The Effect of Total Quality Management Practices on Customer Retention– A Case Study of ZCAS University
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Abstract

The business of providing training has become highly competitive in Zambia to an extent that, if not well strategized, 'Big names' institutions may find themselves becoming 'white elephants' with their structures. The purpose of this study is to investigate the effects of TQM practices on the clients' satisfaction and hence retention at ZCAS University. ZCAS as a University has a Quality Assurance policy from which it draws all its quality initiatives. These initially are drawn from the Higher Education Authority guidelines on what constitute quality in education provision. These guidelines include: Vision, Mission and Strategy, Governance and Management; Clearly defined Academic Programs; Teaching and Learning support systems; Staffing and Training; Adequate physical infrastructure for its operations etc. This paper uses the methodology of both primary and secondary data to examine the relationships between TQM practices variables to the customer satisfaction variable. The study sample consisted of 100 students and employees selected at random, using simple random sampling of which only 80 were able to return the questionnaires. Additionally, some students were interviewed on certain areas related to quality matters and observations were made of certain observable behavior and attitude of employees that border on quality matters. The number of students who returned the questionnaires was less probably because the survey was done during the time when most students were preparing for their exams. This gives a response rate of 80%. A combination of data collection instruments as stated was used so as to increase amount of areas related to quality surveyed. Data were analysed using IBM SPSS version 20 employing frequencies, correlations, percentages etc. Microsoft excel was equally used in selected circumstances in data analysis. Quality at ZCAS University are observed in a number of areas including health facilities, availability of learning and teaching materials, lectures' preparedness, and teaching and learning assessments. It was established that management at ZCAS are committed to enhancing and maintaining quality of service provision to its clients as a number of TQM practices are in place and closely monitored and frequently reviewed by a quality manager who is responsible for the task. This, as shown by the research results unreservedly gives students motivation to continue pursuing their studies at ZCAS University. Particularly employees and students are of the view that quality practices are generally very good. This study has the value of enabling top management to continue promoting quality practices and improve in areas indicated for weak practices so as to use quality for competitive advantage as a university.

Key words: Total Quality Management, Customer satisfaction, Quality Assurance, ZCAS University and competitive advantage.

1. INTRODUCTION

1.1 Background to the study

The world of business has become highly competitive, to an extent that most organizations opt for the use of Total Quality Management (TQM) practices as a means to attaining milestones in their bid to be highly competitive in the market of the industries in which they operate. The adoption of TQM practices is besides other approaches in operation in most business entities for their survival. These other approaches include price and delivery.

However, quality appears to be a tough tested approach to being highly sought by customers. It automatically encompasses the other two, that is, competitive price and meeting or beating delivery times. On the contrary, price may be low because the quality is poor – this is a common feature. And delivery may be on schedule because of poor quality, that is, less time is spent to prepare product or service for delivery to customers because the features that would meet customer expectations are missing. Sheikholeslam and Emanian (2016) states, "offering the best quality is one of the unsurpassed and essential ways for companies to survive." TQM practices have greatest potential to deliver value to customers. The value they receive is appreciated to such an extent that they pay back through being loyal to their value giving supplier.

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It is important for those advocating for quality improvement to remember that it does not imply improvement of service rendered or tangible product alone, but the efficiency with which all processes lead to final service or product delivery must be carried out.
For an organization such as ZCAS University to achieve quality improvements, different operational areas that are people operated need to be clearly understood by those directly involved as the extent to which their contributions enhance quality in the organization as a whole.

To this effect, the ZCAS University has put in place a Quality Assurance Policy (QAP) that among others prescribe the University's objectives regarding quality assurance matters, procedures and processes to be adopted by all in order to achieve desired quality levels. The policy outlines, in addition, the partnerships ZCAS has from which it expects adherence to quality including suppliers of goods and services such as employees (ZCAS Quality Assurance Policy 2019). The policy outlines a number of processes it would implement to achieve its quality objectives and include: student engagement, support services, periodic reviews through evaluations, teaching and learning, use of external verifiers for its internal examinations.

The ZCAS University policy further elaborates that, "the University's quality assurance shall be embedded in all aspects of the institution's operational activities." With all the objectives related to quality enhancement, the researcher in this study sought answers to the question, "do all Quality Assurance procedures adopted by ZCAS lead to customer satisfaction hence loyalty?" The university has, in addition, the objective of expanding the development of its Open and Distance Education Learning (ODEL) to reach learners outside the country.

In view of lack of emphasis on how engaging in and implementing TQM practices impact on customers including suppliers of services for a learning institution like ZCAS. While there has been vast amount of research on quality, certain connections have not been so much explored in terms of how they enhance quality of wholeness of service so as to satisfy customers and hence the reason for this research.

Statement of the problem and justification for research

Jones and Crowe (2006) in their study identified that, "maintaining a high level of customer satisfaction

needs to be one of the goals of every company and can be achieved through total quality management". In the recent past, business entities have been experiencing rapid dynamics in the environments in which they operate, internal or external. These changes call for an unprecedented need to relook at the way things are done, to check if customer expectations are still being met. Besides all, Jablonski, (1992) comments that, "it is the goal of every business entity to use TQM to improve customer satisfaction."

The researcher found out that ZCAS has joined the quest for quality as the institution's attention changes the direction of the wave to customer satisfaction. If ZCAS' products are not longed for by its clients, it is as good as products have no value as they would lack market. This research was particularly important as it showed that the nature of products of the business entity can attract and retain customers. TQM is filled with so many ideas and attitudes.

Hogan (2012) had this to say, "In the present era of economic globalization, the World Trade Organization (WTO) under its General Agreement on Trade in Services (GATS) is treating higher education as a commodity for enforcing trade among member countries.
This study is purposed to determine how TQM can yield positive results for an entity that could retain and satisfy customers.

First of all, TQM has been defined by a Feigenbaum, a doctoral student at the Massachusetts Institute of Technology in the 1950s then in his book 'total Quality Control' as 'an effective system for integrating the quality development, quality maintenance and quality improvement. Many other pioneers have given their opinion about what TQM is and new knowledge continues to emerge as it shall further be explored in paragraphs that follow.

Purpose of the study

The main purpose of this study was to establish whether company executives could use TQM practices to help them manage emerging performance related risks as an offshoot of their operating activities.

The study outcomes will help firms attract, motivate and retain competent employees who will enable it realize its objectives. TQM practices help companies to be known as highly competitive in the markets in which they operate. Eriksson and Hansson, 2003; Yang, 2003) described TQM as a holistic approach to improving quality, productivity and competitiveness in the international marketplace. By understanding the effect of TQM practices at ZCAS University, internal stakeholders will be objectively allocating resources where it matters so that institutional performance would be enhanced via maximization of returns.

Finally, by investigating the effect of TQM practices on customer retention and hence company performance, the study findings will enrich the discussions on effect of TQM practices to the existing theories and literature on their association.
The report seeks to contribute to the development of more effective TQM policy that can enhance customer satisfaction and eventually their retention at ZCAS University that will enhance organization performance operationally and financially. Wen-Yi *et al* (2009) had this to say, "In the contemporary global economy, and turbulent market environment, it is vital for organizations to achieve high levels of customer satisfaction that eventually lead to customer loyalty and improved company-wide performance."

Research objectives

1.3.1 Research aim
The main aim of this research is to serve the needs of ZCAS University by establishing TQM factors that impact and satisfy its customers.

1.3.2 Research Objectives

1. To Identify the TQM practices in operation at ZCAS University.
2. To explore the contribution of TQM practices to customer satisfaction at ZCAS University.
3. To ascertain the effectiveness of TQM practices in operation with regards to customer retention at the university
4. To establish areas of operation at the university in which customers feel quality is compromised.

1.3.3 Research Questions

1. What TQM practices does ZCAS University have in place?
2. What are the contributions of TQM practices to ZCAS quest for customer satisfaction?
3. To what extent do the TQM practices at ZCAS affect your loyalty?
4. What areas of operation at ZCAS University do you feel quality is compromised?

1.7. Definition of Operational Terms

The various definitions that will be put forward reflect the origins as well as the values of the sources of the definitions.

1.8. Quality

Quality can be understood from different perspectives. In the context of this study, it's taken for those good features inherent in a service or product that a customer would appreciate and feel they are getting value for their money. Shahin and Nikneshan (2008) explain, "Quality is considered the ability to meet the stated and implied requirements of customers and not an inherent feature." It means therefore that an entity must endeavor to define the standard that in their view is what customers expect. Crosby (1979) defines quality as "conformance to requirement" while Juran and Gryna (1993) define quality as "fitness for use".

Quality in the context in which ZCAS (2019) defines it is, "being *fitness for purpose;* which entails, the extent to which ZCAS' core and support structures and processes are aligned with its mission, vision, values, purposes and brand promise. Quality Assurance - the activity of providing evidence needed to establish confidence among all concerned that the quality-related activities are being performed effectively.

In the context of Open and Distance e-Learning (ODeL), quality is best defined as fitness for purpose in combination with exceptional high standards, perfection and consistency, value for money, and transformation capabilities.

The learning material has quality if it will definitely work when put to test.

ZCAS (2019) further lists the following to be ingredients of quality: Customer's satisfaction with a product; fitness for purpose; conformance to specifications and excellence, consistency, and achievement of specified standards.

