RELATIONSHIP BETWEEN TOTAL QUALITY MANAGEMENT AND EMPLOYEE PERFORMANCE IN PUBLIC UNIVERSITIES IN KENYA: A CASE STUDY OF KIRINYAGA UNIVERSITY COLLEGE

MAUREEN NYAWIRA NJERU, DR. MARY OMONDI, PHD
RELATIONSHIP BETWEEN TOTAL QUALITY MANAGEMENT AND EMPLOYEE PERFORMANCE IN PUBLIC UNIVERSITIES IN KENYA: A CASE STUDY OF KIRINYAGA UNIVERSITY COLLEGE

1* Maureen Nyawira Njeru, 2* Dr. Mary Omondi, PHD

1* Student, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya
2* Lecturer, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

Accepted May 10, 2016

ABSTRACT

In this competitive era, the higher education sector is primarily focusing on developing, motivating, attracting and retaining their employees to attain competitive advantage. Retention strategies should be put in place to attract, motivate and retain the employees to boost productivity in the organization. The general objective of this study, was to assess the relationship between total quality management and employee performance in public universities in Kenya, A case study of Kirinyaga university college, Kirinyaga County. The study adopted a case study research design. The study targeted 215 employees, from which a sample of 108 respondents were drawn for the study using 50 % of the target population, which included top management, middle management and lower level management. The sample was selected through stratified sampling techniques. The researcher collected data using both structured and unstructured questionnaires and also interview schedule. Quantitative data was analyzed using descriptive statistical tools namely frequencies, percentages, mean and standard deviation, while inferential statistical tools such as correlation and regression were used to determine and explain variable relationship; through SPSS version 22 computer program. The findings revealed that there was a strong positive relationship which was statistically significant between the independent variables and the dependent variable. The study recommended that the management of the University train their employees in order to equip them with knowledge, skills, and abilities, to effectively and efficiently perform their duties adequately; the management should involve all the employees in decision making and in policy formulation and should ensure adherence to the quality policy and procedure in place. The study also recommended that the management should show commitment and support to all its employees achieved through better leadership style, involvement and participation and provision of adequate resources to ensure steady supply of goods and services in the organization. The management of the University and all the employees in general should have a transformative leadership style. Future researchers should focus on other variables that may influence successful implementation of total quality management. A similar study could be carried out in other organizations such as private universities to find out whether the same results will be obtained.

Key Words: Training, Quality Management Systems, Leadership, Employee Performance, Kirinyaga University
Background of the study

Total Quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations. Total Quality Management, TQM, is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices. (Kirkpatrick, 2006). Quality management is becoming increasingly important to the leadership and management of all organizations. It is necessary to identify Quality Management as a distinct discipline of management and lay down universally understood and accepted rules for this discipline. The ISO technical committee working on the ISO 9000 standards had published a document detailing the quality management principles and application guidelines.

A quality management principle is a comprehensive and fundamental rule / belief, for leading and operating an organization, aimed at continually improving performance over the long term by focusing on customers while addressing the needs of all other stakeholders. The ISO 9001:2015 principals are seven compared to the previous revision, Customer focus, leadership, engagement of people, process approach, improvement, evidence based decision making, relationship management.

Total quality management (TQM) has become a world-wide topic in the twenty-first century. Having its roots partly in the USA and partly in Japan, it was primarily adopted by some Japanese companies in the decades immediately after World War II. With the greater successes of Japanese companies during the 1980s, companies all over the world found that it was necessary to have good quality management practices in order to stay competitive (Lagrosen, 2002). Total quality management is an enhancement to the traditional way of doing business. It is a proven technique to guarantee survival in world class competition. Only by changing the actions of management will the culture and actions of an entire organization be transformed.

Total quality management (TQM) as a management approach of an organization is centered on quality, based on the participation of all its members and aiming at long term success. This is achieved through customer satisfaction and benefits to all members of the organization and to society. TQM is a philosophy for managing an organization in a way, which enables it to meet stakeholders' needs and expectations efficiently and effectively without compromising ethical values (Dickens, 2009). Many firms have arrived at the conclusion that effective TQM implementation can improve their competitive abilities and provide strategic advantages in the marketplace (Lehmann et al, 2004).

Total Quality Management is a corporate business management philosophy which recognizes that customer needs and business goals are inseparable. It is applicable within both industry and commerce. TQM ensures maximum effectiveness and efficiency within a business and secures commercial leadership by putting in place processes and systems which will promote excellence prevent errors and ensure that every aspect of the business is aligned to customer needs and the advancement of business goals without duplication or waste of effort. Globalization of market economies has urged corporations in all sectors to concentrate on maintaining a sustainable competitive edge, which is directly, related to the upkeep of quality both in terms of services as well productivity. (Grimm, 2009). TQM is the
coordination of efforts directed at improving customer satisfaction, increasing employee participation, strengthening supplier partnerships, and facilitating an organizational atmosphere of continuous quality improvement (Pride, 2007).

Universities in Kenya
University education in Kenya dates as far back as 1922 when the then Makerere college in Uganda was established as a small technical college to meet the higher education needs of the three East African countries: Kenya, Uganda and Tanzania. In almost half a century later in 1970, the university of Nairobi was established as the first public university in Kenya (Nyaigotti Chacha, 2010). As the years went by, the demand for university education exceeded the capacity of the University of Nairobi and this led to the establishment of Moi University in 1984, thereafter Kenyatta University in 1985 and Egerton University in 1988. From then on, University Education in Kenya has expanded and this is shown by the increase in number of universities both public and private and in the rise in student enrolment. The University Of Eastern Africa, Baraton was the first private university to be given a charter followed by catholic university of East Africa and Scott Theology College in 1992. As of June 2013, there were sixty seven universities operating in Kenya at various authorization levels. Twenty Two were public chartered, seventeen were private chartered and twelve operate had letters of interim authority while two were registered private universities. There were also nine public and five constituent colleges established by a legal order to operate under the guidance of the chartered universities (GOK, 2014)

Kirinyaga University College
Kirinyaga University College was established by the Kenya Government through the Kirinyaga University College Order, Legal Notice No. 108 of September 2011 as a constituent college of Jomo Kenyatta University of Agriculture and Technology. The successor to the Kirinyaga Technical Institute (KTI), the University College aims at becoming a world class university of science and technology specializing in industry oriented innovation and entrepreneurship. The University College is located approximately 115 Km North East of Nairobi off Nairobi Sagana-Embu-Highway in Kutus Town, the headquarters of Kirinyaga County. The main objective of the university is to provide, directly or in direct through collaboration with other institutions of higher learning, university education including technology transfer, scientific and professional education and effective application of knowledge and skills in life work and welfare of the citizens of Kenya.

The University is expected to provide and advance university education and training to, appropriately, qualified candidates leading to the conferment of degree and awards of diplomas and certificates. Vision: To be a world class university in training, research, technology and innovation for development. Mission To train and develop world class human resource equipped with innovative technology and skills to meet the demands of a dynamic world.

Statement of the problem
The world have become a global village, Public Universities in Kenya are not ranked among the best in the world even after the introduction of performance contracting in 2004 which required that the Universities adopts quality management systems. The industry is still marred with strikes, high labor turn over, lack of training and development opportunities and lack of career progression, to name but a few, which have in turn affected the quality of services offered.

In 2012, Kenyan lecturers stepped up a nationwide strike over better pay, and working conditions,
converging in the capital and leaving many students unattended in public universities. About 15,300 members of their university academic staff union had stopped work in the country, to ensure that their demands of increment of 300 percent pay rise (UASU, 2013). Inadequate pay schemes will demotivate the employees to work hard thus attaining set goals and objectives. Poor pay will lead to employee turnover, and this means that the universities lose key people who possess relevant knowledge, skills and abilities to private universities and other sectors in Kenya. (UASU, 2012).

