Transformational Leadership and School Outcomes in Kenya: Does Emotional Intelligence Matter?

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Transformational Leadership and School Outcomes in Kenya: Does Emotional Intelligence Matter?

Abstract
Increased interest in leadership preparation and development is based on the fact that school leaders can make a difference in both the effectiveness and efficiency of schooling. Symptomatic of weak management systems, more than 300 secondary schools experienced turbulence in Kenya between the months of May and August in 2011 due to mismanagement resulting in the destruction of property worth millions of shillings. Various theories and models have been constructed to explain the leadership functions and suggest different approaches to leadership. A growing body of studies has shown that emotional intelligence is inherently associated with transformational leadership whose theory has highlighted the importance of leaders’ influence on followers’ emotional states. This study has a specific purpose of advancing and expanding research on emotional intelligence and transformational leadership in schools in Kenya.


Keywords
School Leadership, Transformational leadership, Emotional Intelligence, Leader Effectiveness, Team Effectiveness and School Climate

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TRANSFORMATIONAL LEADERSHIP AND SCHOOL OUTCOMES IN KENYA: DOES EMOTIONAL INTELLIGENCE MATTER?

Laban P. Ayiro

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Background

The school of the 21st century requires a principal who will embrace a multi-dimensional approach to leadership so as to bring about school improvement and effectiveness. Scholars point out that principals play a pivotal role in the school settings (Leithwood & Jantzi 2008, Waters et al. 2003). In fact, some low-performing schools have been successfully turned around under strong principal leadership (e.g. Duke et al. 2005). Therefore, it is logical to anticipate that the leadership of school administrators may be an important factor for school effectiveness. The lack of effective ways to select and build the capacity of promising school leaders may eventually undermine the performance of schools.

Increased interest in leadership preparation and development is based on the fact that school leaders can make a difference in both the effectiveness and efficiency of schooling (Hackett & Hortman, 2008). Preparation of principals is intended to provide a framework within which they can achieve both school and national objectives of education both of which target individual empowerment and the socio-economic wellbeing of the country respectively. As result, countries have come up with institutions and programmes for preparation and development of school principals. The Commonwealth Secretariat report (1996) cited in Bush and Jackson (2002) refers to the connection between quality leadership and school effectiveness stating that, “the head teacher plays the most crucial role in ensuring school effectiveness” (p.417). One of the ways of ensuring that such a role is effectively carried out is through preparing and continuously developing those principals. However, most studies carried out on principals in Africa (Harbey & Dadey, 1993; Oduro & MacBeath, 2003; Kitavi and Van Der Westhuizen, 1997) focus mainly on acquisition of management skills in the areas of financing, human resource, procurement and curriculum contexts devoid of leadership constructs. Kenya, for example, incurs one of the highest expenditures on education globally; 6.9% of GDP and 17.2% of public educational expenditure as a percent of overall government expenditure

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(UNESCO, 2011). It is therefore vital that the returns from this sector are commensurate to the investment. Currently in Kenya, training programmes developed by the Kenya Education Management Institute (a public institution for training school managers) for training of school managers identify factors and strategies that may increase leader capacity in schools.

**Statement of the Problem**

The effectiveness of an organization’s management can critically impact upon its viability and there are many reasons why the management process may fail and include failure to; think creatively about the likely effects of plans, obtain external/internal participation and commitment, co-ordinate and control resources. Indicative of weaknesses in the schools’ management, the country has experienced numerous disturbances in its secondary schools that can be attributed to a management related problems (Ngware et al 2009). Studies further indicate that in Kenya, there are no set criteria enumerating the skills a person should possess to qualify for appointment as a head teacher (Okumbe 1999). Research by Bush and Jackson, (2002); Fink, (2005); Huber, (2004); Huber and West, (2002), indicate that preparation and development of school principals can lead to school effectiveness and improvement. Most studies carried out on principals in Africa (Harbey & Dadey, 1993; Oduro & MacBeath, 2003; Kitavi and Van Der Westhuizen, 1997; Odhiambo, 2005, 2003; Ngware & Sang, 2009) focus mainly on problems facing principals in restricted contexts. In these studies, preparation and development of those principals is recommended as one of the ways of solving those problems. This will enable them to get the skills, knowledge and attributes (Bush & Oduro, 2006) to run schools in a professional and effective manner to ensure good teaching and learning practices.

A growing body of studies has shown that emotional intelligence is inherently associated with transformational leadership (Barling, Slater, & Kelloway, 2000; Leban & Zulauf, 2004; Mandell & Pherwani, 2003). Palmer, Walls, Burgess, and Stough (2001) found significant correlations between emotional intelligence and several factors of the transformational leadership model. These include Idealized Influence (also known as Charismatic Leadership) – transformational leaders act in ways that make them role models. They are respected, admired and trusted. Followers identify with them and describe them in terms that imply extraordinary capabilities, persistence and determination. Inspirational Motivation – these leaders embody the term “team spirit”. They show enthusiasm and optimism, providing both meaning and challenge to the work at hand. They create an atmosphere of commitment to goals and a shared vision. Intellectual Stimulation – a transformational Leader encourages creativity and fosters an atmosphere in which followers feel compelled to think about old problems in a new way. Public criticism is avoided. Individualized Consideration – transformational leaders act as mentors and coaches. Individual desires and needs are respected. Differences are accepted and two-way communication is common. These leaders are considered to be good listeners, and along with this come personalized interaction. Followers of these leaders move continually toward development of higher levels of potential.

The purpose of this study is therefore to advance research on emotional intelligence (EI) and school turnarounds and postulate that the effect of EI on school outcomes is mediated through transformational leadership.
Theories of School Leadership

The core functions of leadership include setting directions and exercising influence (Leithwood 2005, Northouse 2007). Various theories and models have been constructed to explain the leadership functions and suggest different approaches to leadership. Some theories and models have been employed to examine the role of school leadership (Heaney 2007, Leithwood & Mascall 2008, Hulpia & Devos 2010, Somech 2010). For example, based on the distributed leadership theory, (Leithwood & Mascall 2008) measured schools’ collective leadership, a concept which indicates to what extent each source of leadership (e.g. district leaders, parents, principals and teachers) has influence on school decision, and associated it with student outcomes. They found that collective leadership accounted for significant differences in student achievement across schools. Among the literature of school leadership, the studies of instructional and transformational leadership draw most of the attention (Hallinger 2003, Leithwood 2005).