Numerous empirical studies confirm that firms that have adopted a quality-oriented strategy have achieved improved productivity, greater customer satisfaction, increased employee morale, improved management-labor relations, and higher overall performance.

1.9. Total Quality Management

Total Quality Management (TQM) comprises of initiatives put in place by management so as to create a culture or environment in which continuous improvement is everyone's concern on delivering high quality products or services to customers. Pfau (1989) adds that "TQM is basically a strategy towards continuous change, as well as an operationalized process, and can also be described as a holistic approach which seeks, through the improvement of quality, productivity and competitiveness to integrate all organizational functions and organizational objectives in a focus on meeting customer needs. Yohanes *et al* (2012) reiterates that, "quality in a product makes sure that it can meet the present expectations of the customer and takes account of future needs." That is why

TQM practices must evolve around time and circumstances obtaining in an environment.

Mehra *et al* (2001:856) in his definition of TQM emphasizes that, "the people in the organization are required to make quality a culture in their daily lives. Furthermore, it is also important to understand that TQM is a long-term perpetual improvement process requiring significant resources, both financial and human. It is a dynamic process, a continuous process with no deadlines or target dates, it cannot be considered complete since no goal or destination hence a way of life.

It is not all TQM practices that go everywhere. Despite the growth in the adoption rate of TQM philosophy, most companies still failed. It was later realized that the philosophy was only effective in certain cultures and not all.

Total Quality Management is an approach an organization can use to improve quality and meet customer requirements by controlling. Many educators assume that the TQM model applies only to profit-making organizations. TQM can also be applied to education.

JICA (2006) explained TQM from the perspective of hospitals in Japan as follows; TQM in Japan, which is regarded as a world leader in TQM as it is implemented in the industrial sector. The National Network of TQM for Health was set up in 1999 to build a network of medical organizations for quality improvement. Its activities include sharing ideas among medical institutions working on medical quality improvement and putting of supportive efforts such as developing and promoting quality improvement methodologies.

1.10. Customer satisfaction

Global competition has increased dramatically. A larger selection of products and services is available to the same set of buyers, with little growth in overall markets. Thus satisfied customers are important to companies because, on average, approximately 70 percent of all sales derive from repeat purchases.

Firms can no longer maintain volume or profits by seeking out new customers (an offensive strategy); they must adopt a defensive strategy that focuses on keeping current customers as loyal purchasers of the firm's goods and/or services, (Yohanes *et al* 2012).

At the same time, articles in the popular press may be sensitizing consumers to the issue of customer satisfaction. Purportedly "unbiased" publications such as *Consumer Reports* widely publicize comparisons of performance and overall customer satisfaction for many different products and services. Automobile advertising routinely quotes customer satisfaction figures to sway purchase decisions.

It was found that what is now a "best practice" may not be in the future; managers cannot read this article, adopt the best practices identified here, and expect to establish a firm with a reputation for delivering satisfaction to its customers. They must continually improve on current practices just to stay even with the competition, Yohanes *et al* (2012).

The objective of the study was to gain a full and deep understanding of CS best practices within an identifiable segment and make conclusions about companies with those characteristics.

Mensah (2013), postulates that improvement in quality will lead to an increase in the level of satisfaction of customers, and consequently results in greater loyalty. This in turn enables the firm to increase sales and enhance the competitive position of the firms.

1.11. Competitive advantage

Competitiveness is the ability of the firm to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them. it is an art to always try and beat competitors. Porter (2009) explains that competitiveness of a firm is capability of a firm to sustainably fulfill its double purpose; meeting customer requirements at a profit.

He further adds that competitiveness is achieved through offering on the market goods and services which customers value higher than those offered by competitors.

1.12. ZCAS University

The ZCAS University is a subsidiary of ZCAS, a public institution, established by an Act of Parliament of 1989. While the parent institution concentrates on offering professional courses, the subsidiary diverts into academic courses. Both sections of the institution embrace the aspect of Total Quality Management in their offerings with a view to improve performance dimensions of its services.

ZCAS subscribes to the 3 fundamental shifts that would profoundly change the field of higher education in the next several decades. These include: globalization of higher education, impact of technology and market analysis using business model of higher education.

1.13. Quality Assurance

Is the mechanism put in place to guarantee that the education is "fit for purpose" i.e., is good? It refers to a process of defining and fulfilling a set of quality standards consistently and continuously with the goal of satisfying all stakeholders (Mensah 2013). It is further described as a process of checking that the standards and quality of the education meet the agreed expectations.

It is about raising standards and ensuring students have the best possible experience when studying. It is proactive rather than reactive. It is based on quality principle of continuous improvement of all processes involved in delivering the final product of a well-trained and marketable student.

The term "Quality Assurance" (QA) originally referred to the concept and activities of ensuring the quality of industrial products.

2. LITERATURE REVIEW

2.1 Theoretical review

In the recent past, businesses have been experiencing dynamisms in the business environment that have birthed the need to increase customer awareness of quality and technological impacts on business operations and competitive strategies that lead to cost reduction.

It has been established by prior researchers that there is a relationship between provision of quality service and customer satisfaction. Yohanes *et al* (2012) states that, "While the business world also shifts its focus from product to customer, managers are discovering that profitable and sustainable revenue growth results from enhanced customer relations, because consumers nowadays are more informed, more demanding and prone to change brands and companies if their requirements are not met on time and at a price they are willing to pay."

2.2. Theoretical framework

The problem of this study is further elaborated using the Object-Oriented Quality Management model (OQM) by Statistics Netherlands (2007).

2.3. Scope of OQM model

The scope is determined by quality areas; a combination of an object and associated characteristics. It can be successfully applied by those organizations that want to focus on quality for their competitiveness regardless of the type of organization, whether small, big, profit making, nonprofit making, service or non-service organization.

Objects in OQM include customers, outputs, staff, information systems, housing, data, policies, procedures, suppliers, knowledge, policies and infrastructure among others. On the contrary, characteristics relate to objects. Each object has characteristics that must be molded to provide a quality object. Characteristics of staff as an object for example include: competence, integrity, availability, mobility, satisfactory etc.

According to the OQM model, each object plays an important role in enhancing quality in an organization. The role of TQM is to ensure that characteristics of objects are rightly placed to enhance customer satisfaction. For example, if staff lack integrity, they are likely to compromise supplier choice for the firm's inputs that would hamper the achievement of quality.

Additionally, if staff lacks the required competence, they provide poor quality service that is likely to demotivate a customer from being loyal to the firm and may leave for another supplier in search of good quality service. Adsit et al (1996) adds, "the dimensions of employee attitudes, namely team participation and attention to performance evaluation were positively related to customer satisfaction."

A characteristic of an object is either good (good quality signal) or bad (poor quality signal). Objectives and their characteristics are quality areas that require constant improvement. Jiran (1986) identified three basic functions of a quality management process namely planning, organization and control. The objects and their associated characteristics need to be planned, organized and controlled through continuous improvement to attain quality.

Additionally, infrastructure as an object need to possess characteristics such as routine maintenance, utilization only by skilled personnel for machinery infrastructure, training local personnel for all operational functionalities so as not to rely on outsourcing 100% maintenance. Infrastructure machinery when broken down need immediate repair and relying on outsourcing repairs may lead an organization to failing to meet delivery targets for its goods or services which would compromise on quality.

2.4. Quality areas

A quality area combines object and characteristic. For example, the competence of an employee is a quality area, the employee being object and competence characteristic. Additionally, other quality areas include; availability of employee, satisfaction of customers, safety of housing etc.

Within any quality area are measures that control quality. These are policies and procedures an organization employs in various quality areas. For instance, how can the availability of employees be controlled? This may require attendance registers at different points of employee engagement as well as supervision.

Furthermore, users of model can choose level of detail of the quality area. For example, it can identify different customer level satisfaction for internal and external customers.

The OQM model assumes that quality areas promote an optimal choice of measures.

2.5. First overview than insight

The OQM model makes an assumption that a list of all quality areas is created. These are the quality areas that organization wants to control. The list can contain more organization wide quality areas, or just one quality area. Then, an analysis is performed for each quality area.

2.6. Requirements regarding quality areas

Another premise of the model is that it should be clear what the requirements for the quality areas are. These requirements should be clear before adopting measures to be taken. Requirements can also be standards, regulations, rules, conditions, decisions, etc. For the quality area *availability of employees,* it could be the rule that employees must be in the office between 9 and 4.

2.7. Risk analyses

One concept of the OQM model is that a risk analysis should be carried out for each quality area. The purpose of the risk analysis is to get a clear picture of the causes and effects of problems with the quality area.

2.8. Indicators and measures

The model is aimed at determining an appropriate set of quality indicators and measures in order to control a quality area. The OQM model is aimed at determining an appropriate set of measures to be in control of each quality area chosen.

In practice there are few quality areas where no measures have already been taken to control the quality. But measures should be determined so that all requirements are met and the residual risk is acceptable for the organisation. The residual risk is the risk that remains when all measures have been taken.

2.9. Restrictions of the model

Of course, the model also has its limitations. Users get no licenses or quality prizes when using this model. No organization promotes the model. The model therefore has limited PR value.

