 in Chapter 3. Comprehensive descriptive statistical analysis was carried out for each domain. Analysis on the information provided by the respondents on self-awareness, self-management, social awareness and relationship management was presented in tables 4.6, 4.7. 4.8 and 4.9. Data on the levels of emotional intelligence was also descriptively analysed using mean and standard deviation.

4.3.1 Self-awareness Domain

Self- awareness involves self- knowledge in terms of one's feelings and emotions. The domain has three competencies namely, emotional awareness, accurate self-assessment and self-confidence. Each of the competencies has four items. Therefore the total number of items which were scored in the domain of self-awareness was 12. Principals were asked to assess the level of awareness of their own emotions, their ability to accurately assess themselves and the level of their self-confidence. Deputy principals and heads of departments were also asked to assess their principals on the three competencies in the self-awareness domain. Responses to each of three competencies were rated. The researcher compiled the scores obtained from the responses of the principals, deputy principals and heads of departments, in the three competencies under self-awareness domain and presented the findings in table 4.6

Table 4. 6:

Rating of Principals' Self- awareness Domain

Score	Principal self-rating	%	Deputy Principals rating	%	Heads of department rating	%	Level
12 – 29	0	0	1	2.86	5	2.2	Below Average
30 – 45	25	71.4	30	85.7	186	83.0	Average
46 -60	10	28.6	4	11.4	33	14.73	High
Total	**35**	**100.0**	**35**	100.00	**224**	100.00	

N=294

The analysis in table 4.6 indicates that 25 (71.4%) of the principals rated their level of self-awareness as average. The same rating of the principals' level of self-awareness was reported by 30 (85.7%) of the deputy principals and 186 (83.0%) of the heads of departments. It is only 1 (2.9%) deputy principal and 5 (2.2%) heads of departments, who rated the principals below average. The information also indicated that only 10 (28.6%) of the principals rated themselves high in self-awareness domain, a rating that 4 (11.4%) of deputy principals and 33 (14.7%) of the heads of departments were in agreement with.

The rating of principals in self-awareness domain may be attributed to capacity building programmes for principals of schools which do not include competencies of emotional self-awareness, accurate self-assessment and self-confidence. These three competencies empower an individual to interrogate their emotions and address those emotions accurately. Inability to identify ones emotions accurately inhibits one from addressing those emotions. In addition, failure by someone to identify her/his emotions accurately is likely to be picked

by other persons who closely interact with the person. In the current study, responses from most deputy principals and heads of departments indicated that the level of self- awareness among principals was average and below average. The findings of this study do not support the one by Cook (2006) who reported that the self- rating of principals on self- awareness domain was high.

4.3.2 Self-management Domain

Self-management domain had six competencies namely; emotional self-control, transparency, adaptability, achievement orientation, initiative and optimism. Each of the competencies had four items and therefore there were 24 items in this domain. The principals were asked to indicate their self-evaluation in this domain. In addition, deputy principals and heads of departments were asked to indicate their evaluation of the principals in this domain. The findings on the level of self-management competencies among principals are presented in table 4.7.

Table 4. 7:

Rating of Principals' Self-management Domain.

Score	Principal self-rating	%	Deputy Principals rating	%	Heads of department rating	%	Level
24 -53	0	0	0	0	4	1.8	Below Average
54 – 71	0	0	0	0	23	10.3	Average
72 – 120	35	100	35	100	197	88.0	High
Total	**35**	100	**35**	100	**224**	100.00	

N=294

All principals scored themselves highly in self-management domain. The scoring tallied with that of the deputy principals, who also rated the

principals highly. It is only 4 (1.8%) heads of department who rated their principals below average on this domain while 23 (10.37%) of them rated them average. In addition, it was also noted that 197 (88%) of the heads of departments rated their principals highly on this domain. The findings indicated that principals under this study rated themselves high and majority of them were also rated highly by both the deputy principals and heads of departments.

Principals of secondary schools interact with many stakeholders in performance of their duties. Stakeholders such as parents, sponsors of schools and employers, demand that principals perform their duties effectively. They therefore apply most competencies of self-management domain such as transparency, achievement orientation, adaptability and initiative, in order to meet the demands of their job. Application of the competencies of self-management domain by principals was evident from their rating by deputy principals and heads of departments. The findings on the self-rating of principals in self-management domain are not consistent with the findings of Marshall (2010), who reported that competencies of managing one's emotions, among principals were low.

4.3.3 Social awareness Domain

Social awareness domain had three competencies namely empathy, organizational awareness and service orientation. Each competency had four items. This domain had a total of 12 items. The principals were asked to rate themselves on this domain. The deputy principals and the heads of departments were also asked to rate the level of principals' competencies in this domain.

Each of the items in this domain had the lowest score of one and highest score of five. To establish the level of emotional intelligence in this domain the researcher was guided by the categorizations of the scores in table 3.2 in chapter 3. The researcher compiled the scores assigned by the respondents in the three competencies under social awareness and the findings were presented in the table 4.8

Table 4. 8:

Rating of Principals' Social Awareness Domain

Score	Principal self- rating	%	Deputy Principals rating	%	Heads of department rating	%	Level
12-29	0	0	1	2.9	8	3.6	Below Average
30 – 45	14	40	12	34.3	106	47.3	Average
46 – 60	21	60	22	62.9	11	49.1	High
Total	35	100	35	100	224	100	

N=294

According to the analysis of the scores in table 4.8, 1 (2.9%) deputy principal and 8 (3.6%) heads of departments rated their principals below average. The findings of the study also indicated that 14 (40%) principals rated their level of competency in this domain as average. The same rating was given by 12 (34.3%) deputy principals and 106 (47.3%) heads of departments. The analysis further indicates that 21 (60%) principals rated themselves above average in this domain. Approximately 63% of the deputy principals and 49% of the heads of departments also rated their principals high in this domain. It was noted that most of the principals were rated to have average and above average levels of emotional intelligence in social awareness domain.

The results of the study showed that the self-rating by the principals and the rating by deputy principals on level of social awareness domain did not have major variation. However the rating of the principals by heads of department on competencies of empathy, organizational awareness and service orientation were lower than the rating given by both the principals and heads of departments. This variance in scoring might have been attributed to preferential treatment in handling deputy principals as compared to heads of departments by principals. The finding on principals self-rating in this domain support the ones by Cook (2006) who reported that principals studied had scored themselves high in social awareness domain.

4.3.4 Relationship management Domain

The relationship management domain had six competencies namely developing others, inspirational leadership, change catalyst, influence, conflict management and teamwork and collaboration. The respondents were asked to rate the principals in this domain. Each of the items had the lowest score of one and highest score of five. The findings of the evaluation of the principals' level of relationship management are presented in table 4.9.

Table 4. 9:

Rating of Principals' Relationship management Domain

Score	Principal self-rating	%	Deputy Principals rating	%	Heads of department rating	%	Level
24 -53	0	0	1	1.9	6	2.7	Below Average
54 – 71	0	0	1	2.9	42	18.7	Average
72 – 120	35	100	33	94.3	176	78.6	High
Total	**35**	100	**35**	100	**224**	100.00	

N=294

The results in table 4.9 indicate that all the principals in this study scored themselves high in relations management domain. The rating by deputy principals also tallied with that of the principals. Only 6 (2.7%) heads departments rated the principals below average while 42 (18.7%) gave a rating of average. Majority of the heads of department (78.6%) rated their principals high in relationship management competencies.

While the principals under study did not score high in competencies of social awareness, the results of this study indicate that their level of relations management was high. A similar finding was noted in relation to self-awareness domain, where the scoring assigned to principals was low and the one for self-management was high. A plausible reason for this may be the inability of principals to identify emotions in themselves and in others.

The high scores assigned to the principals in relations management domain may be attributed to the demands of their job, which entail working with other stakeholders such as teachers, students, parents and members of Boards of Governors. Principals are also required to offer leadership and establish mechanisms to resolve conflicts. This requires them to apply competencies of teamwork and collaboration to get support from the stakeholders and to provide

a conducive working environment. The results of this study are consistent with that of Cook (2006), who found out that principals' rating in relations management domain was high.

4.4 Analysis on the Levels of Emotional Intelligence

The researcher was also interested in establishing the level of emotional intelligence among principals. This was established by using the descriptive statistics based on the data provided by the principals. The results of this are presented in table 4.10 and figure 4.1.

Table 4. 10:

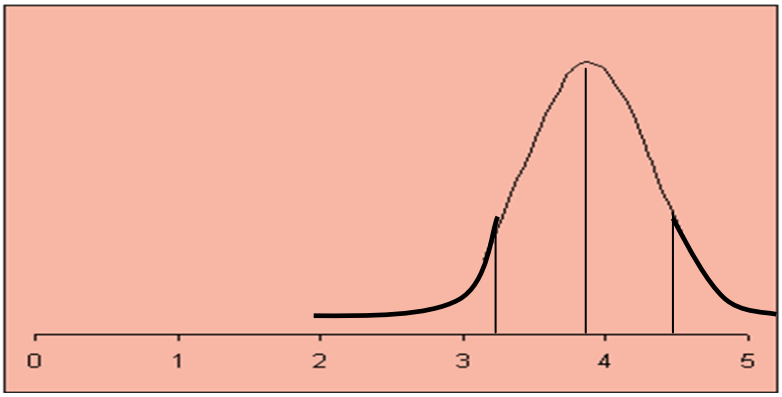
Principals' Self- rating in Emotional Intelligence

	N	Min	Max	Mean	std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Emotional intelligence mean Score	35	3.57	4.49	3.8758	.22814	.805	.398	.328	.778

N=35

Table 4.10 indicates that the overall mean for the survey item scores measuring principals' emotional intelligence is 3.88 and standard deviation is .22 on the 5-point likert scale, where five was the highest score. The results indicated that the principals in the study had above average mean score of 3.88.

Figure 4. 1: Principals' Self- rating Scores of Emotional Intelligence



m=3.88

Figure 4.1 shows the skewness and leptokurtic characteristics of principals' self- rating with the values presented in table 4.10. The coefficient of the data is sk = .805. Therefore the self-rating of the principals is negatively skewed. Kurtosis statistic is .328 which indicates a leptokurtic distribution.

The researcher was also interested in finding out how the principals scored themselves on each of the competencies of emotional intelligence and how their scores compared with those assigned by deputy principals and heads of departments. The findings were recorded in table 4.11.