High labor turnover has also been cited as another problem facing staff in public universities in Kenya. Lecturers and other staff who possess relevant knowledge, skills and abilities, have left the public sector, to go and work in the private sector, where they are adequately remunerated, advanced career growth opportunities, training programs and a conducive and a better working environment. The administration of public universities in Kenya, should come up with policy framework and guidelines, and retention strategies to try and curb the turnover menace in the higher education sector. Retention strategies such as better rewards and incentives, promotions, adequate training programs, and involving employees in decision making will motivate them to be efficient in their job duties, and this will lead to increased employee performance leading to improvement of quality services and goods being offered. (UASU, 2012).

Lack of training and development opportunities has also been another challenge in the higher education sector. Lecturers don’t adopt pedagogical strategies when teaching their students on issues and units that they are teaching, this lack of training on pedagogical issues, has led to half-baked students in society and this has been blamed due to lack of training and mastery of the units by lecturers. (UASU, 2012). Due to lack of training programs, this has led to insufficiency in knowledge and skill acquisition and this will lead to poor delivery of services and low productivity in the organization.

Lack of Career progression ladders (Promotions), has also been a contentious issue with employees working in Public universities in Kenya, some of them cite that they have worked for more than 5 years in their respective capacities and positions, without being promoted, some have worked for more than 15 years, and they have remained in the same job group for decades, and this has led to go-slows and strikes in public universities in Kenya. Public universities in Kenya lack infrastructure from lack of adequate human resources, buildings, lack of land for expansion and this has led to poor services offered and students not being realizing their full potential, due to lack of workshops for their training and this has led to substandard education due to lack of facilities for students to learn and grow in their respective careers.

**General objective**

This study sought to investigate the relationship between Total Quality Management and employee performance in Public universities in Kenya, a case study of Kirinyaga University College.

**Specific objectives**

- To examine the relationship between training and employee performance in Kirinyaga university college
- To determine the relationship between quality management system and employee performance in Kirinyaga university college.
- To establish the relationship between employee participation and employee performance in Kirinyaga University college.
- To evaluate the relationship between Leadership and employee performance in Kirinyaga University College.

**LITERATURE REVIEW**
This chapter presents a review of literature based on the research topic and study objectives.

Theoretical framework

The following theories guided the study:

Deming’s Approach to TQM

The theoretical essence of the Deming approach to TQM concerns the creation of an organizational system that fosters cooperation and learning for facilitating the implementation of process management practices, which, in turn, leads to continuous improvement of processes, products, and services as well as to employee fulfillment, both of which are critical to customer satisfaction, and ultimately, to firm survival (Anderson et al. 2004). Deming (1986) stressed the responsibilities of top management to take the lead in changing processes and systems. Leadership plays in ensuring the success of quality management, because it is the top management’s responsibility to create and communicate a vision to move the firm toward continuous improvement. Top management is responsible for most quality problems; it should give employees clear standards for what is considered acceptable work, and provide the methods to achieve it. These methods include an appropriate working environment and climate for work-free of faultfinding, blame or fear. Deming (1986) also emphasized the importance of identification and measurement of customer requirements, creation of supplier partnership, use of functional teams to identify and solve quality problems, enhancement of employee skills, participation of employees, and pursuit of continuous improvement. Anderson et al. (2004) developed a theory of quality management underlying the Deming management method. They proposed that: The effectiveness of the Deming management method arises from leadership efforts toward the simultaneous creation of a cooperative and learning organization to facilitate the implementation of process-management practices, which, when implemented, support customer satisfaction and organizational survival through sustained employee fulfillment and continuous improvement of processes, products, and services. The means to improve quality lie in the ability to control and manage systems and processes properly, and in the role of management responsibilities in achieving this. Deming (1986) advocated methodological practices, including the use of specific tools and statistical methods in the design, management, and improvement of process, which aim to reduce the inevitable variation that occurs from “common causes” and “special causes” in production. “Common causes” of variations are systemic and are shared by many operators, machines, or products. They include poor product design, non-conforming incoming materials, and poor working conditions. These are the responsibilities of management. “Special causes” relate to the lack of knowledge or skill, or poor performance. These are the responsibilities of employees. Deming proposed 14 points as the principles of TQM (Deming, 1986), which are listed below: Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs; adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change; Cease dependence on mass inspection to quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place; end the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust; Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs; Institute training on the job; Institute leadership. The aim of supervision should be to help people and machines and gadgets
to do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers; Drive out fear, so that people may work effectively for the company; Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service; Eliminate slogans, exhortations, and targets for the workforce asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the workforce; Eliminate work standards (quotas) on the factory floor. Substitute leadership; Eliminate management by objective. Eliminate management by numbers, numerical goals. Substitute leadership; Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality. Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, inter alia, abolishment of the annual or merit rating and of management by objective; Institute a vigorous program of education and self-improvement; Put everybody in the company to work to accomplish the transformation. The transformation is everybody’s job.

**Juran’s Approach to TQM**

TQM is the system of activities directed at achieving delighted customers, empowered employees, higher revenues, and lower costs (Juran and Gryna, 1993). Juran believed that main quality problems are due to management rather than workers. The attainment of quality requires activities in all functions of a firm. Firm-wide assessment of quality, supplier quality management, using statistical methods, quality information system, and competitive benchmarking are essential to quality improvement. Juran’s approach is emphasis on team (QC circles and self-managing teams) and project work, which can promote quality improvement, improve communication between management and employees coordination, and improve coordination between employees. He also emphasized the importance of top management commitment and empowerment, participation, recognition and rewards. According to Juran, it is very important to understand customer needs. This requirement applies to all involved in marketing, design, manufacture, and services. Identifying customer needs requires more vigorous analysis and understanding to ensure the product meets customers’ needs and is fit for its intended use, not just meeting product specifications. (Gary, 2006). Thus, market research is essential for identifying customers’ needs. In order to ensure design quality, he proposed the use of techniques including quality function deployment, experimental design, and reliability engineering and concurrent engineering. Juran considered quality management as three basic processes (Juran Trilogy): Quality control, quality improvement, and quality planning. In his view, the approach to managing for quality consists of: The sporadic problem is detected and acted upon by the process of quality control; The chronic problem requires a different process, namely, quality improvement; Such chronic problems are traceable to an inadequate quality planning process (Grey, 2009).

Juran defined four broad categories of quality costs, which can be used to evaluate the firm’s Costs, related to quality. Such information is valuable to quality improvement. The four quality costs are listed as follows: Internal failure costs (scrap, rework, failure analysis, etc.), associated with defects found prior to transfer of the product to the customer; External failure costs (warranty charges, complaint adjustment, returned material allowances, etc.), associated with defects found after product is shipped to the customer; Appraisal costs (incoming,
in-process, and final inspection and testing, product quality audits, maintaining accuracy of testing equipment, etc.), incurred in determining the degree of conformance to quality requirements; Prevention costs (quality planning, new product review, quality audits, supplier quality evaluation, training, etc.), incurred in keeping failure and appraisal costs to a minimum. (Dale, 2004)

Crosby’s Approach to TQM
Crosby (1979) identified a number of important principles and practices for a successful quality improvement program, which include, for example, management participation, management responsibility for quality, employee recognition, education, reduction of the cost of quality (prevention costs, appraisal costs, and failure costs), emphasis on prevention rather than after-the-event inspection, doing things right the first time, and zero defects. Crosby claimed that mistakes are caused by two reasons: Lack of knowledge and lack of attention. Education and training can eliminate the first cause and a personal commitment to excellence (zero defects) and attention to detail will cure the second. Crosby also stressed the importance of management style to successful quality improvement.