Also the OQM model does not describe how the implementation of the model can or should be managed. The term management in the name of the OQM model regards the quality areas and not the management of the people who will apply the model.

2.10.   Application of the OQM model

The OQM model can be applied by users with a coordinating role, for example, quality managers who have ability to link characteristics to objects. This section discusses some aspect of the application of the OQM model. The application starts with answering the following questions: Who can apply the model? Under which conditions is the model applicable? In what stage of the process of change can the model be applied? Which tools are available?

2.11.   Who Can Apply the Model?

Two target groups can be distinguished as able to use the model: The users with a coordinating role who implement the model in the organizations. This may be quality managers, a quality department or a quality officer. Secondly, the users who will apply the model in their work area, also called end users.

The first target group must be able to distinguish certain concepts like object, characteristic, definition, requirements, effects, causes, indicators and measures. The users must also be able to link characteristics to objects. The end users must have the business insight or management experience to come up with the right measures within a quality area.

statistic is part of the relevance of all products and services of a statistical institute. These relationships show the coherence of quality areas. The OQM model also distinguishes other perspectives, such as the significance of a quality area for the goals of the organisation, relations between quality areas, opportunities of a quality area for the organisation. Sheikholeslam and Emamian (2016) Corredo and Goñi (2011) consider Total Quality management (TQM) as an internally consistent system of practices and explore the connection between the company performance and TQM. By using the universal approach, their study investigates the connection between the two variables and tests if the companies that are implementing TQM are the most competitive ones. In order to achieve results, Corredo and Goñi (2011) consider a sample of companies, which have received TQM prizes and a control sample to compare the outcomes. They found out that before the implementation of total quality management, companies in which this system was applied were not necessarily better than those that were not using the system.

Oghojafor *et al.* (2011) use a questionnaire survey method to collect primary data in order to determine the relationship between Total Quality Management and service delivery in plants for generator assembly. This study was conducted in two companies, which were involved with this industry. The collected data were analyzed by descriptive statistical tools and the results revealed that total quality management improved service delivery and supported the companies' development.

Prajogo and Sohal (2006) sought to find out where total quality management stands in between organization performance and organization strategy as well as how it mediates the relationship between them. This study suggests that in terms of innovation and quality, there is a harmony between organization performance, TQM practices, and differentiation strategy. In order to achieve the objectives, they use a survey from company managers. By using the structural equation modeling (SEM) technique, the analysis was conducted and it examined two models that represented partial and full mediation.

The results indicated that there is a positive and significant relationship between TQM and differentiation strategy. In addition, the outcomes implied that the relationship between three performance measures (process innovation, product innovation, product quality) and differentiation strategy are only partially mediated by TQM. This study suggested that in order to achieve a better realization of a high level of performance, there should be complementary resources for TQM practices, particularly innovation.

This study was concluded with the assertion that TQM practices of product design and customer focus was correlated positively to organization performance. It further revealed that customer satisfaction as one of the high valued objectives of TQM implementation and in turn bring about business excellence.

Another survey on the global perspective was carried out in Japan by Hasegawa (2006). This survey revealed, "The government of Japan institute quality controls largely by means of law and social security system, or specifically remuneration for medical treatments."

Hasegawa (2006) elaborates, "The average age of nurses in Japanese Public Hospitals is generally higher due to equality of treatment of other public employees in pay increase which is in proportion to length of service and maternity leave."

The survey concluded that a pattern of loyalty on the part of employees due to massive benefits was observed and it was found that employee retention and loyalty was a critical success factor for quality service delivery.

In contrast, the survey disapproves the assertion that personal skill development brings about quality as it identifies that this would be so within a short time period as in the long run, as Hasegawa (2006) adds, "hospital workers tend to move from public facilities to the private sector making it difficult to achieve the very original purpose of enhancing quality delivery of medical care."

The other efforts for Quality Management identified by this survey was medical quality initiatives conducted by third-party evaluating organizations, medical practitioners and patients associations such as formulation of clinical guidelines and analyses. International trends on quality management emphasize evaluation and accountability and this phenomenon is called Third Revolution.

Lastly but not the list at global level, An additional survey on the possibility of implementing TQM in Chinese Education system was carried out by Wan, Y (2012) and postulates that, "Chinese educators considered TQM principles in general to be helpful in fostering the quality of education in China."
A focus group that was used in the study found five Total Quality Management principles to be particularly compatible with traditional Chinese culture. Wan's study focused on whether it was feasible to implement TQM practices and findings of the survey revealed that Chinese climates were favourable for implementation of Total Quality Management principles while the Chinese Education System were undergoing several reforms. This implied that the principles of TQM to strive for

continuous quality improvement had much to do with contributing to upgrading the quality of the Chinese education.

Wan, Y (2012) further revealed in this survey that, "the effects of Total Quality Management implementation on the performance of Chinese schools were the fact that teachers claimed ownership of the school and the students and took pride in student success and schools took pride in teachers' success". The study also revealed that building a strong teacher team by breaking down barriers between teachers and staff was an important effect of TQM principles.

Wan, Y (2012) further contends that, "in-service training as a Total Quality Management principle has been a strong component that fosters continuous professional improvement among teachers". This brings the aspect of training into the pre-requisites for improved quality of service delivery.

Overly, this survey concluded that different approaches to improving quality were generally responsible for the improvement in efficient and effectiveness of service delivery in Chinese education system.

In contrast, the survey did not settle on whether a business model like TQM ever works in Chinese education sector, as TQM, "has business orientation of profit-making as an indication of success whereas Chinese educators considered education not as a for profit making business but as a long term commitment for the welfare of future generations. It was therefore asserted in this survey that since education management in China greatly differs from business management, their guiding philosophies should be different as well.

At regional level, the TQM issues are not so different from the global perspective. Only that the implementation in developing African countries mainly differs from especially the Asian and European developed countries. Culture seems to play an important role in effectiveness of the practices. In Tanzania, for example, Ministry of Health and Social Welfare (MOHSW), (2009) reported, "It has always been pointed out that Management of hospital services provision system in Africa has chronic challenges compared to the Asian countries. This is due to the chronic differences of shortfall of medical resources that would be dealt with by the use of 5S (sort, set, shine, standardize and sustain) principles". These were the tools used by Asian countries when they were facing similar problems as those being faced by African countries today. "The 5Ss principles had been used in Japanese manufacturing entities such as Toyota to improve quality of production", Ministry of Health and Social Welfare Tanzania (2009).

Ministry of Health and Social Welfare Tanzania further reports that, "based on the Asian countries' observation, Japanese International Co-operation (JICA) planned a training course for African developing countries to acquire skills and knowledge on TQM practices especially for better hospital services. The course was henceforth named Asia-Africa Knowledge Co-creation Programme (AAKCP). The aim of (AAKCP) was to empower African countries to develop their own approach to enhancing quality implementation for their improved service delivery in their circumstances.

Another regional study reviewed is one that was conducted in Ghana by Mensah in (2013). The study was purposed to determine the extent of implementation of TQM in Ghana. This study asserted that the idea of quality control could be traced back to the days of Fredrick Taylor's "scientific Management" through the era of Walter Shewhart (the father of statistical quality control). In this study, Bergman and Klefjo (2007) observed that, "numerous studies in the field of TQM have established a positive correlation between the

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implementation of TQM and organizational performance." However, despite the well-known benefits of implementing TQM practices, Mellahi and Eyuboglu (2001) notes that, "the implementation of TQM practices has been for a long time been limited to firms in developed countries such as USA, Japan, United Kingdom and other European countries, with little emphasis if any, on firms in developing and third world countries."

Further, Mensah (2013) contends in his study that, "though TQM has been accepted and implemented by many firms as a new Paradigm of organizational management largely due to its numerous benefits, the underlying principles of TQM are highly theoretical, abstract and too broad to be particularly feasible and beneficial."

Other researches within the study observe that, "time duration over which the performance is measured, scope of application, concurrent even occurring simultaneously with TQM can camouflage and mislead interpretation between TQM and performance." Mensah's study was focused on the following TQM dimensions: financial/market performance, organizational effectiveness, customer satisfaction and employee satisfaction.

Hendricks and Singhal (2001) purports that, "companies that won awards due to their commitment to quality were discovered to perform even better in the post award period hence improving financial performance." Sila 2007 adds, "cost of production gets reduced as a result of quality implementation thereby leading to larger market share".

Bergman and Klefjo (2007) adds their voice, "As a result of TQM implementation, performance of dimensions of products and services improve thereby leading to customer satisfaction and eventually firm able to charge higher prices which will increase the profitability of the firm."

On customer satisfaction, Mensah (2013) adds, "An organization's success in the long run is largely determined by the degree to which it is able to satisfy its customers." This assertion was supported by Deming (1986) who argued, "the most important parameter for measuring the outcome of TQM practices is customer satisfaction."

Mensah (2013) further states that empowering employees to meaningfully contribute to the quality of final product through employee involvement, empowerment, training and education was a critical success factor in achieving TQM as well as employee retention. Deming (1086 supports this, "the pride of workmanship by default leads to customer satisfaction.