Table 4. 11:

Rating of Principals' EI Level for each Competency

	Principals	Deputy	Heads of

ECI 2.0 Cluster	Competency	self- rating		Principals		Department		
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	unbiased mean
Self-awareness	Emotional awareness	4.12	0.49	3.89	0.67	3.52	0.72	3.84
	Accurate self-assessment	3.41	0.42	3.11	0.41	3.16	0.56	3.23
	Self-confidence	3.53	0.49	3.40	0.38	3.40	0.48	3.44
Self-management	Emotional self-control	3.76	0.51	3.59	0.41	3.53	0.59	3.63
	Transparency	4.36	0.43	4.03	0.62	3.74	0.92	4.04
	Adaptability	3.81	0.46	3.66	0.56	3.55	0.67	3.67
	Achievement orientation	4.28	0.48	4.42	1.17	3.82	0.81	4.17
	Initiative	3.14	0.59	3.26	0.36	3.38	0.58	3.26
	Optimism	3.86	0.42	3.61	0.47	3.58	0.61	3.68
Social awareness	Empathy	4.16	0.51	3.99	0.53	3.69	0.80	3.95
	Organizational awareness	3.99	0.42	4.24	0.70	3.94	0.88	4.06
	Service orientation	3.47	0.42	3.31	0.47	3.31	0.52	3.36
Relationship management	Developing others	4.45	0.45	4.31	0.53	4.04	0.95	4.27
	Inspirational leadership	4.54	0.40	4.27	0.80	3.86	0.94	4.22
	Change catalyst	3.56	0.43	3.36	0.56	3.47	0.61	3.46
	Influence	3.60	0.60	3.52	0.62	3.43	0.68	3.52
	Conflict management	3.74	0.49	3.56	0.77	3.39	0.77	3.56
	Team work and collaboration	3.98	0.31	4.12	0.76	3.85	0.85	3.98
Overall mean		**3.88**		**3.76**		**3.59**		

N=224

The highest unbiased mean based on principals' self- rating and rating by both the deputy principals and heads of department as shown in table 4.11, was 4.27 on the competence of developing others. It is also observed that the overall mean from the principals' self- rating of 3.88 was higher than the means derived from the scores given by both the deputy principals and the heads of departments which were 3.76 and 3.59 respectively.

The findings of the scores of the various categories of emotional intelligence competencies of principals revealed that emotional intelligence was an area that requires to be strengthened. This is because in some competencies the rating was three or below. This finding is consistent with that of Marshall (2010). One of the possible reasons why gaps were found in the emotional intelligence of the principals is that this construct is not included in either pre-service or in-service capacity building programmes for principals. In addition, the construct is not taught at school or post school level.

4.4.1 Emotional Intelligence Scores Based on Gender

The researcher sought to establish the gender differences among the sampled principals. An analysis of the mean scores of the principals' emotional intelligence, based on gender on each of the domains is presented in table 4.12.

Table 4. 12:

Principals' Emotional Intelligence Score based on Gender

Competencies	Gender	N	$\bar{X}$	S	SE
Emotional awareness	Male	15	4.15	0.52	0.14

	Female	20	4.10	0.48	0.11
Accurate self- assessment	Male	15	3.37	0.43	0.11
	Female	20	3.45	0.41	0.09
Self- confidence	Male	15	3.50	0.46	0.12
	Female	20	3.55	0.52	0.12
Emotional self- control	Male	15	3.82	0.50	0.13
	Female	20	3.73	0.53	0.12
Transparency	Male	15	4.50	0.33	0.08
	Female	20	4.25	0.47	0.10
Adaptability	Male	15	3.80	0.57	0.15
	Female	20	3.81	0.37	0.08
Achievement orientation	Male	15	4.45	0.37	0.10
	Female	20	4.15	0.52	0.12
Initiative	Male	15	3.12	0.46	0.12
	Female	20	3.15	0.69	0.15
Optimism	Male	15	4.02	0.43	0.11
	Female	20	3.80	0.21	0.05
Empathy	Male	15	4.07	0.50	0.13
	Female	20	4.24	0.51	0.11
Organizational awareness	Male	15	3.98	0.45	0.12
	Female	20	4.00	0.41	0.09
Service orientation	Male	15	3.43	0.31	0.08
	Female	20	3.50	0.50	0.11
Developing others	Male	15	4.42	0.46	0.12
	Female	20	4.48	0.45	0.10
Inspirational leadership	Male	15	4.60	0.31	0.08
	Female	20	4.49	0.46	0.10
Change catalyst	Male	15	3.63	0.38	0.10
	Female	20	3.51	0.48	0.11
Influence	Male	15	3.72	0.52	0.14
	Female	20	3.51	0.65	0.15
Conflict management	Male	15	3.72	0.52	0.13
	Female	20	3.76	0.48	0.11
Teamwork and collaboration	Male	15	4.05	0.22	0.06
	Female	20	3.95	0.27	0.06

N=35

The descriptive statistics in table 4.12 indicated that both male and female principals under this study had some slight differences in the mean and standard deviation in some of the competencies. This may be explained by the fact that emotional intelligence competencies are learnt and that both male and female principals were exposed to the same pre-service and in-service programmes.

4.4.2 Description of Emotional Intelligence Domains

The researcher also decided to undertake a descriptive analysis of the four domains of emotional intelligence. To do this, the mean score of the competencies under each domain as provided by the principals' self-rating and the rating by both the deputy principals and heads of departments, were used to arrive at the overall score of each domain. The analysis is presented in table 4.13.

Table 4. 13:

Emotional Intelligence Domain Overall Scores

EI domain	**Principals Self- rating**		**Rating by Deputy Principals**		**Rating by Heads of Department**	
	$\bar{X}$	**S**	$\bar{X}$	**S**	$\bar{X}$	**S**
Self-awareness	3.69	0.47	3.46	0.49	3.36	0.59
Self-management	3.87	0.48	3.76	0.60	3.60	0.70
Social Awareness	3.88	0.45	3.85	0.57	3.65	0.73
Relationship management	3.98	0.45	3.86	0.67	3.67	0.80
Overall mean score	3.85	0.46	3.73	0.58	3.57	0.70

N=294

Emotional intelligence overall mean scores indicate the mean and standard deviation of each of the 4 domains as reported by the principals, deputy principals and heads of departments. The overall mean scores in table 4.13 were calculated by averaging the mean scores. While noting that self-reports are not very dependable (Mayer, Salovey & Caruso, 2000), the researcher decided to include other raters. The results of the study indicated that principals rated

themselves slightly higher in the 4 domains, than the mean of the scores given by both the deputy principals and heads of departments.

The researcher sought to find out how the raw scores of each domain ranged within the given total scores in each competence studied. The findings are presented in table 4.14.

Table 4. 14:

Emotional Intelligence Aggregate Scores

	Principals		**DP**		**HODs**	
Domains	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
Self-awareness	44.26	3.70	41.57	3.70	40.33	5.05
Self- management	92.80	6.42	90.29	7.09	86.38	12.61
Social awareness	46.51	3.66	46.14	5.62	43.81	7.205
Relationship management	95.49	6.74	92.57	12.07	88.10	15.30

N=294

These scores were calculated by adding the individual scores for the competencies in each domain and the mean of the same was worked out. The descriptive analysis in table 4.14 indicates that the mean scores by the principals were 44.3, 92.8, 46.5 and 95.5 in self- awareness, self- management, social awareness and relationship management, respectively. However, the deputy principals rated the principals lower as indicated in the same table. Heads of departments scored the principals even lower than the scores presented by the deputy principals.

Overall, the findings indicated that principals rated themselves above average and were rated the same by majority of deputy principals and some heads of departments. These findings support those by Kathungu (2010), who

found the level of emotional intelligence of service providers in rehabilitation schools in Kenya to be above average.

4.5 Testing of the stated Hypotheses

The researcher tested the hypotheses on emotional intelligence of principals and their demographic information; students' academic and co-curricular achievements and involvement of the members of the Boards of Governors.

4.5.1 Gender Differences in Emotional Intelligence

The mean and standard deviation of emotional intelligence by gender is presented in table 4.15.

Table 4. 15:

Emotional Intelligence by Gender

Gender	N	Mean	Std.	Std. Error
Male	15	3.907	.289	.075
Female	20	3.852	.174	.039

N=35

The emotional intelligence mean score by gender gave the levels for males as m= 3.907 and females as m=3.852. The males in this study had a slightly higher level of emotional intelligence than females.

The researcher sought to ascertain whether there were gender differences in emotional intelligence of principals. To do that the following null hypothesis was forwarded: There are no significant gender differences in emotional intelligence among principals. The results are presented in table 4.16.

Table 4. 16**:**

Emotional Intelligence Independent Sample Test

		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Differenc	Lower	Upper
Emotional intelligence	Equal variances assumed	0.705	33	0.486	0.055	0.08	-0.104	0.215
	Equal variances not assumed	0.658	21.51	0.518	0.055	0.08	-0.119	0.230

p >0.05

An independent samples t-test was calculated comparing the mean score of emotional intelligence of females with the mean scores of the emotional intelligence of males. No significant difference was found (t (33) =0.705, p >0.05). The mean of females (M=3.852, SD=0.174) was not statistically significantly different from the mean of males (M=3.907, SD=0.289). The null hypothesis was retained.

The findings indicate that although emotional intelligence scores for males were slightly higher than those for females, the mean difference was not statistically significant. In particular, the findings indicate that females scored higher than males in self- awareness and social awareness domains, but males had a higher level in self- management and relationship management domains. The findings of this study support those of Bar-On (2000), who noted that although no differences appeared between males and females regarding overall emotional and social competence, females appeared to have stronger interpersonal skills than males. In addition, findings of the same study indicated that males had a higher intrapersonal capacity, and were better at stress

management and adaptability than females. More specifically, females were more aware of emotions and better able to relate interpersonally and act in a socially responsible manner than males. Males, on the other hand, appeared to have better self-regard, were more independent, coped better with stress, were more flexible and were more optimistic than females.

The findings of this study underscore the point that even though the construct includes the word emotional, it is not a female issue, which is a perceptual error that according to Marshall (2010) surrounds the construct. These findings of the current study do not support those of Chu (2002), whose study revealed that males have a higher level of emotional intelligence than females. A study by Petrides and Furnham (2003), found that men perceive themselves to possess higher emotional intelligence levels than women. The findings of this study also do not support other researchers such as Bhosle (1999), King (1999), Sutarso (1999), Wing and Love (2001) and Singh (2002), who reported that females have higher emotional intelligence levels than males.

4.5.2 Principals' Highest Levels of Professional Qualification

The researcher was also interested in the relationship between the emotional intelligence of principals and their highest level of professional qualification. To do this, the following null hypothesis was forwarded: There is no significant relationship between the E1 of the principals and their highest professional qualification. The results are presented in table 4.17.

Table 4. 17**:**

Correlation of EI of Principals and their Highest Professional

Qualifications

		Emotional intelligence	Highest professional qualification
Emotional intelligence	Correlation Coefficient	1	-.039*
	Sig. (2-tailed)	.	.825
	N		35

***p >0.05**

A spearman rho correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and their highest level of professional qualification. There was a negative low correlation between the two variables, r = - 0.039, n =35, p >0.05 which was not statistically significant between principals' emotional intelligence and their highest professional qualification. The null hypothesis was retained. This finding of the study supports the views of Goleman (1995), who explained that traditional training methods are based on cognitive learning which draws from different areas of the brain from emotional learning. The findings also support those of Hashemi (2008) who found no significant relationship between emotional intelligence of Iranian teachers and their professional qualification. A study in the same field by Kathungu (2010), found out that the mean emotional intelligence did not improve with higher levels of learning. This may be explained by the great emphasis attached to cognitive domain in learning, in comparison to affective domain.

4.5.3 Relationship between EI of Principals and their Length of Service

The researcher was interested in the relationship between emotional intelligence of principals and their length of service as principals. To ascertain this, the following null hypothesis was forwarded: There is no significant relationship between emotional intelligence of principals and their length of service. The results are presented in table 4.18.