Instructional Leadership

The term ‘instructional leadership’ has been used to focus principals on teaching (Leithword et al. 1999) and other organizational variables like school culture, exchange between leader and group members, leader provides resources and rewards in exchange for motivation, productivity, effective goal, or task accomplishments (Mortimore, 1993). The most frequently used conceptualization of instructional leadership was developed by Hallinger (2000). His model consists of three dimensions which are further delineated into several specific leadership functions:

a) defining the school mission includes framing and communicating the school goals;
b) managing the instructional programme includes supervising and evaluating instruction, coordinating the curriculum and monitoring student progress; and
c) promoting a positive school-learning climate includes protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers and providing incentives for learning (Hallinger, 2000).

Hallinger and Heck (1998) completed a comprehensive review of school leadership research and concluded that principals contribute to student outcomes through direct effects, indirect effects and reciprocal effects. In a subsequent literature review, Hallinger (2000) found that most evidence indicates that school leaders contribute to school effectiveness indirectly through actions such as shaping the school purposes (Bamburg & Andrews 1990, Goldring & Pasternak 1994), changing the learning climate (Hallinger et al. 1996) and aligning school structures with the school mission (Hallinger & Heck 1996).

Transformational Leadership

Transformational leadership theory has highlighted the importance of leaders’ influence on followers’ emotional states (Ashkanasy & Tse, 2000) and several studies have provided emotion-type insights into the transformational leader–follower linkage. McColl-Kennedy and Anderson (2002), for example, showed that transformational leaders who suggested alternative solutions to problems and who showed individualized consideration to followers were able to redirect follower negative feelings of frustration and helplessness to more constructive ones, which, in turn, led to heightened followers' performance. Conversely, perceptions of minimal
transformational leadership behaviors resulted in high levels of follower frustration and low performance levels. Recent studies have also shown that energetic, exciting, and emotionally appealing expressions of charisma created positive moods in followers (Bono & Ilies, 2006) and lessened the emotion-related phenomena of burnout and stress in the workplace (Bono et al., 2007). Such results imply that transformational leadership can be interpreted as a process in which leaders use emotions to: communicate a vision to, as well as elicit responses from, followers; and to ensure that followers are emotionally motivated to perform their tasks beyond their own expectations (Brown & Moshavi, 2005; Humphrey, 2002). The qualities of empathy, motivation, self-awareness, trust, and emotional stability, all qualities of a transformational leader, are also considered to be important elements of emotional intelligence (Bar-on, 1997; Goleman, 1998; Mayer & Salovey, 1997). Based on our review of the literature one is tempted to propose a direct linkage between emotional intelligence and transformational leadership (Brown & Moshavi, 2005).

The model for transformational leadership in education was developed by Leithwood and Jantzi (2005) and contains four categories (Leithwood & Jantzi 2008 p30):

a) Setting directions includes building school vision, developing specific goals and priorities and holding high expectations;

b) Developing people refers to providing intellectual stimulation, offering individualized support and modeling desirable professional practices and values;

c) Redesigning the organization includes developing a collaborative school culture, creating structures to foster participation in school decisions and creating productive community relationships; and

d) Managing the instructional programme refers to the establishment of stable routines, structures and procedures to support change.

The impact of transformational leadership in education is explored by several studies. The findings suggest that it influences teacher job satisfaction (Bogler 2001), their classroom practice (Leithwood & Jantzi 2006), school conditions and student engagement with school (Leithwood & Jantzi 1999, 2000).

Although transformational leaders are described to motivate followers to perform beyond expectations by intellectually stimulating and inspiring them to transcend their own self-interest for a higher collective purpose, transactional leaders use a negotiation process, where followers exchange efforts and services for rewards. A transformational leader activates follower motivation and increases follower commitment. A meta-analysis of results from 39 studies found that three transformational leadership behaviors (charisma, individualized consideration, intellectual stimulation) are related to leadership effectiveness in most studies (Lowe, Kroeck, & Sivasubramaniam, 1996). The transformational leadership behaviours correlated more strongly with leadership effectiveness than did the transactional leadership behaviours which relates to the concept of exchange between leader and group members; leader provides resources and rewards in exchange for motivation, productivity, effective goal, or task accomplishments.

Theories of Emotional Intelligence (EI)
The study of EI is anchored in psychometric studies carried out several decades ago; the first study was by Thorndike and Stein (1937) where he described the concept of ‘social intelligence’ as the ability to get along with other people. Wechsler (1940) proposed that affective components of intelligence may be essential to success in life. Psychologists such as Maslow (1943) and Gardner (1975) studied the domain of human intelligence in which social, personal and emotional information is incorporated. More recently, scholars attempted to define people’s ability in the area of emotions (Goleman 1995, 1998, Gibbs 1995, Mayer et al. 1990, Salovey & Mayer 1990). Goleman’s books about EI served as a catalyst for divergent dialog about this topic (Becker 2003, Cherniss 2000, Davies et al. 1998). Not surprisingly, there are different definitions, models and measures of EI. Scholars (Emmerling & Goleman, 2003, Mayer et al., 2000) affirm that there are essentially three ways to define EI.

At the first level of conceptualization, scholars embrace a broad definition of emotional intelligence, which perceives EI as an integration of emotion and reason. Here EI is seen as a wide pool of competencies that explain individual difference in social and emotional skills (Goleman, 1995) and can be fostered in schools (Payne, 1985). Goleman’s theory is an example of the above perspectives. Goleman, (1998) developed a framework of EI, that combines mixed traits of social behaviours and competencies (Brown et al. 2006). It consists of four domains: self-awareness, self-management, social awareness and relationship management (Boyatzis et al. 2000). Each domain contains a group of competencies, such as adaptability, communication and conflict management (Goleman, 1998). The measure for Goleman’s EI model is the Emotional Competencies Inventory (ECI). The recent version (2.0) contains 72 statements about the EI-related behaviours (Boyatzis & Sala, 2004). The internal consistency of the instrument is ‘adequate’, but there is ‘little evidence’ of the test–retest reliability (Goleman et al. 1999). The reason may be that Goleman’s EI theory is primarily competency-based and the ‘crucial EI competencies can indeed be learned’ (Goleman, 1995). So, it is likely that people’s EI competencies and skills change over time. There are also limitations of the validity of the inventory, but overall it ‘shows promise’ (Goleman et al. 1999).