This study concluded that though TQM was practiced in Ghana, it was so with multinational companies unlike indigenously owned Ghanaian companies. Mensah (2013) established, "the differences were caused by the presence of strong management commitment, already existing quality management provided by the multinational headquarters, resource availability and the need for multinational companies to meet the set standards for products of the countries they export to. The low state of quality management by the indigenous Ghanaian firms is the result of relatively low awareness of product and service quality, lack of top management support and resource limitations.

Salami and Akpobire (2013) carried out a research on application of TQM to the Nigerian education system. In this study, they established that there was general criticism in managing educational change, and that government initiatives were being pushed by a narrow employer strategy that products of education should respond to labour needs. Sangeeta et al (2004) consider education system as a transformation process comprising of inputs of students, teachers, administrative staff, physical facilities and process. The processes include

teaching, learning, and administration. Outputs include examination results, employment, earnings and satisfaction.

In their model for TQM implementation in higher educational institutions, Osseo-Asare and Longbottom (2002) propose enabler criteria which affect performance and help organizations achieve organizational excellence. These include leadership, policy and strategy, people management, resources and partnerships, and processes. They also suggest result" criteria which include customer satisfaction, people satisfaction, impact on society as well as key performance results for measuring the effectiveness of TQM implementation.

At National level, three surveys were reviewed and analysed with regards to what Total Quality management are capable of bringing to various sectors of the economy.

The first survey is one that was done by Koyi *et al* (2016) on, "how quality management practices affect productivity and profitability in Zambia's manufacturing industry. It is recorded that the purpose of this study was to fill the research gap through examination of the relationships between TQM practices, productivity and manufacturing sector in Zambia.

The study revealed the following;
"Benchmarking people management, customer focus, process management and top leadership support have strong contributions towards TQM implementation in the Zambian manufacturing sector."
"There is significant positive impact of TQM on productivity and profitability of the manufacturing industry in Zambia."
"There is significant mediating effect of productivity on TQM and profitability link, that is, higher level TQM implementation would lead to higher productivity and ultimately higher level profitability."

Therefore, the deduction from this study by Koyi was that Total Quality Management practices ultimately bring about positive gains. It was further concluded as asserted by Agus et al (2009) that quality makes manufacturing process efficient, thereby leading to decreased waste, reduced requirement for process rework and a variety of other quality related improvements.

Secondly, a survey carried out in Zambia by Sichisambwe was reviewed and it was based on Total Quality Management practices in Zambian secondary Schools focusing on Lusaka district. The survey purposed to explore TQM practices and identify those that were applied by secondary schools in Lusaka District. Pourajab et al (2011) states, "A continuous improvement approach requires teachers to strive for zero defects and efficiency in all processes." Pourajab et al (2011) further elaborates that, "…customer focus as another TQM principle involves focus on internal (co-workers) customers and external (pupils and others seeking services from the school) customers with the school's TQM system."

Sichisambwe (2015) adds to this by saying, "each teacher in a school that adopts TQM principles must identify his/her customers and determine the best way to serve them with the service they seek from the school". The researcher in this survey concluded that service has to be in the manner that satisfies the needs of the customers.

Sichisambwe (2015) also found that, "team involvement principle is not an exception for TQM hungry organizations." He contends that, "teachers must identify their suppliers and communicate their quality needs." Baidoin (2003) alluded to the fact that to become successful in 'Total Quality Management, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems; teams also provide more permanent improvements in

processes and operations. In teams, people feel more comfortable bringing up problems that may occur, and can get help from other workers to find a solution and put into place, team work therefore can only be attained with the total management commitment in TQM practices.

This research formed hypotheses based on the seven principles of TQM and this was also verified through the analysis of questionnaires and structured interviews conducted. From the analysis and interpretation of the results, the following was found. Teamwork principle was found to be practiced although most respondents did not know the extent to which it was been practiced. Continuous improvement and training are also principles which were explored and found to be practiced.

For continuous improvement, most of the respondents indicated this to have been achieved through carrying out monthly tests and end of term examinations to measure the excellence in service delivery, as for the training principle; this has been interwoven with the policy of the ministry in programs aimed at training in-service teachers and anticipated teachers. For the commitment principle, there was commitment from management with a view to working together for pupil-satisfaction. For the quality principle, it was found that, at 95% confidence level the mission statement, the motto and the vision of the school depicted quality related activities. The research also established that at 95% confidence level, teachers were empowered to take direct action whenever action is likely to affect quality.

All in all, this survey asserted that all identified Total Quality Management principles were to a large extent in practice at the target schools for the study in Lusaka. The survey however reviewed some lax with the extent of implementation of some principles such as teamwork, which in the researcher's view required strengthening school management

commitment and training for teachers which the researcher felt were important critical success factors to achieving milestones from the Total Quality Management principles implementation.

3. *METHODOLOGY*

3.1 Overview
The previous chapter presented summaries of information derived from other researchers' work on the subject matter of this study. It covered specific areas of theoretical review, theoretical framework, summaries of literature review and research gaps on effects of total quality management to customer satisfaction and retention. This chapter gives summary of the methodologies and procedures that were used in the study. It provides a description of the research design, target population, sample design, data collection and methods that were used in analyzing data.

3.2 Research design
The research technique that was used for this research project effect of TQM practices on customer satisfaction was descriptive design. It was considered an appropriate design because descriptive survey is strong as it seeks to describe the state of affairs as it exists. It is most appropriate when collecting information about people's attitudes, opinions and habits. Kothani (2008) supports, 'descriptive research design is a very valuable tool for assessing opinions and trends in a quantitative research'. Particularly, in this research, research questions demanded that participants provide information about the state of affairs regarding TQM practices in ZCAS as well as requiring the researcher to formulate principles of knowledge that the Management team of ZCAS could use as solutions to the problem.

3.2.1 Research Paradigm
This research was carried out based on the Pragmatic Paradigm. Pragmatic Paradigm is based on the belief that reality is constantly renegotiated, debated and

interpreted in light of its usefulness in new and unpredictable situations, and therefore the best method to use to solve problems. "It is a design based and action-oriented research (Slack et al 2007).

3.2.2 Research Site
The study was conducted using the data and information provided by present students and lecturers at ZCAS University, with few support staff interviewed.

3.3 Sampling frame and sample size
Although the initial target population for the research was 100 respondents who were given the questionnaires, only 80 returned them representing 80% response rate. Out of the 80 respondents, 33 were male and 47 were female, representing 41% and 58% respectively. Table 3.1 below summarizes the distribution of gender of participants:

Table 3.1: distribution of gender of respondents

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	33	40.7	41.3	41.3
	FEMALE	47	58.0	58.8	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
	Total	81	100.0		

Source: field data

3.3.1 Sample size
The following formula was used to determine a sample:

$S = N/ [1 + N(e)^2]$

Where N= Target population; S = sample size; e = level of significance of 10%

Therefore, $S = 100/ [1 + 100(0.1)^2] = 99$

3.3.2 Sampling technique
The research was conducted using simple random sampling technique due to its advantage over other techniques of ease of assembling a sample and fairness with which a sample is selected from any given population. This comes about as a result of its ability to give each member an equal opportunity of being selected. The sample turned out to be 80% of the population.

3.4 Data collection instruments
Primary data was collected through administration of a questionnaire which comprised of various sections so as to adequately cover the objectives of the study. Francis (2011) defines, "Primary data is the name given to data that are used for the specific purpose for which they were collected." The types of questions were close ended. Other primary data was gathered through face to face interviews with students and employees. The interviews were unstructured and were aimed at gathering data that could not easily be obtained via questionnaires.

The questionnaire method was used because a large coverage of the population being studied was realized within limited costs and time. A letter accompanied the questionnaire that guaranteed anonymity so that honest responses could be obtained. The questions in the questionnaire were based on a 5-point Likert scale. The Likert scale approach was selected because of its advantage in eliciting the extent of a respondent's agreement or disagreement with a statement and facilitating the generation of hierarchies of preferences for different categories of respondents in the sampled population, which can be compared (Siegel and Castellan, 1988). The target population consisted of respondents from different departments of the university including maintenance staff, administrative staff, HR staff besides students.

In addition to questionnaires and unstructured interviews, the researcher did make some observations of some activities that border on quality so as to derive some of the answers to the research questions. The researcher took time to observe the front office staff response time to first time clients, students administration staff response time when students are registering. The measure of quality was by the speed with which the staff re-direct clients to

respective departments or indeed attend to them where necessary.

Additionally, observations were carried out on a process undertaken to attach all students on the learning portal where much interaction takes place between lecturers and students, whether full time, part time or distance students. The portal is in short a virtual classroom. The measure of quality here was based on how quickly after students enroll for a particular course are actually attached to the learning platform as well as the extent of support to settle them in as far as the portal is concerned.

Further, observations were made on procedures for cleaning the classrooms and surrounding areas. The measure of quality was to be based on the timing and frequency when the responsible personnel do the cleaning up.

For all observations made, notes were taken down as observations were being made and combined with interview responses as well as questionnaire feedback for use in the presentation and discussion sections of this paper.

The unit of study was employees and students within ZCAS as the aim of this study was to measure the effect of TQM practices at ZCAS University on satisfaction of clients who may include employees as they interact to do business with other operational functions of the institutions. Orodho (2003) had this to say about data collection, "people's attitude, beliefs and values well expressed must be known". In addition, Kombo and Tromp (2014) argues that, "data collection is important in research as it allows for dissemination of accurate information and development of meaningful programs."