Table 4. 18**:**

Correlation of EI of Principals and their Length of Service

		Emotional intelligence mean score	Length of service as principals
Emotional intelligence mean score	Pearson Correlation	1	-.219*
	Sig. (2-tailed)		.207
	N		35

p>0.05

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and their length of service as principal. There was a negative correlation between the two variables, r = -.219, n=35, p >0.05. The null hypothesis was retained.

A plausible reason for this finding is that the concept of emotional intelligence is not included in any of the capacity building programmes for serving principals regardless of their years of service. The finding supports that of Marshall (2010), who found that there was no statistically significant difference in the emotional intelligence scores of experienced and inexperienced principals. Aremu and Tella (2008), in a study on assessment of emotional

intelligence among Nigerian police officers, also found that length of service in the police force was not related to the emotional intelligence displayed.

4.5.4 Students' Academic Achievements

The principals were requested to indicate the mean score performance of their schools in KCSE in 2008 and 2009. The information was verified with records from KNEC. In order to analyse the findings on the KCSE results the researcher used the information in table 3.2 on the rating of schools per category. The mean scores of all the schools under study were analysed and the results presented in table 4.19.

Table 4. 19:

Mean Score for 2008 and 2009 KCSE for Participating Schools

	KCSE Index Number	No of streams	School type	National Schools	2008	2009	overall mean score	Rating
1	400003	5	Girls	Kenya High	10.2	10.23	10.22	Above average
2	400008	4	Boys	Moi Forces	7.89	8.73	8.31	Average
3	400004	6	Boys	Starehe Boys	10.75	10.7	10.73	Above average
4	400009	2	Girls	Starehe Girls	9.95	9.93	9.94	Above average
				County boarding Schools				
1	401084	4	Girls	Buru Buru Girls'	8.08	8.01	8.05	Above average
2	401002	5	Boys	Dagoretti High	6.96	7.27	7.12	Above average
3	401071	3	Mixed	Hospital Hill High	6.64	6.6	6.62	Average
4	401014	6	Girls	Moi Girls School Nairobi	8.64	8.65	8.65	Above average
5	401076	3	Girls	Nembu High	6.85	6.7	6.78	Average
6	401015	4	Girls	Ngara Girls' High	7.3	7.39	7.35	Above average
7	401017	6	Girls	Pangani Girls'	9.88	9.88	9.88	Above average
8	401018	3	Girls	Precious Blood	10.96	10.38	10.67	Above average
9	401079	5	Girls	St. George's Sec	8.65	8.38	8.52	Above average
10	401019	5	Girls	State House Girls	7.95	7.94	7.95	Above average
11	401009	5	Boys	Upper Hill School	7.84	8.07	7.96	Above average
				County day Schools				
1	401001	5	Boys	Aquinas High	6.44	6.08	6.26	Above average
2	401005	5	Boys	Highway Sec	5.89	5.62	5.755	Average
3	401003	6	Boys	Jamhuri High	5.61	5.58	5.595	Average
4	401063	3	Mixed	Kamiti Sec School	4.43	4.29	4.36	Below average
5	401091	3	Mixed	Kayole Sec School	4.43	4.52	4.475	Below average
6	401054	4	Mixed	Langata High	4.41	4.7	4.555	Below average
7	401062	3	Mixed	Kangemi Sec	3.9	4.43	4.165	Below average
8	401110	4	Mixed	Muhuri Muchiri	5.71	5.51	5.61	Average
9	401029	2	Mixed	Mutuini Sec School	3.68	4.28	3.98	Below average
10	401086	2	Boys	Nairobi Milimani	4.08	3.8	3.94	Below average
11	401197	2	Mixed	Ndururumo Sec	3.14	3.86	3.5	Below average
12	401022	4	Boys	Ofafa Jericho Sec	4.82	5.11	4.965	Average
13	401073	3	Mixed	Nile Road Sec	3.37	4.32	3.845	Below average
14	401088	4	Mixed	Our Lady of Fatima	5.84	6.23	6.035	Above average
15	401016	3	Girls	Our Lady Of Mercy	6.31	6.12	6.215	Above average
16	401011	4	Girls	Parklands Arya Girls	4.84	5.16	5	Average
17	401122	2	Girls	Ruthimitu Girls Sec	3.91	3.82	3.865	Below average
18	401008	3	Boys	St. Teresa's Boys	4.36	4.01	4.185	Below average
19	401090	2	Boys	Uhuru Sec School	3.91	4	3.955	Below average
20	401020	2	Girls	St. Teresa's Girls	5.4	5.59	5.495	Average

N=35

The KCSE results for the national, county boarding and county day schools under study were analysed and the information, which is presented in

table 4.19, indicates that most national schools in this study had above average score in the two years under study, based on the score sheet on table 3.2. The researcher also analysed KCSE mean scores of both boarding and county day schools. The findings on performance of the schools in the county boarding category, indicated that 9 (81.8%) of the schools had above average performance and only 2 (18.2%) schools had an average performance. None of the county boarding schools had below average performance. Performance of the county day schools was much lower than that of the county boarding schools. The findings revealed that 11 (55%) of the schools in the county day schools' category had below average score, and 7 (45%) of the schools registered a downward trend in their performance in 2009 compared to 2008. It is only 5 (30%) schools that had an average score, while 4 (15%) had above average score. In order to find the relationship between the emotional intelligence of principals and student academic achievement, the following null hypothesis was used: There is no significant relationship between the E1 of principals and student academic achievement. The results are presented in table 4.20.

Table 4. 20:

Correlation of EI of Principals and Students' Academic Achievement

		Emotional intelligence mean score	KCSE overall mean score
Emotional intelligence mean score	Pearson Correlation	1	-.298*
	Sig. (2-tailed)		.082
	N		35

***p>0.05**

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and student academic achievement. There was a negative correlation between the two variables which was not statistically significant, r = -.298, n=35, p >0.05. The null hypothesis was retained.

The researcher further decided to find out the relationship between emotional intelligence of principals and students' academic performance in national, county boarding and county day schools. To obtain that information, Pearson product-moment correlation based on performance of national, county boarding and county day schools was carried out. The results are presented in tables 4.21, 4.22 and 4.23, respectively.

Table 4. 21:

Correlation of Principals' EI and Student Academic Achievement in National Schools

		Emotional intelligence	KCSE overall mean score
Emotional intelligence	Pearson Correlation	1	.989*
	Sig. (2-tailed)		.011
	N		4

*** p<0.05**

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and student academic achievement in the national schools. There was a positive strong correlation between the two variables, r =0.989, n=35, p <0.05. The findings in this study indicate that there is a significant relationship between emotional intelligence of principals and students' academic achievement in national schools. This may be attributed to the fact that national schools admit students who attain very high grades in KCPE. In addition, national schools have adequate learning and teaching resources. The findings of this study show that in addition to a principals' level of emotional intelligence, interplay of other variables may affect academic achievement of students. Fall (2004) in a related study, found that emotionally intelligent principals are likely to lead schools that are considered to be effective.

Table 4. 22:

Correlation between EI of Principals and Students' Academic Achievement in County Day Schools

		Emotional intelligence mean score	KCSE overall mean score
Emotional intelligence mean score	Pearson Correlation	1	-.085*
	Sig. (2-tailed)		.723
	N		20

***p>0.05**

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and student academic achievement in county day schools. There was a negative low correlation between the two variables, r =.085, n=35, p >.05. The correlation was found to be negative and not statistically significant.

Table 4. 23:

Correlation between EI of Principals and Students' Academic Achievement in County Boarding School

		KCSE overall mean score	Emotional intelligence mean score
KCSE overall mean score	Pearson Correlation	1	-.053
	Sig. (2-tailed)		.878
	N		11

***p>0.05**

The researcher also computed the Pearson product-moment correlation coefficient to assess the relationship between the principals' emotional intelligence and student academic achievement in county boarding schools. There was a negative low correlation between the two variables, r =.053, n=35, p >.05. The correlation was found to be negative and not statistically significant.

Analysis of the data did not show any significant relationship between EI of principals and academic achievement of students in county boarding and day schools, where the academic performance in some schools was average and below average. This may be attributed to the fact that while national schools in Kenya are well endowed with both physical and human resources, which are key to the learning and teaching process, some county boarding schools and majority of county day schools, are constrained in terms of these enabling resources.

The findings in this study indicate that there is a significant relationship between emotional intelligence of principals and student academic achievement in national schools. This finding is supported by Andrew and Soder (1998), who after studying the relationship between principals' leadership and student academic achievements; found that principals do not have an effect on academic performance of students, especially on low-achieving students.

4.5.5 Students' Participation in Co-curricular Activities

The co-curricular activities that were considered in this study are music, drama, ballgames, athletics and science congress. The five co-curricular activities were considered because they are the most popular in public schools. The researcher was interested in the co-curricular activities that students participated in. To get that information, principals were asked to indicate the activities that students in their schools were involved in at national, county and school level in 2008 and 2009. Their responses were verified with records from the Ministry of Education. The multiple responses obtained from the principals on students' participation in co-curricular activities at national, county and school level during the period under study were recorded in table 4.24.

Table 4. 24:

Participation in Co- curricular Activities at National, County and School Level

National level	**Frequencies**

	2008		2009	
	Responses			
Activities	N	%	N	%
Music	31	88.6	29	82.9
Drama	18	51.4	18	51.4
Ballgames	27	77.1	27	77.1
Athletics	24	68.6	22	62.9
Science	24	68.6	23	65.7
Total	124	354.3	119	340.0
County level Frequencies				
Music	32	91.4	33	94.3
Drama	28	80.0	31	88.6
Ballgames	34	97.1	32	91.4
Athletics	28	80.0	28	80.0
Science	28	80.0	28	80.0
Total	150	428.6	152	434.3
School level Frequencies				
	N	%	N	%
School music	35	100.0	35	100.0
School drama	35	100.0	35	100.0
School ball	35	100.0	35	100.0
School athletics	35	100.0	35	100.0
School science	35	100.0	35	100.0
Total	175	500.0	175	500.0

N =35

The results in table 4.24 indicate that music attracted the largest number of entries in both 2008 and 2009. The entries were from 31 (88.6%) and 29 (82.9%) of schools, in 2008 and 2009 respectively. The activity which registered the least participation at national level in 2008 and 2009 was drama festivals. The schools which participated in this activity were 18 (51.4%). Athletics and science congress had equal participation of 24 (56.7%) of the schools in 2008. It was noted that over all, students participated actively in co-curricular activities at national level during the two years under study. A plausible reason for the

reported performance may be the commitment of principals to promote co-curricular activities in their schools.

The multiple responses from the principals on participation of their schools in co-curricular activities at county level were also recorded in table 4.24. Students from 34 (97.1%) schools in this study participated at the county level in ball games in 2008 and 33 (91.4%) in 2009. Music festivals had highest participation in 2009 from 33 (94.3%) schools. Participation in athletics and science congress was equal in 2008 and 2009 where 28 (80.0%) schools were involved. The results also indicate that participation rates at county level are higher than at national level. This may be attributed to the fact that competition in co-curricular activities at county level is less stiff than at national level.

The multiple responses from the principals on the co-curricular activities that students participated in at school level are also presented in table 4.24. The findings indicate that students from all the sampled schools participated in all the five co-curricular activities. This high participation may be because co-curricular activities at school level are part of every school's compulsory learning programme.