The key to quality improvement is to change the thinking of top managers-to get them not to accept mistakes and defects, as this would in turn reduce work expectations and standards in their jobs. Understanding, commitment, and communication are all essential. Crosby presented the quality management maturity grid, which can be used by firms to evaluate their quality management maturity. The five stages are: Uncertainty, awakening, enlightenment, wisdom and certainty. These stages can be used to assess progress in a number of measurement categories such as management understanding and attitude, quality organization status, problem handling, cost of quality as percentage of sales, and summation of firm quality posture.

The quality management maturity grid and cost of quality measures are the main tools for managers to evaluate their quality status. Crosby offered a 14-step program that can guide firms in pursuing quality improvement. These steps are listed as follows: Management commitment: To make it clear where management stands on quality; Quality improvement team: To run the quality improvement program; Quality measurement: To provide a display of current and potential nonconformance problems in a manner that permits objective evaluation and corrective action; Cost of quality: To define the ingredients of the cost of quality, and explain its use as a management tool; Quality awareness: To provide a method of raising the personal concern felt by all personnel in the company toward the conformance of the product or service and the quality reputation of the company; Corrective action: To provide a systematic method of resolving forever the problems that are identical through previous action steps; Zero defects planning: To investigate the various activities that must be conducted in preparation for formally launching the Zero Defects program; Supervisor training: To define the type of training that supervisors need in order to actively carry out their part of the quality improvement program; Zero defects day: To create an event that will make all employees realize, through a personal experience, that there has been a change; Goal setting: To turn pledges and commitment into actions by encouraging individuals to establish improvement goals for themselves and their groups; Error causal removal: To give the individual employee a method of communicating to management the situation that makes it difficult for the employee to meet the pledge to improve; Recognition: To appreciate those who participate; Quality councils: To bring together the professional quality people for planned communication on a regular basis; Do it over again: To emphasize that the
quality improvement program never ends. (Baron, 2012).

**Conceptual framework**

Figure 1 illustrates the conceptual framework of the study, identifying the dependent and independent variables, which formed the basis of the study.

Training
- Training methodology
- Training policy

Quality Management System
- ISO 9001:2008 Standard

Employee participation
- Union membership
- Involvement in decision making

Leadership
- Leadership Style
- Top management support

Employee performance
- Output
- Quality services offered
- Retention

Independent variables  Dependent variable

**Training practice**

Training refers to process of changing in thought, behavior, and action as a result of changes in knowledge, skills and competencies. (Bernard, 2012). Training is a process for the benefit of skill and effectiveness, in terms of their skills, knowledge and attitude as building blocks towards the achievement of wider organizational goals, to improve organizational efficiency (Dessler, 2008). It can also be defined as a systematic process, of altering behavior of employees, in a direction that will achieve organizational goals (Bernadine, 2003). Training is necessary to keep up with rapidly changing technology, which quickly renders skills obsolete. Training provides employees with specific skills or helps to correct deficiencies in their performances, while development is an effort to provide employees with abilities the organization will need in the future (Bernard, 2012).

Organizations today, have to ensure that they adequately train their employees, in order to increase performance level and avert turnover, and increase their knowledge, attitude and skill base, to be able to accomplish their tasks efficiently and effectively thus attaining organization’s goals and objectives. Training an employee enhances their feelings of belongingness and being valued by the organization, due to time and money spent to develop one’s skills. This motivates an employee to work harder and better, with hope of career advancement. Learning and development enhances individual’s personal competence, adaptability and employability (Armstrong, 2009). Learning can be promoted through training, which promotes employees’ skill acquisition and improvement. Armstrong further observed that learning is the planned and systematic modification of behavior through events, programmes and instructions which enable individuals to achieve the level of knowledge, skill and competence needed to carry out their work effectively (Armstrong, 2009).
Training and development opportunities are the most important reasons why employees’ remain in the organization, especially the youthful ones (Ng’ethe et al, 2012). Training must be a systematic process, hinged on effectively administered performance appraisals, identification of training needs, and establishment of a competence framework that addresses organizational goals (Bernard, 2012). Training and development widens one’s compatibility with opportunities for advancement contingent upon one’s ability to efficiently tackle new levels of responsibility and challenges, hence it is an investment in human capital whether initiated by the individual or the organization (Bernard, 2012).

Organizations should ensure to adequately train their employees, in order to reduce turnover and increase employee performance. Firms should use better training methods, which should comprise of either on-job training method, which comprises of, job instruction training, job rotation, orientation, coaching and on-the job projects. Also, off-job training method, comprise of sponsored courses, lectures, tutorials, distant learning, case study analysis, simulation exercises and private training (Carins, 2009). Training is a very important asset, because it is beneficial in this ways and it helps the firm to gain competitive advantage, and the merits include, reduced labor turnover, increased job satisfaction, employee motivation, efficiency in processes resulting in financial gain, enhance a firm’s image, helps in risk management, it leads to improved productivity, leads to reduction of mistakes and accidents and also leads to improved task expertise (Armstrong, 2009).

Croucher (2008), emphasizes that employee development, requires a shared responsibility among the organization and the employees. The university should ensure that policies and programs, facilitate the continuing development of employees, by working with employees to, assess and provide feedback on their skills and interests, training and development activities that match their career development objectives and job needs; use the training and development catalogue, as a tool to tell employees about training and development opportunities, in the organization, and to create an annual development plan; enact policies and practices that support employee development; follow up with employees after a learning activity to integrate new skills and knowledge into their responsibilities. Employees take initiative to assess skills and interests, and seek development opportunities that match needs; employees work hand in hand with the organization, to identify training and development objectives as a result, the organization experiences employees with upgraded skills set, working efficiently to attain set goals and objectives, and this has a high effect on, morale, career satisfaction, creativity, increased productivity and motivation ( Deb, 2006).

**Quality Management System**

A quality management system (QMS) is a set of policies, processes and procedures required for planning and execution (production/development/service) in the core business area of an organization. (i.e. areas that can impact the organization's ability to meet customer requirements.) ISO 9001:2008 is an example of a Quality Management System. A quality management system (QMS) is a collection of business processes focused on achieving quality policy and quality objectives to meet customer requirements (Green, 2008) It is expressed as the organizational structure, policies, procedures, processes and resources needed to implement quality management.

Early systems emphasized predictable outcomes of an industrial product production line, using simple statistics and random sampling. By the 20th century, labor inputs were typically the most costly inputs in most industrialized societies, so focus shifted to
team cooperation and dynamics, especially the early signaling of problems via a continuous improvement cycle. In the 21st century, QMS has tended to converge with sustainability and transparency initiatives, as both investor and customer satisfaction and perceived quality is increasingly tied to these factors. Of QMS regimes, the ISO 9000 family of standards is probably the most widely implemented worldwide - the ISO 19011 audit regime applies to both, and deals with quality and sustainability and their integration. (Greene, 2000).

Other QMS, e.g. Natural Step, focus on sustainability issues and assume that other quality problems will be reduced as result of the systematic thinking, transparency, documentation and diagnostic discipline.

The concept of quality as we think of it now first emerged from the Industrial Revolution. Previously goods had been made from start to finish by the same person or team of people, with handcrafting and tweaking the product to meet 'quality criteria'. Mass production brought huge teams of people together to work on specific stages of production where one person would not necessarily complete a product from start to finish. In the late 19th century pioneers such as Frederick Winslow Taylor and Henry Ford recognized the limitations of the methods being used in mass production at the time and the subsequent varying quality of output. Birland established Quality Departments to oversee the quality of production and rectifying of errors, and Ford emphasized standardization of design and component standards to ensure a standard product. Management of quality was the responsibility of the Quality department and was implemented by Inspection of product output to 'catch' defects. (Ogetto, 2005)

Application of statistical control came later as a result of World War production methods, and were advanced by the work done of W. Edwards Deming, a statistician, after whom the Deming Prize for quality is named. Joseph M. Juran focused more on managing for quality. The first edition of Juran's Quality Control Handbook was published in 1951. He also developed the "Juran's trilogy," an approach to cross-functional management that is composed of three managerial processes: quality planning, quality control and quality improvement. These functions all play a vital role when evaluating quality (Juran, 1951).