With the mixed method design, questionnaire, interview guide and observation checklist were developed to collect the primary data from the field. These instruments were selected because they were the most appropriate.

3.5 Data collection procedure

Before commencement of data collection for this study, the researcher sought permission from relevant authorities at ZCAS University to conduct this study. In addition, respondents were informed of the voluntary nature of the study and how the answers were to be used. In addition, a pre-test was conducted with few respondents. The reason for the pre-test was to check for possibility of errors in the questions administered in the questionnaire.

Questionnaires were all handed to participants by hand. They all contained same questions. Brief guidance on answering the questions was explained to especially student respondents who were found studying in class rooms but not all questions were explained to them.

Observations were made after familiarization with the cleaning schedule for various places of the building. The personnel involved were not informed of the observation which was made over a period of four weeks in the month of February. This month was chosen for the cleaning observation as it is very busy at start of semester when all students have returned from recess.

The unstructured interviews involved questions randomly selected from the researcher's list. No copy of the questions was presented to the respondents and follow up questions depended on the responses to questions asked earlier on. The interview schedule was used because of its known benefits of building good rapport, creating a relaxed and healthy atmosphere in which respondents easily cooperate, answer questions, and clear misapprehension about any aspect of a study (Kumekpor, 2002).

The interview schedules were semi-structured and comprised of many close ended questions. This facilitated relaxed administration of the interview schedules. It also aided to avoid irrelevant answers from respondents, and this made data entry in the SPSS easier.

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In-depth interviews were used to collect data and information from the key informants. The interview guide for the In-depth-interviews was in semi-structured format in line with the view of Hockey, Robinson and Meah's (2008) that semi-structured interviews are flexible, and they allow for the exploration of emerging themes and ideas. In other words, In-depth-interviews provide some scope for asking for more relevant information through additional questions often noted when it prompts the interviewer.

3.6 Pilot testing

The researcher carried out pilot testing to enhance the validity and reliability of the questionnaire. The pilot data has not been included in the actual study analysis. Pilot testing was done on three (3) students who are not part of the actual sample.

3.7 Data analysis

'This refers to examining data that has been collected in a research survey and making it meaningful." Kombo and Tromp (2014). Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. Ader, (2008) is of the view that analysis of data is a process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making.

Quantitative and qualitative method of data analysis was used. The data from the questionnaires was cleaned, and collated using Statistical Package for Social Sciences (SPSS). Data coding was done by using SPSS as well as Microsoft excel. Information has been displayed in using tables and charts. Data collected were entered into the software and manipulated accordingly to produce the required tables of frequencies and percentages.

On the other hand, qualitative data were analysed by processing the data into a form that

allows common themes or patterns. During data analysis, the results were stratified to eliminate any biases that could have arisen from any specific group of people from the target population. The questionnaire consisted of two sections. The first section elicited information about the respondents; in the other section, their perceptions on the issues surrounding quality of service at ZCAS University.

Data has been interpreted with the help of calculation of percentages, means and frequencies. Interpretation has been done in line with the objectives of the study and assumptions of SPSS from which conclusion and recommendations have been drawn.

Quantitative data was analysed using statistical package for social sciences (SPSS) (Creswell, 2008). Numbers were assigned to response categories in which respondents were known. Denzin and Lincoln (2005) postulated that, SPSS has scores of statistical and mathematical functions, scores statistical procedures, and a very flexible data handling capability. It can read data in almost any format (e.g., numeric, alphanumeric, binary, dollar, date, time formats). It also has excellent data manipulation utilities. In addition, in a statement where respondents were expected to indicate their degree of agreement or disagreement Likert scales were used. It is commonly used in questionnaires, and is the most widely used scale in survey research.

3.8 TRIANGULATION

The data for qualitative research was drawn from several sources, including field observations and questionnaires. Triangulating the methods of data collection in this way allowed the researcher to compare different perspectives and ensure validity of the findings. Quantitative data was also interpreted using SPSS descriptive statistics in form of frequencies and percentages. Triangulation was achieved through the use of field observations and analysis of some documents accessed that contain the center's pledge for quality in its service provision.

Mikkelsen (1995) identified two forms of mixed method which are "within method" triangulation and "between method" triangulation. Within method triangulation involves using the same method on different occasions whilst the "between methods" triangulation is where different methods are used in the same study. The study used the "between methods" triangulation. In this study, both interview schedule (quantitative method), and in-depth interview and observation (qualitative methods) were used to collect data from the field.

Some criticisms have been levelled against the use of mixed method approach. For example, Creswell (2008), described the use of mixed method as time consuming, while Sarantakos (2005) observed that mixed method is difficult to replicate, and therefore advised that it is not more valuable than the single-method procedure.

3.9 Variable measurements

The inputs are also referred to as independent variables which are the determining factors for customers to attain satisfaction when they deal with the company. For example, proactive leadership, efficient human resources in general, robust and well managed processes, paying more attention to needs of customers and proper planning for activities of the firm will play a vital role in delivering a quality service and are all a pre-requisite of satisfaction to the clients.

This research report is about the relationship that exists between TQM practices and customer satisfaction. According to Kotler et al. (1996), satisfaction is "the level of a person's felt state resulting from comparing a product's perceived performance in relation to the person's expectation." Satisfaction is a product of numerous factors that are key success factors. They include people and customer management, communication of information about improvements, teamwork structures for improvement, operational quality management etc.

3.10 Reliability of Research Findings

Reliability is a common means used to measure the internal consistency of a scale used in the questionnaires. This was increased by including many similar items on a measure, by testing a diverse sample of individual items and by using uniform testing procedures. Strachan and Burgess (2009) states that, reliability is the consistency of measurement and is frequently assessed using testing and re-testing method.

On the other hand, Kombo and Tromp (2006) equally define, "validity is the degree by which the sample of test items represents the content the test is expected to measure. This was done using Cronbach Alpha instrument. A Cronbach Alpha coefficient of a scale is ideally supposed to be .7 (DeVellis 2003 in Pallant [2010:97]) it is however important to note that Cronbach Alpha values tend to be sensitive to a Number of factors (items in the scale). That is, for low number of items, scale gives quite low cronbach values that could be less than .7 but ideal, such as .2 and .4.

In this research, a questionnaire administered had 21 items and reliability test shows Cronbach's Alpha of .795 hence reliability of scales used. Table 3.2 below demonstrates this reliability in the reliability statistics table.

Table 3.2
Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.795	.808	58

Source: Field data

Table 3.3
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.289[a]	9	.006
Likelihood Ratio	23.338	9	.005
Linear-by-Linear Association	10.244	1	.001
N of Valid Cases	80		

a.   11 cells (68.8%) have expected count less than 5. The minimum expected count is .07.
Source: Field data

3.11 Multiple Regression analysis

Multiple regression analysis was carried out to ascertain the relationship between TQM practices and service quality besides ascertaining the link that the TQM practices have with customer satisfaction.

3.12 Ethical issues

This research project took into account all necessary ethical issues with regard to information involving people and their opinions. The paper engaged participants by obtaining prior consent with regards the engagement with students and related the study to ethical consideration to ensure the understanding and agreements between the participants and the researcher. Punch (2009) adds that, "ethical issues are one of the acute parts of any social research especially qualitative research as it often intrudes people's lives, sensitivities and intimacy." He also categorized the research ethics into three parts namely 1. Before the research is conducted, researcher ought to ensure it is a worthwhile project and researcher has necessary competencies to carry out a research; 2. During a research, harmfulness and risks to participants should be paid attention at the same level of privacy, anonymity, confidentiality intervention by checking the research integrity and quality by keeping honest and trust; 3. After the study, the researcher should carefully double check the research quality, ownership of data and conclusion to see if there is any misuse of data and the appropriateness of the information."

This research has taken into consideration all above matters to ensure integrity of the whole project. Respondents were not made to fill in a questionnaire whose purpose was not understood by them and were not required to put down their names on the questionnaire, instead were reminded to answer the questions very objectively. All this was done because of the understanding that a researcher must be accountable for the consequences of their research work, whether good or bad.

4. PRESENATION OF FINDINGS

4.1 Overview

The previous chapter presented the methodology adopted for this study. Specific issues considered were research design, study site, study population, sample size, sampling techniques, instruments of data collection and means of analysis. This part of the study considers the findings from the research carried out based on the objectives of the research and analyses the findings there of. The findings are based on the purpose of this study that sought to examine the nature of the relationships between TQM practices and customer satisfaction, as well as establishing a link between the satisfaction of the customer to quality of services offered by ZCAS University and whether levels of quality impacts upon retention of the customers.