4.5.5.1 Achievement in Co-curricular Activities.

Information provided on participation in co-curricular activities at national, county and school level was rated. Responses of principals on the co-

curricular activities that students in their schools were involved in, were scored and the findings presented in table 4.25

Table 4. 25:

Scores in Co-curricular Activities at National, County and School Level

			2008			
Scores	National level	%	County level	%	School level	%
1-5	2	5.7	0	0	35	100
6-10	1	2.9	9	25.8	0	0
11-15	15	42.9	26	74.2	0	0
16-20	10	28.6	0	0	0	0
20-25	7	20	0	0	0	0
Total	35	100	35	100.0	35	100
			2009			
Scores	National level	%	County level	%	School level	%
1-5	2	5.7	0	0	35	100
6-10	4	11.4	5	14.3	0	0
11-15	15	42.9	10	28.6	0	0
16-20	7	20	20	57.1	0	0
21-25	7	20	0	0	0	0
Total	35	100.0	35	100	35	100

N=35

Performance of the schools under study at national level indicated that 15 (42.9%) schools in both 2008 and 2009 attained the highest scores of between 11 and 15. Only 7 (20%) of the schools attained a score of between 20 and 25 in both 2008 and 2009. The results indicate that in 2008, 9 (25.8%) of the schools participated in three activities at the county level, while 26 (74.2%) schools participated in more than three activities at county level. The scores for 15 (42.9 %) schools at national level in 2009 were within the range of 11 and 15. At the county level, 10 (28.6%) schools scored between 11 and 15, while 20 (57.1%) schools scored between 16 and 20. Participation at school level in co-

curricular activities is mandatory for every school that intends to participate at county or national level. This is because competition at school level serves to identify competing teams. Table 4.8 indicates that all the schools under study scored a maximum of 5 in co-curricular activities at school level.

4.5.5.2 Scores and Mean Scores in co-curricular activities

The overall scores of the schools were calculated by adding the national, county and school level total scores attained in 2008 and 2009. The findings are presented in table 4.26.

Table 4. 26**:**

Co-curricular Overall Scores

	2008		**2009**	
Score	Frequency	%	Frequency	%
25 – 29	6	17.1	6	17.2
30 – 34	5	14.3	6	17.1
35 – 39	14	40.0	13	37.2
40 – 45	10	28.6	10	28.6
Total	35	100.0	35	100.0

N= 35

The participation in co-curricular activities scores in 2008 indicate that 14 (40%) schools scored between 35 and 39. In the same year 10 (28.6%) schools scored between 40 and 45 which was the highest score. In 2009, 13 (37.2 %) of the schools scored between 35 and 39 while 10 (28.6 %) scored between 40 and 45. The mean scores were calculated and information presented in table 4.27.

Table 4. 27:

Co- curricular Mean Score

Mean score	Frequency	%
3.28	1	2.9
3.34	1	2.9
3.38	2	5.7
3.56	1	2.9
3.63	5	14.3
3.72	1	2.9
3.75	11	31.4
3.76	1	2.9
3.78	1	2.9
3.87	3	8.6
3.89	1	2.9
3.90	2	5.7
3.97	1	2.9
4.00	3	8.6
4.25	1	2.9
Total	35	100.0

N=35

Table 4.27 provides the mean scores of the performance in co- curricular activities for all the schools under study at national, county and school level in 2008 and 2009. The highest mean score was 4.25 and it was achieved by only one school.

4.5.5.3 Strategies to Promote Co-curricular Activities

Principals were asked to provide information on the strategies which they used to promote co-curricular activities in their schools. Their responses are presented in table 4.28

Table 4. 28:

Strategies to Promote Co-curricula Activities

Strategies	**2008**	**%**	**2009**	**%**
Allocated more time for practice	16	50.0	30	93.8
Organized inter and intra school competitions	30	93.8	16	50.0
Invested in equipment and facilities e.g. balls	31	96.9	16	50.0
Assigning a head of departments to be in charge of activities	35	100.0	35	100.0
Reallocating time for studies and co-curricular activities	16	50.0	35	100.0
Other measures	5	15.6	5	15.6

N=35

All the 35 principals under study reported that they assigned a head of department to be in charge of the co-curricular activities in both 2008 and 2009. This strategy ensured that co-curricular activities received the same attention as the academic subjects. In 2008, 31 (96.9%) of the principals had invested heavily in equipment and facilities for co-curricular activities in their schools as compared to 16 (50%) in 2009. One of the possible reasons that fewer principals invested in equipment in 2009 compared to those who did the same in 2008, is that equipment acquired in 2008 were likely to be in use in 2009. Approximately, 94% of the schools allocated more time for practice in co-curricular activities in 2009 compared to 50% who employed the same strategy in 2008. Principals who had not implemented this strategy in 2008, adapted it in 2009 because they expected that more practice in co-curricular activities would improve performance in the same. It is noted from the results in table 4.28, that

principals varied strategies to promote co-curricular activities in their schools during the two years under study.

The researcher was interested in finding out the relationship between the emotional intelligence of principals and co-curricular activities of students. The following null hypothesis was used: There is no significant relationship between the emotional intelligence of the principals and students' co-curricular achievements. The results are presented in table 4.29.

Table 4. 29:

Emotional Intelligence and Co-curricular Activities Correlations

		Emotional intelligence mean score	Co-curricular mean score
Emotional intelligence mean score	Pearson Correlation	1	.349*
	Sig. (2-tailed)		.040
	N		35

p<0.05

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and students' co-curricular achievements. There was a positive correlation between the two variables, r =0.349, n=35, p<0.05. The relationship between the two variables was statistically significant. The null hypothesis was rejected.

The finding of this objective was based on selected co-curricular activities namely ball games, drama, music festivals, science congress and athletics which the schools under study had participated in at school, county and national level. Analyses of the data indicated that there is a positive relationship between emotional intelligence of principals and co-curricular activities.

Whereas there is limited research on the relationship between emotional intelligence of principals and co-curricular activities of students, the field of relationship between academic achievements of students and co-curricular activities has attracted many studies. One of such studies by Ara & Rakhsi (2008), concluded that the overall effect of co-curricular activities on the students' academic performance and personality development is positive. They also found out that co-curricular activities compliment academic activities in attainment of education's main goal of bringing change in students' behaviour. In the current study the findings indicated that most principals employed emotional intelligence competencies in promoting co-curricular activities in their schools. For example all the principals assign a head of department to be in charge of the co-curricular activities. This portrays organizational awareness, influence, achievement orientation initiative and teamwork.

4.6 BOG Involvement in Students' Learning Achievement

The researcher sought to find out the level of involvement of Board of Governors in school matters. In order to capture that information, the principals and deputy principals were asked to indicate frequency of BOG meetings, level of attendance and the school activities that the BOG members were involved in.

4.6.1 Frequency of BOG Meetings

Principals and deputy principals were asked to indicate the number of BOG meetings held in 2009 and the members in attendance. Their responses are as shown in table 4.30

Table 4. 30:

Number of BOG Meetings

	Responses			
	Principals		Deputy principals	
Number of meeting(s)	Number of schools	%	Number of schools	%
2 meetings	1	2.9	1	2.9
3 meetings	9	25.7	16	45.7
More than 3 meetings	25	71.4	18	51.4
Total	35	100.00	35	100.00

N=70

The Ministry of Education regulates BOG meetings to a minimum of one every school term. The information provided by the principals and deputy principals indicated that 25 (71.4%) and 18 (51.4%) schools respectively, held more than the three mandatory BOG meetings. It is only one school that held two BOG meetings.

The results also indicate that there was a discrepancy in the information provided by principals and deputy principals regarding the number of meetings held in the sampled schools in a year. Convening of the mandatory meetings was in compliance with the law. Principals were also aware that failure to convene the meetings would have been raised by the members themselves.

The researcher was interested in the number of the members of BOGs who attended the meetings. To get this information, the principals and deputy principals were asked to indicate the meeting attendance by BOG members. Their responses are presented in table 4.31.

Table 4. 31:

Attendance of BOG Meetings

Number of members	Responses			
	Principals	%	Deputy principals	%
10 members(quorum)	12	34.3	16	45.7
More than 10 members	23	65.7	19	54.3
Total	35	100	35	100

N=70

Membership of a BOG of a secondary school at the time of the study, was 15. and 10 members in attendance made a quorum for a meeting. The results in table 4.31 indicate that all the principals reported that quorum for all the BOG meetings held was realized. The results also indicate that 23 (65.7%) principals reported that in most meetings, the attendance level surpassed the quorum. The information provided by the principals and deputy principals on attendance of BOG members within the quorum, tallied. The BOG members attend the meetings on invitation of the principal. The attendance of meetings by the BOG members may be attributed to the keen interest the members take in management of schools. In addition, failure to attend three consecutive meetings would lead to revocation of a member's appointment. The other reason that made the members attend the BOG meetings is that those meetings were convened by the principals

4.6.2 Involvement of BOG Members in School Matters

Principals and deputy principals were asked to indicate the activities that the BOG members were involved in to support the school. These activities included regular attendance of meetings; providing technical expertise and

skills; ensuring successful delivery of statutory curriculum; approval of annual estimates of income and expenditure and utilization of funds; discipline of teachers and students; recruitment of teaching and non-teaching staff and soliciting funds for the school. The researcher rated and computed the scores for the activities that the members of the BOGs were involved in. The scores are presented in table 4.32.

Table 4. 32**:**

Scores on Board of Governors Involvement

	Principal		**Deputy principal**		**Rating**
Score	**Frequency**	**%**	**Frequency**	%	Level
21-30	1	2.9	2	5.7	Average
31-40	34	97.1	33	94.3	High
Total	35	100.0	35	100.0	

N=35

The maximum score for BOG involvement was 40 and mean score was five. High involvement of BOG members in school activities with a score of between 31 and 40 was reported by 34 (97.1%) of principals and 33 (94.3%) of deputy principals. The level of involvement was reported to be above average by all the principals and deputy principals. The results are an indication that members of the BOGs did not only attend meetings but they were also active participants in school matters. The activities the members were involved in had an impact on students' learning achievements. The researcher was also interested in the mean scores of the involvement of members of Board of

Governors in school activities. The calculated mean scores are presented in table 4.33.

Table 4. 33:

Involvement Mean Scores of Board Governors

BOG involvement mean score		
Mean score	Frequency	%
3.38	2	5.7
3.63	3	8.6
3.68	1	2.9
3.69	1	2.9
3.70	1	2.9
3.73	7	20.0
3.74	3	8.6
3.75	11	31.4
3.78	1	2.9
3.79	1	2.9
3.88	2	5.7
3.95	1	2.9
4.02	1	2.9
Total	35	100.0

N= 35

Mean scores on involvement of members of BOGs ranged between 3.38 and 4.02 on a scale of 5. This is an indication that the involvement of members of BOGs in the schools under study was above average. Members from 11 (31.4%) of the schools had a mean score of 3.75. The highest mean score was 4.02 and it was attained by members from only one school.