Quality, as a profession and the managerial process associated with the quality function, was introduced during the second-half of the 20th century, and has evolved since then. Over this period, few other disciplines have seen as many changes as the quality profession. The quality profession grew from simple control, to engineering, to systems engineering. Quality control activities were predominant in the 1940s, 1950s, and 1960s. The 1970s were an era of quality engineering and the 1990s saw quality systems as an emerging field. Like medicine, accounting, and engineering, quality has achieved status as a recognized profession (Robert, 2001).

As Lee and Dale (1998) state, there are many organizations that are striving to assess the methods and ways in which their overall productivity, the quality of their products and services and the required operations to achieve them are done.

Employee involvement / Participation

Dollard and Bakker (2010) suggested that employee participation at work resulted in positive organizational outcomes such as employee empowerment, improved productivity and motivation of employees. It is empowering for employees to be involved in their work processes and associated business processes (Hsu et al., 2008). Branham (2010) suggested that a workforce research has identified some links between participation and
organizational outcomes. These include improved productivity (Eaton and Nocerino, 2000; Gunningham, 2008; Markey and Patmore, 2011; Sorensen et al, 2009), and better utilization of employees’ skills and knowledge for organizational outcomes (Dundon and Gollan, 2007). According to Skaugrud (2011) employee involvement is an important contributor to organizational performance because employees gain understanding and knowledge about the workplace operations. When procedures are made, involvement of workers is especially important given that they hold important knowledge about the specific operations, and the context surrounding the operation. When the workers feel involved in this process and feel like they contribute to it, this may create a stronger feeling of ownership towards the procedure, which will increase compliance with these procedures. It is also likely that an involvement like this will increase the quality of the procedures as well, which will also make a higher level of compliance more likely.

Armstrong, (2009) has supported that there is a positive association between participation in decision making and social identification with the organization. Social identification is defined as “the extent to which the group is valued and self-involving” (Haslam, 2001). According to the social identity theory, individuals evaluate the groups or organizations’ they belong to in terms of status. High status implies a positive social identity or high social identification. This approach to social identity has later been developed to propose that status may also derive from comparing with other in-group members on social identification in organizations’ (Joensson, 2008).

Fuller et al. (2006) argue that employee participation is linked with organizational identification because it signals inclusion and that the organization values the individual’s opinions. Their field study of hospital employees showed that employee participation was positively related to employee’s perceived respect, i.e. their status within the organization, and, in turn, related to social identification with the organizations’ (i.e. organizational identification).

Joensson (2008) defines participation as the totality of forms by which individuals, groups, collectives secure their interests or contribute to the choice process through self-determined choices among possible actions. He emphasizes that different forms of participation may imply varying degree of influence, termed “intensity of participation”, participation may encompass the single employee, work groups or all the employees as a group, and participative decisions may concern different issues.

Distribution of power is a necessary condition for enhancing performance and satisfaction by means of employee participation. Intensity may play a role in the identification process, for several reasons: groups may use their influence to secure properties of social value, thereby enhancing the groups’ status. The group’s influence per se may also symbolically signal the group’s status in an organization. (Heller, 2011)

Employee participation may apply to decisions about very different issues; a distinction exists discriminating between issues related to the organization ( Joensson, 2008). The work related issues are related to employees’ immediate conditions for performing the job while the organizational issues are related to employees’ distal organizational environment.

Donaldson (2010) argues that employee job satisfaction and well-being is enhanced when supervisors provide a supportive environment where employees are encouraged to interact and speak about the workplace issues. Joensson (2008) argues that such global conceptualization’s of participation neglect the fact that participative practices can be organized along a number of different, yet
significant, dimensions, such as degree of influence, form and decision issues. Where managers fail to involve employees in decision making, the employees feel alienated and less willing to accept changes that are imposed on them. This implies that clear communication about changes which are about to take place reduces employee anxiety and resistance to change.

**Leadership**

The principles and practices of Total Quality Management can be different between various industries and enterprises, but there is a universal agreement about the importance of leadership for its achievement. The use of TQM encourages employees at all levels of the organization to participate not just in resolving the problem of quality, but also in continual work improvement and achieving the projected goals. From this we can conclude that many of the activities occur in the lower levels of the organization. Yet, only the leadership of top management is in position to create a necessary organizational culture that is capable to lead and support TQM actions among employees from the lower levels of the organization. (Nzuve, 2009). With the visionary leadership the healthy organizational culture can be easily transformed into TQM. The work of the leaders needs to be oriented from the inside to the outside of the organization, because only a healthy organization can reflect success into the environment. Though, for achieving this objective, a suitable model of leadership which its active application will guarantee the wanted result, is needed. The process of quality improvement in an organization is in a close bond with improving of effectiveness of individuals, groups and the organization in whole. To enhance the efficiency it is needed to know what is working, to know how to work, to have all the means that are needed for getting the work done, to be able to measure the produce and to be able to get information back from all parts of the organization. (Davidson, 2006).

The success of the company which managed to achieve the quality control is based on these key concepts, concern for the consumers, continual improvement, and process control, taking preventive actions and leadership and team work. Clearly leadership is one of the important concepts of TQM, the principles and practices of Total Quality Management can be different between various industries and enterprises, but there is a universal agreement about the importance of leadership for its achievement. Good management is a precondition for the success of strategies and planes. (Nzuve, 2009). Those enterprises that succeeded to achieve total quality control managed that because of the strong leadership The leader is the one that promotes the importance of quality in the organization, provides conditions for continuous education and training of employees, as well as maintaining constant contacts with the employees, consumers and suppliers. Primarily, the leader needs to be a strong instigator of the organization, provocateur of changes, by seating aggressive goals of constant improvement and by searching for opportunities for making a larger benefit he has to primarily have the needs and expectations of the costumers. Within the organization he has to be seen as a trainer, instead of a boss (Kamau, 2015).

The success of the organization depends on the abilities of the leader and the behavior of the top management. In that case, it is necessary to create a convenient organizational culture and selection of appropriate policies for initiation and application of quality control in an organization; the quality control to be a part of the activities of employees and to be formulated into a promotional plan and promoted through the organization; to acquire the necessary education and proper information about the quality control and how to implement it; to provide a system
for protection of quality; to check if the actions for implementation of the quality control correspond with the previously determined plans and policies and if it’s necessary to take corrective activities; to establish a control system of the individual functions if it is necessary to accomplish the control more thoroughly; all this instructions don’t refer just to the managers; they also have to be understood, accepted and applied by the employees of all levels of the organization. Maybe, leadership is the most important element for achieving Total Quality Management. It requires from the manager to provide an inspirational vision, strategic direction which will be understandable for all the employees, as well as setting values which will lead the lower level employees. (Armstrong, 2009).

Total Quality audit is important because of the coordination between the quality plan and the achieved results. It opens up space for detecting new possibilities for improvement. With the check process it is controlled if there is correspondence between the defined plan and the achieved results, a primary goal that needs to be understood is; why the results don’t satisfy the expectations according to the plan? Or why are the results better than expected? Total quality audit actually represents a quality check of the processes in the company. In the past these activities were part of the responsibilities of the department for quality, but today it is clear that they can’t be delegated and they are the key elements of leadership (Cummings, 2005).