The second of conceptualization considers EI as personality traits. Some researchers use EI to refer to a list of attributes that appear drawn from a number of aspects of personality (Mayer et al. 2000). For example, apart from the competencies mentioned before, Goleman (1995) also included a group of traits like impulse control and ‘delaying gratification’ in his EI framework. Bar-On (2000:185) further defines EI as a ‘multifactorial array of interrelated emotional, personal, and social abilities that influence our overall ability to actively and effectively cope with daily demands and pressures’. The five domains in Bar-On’s EI model are ‘intrapersonal skills’, ‘interpersonal skills’, ‘adaptability’, ‘stress management’ and ‘general mood’ (Bar-On 1997). Like Goleman’s EI framework, Bar-On’s model is also viewed as the mixed model (Brown et al. 2006), but it puts more emphasis on traits and psychological well-being. Some components of the model like ‘self-awareness’, ‘stress tolerance’ and ‘optimism’ are personality attributes (Mayer 1995, 1998). Unsurprisingly, Bar-On’s EI measure, the Emotional Quotient Inventory (EQ-i), overlaps with several personality measures (Dawda & Hart 2000, Newsome et al. 2000). According to Mayer et al. (2000), emotion is one of the foundations of personality. Understanding EI as a part of the broader personality system has a number of advantages. It permits comparison of the EI theories and relevant measures with ‘similar, competing theories and measures’ (e.g. the personality measures). Furthermore, it can alert researchers as to what parts of personality may influence EI. However, the EI theories in this category seem to stretch beyond the meaning of emotion and ‘cover almost all of personality’ (Mayer et al. 2000). Bar-On (2000) also acknowledged that his scale assessed something
considerably broader than EI. Because of the correlations with the traditional personality constructs, some concerns are raised about the incremental validity of the trait-based EI scales (Davies et al. 1998, Mayer et al. 2000, Newsome et al. 2000).

The third category of EI theories combines the terms ‘emotion’ and ‘intelligence’ (Mayer & Salovey, 1997). On one hand, this set of perspectives share some similarities with the second category, for it also understands EI as one aspect of personality. On the other hand, EI is a kind of intelligence that processes emotional information (Mayer et al. 2004). The psychology literature shows that intelligence is defined as a group of mental abilities or capacities which involve abstract thinking and problem solving (Gardner 1993, Herrnstein & Murray 1994). This definition enables us to make a distinction between personality qualities and intelligence. As explained by Mayer et al. (2000), sociability, a personality trait, does not necessarily suggest the presence of social intelligence. Sociability means to interact with people while social intelligence is necessary to solve problems or accomplish something like building group cohesiveness or convincing other people. Therefore, as one kind of intelligence, EI is also a mental ability of solving problems or achieving certain purposes. Mayer et al.’s (2004, p.197) definition of EI reflects the central viewpoints of this category:

“EI is the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth.”

Subsequently, the model constructed by Mayer and his colleagues, also called the ability model (Brown et al. 2006), divides EI into four branches (Mayer et al. 2004): perceiving emotion, facilitating thoughts, understanding emotion and managing emotion. They are assessed by the four subscales of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) developed based on this model. Evidence shows that this EI model meets the traditional standards of intelligence: any intelligence must reflect the actual mental performance rather than behaviours or traits; it should describe the mental abilities that are distinct from other established intelligences; and, it should develop with age (Mayer et al. 1999, Mayer et al. 2001). According to these standards, Mayer and his colleagues argue that EI is ‘a relatively stable aptitude’ (Mayer et al. 2004). The short-term EI training programme cannot substantially increase one’s EI level.

Emotional Intelligence and Transformational Leadership

An increasing number of studies have shown that emotional intelligence is inherently associated with transformational leadership (Barling, Slater, & Kelloway, 2000; Leban & Zulauf, 2004; Mandell & Pherwani, 2003). Palmer, Walls, Burgess, and Stough (2001) found significant correlations between emotional intelligence and several factors of the transformational leadership model. Specifically, the ability to monitor and manage emotions correlated with the inspirational, motivational and individualized consideration factors of transformational leadership. Similarly, Gardner and Stough (2002), and later Barbuto and Burbach (2006), showed that the emotional intelligence of leaders accounted for the majority of the variance in transformational leadership. The key proposition in this study is that
transformational leadership mediates the relationship between emotional intelligence and the team outcomes. A requirement for this proposition is that emotional intelligence be related to team outcomes, and an extensive range of studies supports this proposition (e.g., Gardner & Stough, 2002; George, 2000; Kerr et al., 2006). Our model assumes that emotional intelligence precedes transformational leadership thus has a causal effect on transformational leadership.

These findings of previous studies provide evidence that leaders who scored high on emotional intelligence were perceived by followers as exhibiting more transformational leadership behaviors. A dissertation study was conducted in the public school settings for example. One of them (Buntrock 2008) assessed the EI of 29 principals from an urban school district in Pennsylvania. The logistical regression analysis demonstrated that the principal’s EI was a significant predictor of the school’s success in meeting Adequate Yearly Progress (AYP), after student scores and minority levels within each school’s population were controlled for. Despite some limitations, the majority of the studies in the area of EI and transformational leadership support the argument that the association is statistically significant (Bar-on, 1997). The qualities of empathy, motivation, self-awareness, trust, and emotional stability, all qualities of a transformational leader, are also considered to be important elements of emotional intelligence (Bar-on, 1997; Goleman, 1998; Mayer & Salovey, 1997). From the angle of individual and contextual antecedents of transformational leadership behavior, emotional intelligence can be seen as the bedrock for transformational leaders. Based on the review of the literature the study proposes a direct linkage between emotional intelligence and transformational leadership.