Further, the researcher sought to establish the relationship between the emotional intelligence of principals and BOG involvement in students' learning achievement. To do this the following null hypothesis was used: There is no

significant relationship between emotional intelligence of principals and BOG involvement in students' learning achievement. The results are presented in table 4.34

Table 4. 34:

Correlations of Emotional Intelligence of Principals and BOG Involvement

		Emotional intelligence score	BOG involvement mean score
Emotional intelligence mean score	Pearson Correlation	1	.498*
	Sig. (2-tailed)		.002
	N		35

***p<0.05**

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and BOG involvement in students' learning achievements. There was a positive correlation between the two variables, r =0.498, n=35, p<0.05. The relationship between emotional intelligence of principals and participation of BOG members in students' learning achievements was statistically significant. The null hypothesis was rejected.

The results of this study are supported by Bishop (1985), Shiundu and Omulando (1992) and Olembo (1977), who emphasized that the BOG members can play a vital role in curriculum implementation. For the BOG members to contribute effectively, they need to be equipped with appropriate and relevant training. This can be achieved through intensive workshops, and a series of in-

service courses which are appropriate to provide the members with content on school programmes. The results also support the views expressed by Kindiki (2009).

The involvements of the BOG members in the schools activities are dependent on the initiative of the principal. The principal utilizes competencies of emotional intelligence such as initiative, inspirational leadership, transparency, organizational awareness and teamwork and collaboration, to enhance BOG involvement. The availability of the BOG members to participate in school activities may be explained by the fact that they are the managers of schools. Their involvement also depends on invitation by the principals.

4.7 Parents' Involvement in Students' Learning Achievement

The researcher was interested in finding out the involvement of parents in students' learning achievements. The principals and deputy principals were asked to indicate whether or not schools held annual general meetings. The responses are presented in table 4.35.

Table 4. 35**:**

Parents' Annual General Meeting (AGM)

	Principals		Deputy principals	
AGM	Frequency	%	Frequency	%
None held	4	11.4	1	2.9
Held	31	88.6	34	97.10
Total	35	100.0	35	100.00

N=35

The principals and deputy principals concurred that an annual general meeting is usually held in the schools under study. The responses from the principals and deputy principals indicated that 31 (88.6%) and 34 (97.1%) schools, respectively held an annual general meeting in 2009. There were only four principals and one deputy principal who did not indicate that an annual general meeting was held in their schools.

Principals and deputy principals were also asked to indicate the number of parents who attended the AGM, class meeting and prize giving days. Their responses are presented in table 4.36.

Table 4. 36**:**

Parents' Attendance of School Meetings

Parents' attendance of AGM			
Number of streams	Number of parents in attendance	Principals	Deputy principals
2	0 – 320	7	7
3	321 – 480	8	9
4	481 – 640	8	7
5	641 – 800	7	7
6	801 – 960	5	5
Total		35	35
Parents' attendance during class meetings			
2	201 – 400	8	8
3	401 – 600	9	9
4	601 – 800	7	7

5	801 – 100	7	7
6	1001 -1200	4	4
Total		35	35
Attendance of parents on prize giving days			
2	201 – 400	8	8
3	401 – 600	9	9
4	601 – 800	7	6
5	801 – 100	7	7
6	1001 -1200	4	5
Total		35	35

N=70

Information provided by the principals and deputy principals is an indication that most parents attend annual general meetings. The reported level of attendance is based on the number of streams in a school. Annual general meetings are crucial for each school because during such forums, parents deliberate and make resolutions on school projects and welfare issues of students. Parents attend the annual general meetings when they are invited by the principals to such meetings. Both principals and deputy principals concurred that there was a high number of parents who attended annual general meetings.

The researcher further sought information from principals and deputy principals on the number of parents who attended class meetings. The responses from principals and deputy principals were grouped based on the number of streams in each school and presented in table 4.36. Each of the schools under study had more than 200 students. The information provided by both the principals and deputy principals indicated that the level of parents' participation in class meetings was high and corresponded to the sizes of the schools. Class meetings are important forums which provide opportunities for parents and teachers to discuss the progress of individual students in the presence of the

pupils. Challenges faced by a student are discussed between the parent, teachers and corrective and support strategies are agreed upon. Implementation and monitoring mechanisms by both the parent and the teachers is specified.

The researcher was also interested in finding out attendance of parents during prize giving days, from both principals and deputy principals. Their responses are presented in table 4.36. Both principals and deputy principals reported that parents' attendance during prize giving days was high and corresponds to the size of schools. No school reported attendance of less than 200 parents. Six streamed schools, each with an average of 1,080 pupils reported parents' attendance of between 1,001 and 1,200. Prize giving days are important days within a school's calendar. It is during such forums that outstanding performers in both academic and co-curricular activities are rewarded in the presence of their parents. This serves as a motivation to the students. In addition, other students are challenged to work hard in anticipation that they would also be rewarded. Attendance of parents is an indication of the support they accord the schools and their level of involvement in their children's learning activities.

4.7.1 Participation of Parents in Management of School

The researcher was interested in finding out the activities that parents participated in to assist in school management. To obtain that information, principals and deputy principals were asked to indicate the activities that the parents were involved in, to support the school. The activities included, promoting student discipline, attending co-curricular functions such as sports days and school prayer days, participating in academic clinic days, prize giving

days, motivation of teachers and students, fund raising for the school and participating in discussions concerning the annual school budget. The scores derived from the responses of the principals and deputy principals and the mean of the same are presented in tables 4.37 and 4.38 respectively.

Table 4. 37:

Overall Scores of Parents' Involvement

	Principals		Deputy principals		Rating
Score	Frequency	%	Frequency	%	Level
21-30	1	2.9	2	5.7	Average
31-40	34	97.1	33	94.3	High
Total	35	100.0	35	100.0	

N=35

High involvement of parents in school activities was reported by 34 (97.1%) and 33 (94.3%) of the principals and deputy principals respectively. The results of the study indicated that parents participated in the school activities that enhance students' learning. This may be explained by the great expectation of parents that learning contributes to success of their children, economically and socially. In addition, parents are conscious of the fact that, even after secondary school education, children continue to be their (parents) responsibility. Parents' involvements mean score were calculated and recorded in table 4.38.

Table 4. 38:

Mean Scores of Parents' Involvement

Mean Score	Frequency	Percent
3.39	1	2.9
3.50	1	2.9

3.64	2	5.7
3.67	1	2.9
3.68	1	2.9
3.69	1	2.9
3.72	5	14.3
3.73	5	14.3
3.74	4	11.4
3.75	8	22.9
3.76	1	2.9
3.78	1	2.9
3.79	1	2.9
3.88	1	2.9
3.92	1	2.9
4.01	1	2.9
Total	35	100.0

N=35

In this study the researcher was also interested in finding out the relationship between the emotional intelligence of principals and parents' involvement in students' learning achievement. To do this, the following null hypothesis was used: There is no significant relationship between emotional intelligence of principals and involvement of parents in students' learning achievements. The results are presented in table 4.39.

Table 4. 39:

Emotional Intelligence of Principals and Parents' Involvement

Correlations

		Emotional intelligence mean score	Parents Involvement mean score
Emotional intelligence mean score	Pearson Correlation	1	.465*
	Sig. (2-tailed)		.005
	N		35

*** p<0.05**

A Pearson product-moment correlation coefficient was computed to assess the relationship between the principals' emotional intelligence and parents' involvement in students' learning achievements. There was a positive correlation between the two variables, $r = 0.498$, $n = 35$, $p < 0.05$. The relationship between emotional intelligence of principals and parents involvement in students' learning achievements, was statistically significant. The null hypothesis was rejected.

When parents monitor homework, encourage participation in co-curricular activities and active in parents-teacher associations, they complement the work of the teachers and in particular, the principal, in facilitating students' learning. Involvement of parents in the schools activities is dependent on the initiative of the principal. The principal utilizes competencies of emotional intelligence such as initiative, inspirational leadership, transparency, organizational awareness and teamwork and collaboration to win participation of parents. The findings of this study support those of Duncan (1992), who noted that principals are key contributors in helping parents and other educators to understand each other. Campbell (1995), clarified that the ultimate responsibility for creating harmony between the school and the home rests with the principal. In the same field of study Cotton and Wikelund (2005), found out that the more intensively parents are involved in their children's learning, the more beneficial the achievement effects.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMEN DATIONS

5.0 Introduction

This chapter summarizes the study findings of the relationship between principals' emotional intelligence and students' learning achievements in public secondary schools, in Nairobi County, Kenya. It provides the summary, conclusions, recommendations and further areas of research.

5.1 Summary of Findings

This section provides a summary of the results of the findings. The sample of the study was 35 principals who had served for a minimum period of two years. Other respondents in the study were 35 deputy principals and 224 heads of departments, from the same schools as the sampled principals. The study was conducted in four national, 11 county boarding and 20 county day secondary schools in Nairobi County.

On demographic information, the sample provided findings on gender, highest professional qualifications and duration of service of principals. The genders of the principals under study were 20 (57.1%) females and 15 (42.8%) males. All 15 (100%) male principals in this study were between 46 and 55 years of age as compared to 15 (75%) females in the same age bracket. Only two (5.8%) female principals were in service after attainment of 55 years. It was further noted that most male principals were within age bracket 51 to 55 as compared to the largest number of female principals, who were at the age

bracket of 46 to 50 years. Thus males took up responsibility of heading schools when they were younger than their female counterparts.

On professional qualifications, 20 (57.1%) of the principals had a B.Ed. as their highest level of qualification and 14 (40 %) had M.Ed. Only 1 (2.9%) of the principals had a Diploma. However, it was noted that 10 (28.6%) female principals had M.Ed. qualifications as compared to 4 (11.4%) male principals. The Spearman rho correlation was computed on emotional intelligence of principals and their highest qualifications. The findings revealed that there was a negative low correlation between the two variables which was not statistically significant. These findings agree with those of Keshni (2010), who did not find any significant relationship between emotional intelligence of principals and their professional qualifications.

The period of service of principals ranged between two and 35 years. Approximately, 13 (37%) of the principals had served for a maximum of five years in that post. Only 1 (2.9%) principal had served in that post for 35 years. To establish the relationship between emotional intelligence of principals and their length of service, Pearson product-moment correlation was computed which revealed that there was a negative low correlation that was not statistically significant. This finding supports that of Aremu and Tella (2006), who found out that length of service in the police force, is not related to the emotional intelligence of the police officers. This implies that the emotional intelligence of principals is not determined by the number of years of service.

Descriptive data analysis on the level of emotional intelligence of principals revealed several findings. Mean for the survey items measuring principals' emotional intelligence, ranged from 3.14 to 4.45 on the 5-point likert scale. The level of emotional intelligence of principals from self- rating was relatively high with a mean score of 3.9 which was negatively skewed. The principals' self- rating scores were slightly higher than their rating by the deputy principals and heads of department, which registered a mean score of 3.76 and 3.59, respectively. These findings are in agreement with those by Cook (2006), who found out that self-rating by principals on levels of emotional intelligence for self-awareness and social awareness domains was high.

In terms of gender differences in emotional intelligence among the principals, males had self-rating mean score of 3.9 which was slightly higher than 3.85 for females. Females had scored themselves higher than males in some domains. Female principals had a higher mean than males in self-awareness domain and social awareness domain at 3.7 and 3.91 respectively. The means from male principals' self-rating in self-awareness and social awareness domains were 3.67 and 3.82 respectively. Male principals rated themselves slightly higher than the rating of the females in self-management and relationship management domains. The t- test analysis revealed no significant difference in emotional intelligence between males and females. This finding agrees with that of Bar-On (1997), which indicated that, although there was no gender differences in emotional intelligence, females were stronger in some

competencies than males and males stronger in other competencies than females.