4.2 Demographic characteristics of respondents

Table 4.1: level of study and duration of stay at ZCAS
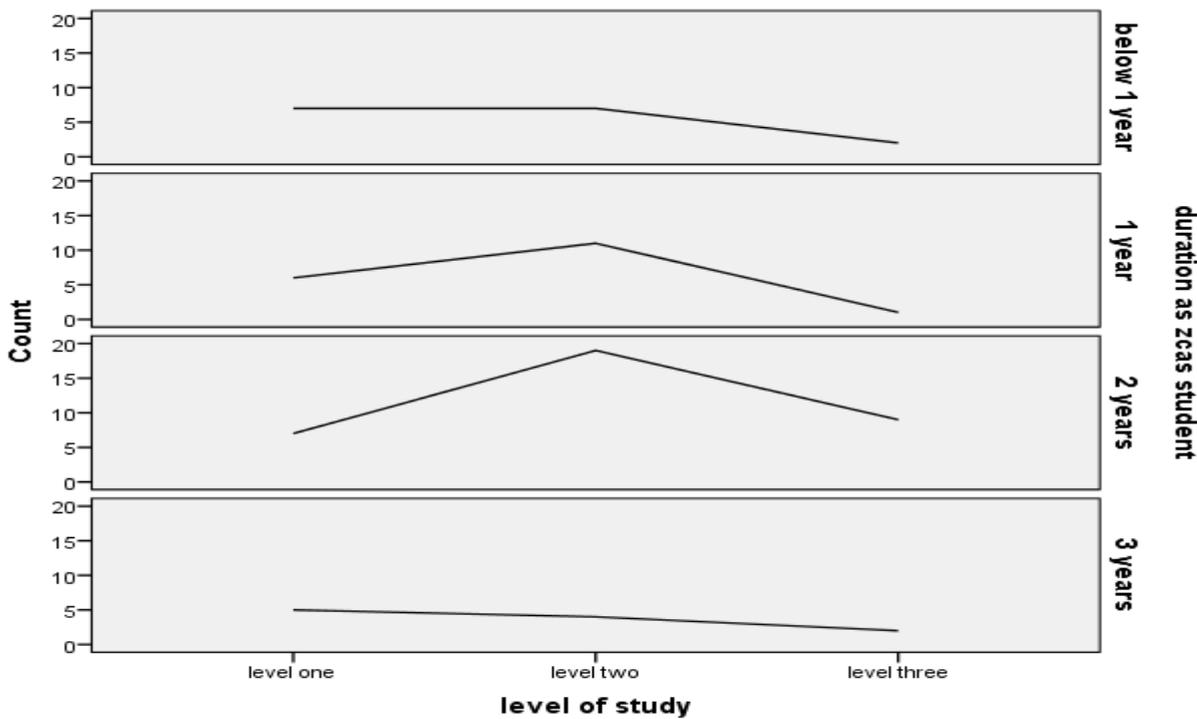
Source: Field data

From the above diagram, it can be deduced that the majority of the respondents in this survey were in their middle level of studies as indicated by the pivoted area of the line graph that is concentrated on level two of study, and this is regardless of their duration of stay at ZCAS.

On the extreme end, few respondents, despite being at ZCAS for three years were still in their first level of studies. This happens especially on the professional programs when students cannot move to another level of study until they clear their lower level papers.

For purpose of this research findings, it is likely to be reliable as majority respondents had been at ZCAS for reasonable period of time to make informed judgment of quality matters at the institution.

*Table 4.2: Distribution of gender of participants by %.*

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	33	40.7	41.3	41.3
	FEMALE	47	58.0	58.8	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Source: field data, 2019

The figure below is also used to demonstrate the distribution of gender in more pictorial form. 1 represents male and 2 represents female.

Figure 4.1 pictorial presentation of gender distribution
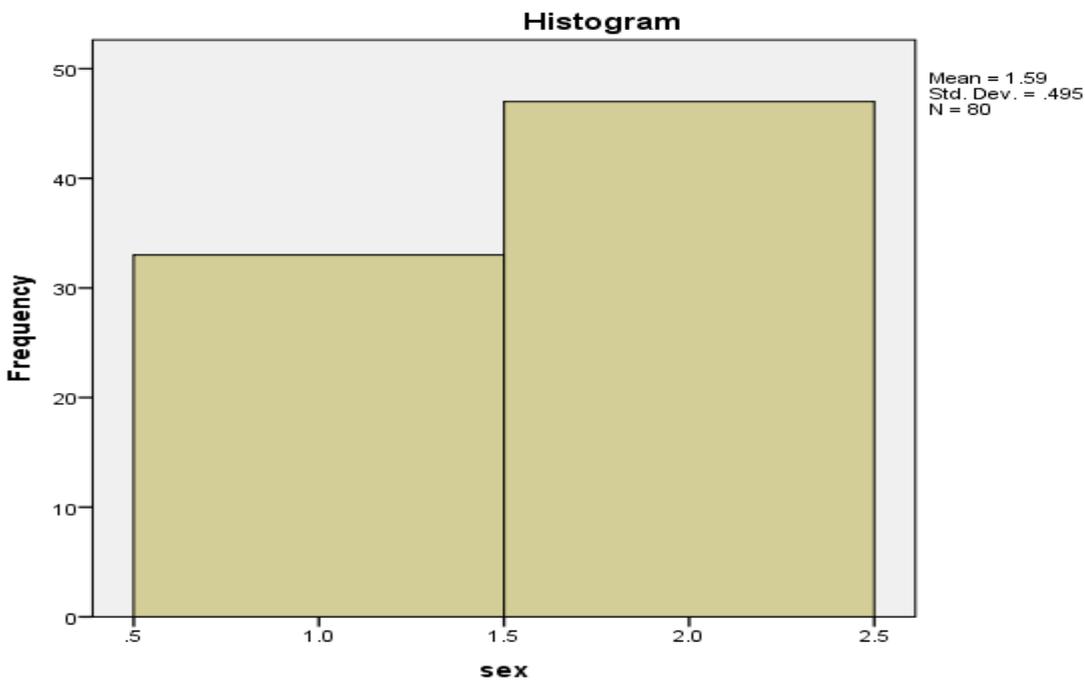
The findings are based on the responses expressed by 80 respondents to questionnaires issued. The results here in are presented using the thematic approach in line with the research questions set out in chapter one. The following were the research questions:

4.3 Findings based on research questions:
Research Question 1: Identify Total Quality Management practices in operation at ZCAS University?
One of the four objectives of the study was to establish what TQM practices are in operation at ZCAS University. This objective was guided by the research question: Identify Total Quality Management practices in operation at ZCAS University? To get well informed responses, the researcher targeted members of staff at ZCAS University and some special responsibility members of management and students to provide answers

to this question in some structured interviews. For instance, figure 4.2 below shows responses from respondents on the levels of satisfaction regarding health facilities that ZCAS offers to its clients, both internal and external. It shows from the figure below that a total 0f 70 respondents were appreciative of the level of service regarding health facility provided by ZCAS University, representing 87.5% with only a 12.5% having rated the service as poor.

Figure 4.2 level of satisfaction regarding health facility at ZCAS University
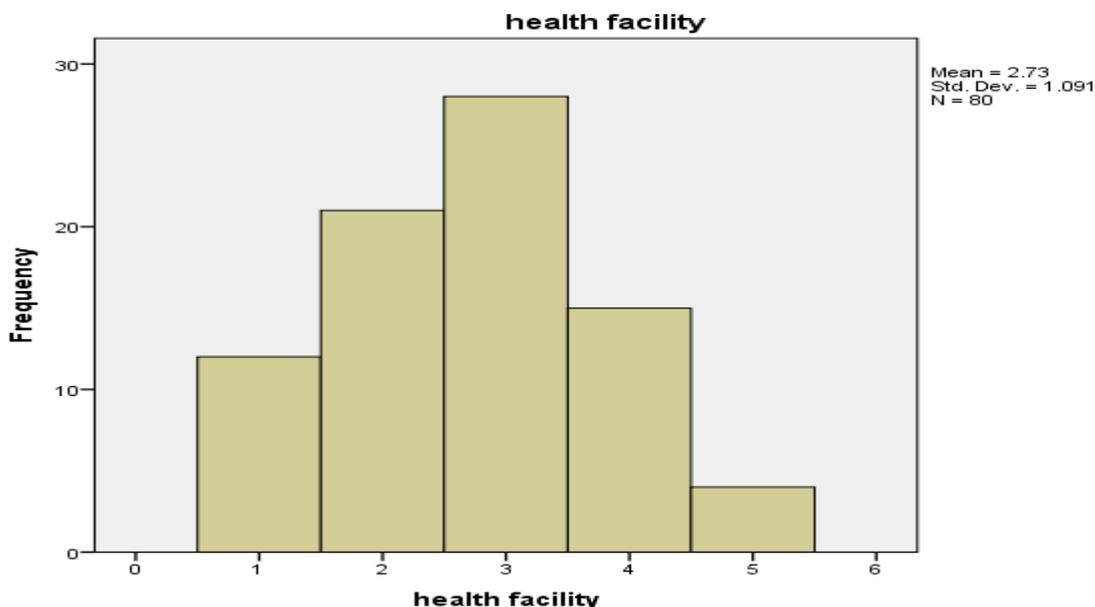
Table 4.3 below further demonstrates how in its quest to ensure quality to its clients, ZCAS university is particular about its staff recruitment practices. Again, few individuals in relevant positions were interviewed

Table 4.3: staff recruitment practices

staff recruitment practices

		Frequency	Percent	Valid Percent	Cumulative Percent
	Excellent	14	17.3	17.5	17.5
	Good	30	37.0	37.5	55.0
	Average	19	23.5	23.8	78.8
Valid	below average	12	14.8	15.0	93.8
	Poor	3	3.7	3.8	97.5
	6	2	2.5	2.5	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Research Question 2: What are the contributions of TQM practices to ZCAS quest for customer satisfaction?