Quality Challenges for Schools in Kenya

While the gains in enrolment had been quite impressive in schools in Kenya, low quality and high dropout rates has led to the perception that many of the children leave school without having obtained a sustainable level of basic reading, writing and numeracy skills (Sifuna & Sawamura, 2010). Among the contributory factors are (1) inadequate capacity of the principals; (2) weak or non-existent databases; (3) deficient pedagogies; (4) inadequate instructional and infrastructural support; (5) ineffective or non-existent teams; and (6) unsupportive school culture and environment. Each is explained in relation to school leadership below:

**Inadequate capacity of the principals.** As Kitavi and van der Westhuizen (1997, p. 260) put it, “too often, and without consideration, principals in developing countries like Kenya are tossed into the job without pre-service training, without guarantee of in-service training, and without support from their employers”. They report that most experienced principals overcame their problems through trial and error. However, “beginning principals in developing countries like Kenya need well-structured induction strategies that will make them effective and efficient educational managers” (p. 260). Researchers (e.g. Duke et al. 2007) point out that many staff members in underachieving schools are unclear about where to concentrate their efforts. Since setting directions is a core function of school leadership (Leithwood 2005), it is the responsibility of the principals to develop clear school visions and communicate them with the staff and students in order to motivate people to strive in the same direction.

**Weak or non-existent databases.** According to the 2005 Education for All Global Monitoring Report (UNESCO, 2009), the quality of education remains very poor in most Sub-Saharan African countries, including Kenya. Unsurprisingly, low-achieving schools usually do not have measurable outcomes or timely data to monitor student progress (Duke et al. 2007, O’Day 2002.), since they lack organizational goals. The absence of such information adds to the
challenges facing teachers, because they have no idea about the strengths and weaknesses of their instruction or how to improve the quality of teaching.

**Deficient pedagogies.** Kenya’s Ministry of Education identified a number of factors affecting the quality of the teaching force in the country. These factors included the fact that many teachers took up teaching as a career of last resort, others are trained or selected to join teaching not in the areas of their interest but in a field where vacancies existed, and the lack of comprehensive teacher in-service programme (GOK, 2004). Two studies on principals (Duke et al. 2005, Duke et al. 2007) noted that teachers rely on ineffective strategies and programmes to deliver instruction at low-performing schools. In addition, it is very common at failing schools that the academically neediest students are often educated by the least well-prepared and least experienced teachers (Coulter 2007), which exacerbate the problems the students have.

**Inadequate instructional and infrastructural support.** The most serious problems facing beginning principals in developing countries like Africa include: students who cannot pay school fees and buy books; shortage of school equipment; shortage of physical facilities; lack of staff accommodation; lack of playgrounds; students travelling long distances; and use of English as a medium of instruction (Kitavi & van der Westhuizen, 1997). Research shows that a greater percentage of secondary school teachers in Kenya did not have opportunities for teacher professional development programmes (Odhiambo, 2005). Efforts also need to be directed to the areas which are more directly linked to teaching and learning, such as facilities, scheduling, teacher training and instructional materials. However, the support to address such situations is often missing in failing schools (Duke et al. 2005, Duke et al. 2007). In the Kenyan context, such schools would be categorized as low performing schools in the Kenya Certificate of Secondary Examination (KCSE).

**Ineffective or nonexistent teams.** Successful schools are often organized so teachers can collaborate (McDonald 2001). Teamwork can provide teachers more opportunities to develop shared understandings about teaching and refine their instruction skills. Unfortunately, in struggling schools, the staff members are used to work in isolation (Corallo & McDonald 2001, Nicolaïdou & Ainscow 2005, Duke et al. 2007). To the contrast, in Africa and Kenyan in particular, there is greater collaboration among the teachers.

**Unsupportive school culture and environment.** The general term “accountability” does not adequately convey the day-to-day struggle schools are undergoing in their attempt to become answerable to their various constituencies such as the local community, professional groups, legislatures, teachers, administrative staff, pupils and parents (Ayiro, 2010). By extension, this burden is on the principal of the school hence the importance of assessing his/her abilities and identifying the gaps for support. Impersonality, lack of a sense of identity and low expectations for student achievement (Duke et al. 2007, Fleischman & Heppen, 2009) prevail in many struggling schools and present a major obstacle to school improvement. Such cultures reflect people’s common beliefs about the schools, which can directly impact their behaviours. For example, impersonality may contribute to discipline problems and increase violence in schools (Fleischman & Heppen 2009). Undoubtedly, negative cultures can exacerbate the problems which failing schools already have and create a downward spiral.

In this paper the author explored the EI of selected principals in Kenya; correlated it to their transformational leadership and then sought to establish if this is mirrored in school
outcomes. The principals who participated in this study were selected based on the following criteria:

I. Principals whose schools had over the last one and half years gone through intensive performance improvement programmes with funding from the National Constituency Development Fund.

II. Principals undergoing the Masters programme in Educational Leadership and Policy Studies offered by one of the universities in Kenya.

Few studies, if any, exist on EI and leadership dispositions and how these relate to school operation outcomes in sub-Saharan Africa. A study by Ayiro (2009) demonstrated a possible link between the emotional intelligence of principals and school performance. This study has a specific purpose of advancing and expanding research on emotional intelligence and transformational leadership to an African setting. The study was conducted in Kenya, rather than in the west where most studies on emotional intelligence have been conducted to date.

Method

The data and methods are investigated using two main hypotheses:

**Hypothesis 1.** The emotional intelligence of the school principal is positively related to his/her level of transformational leadership.

**Hypothesis 2.** Transformational leadership is positively related to leader effectiveness, team effectiveness and school climate.

Respondents and procedures

This study was conducted using a mixed methods research design. The target population for this study consisted of principals of high schools, deputy principals and heads of department in Kenya. Of these 103 principals were identified through (i) an Executive Masters degree programme in educational leadership and policy studies offered at one of the public university’s in Kenya (ii) participation in a performance improvement/turnaround initiative in one of the counties in the country Table 1. An additional 206 deputy principals / heads departments were also involved in the study as raters in the MLQx5 questionnaires (2 for each principal).