The Act phase is the second step in this model of leadership and it includes the part of motivation and the part of selection. In this leadership model, the goal of the Act phase is to create an environment that will work motivational and will encourage employees to participate and give suggestions for improving the quality. Defining the aims and policy for quality achievement, as well as the creation of quality plan are the components of the Plan phase of PDCA leadership model. The aims show were the organization wants to be in the future, while planning is creating a detailed plan for getting the
wanted goal, those who are included in its accomplishment need to be part of its creation. This will contribute to straightening the organization, change of the organizational culture into the desired goal and certainty that the plan is not going to enter the executive phase, while there are negotiations between different levels of management and the team in charge for the implementation of the plan (Peterson, 2001).

There are also two elements: communication and education; which means that the final quality plan has to be presented to all concerned parties individually and the necessary education has to be made. Besides the employees, the education also refers to the top management, while the realization of this phase means functioning of the hierarchy i.e. the team functions like an orchestra directed by the team leader, which is directed by the head of department, and the department leader is controlled by the one above him, and on the top is the companies managerial group which is in charge of the quality improvement. The creation and recognition of new possibilities for quality improvement depends on the education of employees. The positive results from the work force, and also the motivation and the capacity of the labor output are constructive parts in the process of continuous improvement and depend on the education and training of the work force (Kamau, 2015).

According to the way in which the functioning of this model of leadership is thought out, we can say that the two phases can be divided in two types depending on the way it is being practiced among employees and superiors, actually from where the initiatives come. Plan, Do, and Check phase in the model reflect a type of leadership from the top to the bottom. And as such they include change in the pre-existing plans, setting new goals and so on, but they don’t eliminate the participation of employees, unlike the Act phase, where the typical relation is from the bottom to the top, where the suggestions for quality improvement comes from employees. One of the most important managerial duties is to create an environment which will act motivationally and will make sure that the employees function accordingly to the set quality goals and will give suggestions for improving it. The motivation will be challenged and the dedication of employees will be visible only if the management takes instant actions and reacts appropriately to the productive ideas that come from the work force (Nzuve, 2009).

**Employee performance**

Employee Performance Management is a process for establishing a shared workforce understanding about what is to be achieved at an organization level. It is about aligning the organizational objectives with the employees’ agreed measures, skills, competency requirements, development plans and the delivery of results. The emphasis is on improvement, learning and development in order to achieve the overall business strategy and to create a high performance workforce (Armstrong, 2009).

Most organizations have some type of employee appraisal system, and many are experiencing the shortcomings of manual staff evaluation systems. When discussing workforce performance the most commonly asked question is "How does Performance Management differ from performance appraisals or staff reviews"? Performance Management is used to ensure that employees' activities and outcomes are congruent with the organization’s objectives and entails specifying those activities and outcomes that will result in the firm successfully implementing the strategy (Noe et al. 2000). An effective Performance Management process establishes the groundwork for excellence by: Linking individual employee objectives with the organization’s mission and strategic plans. The employee has a clear concept on how they contribute to the achievement the overall business
objective, focusing on setting clear performance objectives and expectations through the use of results, actions and behavior’s, defining clear development plans as part of the process, and conducting regular discussions throughout the performance cycle which include such things as coaching, mentoring, feedback and assessment (Cole, 2002).

Performance appraisal properly describes a process of judging past performance and not measuring that performance against clear and agreed objectives. Performance Management shifts the focus away from just an annual event to an on-going process. If Performance Management is implemented correctly with specific objectives tied to the strategic and operational plan, organizational performance outcomes will likely increase very quickly. By conducting more frequent reviews, objectives can be adjusted and modified to suit changing business conditions. This dramatically increases the probability that the objectives are relevant and are able to be acted upon during the performance period (Cole, 2002).

By performing frequent performance reviews, visibility is increased dramatically. Areas of non-performance receive much more focus and attention and problems can be acted upon much quicker. Most Performance Management systems provide reporting as to who has or has not achieved their objectives (departments and individuals). Adjustments to objectives or strategy can then be made to ensure expectations can be met. Alternately, expectations can be modified as appropriate. By reviewing more frequently, all managers and employees start to plan and execute to clearly think about objectives. This results in better resource management and enables managers to work on the business, not in the business (Armstrong, 2009).

Job performance entails the way the employees actually perform the job, duties and responsibilities given to him and the result of the effects in achieving the overall organizational objective. (Armstrong, 2009). Performance can also be measured through a performance measure program and tools such as reports, 360-degree feedback, balance score card and other tools to determine progress. (Armstrong, 2009).

**Empirical study**

Findings by Karani (2011), on the effects of TQM implementation on business performance in the service industry, a case study of Kenya wildlife services, focused on the following independent variables, TQM principles, TQM implementation and challenges in the implementation of TQM, the eight principles covered included, customer focus, role of leadership, involvement of people, process approach to management, systems approach to management, continual improvement, factual approach to decision making, mutual beneficial supplier. In connection to the role of leadership in TQM implementation, the finding of this study, results revealed that the role of leadership has a positive impact on TQM implementation. The finding also reveals that KWS practice TQM to a great extent since managerial decisions directly affects the implementation processes. Customer focus was found to be a driving factor that influences the need to adopt TQM this cannot be achieved without the participation of the entire employees. The findings on customer focus in TQM implementation implies that KWS are customer oriented and that it practices TQM to a very large extent. From the finding, it is revealed that employee involvement in the implementation of TQM is a major factor that most firms should put in to consideration since they are the determinants for failure or success of an organization.

The findings also revealed that KWS practice five TQM tools to a great extent. This implies that KWS has made use of quality tools to a great extent. The
study finding revealed that KWS practices continual improvement through continual improvement policy, performance appraisal schemes, and research schemes for innovative solution and improvement programs. This clearly shows that continual improvement is highly being practiced in the organization. The research findings imply that the major challenge in TQM implementation is cascading the program to the bottom of the pyramid. Management should ensure TQM awareness to all staff levels. Most organization use bits and pieces of the TQM principles more especially organization use TQM principles that support their existing organization culture thus leading to ineffective TQM implementation. Efforts should be done to mitigate the above challenges for successful implementation of TQM.

In his study on the transformational leadership practices in Russian companies; Elenkow (2002) examined the former impact on organizational performance. Using a Multifactor Leadership Questionnaire, he analyzed the leadership behavior of 253 leaders. The analysis underlined a strong correlation between transformational leadership practices and organizational performance.

In their study on the connection between the transformational leadership style and organizational performance, Zhu, Chew and Spanger (2005) identified within 170 companies from Singapore, a positive relationship between the transformational leadership and the organizational performance. They also demonstrated that effective human resources management arbitrates the relationship between leadership and performance through increased commitment, higher motivation and intellectual motivation.

Moreover, a positive relation between the long-term income growth and transformational leadership was depicted in a study on 94 companies investigating the impact of transformational leadership practices on the financial performance of the organization in terms of profitability, increased sales or revenue and stock measures (Roi, 2006).

Moore (2007) in his research within the United Way of America organization found out that there is a significant positive relationship between female transformational leaders and the revenue element of organizational effectiveness. In another study on leadership styles and organizational performance, Kieu (2010) on 151 companies from IT industries underlined that transformational leadership relates positively and significantly to organizational performance. The study used a Multifactor Leadership Questionnaire (5X) and it revealed that transformational leadership is a stronger predictor for the performance, satisfaction and commitment within organizations by building commitment, empowerment and demanding a higher degree of respect and trust for the leader.