4.3.1 Link between TQM practices and service quality

This study had proposed a six predictor variables TQM practices. The predictors were focus on customer, organizational leadership, HR practices, process management, information and communication and strategic management. The specified variables in table 4.6 below do somehow point to these variables.

Additionally, a comparison of different variables that were converted to the same scale shows that the greatest contributor to quality of service at ZCAS University was monitoring of teaching practices (process management and leadership) at .600 (60%), followed by senior management commitment to quality practices (strategic management) at .375 (37.5%), then lecturer's preparedness for academic work (information and communication) at .234 (23.4%). The least contributors as per the column Beta (ß) were lecture presentation skills, public relations practices, availability and access of teaching resources.

Table 4.4 Coefficients of Correlation in Regression Analysis Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	.568	.237		2.402	.020	.093	1.044					
lecturers' presentation skills	.011	.127	.013	.086	.932	-.245	.267	.441	.012	.008	.379	2.636
lecturers' preparedness for academic work	.181	.108	.234	1.673	.101	-.036	.398	.431	.233	.155	.439	2.277
senior management commitment to quality improvement practices	.229	.075	.372	3.048	.004	.078	.380	.532	.399	.282	.574	1.741
staff recruitment practices	-.040	.081	-.067	-.493	.624	-.203	.123	.501	-.070	-.046	.461	2.171
availability and accessibility of teaching and learning resources	.044	.069	.065	.647	.521	-.094	.182	.257	.092	.060	.852	1.174
monitoring of teaching practices	.413	.110	.600	3.759	.000	.192	.633	.650	.473	.348	.336	2.975
learning assessments	-.163	.123	-.185	-1.324	.192	-.410	.084	.447	-.186	-.123	.437	2.288
our public relations practices	-.029	.067	-.046	-.428	.670	-.162	.105	.327	-.061	-.040	.736	1.359

a. Dependent Variable: How would you rate the quality of services that ZCAS offer to its clients?

Furthermore, the normal P.P Plot of regression Standardized Residual shows that there were no major deviations of the predictors from the normal as shown in figure 4.3 below: this is so because the points lie reasonably straight diagonally from bottom left to top right.

*Figure 4.3: Normal P-P Plot of regression standardized residual*

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: How would you rate the quality of services that ZCAS offer to its clients?
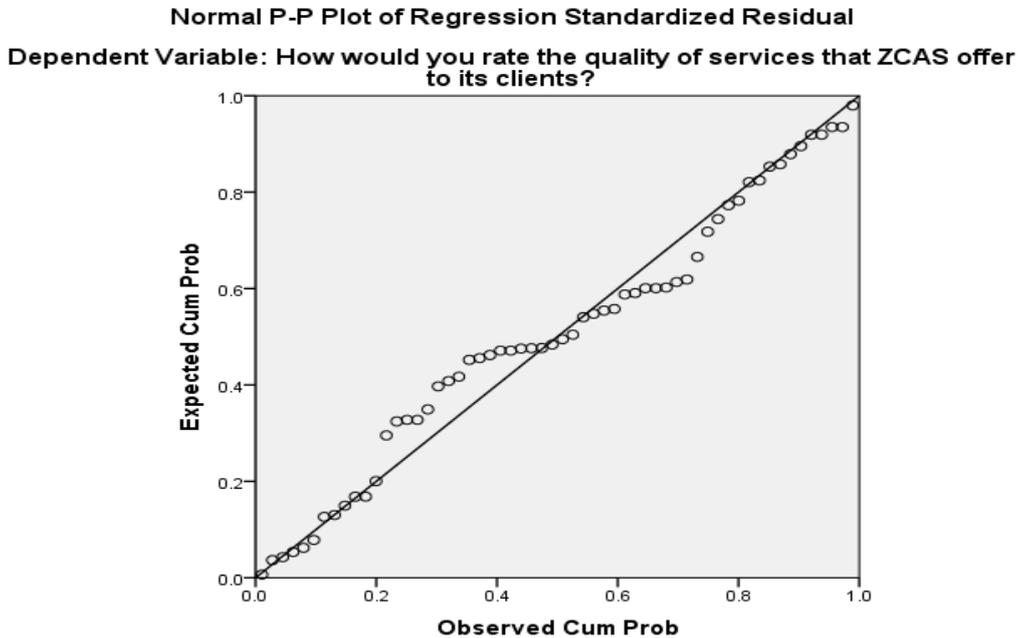
Source: field data, 2019

4.3.2 Contribution of TQM practices to customer satisfaction (e.g. availability of teaching and learning resources).

The results of this study have indicated a positive association between resource availability and customer satisfaction as indicated by figure 4.4 below. It can be seen from the pie chart below that respondents are confident and satisfied with resource availability at ZCAS as almost 70% indicated excellent and good, while about 30% feel these are not adequate

Figure 4.4 availability and accessibility of teaching and learning materials

availability and accessibility of teaching and learning resources

- excellent
- good
- average
- below average
- poor
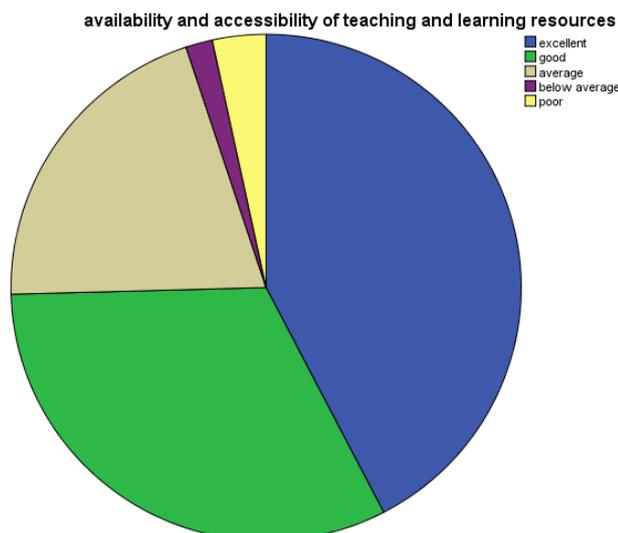
Source: Field data

4.3.3 Leadership as a Pre-requisite for quality of service

As indicated in Table 4.5 below:

Table 4.5 senior management commitment to quality improvement practices

senior management commitment to quality improvement practices

		Frequency	Percent	Valid Percent	Cumulative Percent
	Excellent	20	25.0	25.0	25.0
	Good	28	35.0	35.0	60.0
Valid	Average	19	23.8	23.8	83.8
	below average	7	8.7	8.7	92.5
	Poor	6	7,5	7.5	100.0
	Total	80	100.0	100.0	

Source: field data, 2019

At ZCAS University, the stakeholders, that is, employees and students feel management is generally committed to quality improvement practices which are a pre-requisite for better quality service and customer satisfaction.

Figure 4.5: % of senior management commitment to quality improvement practices.

4.3.4 Customer focus

The results of this research show that there is positive association between an institution of learning like ZCAS University paying particular attention to matters that focus on customer and satisfaction of customer. This is in agreement with Zhang (2000) who says, "effective and participative management that focus on customers' requirements while adopting customer-centric approaches could contribute towards the level of customer satisfaction."

Table 4.6: ZCAS public relations practices and how they satisfy its clients

Our Public Relations Practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	9	11.1	11.3	11.3
	Good	22	27.2	27.5	38.8
	Average	27	33.3	33.8	72.5
	below average	17	21.0	21.3	93.8
	Poor	5	6.2	6.3	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Source: field data

About 72.5% of respondents are happy with existing public relations approaches while 27.5% are not. This means overall clients are happy and derive satisfaction from the approaches in place.

A broad spectrum of activities may be considered effort to focus on customer needs. These include estates management for students' comfort, public relations, health facilities, lecturer's preparedness and presentation skills etc. Through Management's concern for customers, the institution has provided health facility, that is, a clinic where ailing clients seek medical attention. About 72.5% of respondents are happy with existing facilities while 27.5% are not. This result is in agreement with results of the researchers Yi-wen et al (2009) that concluded that, "being a customer-oriented organization is crucial to the success of TQM implementation."

Table 4.7 ZCAS' University health facility level of satisfaction to clients

Health Facility

|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied	12	14.8	15.0	15.0
	Satisfied	21	25.9	26.3	41.3
	partly dissatisfied	28	34.6	35.0	76.3
	Dissatisfied	15	18.5	18.8	95.0
	very dissatisfied	4	4.9	5.0	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Source: Field data, 2019

A total of 61 of respondents are satisfied with existing health facilities at ZCAS University and 19 appear completely dissatisfied.

Research question 3: to what extent do the TQM practices at ZCAS University lead to customer satisfaction and hence Loyalty

One of the four objectives of the study was to ascertain the effectiveness of TQM practices in operation at ZCAS University with regards to customer retention. This objective was guided by the research question: To what extent do the TQM practices at ZCAS lead to your loyalty? To get specific responses for this study, the researcher targeted students cutting across various programs and members of staff at ZCAS University.