<table>
<thead>
<tr>
<th>Table 1: Respondents</th>
<th>Number</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals enrolled in the Masters programme</td>
<td>55</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>Principals whose schools are involved in the performance improvement initiative</td>
<td>48</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Deputy principals/ HOD’s</td>
<td>206</td>
<td>86</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>309</td>
<td>141</td>
<td>168</td>
</tr>
</tbody>
</table>

The sampled schools were from the 3 categories of schools in Kenya, namely National, County and District schools. The sampled principals included 55 male and 48 female and were selected from schools with a population ranging from 120 to 1000 students. The schools had
the following characteristics; day and boarding schools, mixed day and boarding schools, same sex and co-educational schools and the students age cohort was between 14-19 years. This sample represented 30% of the population of principals in the designated administrative region.

**Instrumentation**

Questionnaires were completed by the participants online and relayed to the publisher for scoring. The confidentiality of the process was guaranteed. Customers receive a coded Web page to enter leader names and email addresses. The page contains a button to send an invitation email to the leader and for requesting reports. The leader receives a page to enter their raters, invite the raters by email to rate them, and to take their self-rating. And it was emphasized that the data collected would be secured for up to three years before disposing of it.

**Emotional Intelligence**

The Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002) was administered to all the principals \(n = 103\) to measure the variable of emotional intelligence. As for the EI measure (the MSCEIT), it is suggested to be scientifically derived and psychometrically independent from the traditional personality measures, (Mayer et al. 1990, Salovey and Mayer 1990, Mayer and Salovey 1997). Consistent with its theoretical assumptions, the test–retest reliability of the MSCEIT is adequate.

The instruments were administered online and after completion they were relayed back to the publisher for scoring. The scored data were returned and analyzed using correlational statistics. This instrument reports five scores in the areas of (a) perceiving emotions, (b) facilitating emotions, (c) understanding emotions, (d) managing emotions, and (e) overall emotional intelligence.

The MSCEIT, is becoming the standard for measuring emotional intelligence from an ability perspective. The MSCEIT (Mayer et al., 2002) provides 15 main scores as shown in table 2: total EIQ score, two area scores, four branch scores, and eight task scores. The overall Emotional Intelligence Score (EIQ) provides an overall index of the respondent’s emotional intelligence.

A total EIQ score compares an individual’s performance on the MSCEIT to those in the normative sample (of the 103 respondents). The area scores enable one to gain insight into possible differences between the respondents’ (a) ability to perceive and utilize emotions (experiential emotional intelligence) and (b) their ability to understand and manage emotions (strategic emotional intelligence).

Perceiving emotions, the first branch, is defined as the “ability to recognize how an individual and those around the individual are feeling...this involves the capacity to perceive and to express feelings” (Mayer et al., 2002, p. 19). This emotion perception involves paying attention to and accurately decoding emotional signals in facial expressions, tone of voice, and artistic expressions. In this section, the participant will be asked to look at a picture of a face expressing some type of emotion, or general picture of some kind.

The second branch of the MSCEIT (Mayer et al., 2002), facilitating thought, measures how much a respondent’s thoughts and other cognitive activities are informed by his or her experience of emotions: “Facilitating thought focuses on how emotions affect the cognitive system and, as such, can be harnessed for more effective problem solving, reasoning, decision-making, and creative endeavors” (p. 19).
Understanding emotions was measured through the third branch of the MSCEIT (Mayer et al., 2002). This branch includes the ability to label emotions and to recognize that there are groups of related emotional terms: “Knowledge of how emotions combine and change over time is important in one’s dealings with other people and in enhancing one’s self-understanding” (p. 19).

The final, fourth branch measures the managing emotions component of emotional intelligence: “Managing emotions means that, at appropriate times, one feels the feeling rather than repressing it, and then uses the feeling to make better decisions” (Mayer et al., 2002, p. 19). This management involves the participation of emotions in thought and allowing thought to include emotions. The MSCEIT measures people’s actual performance, rather than their self-reported skills on emotional problem-solving tasks.

Table 2. The Ability Model of Emotional Intelligence (Caruso et al., 2002, p. 57)

<table>
<thead>
<tr>
<th>Ability</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceiving</td>
<td>Identify emotions in thoughts</td>
</tr>
<tr>
<td></td>
<td>Identify emotions in other people</td>
</tr>
<tr>
<td></td>
<td>Express emotions accurately</td>
</tr>
<tr>
<td></td>
<td>Discriminate between accurate and inaccurate feelings</td>
</tr>
<tr>
<td>Using</td>
<td>Prioritise thinking by directing attention</td>
</tr>
<tr>
<td></td>
<td>Generate emotions to assist judgement</td>
</tr>
<tr>
<td></td>
<td>Mood swings change perspective</td>
</tr>
<tr>
<td></td>
<td>Emotional states encourage problem solving</td>
</tr>
<tr>
<td>Understanding</td>
<td>Label and recognise relations among emotions</td>
</tr>
<tr>
<td></td>
<td>Interpret meanings emotions convey</td>
</tr>
<tr>
<td></td>
<td>Understanding complex feelings</td>
</tr>
<tr>
<td></td>
<td>Recognise emotional transitions</td>
</tr>
<tr>
<td>Managing</td>
<td>Stay open to feelings</td>
</tr>
<tr>
<td></td>
<td>Engage/detach from an emotion</td>
</tr>
<tr>
<td></td>
<td>Reflectively monitor emotions</td>
</tr>
</tbody>
</table>

Transformational leadership

The Multifactor Leadership Questionnaire (MLQ-Form 5X-Short; Bass & Avolio, 2000) was administered online to assess the transformational leadership style of the principals. The questionnaire instructed HOD’s and deputy principals to judge how often principals display each of 20 different transformational leadership behaviours along a 5-point rating scale ranging from 1 (not at all) to 5 (frequently, if not always). This instrument was also sent to the publisher for scoring and the respective results were then entered and analyzed using correlational statistics. Sample items for each of the five dimensions of transformational
Transformational Leadership and School Outcomes in Kenya

Leadership include: (a) Idealized Influence (Attributed), “Displays a sense of power and confidence”; (b) Idealized Influence (Behavior), “Emphasizes the importance of having a collective sense of mission”; (c) Inspirational Motivation, “Articulates a compelling vision of the future”; (d) Intellectual Stimulation, “Suggests new ways of looking at how to complete assignments”; and (e) Individual Consideration, “Spends time teaching and coaching.” Judge and Piccolo (2004), in a meta-analysis, reported that these dimensions of transformational leadership exhibited high reliability as well as validity.