A study was done by Zhang (2006) on the implementation of total quality management, an empirical study of Chinese firms, where he analyzed the following variables on TQM implementation, leadership, supplier management, vision and plan statement, evaluation, process control and improvement, product design, quality system improvement, employee participation, recognition and reward, education, training and customer focus, where employee participation and training had a stronger relationship on implementation of total quality management programs in the manufacturing sector in China.

Kasongo (2010), did a study on factors that lead to a successful TQM implementation, a case study on the Zambian tourism industry. He investigated the following variables, quality practices of top management, employee involvement in quality management system, customer focus, process and data quality management, and quality tools and techniques implementation. According to the study findings, these factors significantly affect the company’s performance with respect to their
internal procedures, customers, market share and the natural and social environment.

While studying on the influence of employees' involvement in performance assessment system on employees' creativity of sales and engineering departments of Ebtekar manufacturer Sayyed (2012) undertook an empirical survey and analyzed data by descriptive analytical methods. A sample size of 97 employees was selected by simple random. In the study by Sayyed (2012), questionnaires were used for data collection and structural equation modeling was used for data analysis. The results of the study by Sayyed (2012) showed that all effects were adopted with the theoretical framework. Therefore, the variable of employees' involvement in performance assessment system positively influences the employees' abilities and skills to create creativity. The findings by Sayyed (2012) concur with a study carried out by Mohan (2001) on participatory development that indicate that an effective performance measurement system ought to be participatory. That Sayyed (2012) noted the influence of employees’ abilities and skills on performance confirm findings from a study on the influence of cognitive factors on performance by Aronson and Wilson (2006).

Ng’ethe (2013) also established that while 61.5% felt that their training levels were adequate for their current jobs, 57.4% felt that fairness was not employed when implementing the training policy and 49.4% felt that external training opportunities influenced staff to leave.60% of respondents were of the opinion that training would increase staff retention but 53.1% felt that there was insufficient financial support to undertake training. These findings imply that training has a significant bearing on employee retention but the training policies need improvement.53.5% were not satisfied with the promotion criteria and practices in their organization as well.

Kamau (2015) conducted a study on the relationship between human resource management and staff retention in public hospitals in Kenya. He idealised the use of reward practices, training and health and safety practice to boost employee performance and aid in attraction, motivation and staff retention. According to the equation taking all factors constant; the staff retention at Gatundu District Hospital was 2.174. A unit increase in Reward Practices led to a 0.116 increase in the staff retention at Gatundu District Hospital. A unit increase of employee training would lead to a 3.512 increase in staff retention at Gatundu District Hospital; a unit increase in health and safety leads to a 0.059 increase in staff retention at Gatundu District Hospital. Therefore according to the study findings employee training contributes more to staff retention at Gatundu District Hospital.

Fuller et al. (2006) argue that employee participation is linked with organizational identification because it signals inclusion and that the organization values the individual’s opinions. Their field study of hospital employees showed that employee participation was positively related to employees’ perceived respect, i.e. their status within the organization, and, in turn, related to social identification with the organization (i.e. organizational identification).

A study conducted by Ndung’u, (2015), on the relationship between talent management practices and employee turnover in the banking sector in Kenya, established the following variables which include, recruitment, training strategy, retention strategy and employee turnover. According to the equation taking all factors constant; the employee turnover at Co-operative bank was 0.851. A unit increase of Recruitment would lead to a 0.309 decrease in Employee Turnover at Co-operative bank; a unit increase in Training Strategy leads to a 0.456 decrease in Employee Turnover and a unit increase in Retention Strategy leads to 0.320 decrease in Employee Turnover. Therefore according
to the study findings Training Strategy contributes more to reduce Employee Turnover at Co-operative bank of Kenya.

Bernard (2012) cites a study of retention in Australian organizations by Chew (2004) which established that younger employees were mostly driven by remuneration, training and development, career advancement, challenging work, growth opportunities and recognition. The older generation attached great importance to autonomy, opportunities to mentor and job challenge.

A study by Ristova (2010) on the the impact of leadership on achieving total quality management in universities in Macedonia, researched on these variables, total quality management, leadership and the model of leadership, where he idealized the use of leadership as a major factor in boosting total quality management and overall organizational performance.

**RESEARCH METHODOLOGY**

This chapter provides details about the methodology adopted to conduct research.

**Research design**

A research design is the structure of research. Orodho (2003) defines it as the scheme, outline or plan that is used to generate answers to research problems. The study adopted a case study design method.

**Target population**

Newing (2011), describes a population as the set of sampling units or cases that the researcher is interested in. Kirinyaga University College had 215 employees; top management, middle level management and lower level management.

**Sampling frame**

According to data obtained from Kirinyaga University College, the total number of employees is 215.

**Sample and sampling technique**

Sampling is the process of selecting units (people, organizations') from accessible population so as to fairly generalize results to the target population (Castillo, 2009). The accessible population in Kirinyaga University College was 215 and the sample size was calculated to 108. Stratified random sampling technique was used to select the sample.

**Data collection instruments**

Kothari (2004) define data collection as the precise, systematic gathering of information relevant to the research purpose. The study made used questionnaires as the major tool of collecting primary data. The researcher used structured (closed-ended) and unstructured (open-ended) questionnaires that captured the various variables of the study and the likert scale used to allow for consistency and ease of answering. Closed ended questions generated specific responses and allowed easy analysis of data, while open ended questions gave the respondents a chance to give more information on relationship between total quality management and employee performance in the higher education sector.

**Data collection procedure**

The researcher obtained an introduction letter from the university which was presented to Kirinyaga University College, to allow her carry out the study. The researcher then moved into the area of study, identified the target population and proceeded to select the respondents. The researcher then administered the questionnaires, sorted the collected data, prepared the data for analysis and analyzed the data using SPSS version 22.

**Data analysis and presentation**

Both quantitative and qualitative approaches were used for data analysis. Quantitative data from the questionnaire was coded and entered into the computer for computation of descriptive and
inferential statistics, whereas inferential statistics, entailing correlation and regression, was computed to determine the relationships between the study variables. SPSS version 22 was used in computation of the quantitative data for both descriptive and inferential statistics. The results were then presented in tables and charts with brief explanation on each. The qualitative data generated from open ended questions was categorized in themes in accordance with the research objectives and reported in a narrative form along with presentation in terms of percentage of similarity in response. The qualitative data was used to reinforce the quantitative data.

RESEARCH FINDINGS AND DISCUSSION

This chapter presents the research findings and results of the study. Data analysis was conducted for each of the specific objective.

Response Rate
In this study a total of 108 questionnaires were distributed, a total of 70 questionnaires were returned representing a response rate of 71%.

Education Level of the respondents
According to the study findings, majority of the respondents 44.3% were degree holders. 24.3% were master’s holders; 21.4% were diploma holders. 5.7% had attained doctorate while 4.3% had were certificate holders.

Number of year of work in the university
According to study findings; 31.4% of the respondents had worked in the university for 2-3 years. 28.6% of the respondents had worked for 1-2 years as well as 3-4 years while 11.4% indicated that they had worked for over 4 years.

The relationship between training and employee performance
The study sought to find the respondents level of agreement with statements that relate training and employee performance at Kirinyaga University College. According to findings, the respondents agreed that Kirinyaga University had a formal employee training programme. The respondents agreed that various methods were used for Training employees and the training methods used at Kirinyaga University College were motivating. They also agreed that Coaching and mentoring programs were done at Kirinyaga University College. The respondents agreed that training had helped improve their performance since they joined Kirinyaga University and that both formal and informal training was administered at Kirinyaga University College. The respondents agreed that training had helped equip them with the necessary knowledge, skills and attitudes to better perform their job. They agreed that training provided enabled them to be highly committed and satisfied with their and employees were adequately trained in their organization to offer better quality services. The findings of this study were in line with Wanyama and Mutsoso (2010), Employees who receive training in line with their individual or organizational goals becomes more efficient in what they do.