Data analysis on KCSE mean scores revealed that national schools had very high mean scores of 9.46 in 2008 and 9.74 in 2009, compared to county boarding schools, which had mean scores of 7.95 in 2008 and 7.89 in 2009. The mean scores for county day schools were relatively low, at 4.68 in 2008 and 4.76 in 2009. A Pearson product-moment correlation coefficient on emotional intelligence of principals and students' academic achievement, did not indicate any statistically significant relationship ($p>0.05$).

Further Pearson product-moment correlation coefficient was carried out on emotional intelligence of principals and students' academic achievements based on national, county boarding and county day schools. The findings revealed strong relationship between emotional intelligence of principals and academic achievement of students in national schools which was statistically significant ($p<0.05$). This finding supports that of Fall (2004), who found out that emotionally intelligent principals are likely to lead schools that are considered to be effective.

The findings did not reveal a significant relationship between the two variables in county schools ($p> 0.05$). The findings on the relationship between emotional intelligence of principals and students' academic achievement in county schools, is supported by Andrew and Soder (1998), whose study revealed that principals do not have an effect on performance of low achieving students.

Participation of students at national, county and school level in co-curricular activities in this study was based on five selected activities namely, ball games, drama, music, athletics and science congress. Students in all the schools participated in all the co-curricular activities at school level while students in 26 (74.2%) schools participated in three activities at county level. There were only 10 (28.6%) schools which entered students for four co-curricular activities at national level but generally, there was active participation of schools in the various co-curricular activities at all levels.

It was also reported that all the principals had assigned a head of department to be in charge of the co-curricular activities to provide leadership. In addition, 31 (96.9%) principals had invested in equipment and facilities for co-curricular activities in 2008 compared to 16 (50%) in 2009. It was further noted that all the principals under study allocated more time for co-curricular activities in 2009 than in 2008, when only 16 (50%) adapted the same strategy. However, in 2008, 30 (93.8%) principals promoted co-curricular activities in their schools, by organizing both intra and inter school competitions compared to 16 (50%) principals who adapted the same strategy in 2009.

A Pearson product-moment correlation coefficient on emotional intelligence of principals and students' achievements in co-curricular activities, revealed a significant relationship between the two variables ($p<0.05$). Principals involve members of Boards of Governors in the management of schools. Most schools held the mandatory three meetings, for the Board of Governors, while 25 (71.4%) schools exceeded that number. This implies that

the Board of Governors members in most of the schools participated actively in school activities during the period under study. A Pearson product-moment correlation coefficient was calculated for the relationship between emotional intelligence of principals and involvement of Board of Governors in students' learning achievements. The findings revealed a positive correlation which was significant, between emotional intelligence of principals' and involvement of members of BOGs in students' learning achievement ($p<0.05$). This finding is supported by Kindiki (2009), who found out that involvement of the BOG members in school activities is dependent on the initiative of the principal.

Principals also involved parents in the management of schools. Therefore most of the schools held annual general meetings, class meetings and prize giving meetings. Parents' attendance in these meetings was high. Principals indicated that parents are actively involved in the school activities. A Pearson product-moment correlation coefficient on emotional intelligence of principals and parents' involvement in students' learning achievements, indicated a statistically significant relationship ($p<0.05$). The finding is supported by Cotton and Wikelund (2005), who found out that the involvement of parents in school activities is dependent on the initiative of principals.

5.2 Conclusions

Several conclusions were drawn from the study on the relationship between emotional intelligence of principals and student learning achievement. Emotional intelligence levels of principals under this study were above average as shown by their own self rating and ratings by both deputy principals and

heads of departments. However, rating of emotional intelligence in the self-awareness domain ranged between average and below average. This rating was lower than the other three domains. Yet this is the domain of emotional intelligence that is directly linked to the principals' ability to cultivate a healthy and successful relationship with teachers, students and other stakeholders. It also provides the basis for all the other domains of emotional intelligence. Emotional intelligence of principals in self-awareness and social awareness domain, need to be enhanced.

There was a low correlation between principals' emotional intelligence and their highest professional qualification. Thus highest professional qualifications are not related to emotional intelligence levels of principals. Emotional intelligence of principals was not also correlated to the length of service. This shows that although a few principals had served for a long time in that post, length of service did not reveal corresponding increase in their emotional intelligence. In addition there was no significant relationship between emotional intelligence of principals and their gender. Therefore all principals, regardless of their professional qualifications, length of service and gender, are capable of improving their levels of emotional intelligence.

Emotional intelligence of principals was found to be correlated and statistically significant with students' academic achievements in national schools. This is attributed to the conducive learning and teaching environment. While the level of emotional intelligence of principals in county boarding and day schools was comparable to that of principals in the national schools, the

relationship between emotional intelligence of the principals and students' academic achievements in the county schools was not statistically significant. Different categories of schools vary in terms of entry qualifications of students and availability of learning and teaching resources. This is a pointer that, there are variables, other than emotional intelligence of principals, which have an impact on students' learning achievement. Emotional intelligence of principals and students' co-curricular achievements were significantly correlated. The emotional intelligence of principals has an impact on students' co-curricular activities.

Emotional intelligence of principals was found to be correlated with involvement of Board of Governors members and parents on students' learning achievements. Involvement of BOG members and parents in management of schools enhances motivation and discipline of students which in turn contributes to student learning achievements.

5.3. Recommendations

Based on the findings of this study several recommendations for policy makers, in-service programmes providers, researchers and principals are drawn and documented as follows:

i. Many studies have revealed that emotional intelligence of leaders of institutions contributes immensely to the success of institutions, including learning ones. In addition, emotional intelligence plays a critical role in managing one's emotions and the emotions of others. Considering the critical role that emotional intelligence of leaders of institutions plays in

management of those institutions, content on emotional intelligence should be incorporated in the in-service courses for serving and aspiring principals.

ii. Emotional intelligence can be learnt and improved. In view of its wide application, every person requires competencies in emotional intelligence to successfully deal with life's situations. One approach to expose many people to the concept is through education. In order to popularise the concept of emotional intelligence, it should be incorporated in the school and post school curricula for all levels of education.

iii. Effective delivery of educational content is facilitated by adequate preparation of the implementers and relevant support materials. KIE should develop curricular and curriculum support materials on emotional intelligence for students, teacher trainees and education managers. In addition, KIE should undertake orientation of implementers of that curricular.

iv. Most human resource recruitment processes depend on academic and professional qualifications and work experience of applicants. There is hardly any reference made to the interpersonal and intrapersonal skills of the applicants. Yet there is documented evidence that, while IQ enables a person to get to a position of responsibility, it is the level of emotional intelligence that enables a person to succeed in that position. The concept of emotional intelligence should be included in the criteria for identification and appointment of education managers to ensure that they have the skills required to undertake administrative duties.

v. The Teachers Service Commission which recruits teachers for public schools should recognize the training undertaken by principals on emotional intelligence, from accredited institutions and consider the certificates acquired for upward mobility. This will motivate teachers to acquire and continuously upgrade their competencies in emotional intelligence.

vi. Universities and other institutions of higher learning should include emotional intelligence among the general courses to be offered to all students. This will ensure that those who might have missed the concept at basic level of education are not left out.

vii. Monitoring of programmes in schools contributes to successful implementation of those programmes. Quality Assurance and Standards officers in the Ministry of Education should be trained on emotional intelligence competences and incorporate those skills when monitoring implementation of school programmes to ensure that the concept of emotional intelligence, if introduced in schools, is taught.

viii. The Ministry of Education should enhance effective implementation of co-curricular activities in schools to develop the psychomotor domain of learners.

ix. There is great disparity in provision of basic learning and teaching resources in the different categories of secondary schools. In order to improve quality of secondary level education, while ensuring equity and access, in provision of education, the Ministry of Education should work

towards providing every secondary school with basic learning and teaching resources.

5.5. Recommendations for Further Research

This study which was carried out to investigate the relationship between emotional intelligence of principals and students' learning achievement, seems to be the first study in Kenya on this field. The following areas of concern can be considered for further research:

i. There is need for a study on emotional intelligence of principals and the in-service courses undertaken by them.
ii. There is need for a study on emotional intelligence of principals and the parents' involvement in school issues.
iii. There is need for a study on emotional intelligence of principals and the teachers' and students' discipline issues.
iv. There is need for a study on the role of emotional intelligence of students and their learning achievement.
v. There is need for a study on quality of secondary school education in Kenya.

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APPENDICES

Appendix I: Principals' Questionnaire

Identifying Information:

1. School Size:_____
2. Mean Grade 2007_____
3. Mean Grade 2008_____
4. Mean Grade 2009 _____

This questionnaire has four parts. You are kindly requested to fill in all the sections taking into account the instructions given. The information provided will be treated with confidentiality.

PART I

Instructions

The purpose of this section is to request you to honestly provide the information that applies to you. Please tick (√) in the box where applicable.

Please fill and tick the information as appropriate.

1. Gender ☐ Males ☐ Female
2. Age (Years) ☐ 36 – 40 ☐ 41 – 45 ☐ 46 – 50 ☐ 51-55 ☐ 56+
3. . Size of your current school in streams _____
4. Category of school ☐ National ☐ County boarding ☐ County day
5. Length in service as a Principal _____years
6. Length of service as Principal in current station_____ years
7. Highest professional qualification ☐ Diploma ☐ B.Ed. ☐ M.Ed. ☐ Ph.D.

PART II: EMOTIONAL COMPETENCE INVENTORY

Instructions

The purpose of this test is to request you to assess your emotional intelligence tendencies and abilities.

Emotional intelligence here refers to your ability to understand your feelings and manage them well and also the ability to understand other peoples' emotions and to relate well with them. There are no right or wrong answers. Please tick (√) in the box that best describes your honest decision with the statement on the scale of Never, Rarely, Sometimes, Often, or Consistently.