The MLQ5x has generally adequate reliabilities (Cronbach’s alpha) ranging from .63 to .92. Estimates of internal consistency were above a = .70 for all scales except for active management by exception (Bass & Avolio, 2000). The intercorrelations among the five MLQ5x transformational leadership scales were relatively high and positive. The average intercorrelation was .83, and it was .71 for the five transformational leadership scales with ratings of contingent reward leadership (Bass & Avolio, 2000). All of these results confirm the factor structure and validate the instrument. Because of the relatively high intercorrelations among the subscales in transformational leadership, some authors (Atwater & Yammarino, 1992; Dubinsky, Yammarino, & Jolson, 1995) combine them and consider transformational leadership as one 20-item scale instead of five separate 4-item scales.

Leader effectiveness

Four items from the Multifactor Leadership Questionnaire (Bass & Avolio, 2000) were used to measure perceived leader effectiveness (e.g., “Is effective in meeting my job related needs”). Items were rated on a 5-point scale, ranging from 1 (not at all) to 5 (frequently, if not always) and Cronbach’s alpha was .94.

Service climate

Service climate was assessed using an eight-item scale developed by Schneider et al. (1998), called the Global Service Climate Scale. All items were scored on a 5-point rating scale, ranging from 1 (poor) to 5 (excellent).

An example is: “How would you rate the overall climate for service in your department?” Cronbach’s alpha for this scale was .90.

Team effectiveness

Eight items from a scale originally developed by Hackman (1987) and validated by De Dreu (2007) to capture the full range of team effectiveness. Items were scored on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include: “The staff of our team are good in coming up with ways to complete their tasks” and “The teachers of our team get their work done very effectively.” Cronbach’s alpha for the index was .80. These instruments (for service climate and team effectiveness) were self-administered and the data analysed using SPSS software.

Results

The 103 principals were sent the MSCEIT (Mayer et al., 2002) on line to evaluate their emotional intelligence, 92 completed surveys were received, 11 principals did not respond. A response rate of 89.3% occurred from the principals. The MLQ5x (Bass & Avolio, 2000) was dispatched online to the deputy principals and HOD’s to gain their perceptions of their
principal’s leadership style and leadership effectiveness. A total of 206 deputy principals and HOD’s were asked to participate. 184 completed surveys were returned. In each case two of the 184 responses were connected to a particular principal. The resulting deputy principal/HOD’s response dataset was therefore matched to each of the 92 principals who were provided the MSCEIT. The responses for the principals who did not complete the MSCEIT were not included in the study analyses. Any principal that did not receive a minimum of one rater was also not included in the final analyses. The results were entered and analyzed using descriptive and correlational statistics. The total response rate was 79.9% and was considered acceptable by the researchers.

Descriptive Statistics

In addition to the substantive measures described above, demographic data were also collected since demographics might account for variance in emotional intelligence (Mayer, Salovey, & Caruso, 2004). Data on gender, experience, age and education level of the 103 principals was collected although no further analysis was undertaken in relation to this data. Consistent with the leadership literature in reporting on the MLQ5x (Bass & Avolio, 2000), the leadership factors were grouped into three leadership styles: transformational leadership, transactional leadership, and laissez-faire leadership.

Table 3: Demographics of Principals

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
</tr>
<tr>
<td>Occupation level</td>
<td></td>
</tr>
<tr>
<td>Chief principal</td>
<td>0</td>
</tr>
<tr>
<td>Senior principal</td>
<td>4</td>
</tr>
<tr>
<td>principal</td>
<td>99</td>
</tr>
<tr>
<td>Age, years</td>
<td></td>
</tr>
<tr>
<td>&lt;40</td>
<td>15</td>
</tr>
<tr>
<td>40-49</td>
<td>77</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
</tr>
<tr>
<td>Experience as principal in years</td>
<td></td>
</tr>
<tr>
<td>1-9</td>
<td>12</td>
</tr>
<tr>
<td>10-19</td>
<td>60</td>
</tr>
<tr>
<td>20-29</td>
<td>31</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
</tr>
<tr>
<td>Bed</td>
<td>70</td>
</tr>
<tr>
<td>Med</td>
<td>30</td>
</tr>
<tr>
<td>PhD</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>03</td>
</tr>
</tbody>
</table>
In laissez-faire leadership a person may be in a leadership position without providing leadership, leaving the group to fend for itself. Subordinates are given a free hand in deciding their own policies and methods. This can sometimes be a positive leadership style if workers are responsible and self-starting and do not require a lot of supervision. In this situation employees may enjoy a laissez-faire style of a leader. Intellectual stimulation, individualized consideration, charisma, and inspirational motivation all make up transformational leadership. This study only dealt with transformational leadership since the literature had indicated that the other two forms of leadership offer no linkage to EI. Emotional intelligence is reported by each factor, and a combination of the four factors is reported as an overall emotional intelligence score. The reliability of each instrument and its scales was measured by calculating Cronbach’s alpha for each scale for the MLQ5x and Split ½ for the MSCEIT.

To test the questions relative to emotional intelligence and transformational leadership, the data sets were merged. Correlational statistics were completed to evaluate the degree of relationship between each factor of transformational leadership, emotional intelligence, and leadership outcomes.