The relationship between Quality Management Systems and Employee Performance
Response on presence of Quality Management System
From the study findings, majority of the respondents 97% indicated that the university has a Quality Management Systems while 3% indicated there is no.

Response on relationship between Quality Management Systems and Employee Performance
The study sought to find the respondents level of agreement with statements that relate Quality Management Systems and employee performance at Kirinyaga University College. According to findings, the respondents indicated that Quality services were provided in the organization and that Quality
management systems had been implemented in the organization to attain competitive advantage. The respondents agreed that the organization aimed to improve its quality to attain competitive advantage and that the organization’s policies and procedures helped to attain quality management in the organization. The respondents indicated that the leadership of the university had put in adequate resources to guide in quality management and that their stakeholders were satisfied with services in the organization. The respondents agreed that their organization involves employees in decision making and matters on quality improvement and employees were adequately trained in the organization to offer better quality services. The findings of the study were in line with Potter (2000), where he asserts that for organizations to attain massive payoffs through return on investment and increased profit margins, they have to ensure that they offer quality products and services thus leading to competitive advantage over their competitors.

**The relationship between Employee Involvement and Employee Performance**
The study sought to find the respondents level of agreement with statements that relate employee involvement and employee performance at Kirinyaga University College. According to findings, the respondents indicated that they agreed that the top management made all important decisions in the University College. The respondents also agreed that employees were encouraged to come up with new and innovative ways of doing things at the workplace and that employees at the University College were represented through a trade union or a workers association. The respondents agreed that employees were adequately involved in decision making process in the organization and that the management held regular meetings with all staff. According to MacLeod and Clarke (2009) effective and empowered employee voice occurs when Employees’ views are sought out; they are listened to and see that their opinions count and make a difference.

**The relationship between Leadership and Employee Performance**
According to findings, the respondents agreed that Supervisors assisted in aligning individual goals with overall organizational objectives and assisting in performance improvement. The respondents agreed that the leadership of the organization had established a clear unity of purpose and direction and that the leadership of the organization was visionary and motivated employees to better performance and to attain the set goals and objectives. The respondents agreed that the leadership of their organization had put in adequate resources to guide in quality management and that the leadership style of their supervisor was motivating.

**Employee Performance**
**Rating of employee performance in the university college**
According to study findings; Majority of the respondents 51.5% indicated that employee performance in the university was very good. 45.6% indicated the employee performance was good while 2.9% were neutral about the employee performance. According to study findings; the respondents strongly agreed that the image of the university had improved since adoption of TQM practices and that implementation of TQM practices had promoted business excellence in the university. They also agreed that they planned to stay in the same job for more than 10 years. The respondents agreed that since implementation of TQM in their university, productivity had increased. The respondents agreed that the university offered better services and products to its growing customer base and that they had no intention of quitting the university College employment.
Correlation analysis
Correlation measures the degree of association between two or more variables simultaneously. In this study the aim was to establish whether there was linear relation between the dependent variable (Employee Performance) and independent variables (Training, Quality Management Systems, Employee Involvement and Leadership), at 95% confidence interval and 5% level of significance. As stated above if the significance value is less than 0.05 (p<0.05) then it is considered statistically significant. If the significance value is greater than 0.05 (p>0.05) the relationship is not statistically significant. Pearson’s product-moment correlation coefficient (PPMCC) usually represented by the letter (r) can take on any value between +1 and -1. Having two variables X and Y; \( r = 1 \): indicates very strong positive linear relationship between X and Y. That is Y increases as X increases. \( r = 0 \): indicates no linear relationship between X and Y. Y does not tend to increase or decrease as X increases. \( r = -1 \): indicates very strong negative linear relationship between X and Y. Y decreases as X increases. The sign of r (+ or -) indicates the direction of the relationship between X and Y.

Table 1: Correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>Employee</th>
<th>Training</th>
<th>QMS</th>
<th>Employee Involvement</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.682**</td>
<td>.837**</td>
<td>.675**</td>
<td>.811**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.004</td>
<td>.000</td>
<td>.005</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td>.697**</td>
<td>.719**</td>
<td>.794**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td>.658**</td>
<td>.658**</td>
<td>.798**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td>.720**</td>
<td>.720**</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

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

Table 1 indicates the correlation between the independent variables (Training, Quality Management Systems, Employee Involvement and Leadership) and Employee Performance at Kirinyaga University College. The findings revealed that there was a strong positive relationship which was
statistically significant between Training and Employee Performance ($r=0.682$, $p=0.004<0.05$). There was strong positive relationship which was statistically significant between Quality Management Systems and Employee Performance ($r=0.837$, $p=0.000<0.05$). There was strong positive relationship which was statistically significant between Employee Involvement and Employee Performance ($r=0.675$, $p=0.005<0.05$). There was strong positive relationship which was statistically significant between Employee Involvement and Employee Performance ($r=0.811$, $p=0.001<0.05$).

**Regression Analysis**

The researcher conducted regression analysis to determine statistical significance between the independent variables (Training, Quality Management Systems, Employee Involvement and Leadership) and dependent variable Employee Performance at Kirinyaga University College.

<table>
<thead>
<tr>
<th>Table 2: Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Adjusted R-square is the Coefficient of determination that explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Employee Performance) that is explained by all the three independent variables (Training, Quality Management Systems, Employee Involvement and Leadership). From Table 2, the value of Adjusted R-Square is 0.751. This implies that, 75.1% of variation of Employee Performance was explained by Training, Quality Management Systems, Employee Involvement and Leadership. From the findings, there was remaining 24.9% which implies that there are factors not studied in this study that affects Employee Performance at Kirinyaga University College.

<table>
<thead>
<tr>
<th>Table 3: ANOVA test summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1 Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant Training, Quality Management Systems, Employee Involvement and Leadership)
b. Dependent Variable: Employee Performance

The ANOVA test is used to determine whether the model is important in predicting the Employee Performance. At 0.05 level of significance the ANOVA test indicated that in this model the independent variables namely; Training, Quality Management Systems, Employee Involvement and Leadership are important in predicting Employee Performance as indicated by significance value=0.001 which is less than 0.05 level of significance ($p=0.001<0.05$). Therefore there is significant relationship between the dependent variable (Employee Performance) and the independent variables (Training, Quality Management Systems, Employee Involvement and Leadership).
Table 4 Coefficient of Multiple determinations of the variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.071</td>
<td>0.107</td>
<td>.668</td>
<td>.507</td>
</tr>
<tr>
<td>Training</td>
<td>0.135</td>
<td>0.069</td>
<td>0.513</td>
<td>0.010</td>
</tr>
<tr>
<td>Quality</td>
<td>0.429</td>
<td>0.100</td>
<td>4.315</td>
<td>0.002</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>0.167</td>
<td>0.062</td>
<td>1.079</td>
<td>0.005</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>0.316</td>
<td>0.097</td>
<td>3.250</td>
<td>0.022</td>
</tr>
</tbody>
</table>

From the findings in table 4 above, at 5% level of significance, Training is a significant predictor of Employee Performance at Kirinyaga University College where (p=0.010<0.05). Quality Management Systems is a significant predictor of Employee Performance at Kirinyaga University College where (p=0.002<0.05). Employee Involvement was a significant predictor of Employee Performance at Kirinyaga University College where (p=0.005<0.05). Leadership was a significant predictor of Employee Performance at Kirinyaga University College where (0.022<0.05).

Where, is Y the dependent variable (Employee Performance at Kirinyaga University), X₁ is Training, X₂ is Quality Management Systems and X₃ is Employee Involvement and X₄ is Leadership.