Item		**Never**	**Rarely**	**Sometimes**	**Often**	**Consistently**
1	I recognize the situations that arouse strong emotions in me					
2	I operate from the hope of success rather than fear of failure					
3	I initiate actions to improve performance					
4	I anticipate obstacles that may slow achievement of a goal					
5	I am reluctant to change or make changes to school traditions					
6	I have no sense of humour about myself					

Item		Never	Rarely	Sometimes	Often	Consistently
7	I encourage others' participation in school affairs					
8	I give constructive feedback to students					
9	I adapt ideas based on new information					
10	I set measurable and challenging goals					
11	I solicit inputs of both students and teachers in school matters					
12	I take calculated risks to reach a set goal					
13	I believe that the future will be better than the past					
14	I encourage teachers to acquire additional skills					
15	I look for feedback even if it is hard to hear					
16	I reflect on underlying reasons for my feelings					
17	I am available to serve students and teachers					
18	I handle difficult people and tense					

Item		Never	Rarely	Sometimes	Often	Consistently
	situations with diplomacy and tact					
19	I relate well with people of diverse backgrounds					
20	I make work exciting					
21	I am defensive when receiving feedback					
22	I bring up ethical concerns in performance of my duties					
23	The call of duty takes priority over teachers' personal issues					
24	I stay composed and positive, even in trying moments					
25	I lead by example					
26	I act on my own values when it is convenient for me to do so					
27	I know how my feelings affect my actions					
28	I strive to spot potential conflict between the students and school administration and bring disagreements into the open					
29	I inspire other people					

Item		Never	Rarely	Sometimes	Often	Consistently
30	I apply standard procedures on all issues					
31	I am not decisive on issues that I am uncertain about or when I am under pressure					
32	I monitor students' satisfaction					
33	In a conflict, I find a position everyone can endorse					
34	I fine tune presentations to appeal to my audience					
35	I articulate need for change					
36	I advocate change despite opposition					
37	I get impatient or express frustration when situations are not in my favour					
38	I recognize specific strengths of students and nurture them					
39	I understand informal structure in the school					
40	I behave calmly in stressful situations					
41	I support initiatives that bring about change					
42	I seek support from key people in					

Item		Never	Rarely	Sometimes	Often	Consistently
	performance of my duties					
43	I understand the school's unspoken rules					
44	I keep my promises					
45	I understand historical reasons for some of the traditions in the school					
46	I find it expensive to improve working environment at the school					
47	I acknowledge my mistakes and confront unethical issues in others					
48	I present myself with confidence					
49	I handle unexpected demands with reservation					
50	I articulate a compelling vision for the school					
51	I do not consider opinions of every stakeholder in the school					
52	I seek ways to improve performance					
53	I acknowledge my own strengths and weaknesses					
54	I can see things from someone else's point of view					

Item		Never	Rarely	Sometimes	Often	Consistently
55	I believe I am capable of an assignment given to me					
56	I bend rules when necessary to get a job done					
57	Failure of achievement discourages me					
58	I depend only on official support in managing the school I head					
59	I persuade students by appealing to their self- interest					
60	I react to situations as they are presented to me					
61	I do not cooperate with others on tasks I can achieve on my own					
62	I doubt my own ability in tackling new tasks					
63	I do not entertain students who have discipline tendencies					
64	I find the current performance of this school to be at its highest point					
65	I establish and maintain close relationships at work					

Item		Never	Rarely	Sometimes	Often	Consistently
66	I hesitate to act on opportunities that are not familiar to me					
67	I deal with students on basis of adherence to school rules					
68	I always know which emotions I am feeling and why					
69	I change overall strategy, goals, or projects to fit a situation					
70	I do not pursue goals beyond what is required or expected of me					
71	I am attentive to peoples' moods or nonverbal cues					
72	I regard setbacks as due to personal flaws and not unmanageable circumstances					

PART III: INVOLVEMENT OF BOG MEMBERS AND PARENTS

The purpose of this part is to request you to provide information on the involvement and support of the Board of Governors members and parents to the school.

a)Attendance of meeting by BOG members.

Please tick (√) what is applicable in (i), (ii) and (iii), below.

i)How many BOGs meetings have you held in the last one year?

2 ☐ 3 ☐ 3+ ☐

ii) How many BOGs members on average attend these meetings?

Less than 5 ☐ 6-10 ☐ 11- 15 ☐

iii) Were the BOG members involved in the following?

Rate the BOGs involvement and support in the school matters and issues. Use the rating of either 'Involved' or 'partially involved'

Please tick (√) in the box that best describes the involvement of the BOG members.

	Items	**Involved**	**Partially Involved**
1.	Regular attendance of meetings		
2.	Providing technical expertise and skills		
3.	Making sure that the statutory curriculum is successfully delivered		
4.	Preparation of annual estimates of income and expenditure		
5.	Approving utilization of funds		
6.	Discipline of teachers and students		
7.	Recruitment of teaching and non-teaching staff		
8.	Soliciting funds for the school		

i) Please fill in the table below

a) **Attendance of meetings by parents**

Type of Meeting	No. of times during the term/year	No. of parents in attendance
AGM		
Class Meeting		
Prize Giving Day		
Others (specify)		

ii) Please consider all questions and tick (√) in the box that best describes the parents' involvement.

	Involved	partially Involved
1) Promoting student discipline		
2) Attending co-curricular activities functions		
3) Participating in academic clinic days		
4) Attending school prayer days		
5) Participating in prize giving days		
6) Participate in motivation of teachers and students		
7) Participating in fund raising for the school.		
8) Participating in the discussions concerning the annual school budget.		

PART IV: CO-CURRICULAR ACTIVITIES

2) Which of the following co-curricular activities did your school participate in 2008 and 2009?

i) National level

2008		2009
Music festivals	□	Music festivals
Ball games	□	Ball games
Athletes	□	Athletes
Science congress	□	Science congress
Drama festivals	□	Drama festivals

At county level

2008		2009
Music festivals	□	Music festivals
Ball games	□	Ball games
Athletes	□	Athletes
Science congress	□	Science congress
Drama festivals	□	Drama festivals

i) At school level

2008	2009
Music festivals	Music festivals
Ball games	Ball games
Athletes	Athletes
Science congress	Science congress
Drama festivals	Drama festivals

2) What strategies did you put in place in 2008 and 2009 to promote co-curricular activities in your school?

a. Allocated more time for practice

b. Organized inter and intra school competitions

c. Invested in equipment and facilities e.g. balls

d. Assigning a head of departments to be in charge of activities

e. Reallocating time for studies and co-curricular activities

f. Others (Specify)_____

Thank you.

Appendix II: Deputy Principals Questionnaire

This questionnaire has three parts; you are kindly requested to fill in all the sections taking into account the instructions given. The information provided will be treated with confidentiality.

PART I

Instructions

The purpose of this section is to request you to honestly provide the information that applies to you. Please tick (√) in the box.

Please tick the information that applies to you.

1. Gender- Males ☐ Female ☐

2. Age(Years) 31 – 35 ☐ 36 – 40 ☐ 41 – 45 ☐ 46 – 50 ☐ 51- 55 ☐ 56+ ☐

3. Size of your current school in streams 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐

4. Category of school -National ☐ County boarding ☐ County day ☐

5. Length in service as a Deputy Principal _____ years

6. Period of service as Deputy Principal in current station _____ years

7. Highest professional qualification – Diploma ☐ B.Ed. ☐ M.Ed. ☐ Ph.D. ☐

PART II: EMOTIONAL COMPETENCE INVENTORY

Instructions

The purpose of this test is to request you to assess the emotional intelligence of your principals' tendencies and abilities. **Emotional intelligence** here refers to a person's ability to understand his/her feelings and manager them well and also the ability to understand other people's emotions and to relate well with them. Please tick (√) in the box that best describes your honest decision with the statement made on your Principal. Use the following scale of: Never, Rarely, Sometimes, Often and Consistently

ITEM		Never	Rarely	Sometime	Often	Consistently
1	Recognizes the situations that arouse strong emotions in him/ her					
2	Operates from the hope of success rather than fear of failure					
3	Initiates actions to improve performance					
4	Anticipates obstacles that may slow achievement of goals					
5	Is reluctant to change or make changes to school traditions					
6	Has no sense of humour about himself/herself					
7	Encourages others' participation in school affairs					
8	Gives constructive feedback to student					
9	Adapts ideas based on new information					
10	Sets measurable and challenging goals					
11	Solicits inputs of both students and teachers in school matters					
12	Takes calculated risks to reach a set goal					
13	Believes the future will be better than the past					
14	Encourages teachers to acquire additional skills					
15	Looks for feedback, even if it is hard to hear					
16	Reflects on underlying reasons for his/her feelings					

ITEM		Never	Rarely	Sometime	Often	Consistently
17	Makes himself/herself available to serve students and teachers					
18	Handles difficult people and tense situations with diplomacy and tact					
19	Relates well with people of diverse backgrounds					
20	Makes work exciting					
21	Is defensive when receiving feedback					
22	Brings up ethical concerns in his/ her performance of duty					
23	The call of duty takes priority over teachers' personal issues					
24	Stays composed and positive, even in trying moments					
25	Leads by example					
26	Acts on own values when it is convenient for him/her to do so					
27	Knows how his/her feelings affect his/her actions					
28	Strives to spot potential conflict between the students and school administration and bring disagreements into the open					
29	Inspires other people					
30	Applies standard procedures on all issues					
31	Indecisive on issues that he/she is uncertain about or when he/she is under pressure					
32	Monitors students' satisfaction					

ITEM		Never	Rarely	Sometime	Often	Consistently
33	In a conflict, finds a position everyone can endorse					
34	Fine-tunes presentation to appeal to his/her audience					
35	Articulates need for change					
36	Advocates change despite opposition					
37	Gets impatient or shows frustration when situations are not in his/her favour					
38	Recognizes specific strengths of students and nurtures them					
39	Understands informal structure in the school					
40	Behaves calmly in stressful situations					
41	Personally supports initiatives that bring about change					
42	Seeks support from key people in performance of his/her duties					
43	Understands the school's unspoken rules					
44	Keeps his/her promises					
45	Understands historical reasons for some of the traditions in the school					
46	Finds it expensive to improve working environment in the school					
47	Acknowledges his/her own mistake and confront unethical issues in others					
48	Presents him/herself with confidence					
49	Handles unexpected demands with reservations					

ITEM		Never	Rarely	Sometime	Often	Consistently
50	Articulates a compelling vision for the school					
51	Considers opinion of every stakeholder in the school					
52	Seeks ways to improve performance					
53	Acknowledges own strengths and weaknesses					
54	Can see things from someone else's point of view					
55	Believes he/she is capable of leadership roles					
56	Bends rules when necessary to get a job done					
57	Is discouraged by failure of achievement					
58	Depends only on official support in managing the school					
59	Persuades students by appealing to their self- interest					
60	Reacts to situations as they are presented to him/her					
61	Cooperates with others on tasks he/she can achieve on his/her own					
62	Doubts his/her own ability in tackling new tasks					
63	Entertains students with discipline tendencies					
64	Considers this school to have achieved its best in performance					
65	Establishes and maintains close					

ITEM		Never	Rarely	Sometime	Often	Consistently
	relationships at work					
66	Hesitates to act on new opportunities which are not familiar to him/her					
67	Deals with students on basis of adherence to school rules					
68	Always knows which emotions he/she is feeling and why					
69	Changes overall strategy, goals, or projects to fit a situation					
70	Pursues goals beyond what is expected or required of him/her					
71	Is attentive to peoples' moods or nonverbal cues					
72	Regards setbacks as due to his/her personal flaws and not unmanageable circumstance					

PART III: INVOLVEMENT OF BOG MEMBER AND PARENTS

The purpose of this part is to request you to provide information on the involvement and support of the Board of Governors members and parents to the school.

a)Attendance of meeting by BOG members.

Please tick (√) what is applicable in (i), (ii) and (iii), below.

i)How many BOGs meetings have you held in the last one year?

1 ☐ 2 ☐ 3 ☐ 3+ ☐

ii) How many BOGs members on average attend these meetings?

Less than 5 ☐ 6-10 ☐ 1- 15 ☐

(b) Rate the BOGs involvement and support in the school matters and issues. Use the rating of either 'Involved' or 'Partially Involved'

Please tick (√) in the box that best describes the involvement of the BOG members.