**Descriptive Statistics based on the MSCEIT**

An answer on the MSCEIT (Mayer et al., 2002) was scored against a general consensus score. All scores are reported as normed standard scores with a mean of 100 and a standard deviation of 15. Scores are obtained on the four emotional intelligence branches and an overall emotional intelligence score.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>M</th>
<th>SD</th>
<th>Split ½ Reliability</th>
<th>Test Manual Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total emotional intelligence</td>
<td>96.12</td>
<td>11.17</td>
<td>.89</td>
<td>.93</td>
</tr>
<tr>
<td>Branch 1: perceiving emotions</td>
<td>98.26</td>
<td>14.15</td>
<td>.93</td>
<td>.91</td>
</tr>
<tr>
<td>Branch 2: facilitating thought</td>
<td>96.10</td>
<td>13.60</td>
<td>.62</td>
<td>.79</td>
</tr>
<tr>
<td>Branch 3: understanding emotions</td>
<td>96.30</td>
<td>8.87</td>
<td>.51</td>
<td>.80</td>
</tr>
<tr>
<td>Branch 4: managing emotions</td>
<td>97.10</td>
<td>7.99</td>
<td>.55</td>
<td>.83</td>
</tr>
</tbody>
</table>

The results of the data analysis found a range, including acceptable reliabilities at the overall emotional intelligence level and Branch 1, and relatively low reliabilities for the balance of the dimensions.

The overall emotional intelligence factor returned a reliability of .89 (Split ½) compared to the reported reliability of .93 in the test manual. The branch reliabilities ranged from an acceptable (Split ½) reliability of .93 (perceiving emotions) to low reliabilities of .62 (facilitating thought), .51 (understanding emotions), and .55 (managing emotions). These reliabilities differ somewhat from those reported by Mayer et al. (2002), which ranged from overall emotional intelligence reliability (Split ½) of .93 to a low reliability at the facilitating emotions (Branch 2) of .79. See Table 4 for details.

The principals in this study scored within the range expected from the normed sample. The means, standard deviations, and internal consistency obtained in this study were consistent.
with that reported by Bass and Avolio (2000). All leadership dimensions were within the expected range. The nine leadership styles and composite transformational leadership score showed sufficient internal consistency ranging from $\alpha = .74$ (management by exception–passive) to $\alpha = .87$ (inspirational motivation), and $\alpha = .94$ for transformational leadership.

The MLQ5x (Bass & Avolio, 2000) returned higher reliabilities than that of the MSCEIT (Mayer et al., 2002) in both the sub dimensions and as the item scores within the dimensions. However significant scores came for (i) the perceiving emotions branch of emotional intelligence and the intellectual stimulation branch of transformational leadership at an $r = .187$ and (ii) the facilitating thought branch of emotional intelligence with the idealized behavior leadership style dimension of transformational leadership at an $r = .192$. All means and standard deviations for both the deputy principals/HOD’s responses on the MLQ5x (Bass & Avolio, 2000) and the principals’ responses on the MSCEIT (Mayer et al., 2002) were within the range expected from the normed sample of each respective instrument. There was a weak correlation ($r = .017$) between perceiving emotions, as measured by the MSCEIT, and transformational leadership styles, as perceived by deputies and the HOD’s. Although there were a number of positive correlations between various elements of emotional intelligence and transformational leadership (understanding emotions and managing emotions), each one of them had no significant correlation. Despite the limitations, some of the findings above support the argument that the association between leaders’ EI and their leadership is statistically significant. The American Psychological Association’s (APA) taskforce on psychological testing concluded that psychologists studying highly complex human behaviour should be rather satisfied with correlations in the $r = 0.10$ to 0.20 range, and they should be generally pleased with correlations in the 0.25-0.35 area (Mayer et al., 2001). Mayer et al. (2000, p. 412) comment, “the best new variables typically increase predictions, for instance, of job performance between 1% and 4%”. Mayer and Salovey (1997, p. 17) also note, “a 10% contribution of emotional intelligence [to life outcomes] would be considered very large indeed”. However some of the findings are completely contrary to what the prevailing literature suggests.

Table 5 below presents the inter-correlations among the sub dimensions of the constructs of emotional intelligence and transformational leadership. Of the four dimensions of emotional intelligence, Regulation of Emotion (ROE) was the most highly correlated with the dimensions of transformational leadership (see Table 5).

**Table 5:** Correlation coefficients between four components of emotional intelligence and five dimensions of transformational leadership.

<table>
<thead>
<tr>
<th>Emotional intelligence scores</th>
<th>Idealized influence (attribute)</th>
<th>Idealized influence (behavior)</th>
<th>Inspirational motivation</th>
<th>Intellectual stimulation</th>
<th>Individual consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total emotional intelligence score</td>
<td>.47 **</td>
<td>.37 **</td>
<td>.46 **</td>
<td>.43 **</td>
<td>.44 **</td>
</tr>
<tr>
<td>Self-emotion appraisal (SEA)</td>
<td>.35 **</td>
<td>.26 *</td>
<td>.34 **</td>
<td>.30*</td>
<td>.31*</td>
</tr>
<tr>
<td>Others’ emotion appraisal (OEA)</td>
<td>.44 **</td>
<td>.35 **</td>
<td>.45 **</td>
<td>.38 **</td>
<td>.39 **</td>
</tr>
<tr>
<td>Uses of emotion</td>
<td>.42 **</td>
<td>.33 *</td>
<td>.42 **</td>
<td>.39 **</td>
<td>.38 **</td>
</tr>
</tbody>
</table>

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Regulation of emotion (ROE) **p < .01; *p < .05.

Hypotheses testing

In previous studies, transformational leadership was shown to relate to leadership effectiveness and hence leadership performance (Lowe et al., 1996). In addition, it was stipulated that emotionally intelligent leaders should have a higher aptitude to tap into their followers and hence lead them transformatively. Leading in this manner is to have your followers question methods and seek ways to improve. Hence, this research study was looking for a significant and positive correlation between various components of emotional intelligence and leadership effectiveness as perceived by the subordinates. The analysis of the data based on the hypotheses is as shown in Table 6 below.

Table 6
Hierarchical regression analyses of control variables, emotional intelligence, and transformational leadership on outcomes.