As per the SPSS generated regression Table 4.8 the equation \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \) becomes:

\[ Y = 0.071 + 0.135X_1 + 0.429X_2 + 0.167X_3 + 0.316X_4 \]

According to the equation taking all factors constant; the Employee Performance at Kirinyaga University was 0.071. A unit increase of would lead to a 0.135 increase in Employee Performance at Kirinyaga University; a unit increase Quality Management Systems would lead to 0.429 increase in Employee Performance at Kirinyaga University; a unit increase in Employee Involvement leads to 0.167 increase in Employee Performance at Kirinyaga University. A unit increase in Leadership leads to 0.316 increases in Employee Performance at Kirinyaga University. Therefore according to the study findings Quality Management Systems contributes more to increase Employee Performance at Kirinyaga University.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presented summary of key findings, conclusions from the findings and recommendations made.

Summary

Therefore, the purpose of this study was to investigate the relationship between total quality management and employee performance in public universities in Kenya. The specific objectives of the study were; to examine the relationship between employee training and employee performance in Kirinyaga university college; to determine the relationship between quality management systems and employee performance in Kirinyaga university college; to establish the relationship between employee participation and employee performance.
in Kirinyaga university college, to evaluate the relationship between leadership and employee performance in Kirinyaga university college

**Relationship between employee training and employee performance in Kirinyaga University College**

Training is a process for the benefit of skill and effectiveness, in terms of their skills, knowledge and attitude as building blocks towards the achievement of wider organizational goals, to improve organizational efficiency (Dessler, 2008). Training is necessary to keep up with rapidly changing technology, which quickly renders some skills obsolete. Training provides employees with specific skills or helps to correct deficiencies in their performances, while development is an effort to provide employees with abilities the organization will need in the future (Bernard, 2012). Employees have to be thoroughly trained to attain these merits which include, reduced labor turnover, increased job satisfaction, employee motivation, efficiency in processes resulting in financial gain, enhance a firm’s image, helps in risk management, it leads to improved productivity, leads to reduction of mistakes and accidents and also leads to improved task expertise.

**Relationship between quality management systems and employee performance in Kirinyaga University College.**

Organisations should ensure to offer quality goods and services to their stakeholders. Organisations that uphold quality are seen to be customer focused organisations, and they attract employees to work in the organisation for long, due to the firm’s image in quality services in its industry. A quality practice, procedure and policy should be redesigned to equip the employees on what is expected of them, resource allocation and strategic planning to ensure that all the laid down goals and objectives are realized in a timely manner. The organisation should ensure there is a well-articulated goal (MBO), and resources to steer in quality realignment. A quality assurance department should be in place, to ensure that products and services produced by the organisation are above board.

**Relationship between employee participation and employee performance in Kirinyaga University College.**

Organisations should ensure to have an open door policy, where they involve employees in the following matters; decision making, grievance and disciplinary procedure formulation, policy formulation, so as to motivate the employees to work hard. Participation also acts as a retention strategy and the employees that are involved in day to day function of duties in the organisation feel a sense of belonging in that firm, and thus will work hard to attain the set goals and objectives.

**Relationship between leadership and employee performance in Kirinyaga University College.**

The leadership of any organisation, plays a pivotal role in its success. The organisation should ensure that its leaders have a clear vision, goal, objective and strategy of where they want to take the organisation in the next few years. Also the leader’s style of handling employees and duties plays a pivotal role in the motivation, attraction and retention of staff to ensure that all employees are motivated thus boosting their performance and overall organisational performance.

**CONCLUSIONS**

From the research findings presented in chapter four and summary above the study concludes the following:

Employees in the university college agreed that there was a formal training program in the organization and that the organization used various methods such as coaching and mentorship programs to equip them
with knowledge, skills and attitudes, for efficient employee performance. The employees also agreed that training opportunities had helped to improve their performance, commitment and satisfaction thus leading to better quality services. Training programs led to improvement in productivity, task expertise and increased efficiency in processes resulting in financial gain. Training led to increased career opportunities where employees were promoted to various positions in the University. It also led to increased employee motivation and job satisfaction. Training could also lead to Hawthorne studies effect, where productivity will increase when employees are given attention.

Employees in the university college had agreed that quality services were provided in the organization and quality management systems had been implemented in the organization thus helping the organization to attain competitive advantage. The employees further assert that the organization aimed to improve quality and also the organization’s policies and procedures helped to attain quality management in the organization.

Employees in this organization indicated that the top management made all important decisions in the organization, and employees were encouraged to come up with new and innovative ways of doing things at the workplace to attain competitive advantage. Employees in this organization were represented by trade union and they were adequately involved in decision making process in the organization to motivate, attract and retain them for superior employee performance. Through involvement of employees in the decision making process, it would lead to, improved task expertise, act as a motivation tool, boost their morale, increase in organizational commitment, increased productivity and increase in job satisfaction levels. Employees in this organization argued that supervisors assisted in aligning individual goals with overall organizational objectives and they assisted in performance improvement. The employees also agreed that the leadership of the organization was visionary and motivates employees’ performance and the visionary leadership had led to attainment of goals and objectives in the organization. The leadership style of their supervisors and managers had motivated employees towards the attainment of set goals and objectives, and the leadership had put in adequate resources to guide in quality management.

Employees in this organization also agreed that the image of the firm had improved since adoption of TQM and this had led to business excellence leading to improved productivity in the organization. The organization offered better services and products to its growing customer base and they had no intention of quitting the organization.

**RECOMMENDATIONS**

The study recommended that government bodies like the National Industrial training authority (NITA), should assist in training employees using current techniques and methods, to equip them with the relevant knowledge, skills and attitudes for effective and efficient performance. This can be done through seminars, on-job training techniques and assessment center’s to analyze the employee’s skills deficiency and equip them with skills and knowledge.

The management should train the employees in order to equip them with knowledge, skills, and abilities, to effectively and efficiently perform their duties adequately. Training should be done on use of pedagogic techniques, public relations, use of new equipment and managing diversity. New training techniques should be employed in order to equip the employees with relevant knowledge, skills and abilities for efficient performance.

The management should involve all the employees at all levels of management in issues to do with
decision making and in policy formulation, so as the employees to feel a sense of belonging in the organization, and this will boost their morale, increase job satisfaction and show a sense of commitment to the firm.

The management of the university should ensure adherence to the quality policy and procedure in place, to ensure that quality goods and services are offered to its stakeholders, to be perceived as a customer focus organization through provision of quality services and products.

The study also recommends that the management of Kirinyaga University College should show commitment and support to all its employees in order to motivate them to work harder and realign individual goals with organizational goals. This can be achieved through adoption of alternative leadership styles, involvement and participation of all employees and provision of adequate resources to ensure steady supply of goods and services in the organization.

The leadership of the University should ensure adherence to the service delivery charter and achievement of the strategic plan already in place by outlining clear expectations to all employees to consistently ensure customer satisfaction and deliver on the vision and mission of the University College.

The management of the University and all the employees in general should have a transformative leadership style, which entails participating in day to day management functions and decision making, having a clear vision and mission of what they want to achieve and through visionary leadership the set goals and objectives shall be realized.

**Suggestions for further research**

This study was limited to the relationship between total quality management and employee performance and it brought out this four factors, employee training, quality management systems, employee participation and leadership. Future researchers should focus on other variables that may influence successful implementation of total quality management to ensure overall employee performance and organizational success, such as empowerment, career development, leadership commitment, and customer focused organization, and factual approach to decision making. Promotions (career advancement), among others.

This study was limited to public universities in Kenya using Kirinyaga University College as a case study. A similar study could be carried out in other organizations such as private universities to find out whether the same results will be obtained.
REFERENCES