Items		Involved	Partially Involved
1.	Regular attendance of meetings		
2.	Providing technical expertise and skills		
3.	Making sure that the statutory curriculum is successfully delivered		
4.	Preparation of annual estimates of income and expenditure		
5.	Approving utilization of funds		
6.	Discipline of teachers and students		
7.	Recruitment of teaching and non-teaching staff		
8.	Soliciting funds for the school		

b)Attendance of meetings by parents

i)Please fill in the table below

Type of Meeting	No. of times during the term/year	No. of parents in attendance
AGM		

Class Meeting

Prize Giving Day

Others (specify)

Thank You.

Appendix III: Heads' of Departments Questionnaire

This questionnaire has two parts; you are kindly requested to fill in all the sections taking into account the instructions given. The information provided will be treated with confidentiality.

PART I

Instructions

The purpose of this section is to request you to honestly provide the information that applies to you. Please tick (√) in the box.

Please tick the information that applies to you.

1. Gender Males ☐ Female ☐

2. Age (Years) 31 – 35 ☐ 36 – 40 ☐ 41 – 45 ☐ 46 – 50 ☐ 51- 55 ☐ 56+ ☐

3. Size of your current school in streams 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 6+ ☐

4. Category of school ☐ National ☐ County boarding ☐ County day

5. Length in service as a Head of Department _____ years

6. Period of service as Head of Department in current station _____ years

7. Highest professional qualification – Diploma ☐ B.Ed. ☐ M.Ed. ☐ Ph.D. ☐

PART II: EMOTIONAL COMPETENCE INVENTORY

Instructions

The purpose of this test is to request you to assess the emotional intelligence of your principals' tendencies and abilities. **Emotional intelligence** here refers to a person's ability to understand his/her feelings and manager them well and also the ability to understand other people's emotions and to relate well with them. Please tick (√) in the box that best describes

your honest decision with the statement made on your Principal. Use the following scale of: Never, Rarely, Sometimes, Often and Consistently.

ITEM		Never	Rarely	Sometime	Often	Consistently
1	Recognizes the situations that arouse strong emotions in him/ her					
2	Operates from the hope of success rather than fear of failure					
3	Initiates actions to improve performance					
4	Anticipates obstacles that may slow achievement of goals					
5	Is reluctant to change or make changes to school traditions					
6	Has no sense of humour about himself/herself					
7	Encourages others' participation in school affairs					
8	Gives constructive feedback to student					
9	Adapts ideas based on new information					
10	Sets measurable and challenging goals					
11	Solicits inputs of both students and teachers in school matters					
12	Takes calculated risks to reach a set goal					
13	Believes the future will be better than the past					
14	Encourages teachers to acquire additional skills					
15	Looks for feedback, even if it is hard to hear					
16	Reflects on underlying reasons for his/her					

ITEM		Never	Rarely	Sometime	Often	Consistently
	feelings					
17	Makes himself/herself available to serve students and teachers					
18	Handles difficult people and tense situations with diplomacy and tact					
19	Relates well with people of diverse backgrounds					
20	Makes work exciting					
21	Is defensive when receiving feedback					
22	Brings up ethical concerns in his/ her performance of duty					
23	The call of duty takes priority over teachers' personal issues					
24	Stays composed and positive, even in trying moments					
25	Leads by example					
26	Acts on own values when it is convenient for him/her to do so					
27	Knows how his/her feelings affect his/her actions					
28	Strives to spot potential conflict between the students and school administration and bring disagreements into the open					
29	Inspires other people					
30	Applies standard procedures on all issues					
31	Indecisive on issues that he/she is uncertain about or when he/she is under pressure					
32	Monitors students' satisfaction					
33	In a conflict, finds a position everyone can					

ITEM		Never	Rarely	Sometime	Often	Consistently
	endorse					
34	Fine-tunes presentation to appeal to his/her audience					
35	Articulates need for change					
36	Advocates change despite opposition					
37	Gets impatient or shows frustration when situations are not in his/her favour					
38	Recognizes specific strengths of students and nurtures them					
39	Understands informal structure in the school					
40	Behaves calmly in stressful situations					
41	Personally supports initiatives that bring about change					
42	Seeks support from key people in performance of his/her duties					
43	Understands the school's unspoken rules					
44	Keeps his/her promises					
45	Understands historical reasons for some of the traditions in the school					
46	Finds it expensive to improve working environment in the school					
47	Acknowledges his/her own mistake and confront unethical issues in others					
48	Presents him/herself with confidence					
49	Handles unexpected demands with reservations					
50	Articulates a compelling vision for the school					
51	Considers opinion of every stakeholder in					

ITEM		Never	Rarely	Sometime	Often	Consistently
	the school					
52	Seeks ways to improve performance					
53	Acknowledges own strengths and weaknesses					
54	Can see things from someone else's point of view					
55	Believes he/she is capable of leadership roles					
56	Bends rules when necessary to get a job done					
57	Is discouraged by failure of achievement					
58	Depends only on official support in managing the school					
59	Persuades students by appealing to their self- interest					
60	Reacts to situations as they are presented to him/her					
61	Cooperates with others on tasks he/she can achieve on his/her own					
62	Doubts his/her own ability in tackling new tasks					
63	Entertains students with discipline tendencies					
64	Considers this school to have achieved its best in performance					
65	Establishes and maintains close relationships at work					
66	Hesitates to act on new opportunities which are not familiar to him/her					

ITEM		Never	Rarely	Sometime	Often	Consistently
67	Deals with students on basis of adherence to school rules					
68	Always knows which emotions he/she is feeling and why					
69	Changes overall strategy, goals, or projects to fit a situation					
70	Pursues goals beyond what is expected or required of him/her					
71	Is attentive to peoples' moods or nonverbal cues					
72	Regards setbacks as due to his/her personal flaws and not unmanageable circumstance					

Thank You

Appendix IV: Emotional Intelligence Score Sheet

Appendix V: KCSE Result of Sample Schools from KNEC

DOMAINS		Competences	items	SCORE	TOTAL	AVERAGE = SCORE/4
SELF AWARENESS	1	Emotional Awareness	1+16+27+68			
	2	Accurate self-Assessment	6+15+21+53			
	3	Self-Confidence	31+48+55+62			
	4	Emotional Self- Control	24+37+40+60			
SELF-MANAGEMENT	5	Transparency	22+36+44+47			
	6	Adaptability	9+30+49+69			
	7	Achievement orientation	4+10+12+52			
	8	Initiative	3+56+66+70			
	9	Optimism	2+13+57+72			
SOCIAL AWARENESS	10	Empathy	19+ 23+54+71			
	11	Organizational Awareness	39+43+45+51			
	12	Service Orientation	17+32+46+64			
RELATIONSHIP MANAGEMENT	13	Developing others	8+14+38+67			
	14	Inspirational leadership	20+25+29+50			
	15	Change catalyst	5+35+26+41			
	16	Influence	34+42+58+59			
	17	Conflict management	18+28+33+63			
	18	Teamwork Collaboration	7+11+61+65			
			PERFORMANCE INDICES(MEAN SCORES)			

	School Index No	sex		Researcher School Code	2008	2009	Overall mean
			National Schools				
1	400003	G	Kenya High School	27	10.2	10.23	10.215
2	400008	B	Moi Forces Academy	34	7.89	8.73	8.31
3	400004	B	Starehe Boys	66	10.75	10.7	10.725
4	400009	G	Starehe Girls	67	9.95	9.93	9.94
			County Boarding Schools		**2008**	**2009**	
1	401084	G	Buruburu Girls' Sec School	3	8.08	8.01	8.045
2	401002	B	Dagoretti High School	5	6.96	7.27	7.115
3	401071	M	Hospital Hill High School	15	6.64	6.6	6.62
4	401014	G	Moi Girls School Nairobi	35	8.64	8.65	8.645
5	401076	G	Nembu High School	43	6.85	6.7	6.775
6	401015	G	Ngara Girls' High School	44	7.3	7.39	7.345
7	401017	G	Pangani Girls' School	51	9.88	9.88	9.88
8	401018	G	Precious Blood Girls' Riruta	55	10.96	10.38	10.67
9	401079	G	St. George's Sec School	65	8.65	8.38	8.515
10	401019	G	State House Girls' School	68	7.95	7.94	7.945
11	401009	B	Upper Hill School	70	7.84	8.07	7.955

			county day schools				
No	school code no	**sex**	**school**	**Researcher code**	**2008**	**2009**	overall mean score
1	401001	B	Aquinas High School	1	6.44	6.08	6.26
2	401005	B	Highway Sec.	13	5.89	5.62	5.755
3	401003	B	Jamhuri High	17	5.61	5.58	5.595
4	401063	M	Kamiti Sec.	20	4.43	4.29	4.36
5	401091	M	Kayole Sec.	25	4.43	4.52	4.475
6	401054	M	Langata High	29	4.41	4.7	4.555
7	401062	M	Kangemi High	32	3.9	4.43	4.165
8	401110	M	Muhuri Muchiri Sec.	36	5.71	5.51	5.61
9	401029	M	Mutuini High	38	3.68	4.28	3.98
10	401086	B	Nairobi Milimani Sec.	40	4.08	3.8	3.94
11	401197	M	Ndururumo Sec.	43	3.14	3.86	3.5
12	401022	B	Ofafa Jericho High	46	4.82	5.11	4.965
13	401073	M	Nile Road Sec.	45	3.37	4.32	3.845
14	401088	M	Our Lady of Fatima Sec.	48	5.84	6.23	6.035
15	401016	G	Our Lady of Mercy Sec.	49	6.31	6.12	6.215
16	401011	G	Parklands Arya Girls' Sec.	52	4.84	5.16	5
17	401122	G	Ruthimitu Girls' Sec.	61	3.91	3.82	3.865
18	401008	B	St. Teresa's Boys' Sec	62	4.36	4.01	4.185
19	401090	B	Uhuru Sec. School	69	3.91	4	3.955
20	401020	G	Teresa's Girls' Sec. School	72	5.4	5.59	5.495

Appendix VI: Pilot study test re-test results

	ECI 2.0 TEST SCORES	ECI 2.0 RE TEST SCORES
1.	233	234
2.	282	270
3.	267	268
4.	298	280
5.	254	254
6.	278	265
7.	255	260
8.	271	272
9.	235	253
10.	234	245
11.	246	230
12.	270	270
13.	245	275
14.	260	245
15.	298	278
16.	245	247
17.	260	261
18.	260	256

Pearson Correlation **for test re test results**

		Emotional intelligence overall score test	Emotional intelligence overall retest
Emotional intelligence test scores	Pearson Correlation	1	.756**
	Sig. (2-tailed)		.000
	N	18	18
Emotional intelligence retest scores	Pearson Correlation	.756**	1
	Sig. (2-tailed)	.000	
	N	18	18

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

r = 0.756

Appendix VII: Research Authorization Letter

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: NCST/RR1/12/1/SS/943/4

Date: 11th November 2010

Ms. Lydia Nkuene Nzomo
Kenyatta University
P. O. Box 43844
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Relationship between Principal's emotional intelligence and students' learning achievements in public secondary schools in Nairobi County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for a period ending ***31st December 2011.***

You are advised to report to **the Provincial Commissioner and the Provincial Director of Education, Nairobi Province** before embarking on the research project.

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

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The Provincial Commissioner
Nairobi Province

The Provincial Director of Education
Nairobi Province