<table>
<thead>
<tr>
<th></th>
<th>Leadership Effectiveness</th>
<th>Service Climate</th>
<th>Team Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.00</td>
<td>-.12</td>
</tr>
<tr>
<td>Education</td>
<td>-.16</td>
<td>-.02</td>
<td>-.05</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>.34</td>
<td>.06</td>
<td>.31 *</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>.57 ***</td>
<td>.36 *</td>
<td>.25</td>
</tr>
<tr>
<td>^R²</td>
<td>.30 ***</td>
<td>.08 *</td>
<td>.06</td>
</tr>
<tr>
<td>R²</td>
<td>.16</td>
<td>.34 ***</td>
<td>.12</td>
</tr>
</tbody>
</table>

Note. Coefficients presented are betas.
* p < .05.
*** p < .001.

Consistent with Hypothesis 1, emotional intelligence was positively related to transformational leadership (r=.44, p<.001), where N=92. Emotional intelligence still accounted for a significant amount of variance in transformational leadership even after controlling for age, level of education of principals; β=.43, p<.01, ΔR²=.19.

The results in Table 6 depict hypothesis 2. It predicted that transformational leadership would be positively associated with leader effectiveness, team effectiveness, and service climate. Again the researchers controlled for age, education of principals, as well as for emotional intelligence. Transformational leadership significantly predicted leader effectiveness (β=.57, p<.001), ΔR²=.34; p<.001 and service climate (β=.36, p<.05), ΔR²=.08; p<.05. However, Hypothesis with regard to team effectiveness was not supported (β=.25, p=.082).
Discussion

Transformational Leadership and Emotional Intelligence

The construct of emotional intelligence is relatively new to many Kenyan public-sector organizations. Nevertheless, these findings are consistent with emotional intelligence and leadership theories that have been developed and tested primarily in Western countries. This study contributes to the literature by demonstrating the external validity of these theories in a non-Western setting. In this study, the correlation between transformational leadership and leader effectiveness is reasonable (i.e., .57, p<.001) even when controlled for same-source bias. This correlation is somewhat in line with the meta-analysis by Judge and Piccolo (2004), and indicates that transformational leaders are also perceived as effective in Kenya. These results are all the more interesting when one considers that Kenya is often described as having a bureaucratic culture influenced by its British colonial past which may cause principals to maintain the status quo, rather than undertake transformational actions.

When comparing the data within the dimensions of emotional intelligence and components of transformational leadership, significant relationships were found, which led to a finding of support for the first hypothesis. The results of this study resemble those reported by Sosik and Megerian (1999). They evaluated the relationships of emotional intelligence, transformational leadership and leadership effectiveness, and found that managers who were rated more effective leaders by their subordinates possessed more aspects of emotional intelligence.

Implications for HRD

The development of effective leaders is recognized as a high priority for both business organizations and the public sector. The topic of leadership is very important to the practice of HRD. Goleman’s (1995, 1998, 2000) emotional intelligence premise challenges conventional thinking, in that the emotions are important to consider in relation to one’s effectiveness. Emotions and emotional intelligence are no longer considered taboo in the workplace today and are rather considered an important foundation for performance. Based on these findings, the issue of innovative leadership initiatives continues to remain at the core to the field of HRD. A better understanding of emotional intelligence and its relationship to leadership style and effectiveness can address a current gap in the literature today and provide a more informed link between theory and practice.

This understanding can also better inform practitioners, and hence their leadership development programs as well as staffing within their organizations. The outcomes of this study are of value to the re-engineering of school management not only in Kenya but also in Sub-Saharan Africa where the constructs of EI are relatively new.

Conclusion

Understanding precisely how emotional intelligence relates to effective leadership has practical implications, particularly in the areas of selection and management development. Leaders need more than just technical and traditional managerial skills; they need well-honed transformational leadership competencies, which require having emotional intelligence. The findings in this study support the idea that teacher agencies should select people who have high levels of emotional intelligence for it is predictive of having the potential to become transformational leaders. Agencies such as the Kenya Education Management Institute can
build emotional intelligence training into their principal training programmes in their quest for transformational leaders. Given that service climate and transformational leadership style have been shown to make a difference in terms of team and organizational performance (Salanova et al., 2005; Schneider et al., 2007), the results of this study may guide new research that aims to capture the potentially business-enhancing effects of combining emotional intelligence and transformational leadership style in non-profit organizations such as schools. It has been suggested that emotional intelligence might be an aide to leadership development and leadership effectiveness (Epitropaki & Martin, 2005). This study was intended to address a gap existing in the literature today in providing a more informed link between the theory and practice of the relationship between leadership effectiveness and emotional intelligence in Africa.

References
AYP schools and principals in high-poverty non-AYP schools in an urban school district. ProQuest Information & Learning. Dissertation Abstracts International Section A: Humanities and Social Sciences, 69(2), 1–118.


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Laban P. Ayiro holds a PhD in Entrepreneurship Development, Kenyatta University, Kenya; MA in International Relations from the United States International University, Africa (Nairobi, Kenya); MSc in Entrepreneurship Development, Kenyatta University, Kenya; and a BEd in the teaching of Chemistry from McGill University, Canada. He is a recipient of the National Colours of the Silver Star of Kenya for his outstanding accomplishments in the field of education. He teaches at Moi University in Kenya and his areas of specialization include, Research Methods and Statistics, Entrepreneurial Management, Management Information Systems and Leadership & Policy Studies. Prof. Ayiro’s teaching philosophy tends towards the needs of working life; combining theoretical and practical knowledge with special emphasis placed on developing new forms and methods of teaching, practical training and cooperation with the market place through research. His philosophical, social and educational views are embedded in quality assurance perspectives that have been sharpened by his career path in education. He has published over 15 articles in refereed journals and 4 books, the latest being A Functional Approach to Educational Research Methods and Statistics: Quantitative, Qualitative and Mixed Methods Approaches. He has been a chemistry teacher, principal of a high school, Provincial Director of Education, Deputy Director of Staff Training, Senior Deputy Director for Policy and Planning at the Ministry Headquarters and Senior Deputy Director for Research and Curriculum Development at the Kenya Institute of Curriculum Development. Dr. Ayiro is a Senior Fulbright Scholar having stayed in the USA in 2011–2012 researching and teaching at the University of Texas A&M. He is a leading consultant in research, organizational leadership and performance.