Figure 4.5 level of satisfaction of overall service delivery
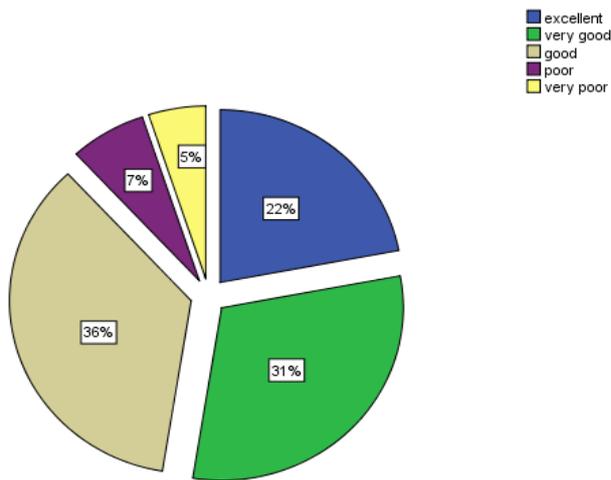
Source: Field data

ZCAS customers, as seen from the pie chart in figure 4.5 above are generally satisfied with quality of service they receive from the institution. This is positive effect of other total quality management practices such as lecture presentation skills, preparedness, health facilities, public relations practices and many more. A total of 89% of the respondents are satisfied with service level delivery and only 11 % feel otherwise.

4.4. ZCAS University Students Retention Rate

Students' numbers on all the programs over the last three years have risen as follows:

Table 4.8: Students Numbers and Retention Rate

YEAR	ACTUAL NUMBERS	ANNUAL % INCREASE	AVERAGE RETENTION RATE (%)
2016	1,500	-	85
2017	1,800	20	85
2018	2,300	28	90
2019 (1ST HALF ONLY)	2,600	13	90

Source: field data, 2019

Impact of overall TQM practices on service quality

Figure 4.6 overall quality assessments.

**How would you rate the quality of services that ZCAS offer to its clients?**
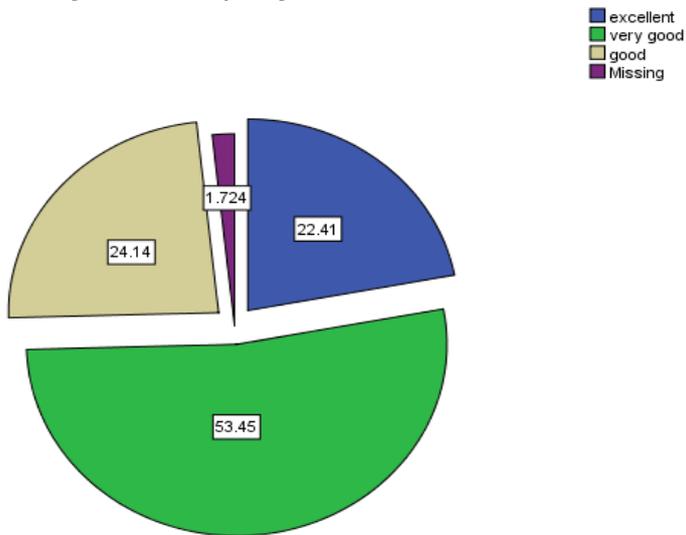
In a nutshell 76% of respondents see the overall quality of service ZCAS provides to its clients as satisfactory with a handful of 24% with an alternative view.

4.5 Link of Lecturer's presentation skills to service quality

Figure 4.7 lecturer's presentation skills

lecturers' presentation skills
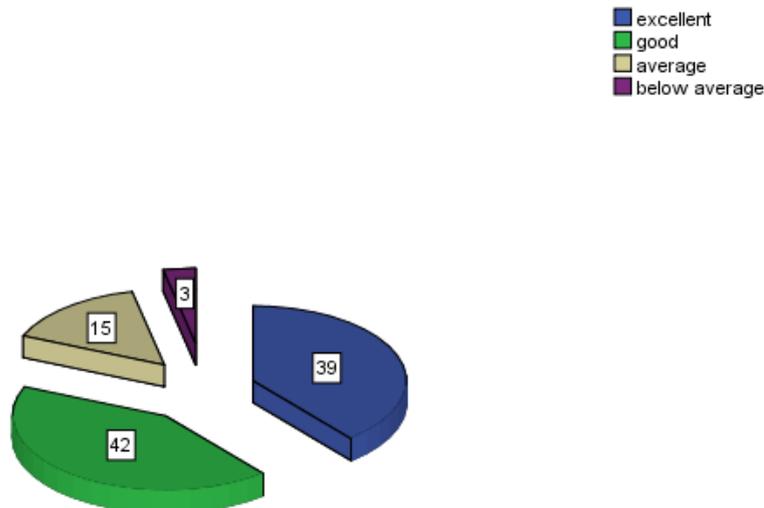
Source: Field data

It is clear that lecturer's presentation skills positively relate with quality of service that ZCAS University offers. The Multiple regression analysis shows this correlation to be .44 of which the standard minimum is .3 hence confirming its predictive feature of quality.

It therefore means that the better the presentations of teaching and learning materials from lectures, the more satisfied the customers will be and in turn ZCAS experiences customer retention. It is normal for an institution to retain customers when they are satisfied with level of quality of what they get from an organization. They tend to come back.

As observed from figure 4.6 above, a total of 84% of respondents have the view that lectures have very high-quality presentation skills that represent quality predictor. Only 16% feel the presentation skills are below par. Overall, the presentation skills are good.

It therefore means process management at ZCAS is a significant contributor of quality as the lecturers contribute to good process management by their high-level presentation skills.

Research question 4: What areas of operation at ZCAS University do you feel quality is compromised?

Feedback from the respondents was not without areas of concern. In almost all the variables, some proportion of respondents expressed negative views about ZCAS University effort to improving quality standards for students' retention. A few highlights follow below:

Table 4.9 Human resource contribution to quality assurance at ZCAS University

human resource

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied	20	24.7	25.0	25.0
	Satisfied	26	32.1	32.5	57.5
	partly dissatisfied	12	14.8	15.0	72.5
	Dissatisfied	18	22.2	22.5	95.0
	very dissatisfied	4	4.9	5.0	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Source: field data

As seen from the above table, about 42.5% of respondents were not satisfied with the way Human Resources issues are handles in light of contribution towards improvement of quality. Some unstructured interviews to probe further on this one was conducted with few personnel and revealed that mainly the large number of part-time lecturing staff used pauses a challenge when it comes to adherence to quality standards.

5. 5.0 DISCUSSION, CONCLUSION AND RECOMMENDATION

A number of areas were highlighted as TQM practices in operation at ZCAS that include: staff recruitment practices, teaching and learning resource availability, commitment of senior management to quality improvement practices, staff evaluations done by students on numerous quality issues (such as presentation skills, preparedness, extent of coverage of syllabus, administration of tests, mock exams, other continuous assessment instruments, effectiveness of lecturer responses to students questions, lecturer reporting time to class and whether or not classes get cancelled at will).

Some questions were administered via interviews and general feedback is that students are satisfied with adherence to these quality procedures of the university as they are adequately and positively fulfilled by members of staff.

On the issue of syllabus coverage, monthly tests and mock examinations, it is a matter that no single lecturer at ZCAS wants to leave unturned as it impacts on the year end evaluation of performance that subsequently determines promotion prospects and contract renewal possibilities. This makes each and every lecturer to take the matter seriously and hence providing high quality service to clients.

The matter is not so clear in terms of seriousness of handling when it comes to part-time lecturers as the researcher was not able to analyse student respondents into those taught by full time lecturers and those taught by part-time counter-parts.

Regarding satisfaction with staff recruitment practices, a cumulative total of 78.8% respondents consider the practices satisfactory through appropriate delivery of learning materials to learners and demonstration of appropriate skills. In line with ZCAS recruitment procedures, no lecturing staff is recruited without attaining a prescribed minimum level of qualification. Additionally, paper qualification are not a guarantee for securing employment and lecturers, of all employees are continually assessed by their respective students against a number of measurements through administration of questionnaires and one found falling below tolerable levels of assessment by the learners may find themselves out of favour when it comes to contract renewal.

Research Question 2: What are the contributions of TQM practices to ZCAS quest for customer satisfaction?

Two important values emerge from the table of coefficients in the previous chapter, that is, Tolerance and Variance Inflation Factor (VIF). The tolerance of 1 is high enough indicating that the independent variable 'lecturers' presentation skills' effects on quality of service is not influenced by other independent variables A Collinearity diagnostics was performed on the variables and reviewed that none of the independent variables have tolerance of $< .1$, indicating that there was no multiple correlation of any independent variable with other independent variables in influencing the dependent variable quality of service. This is so because the tolerance for all of them is $>.1$.

Further results show that lecturer presentation skills and public relations were amongst the least variables to contribute to ZCAS quest for customer satisfaction. This means these were valuable to respondents quite alright but not to the extent of importance of availability of high quality lecturers and senior management commitment to ensuring quality.

It is important to note that as ZCAS offer a variety of programs and most of which are newly introduced, it may be that the 30% respondents that felt teaching and learning materials were inadequate may have been victims of courses that are not fully developed and so they may not surely access those resources per their expectations.

Exceptionally, the distance education students whose main source of resources are soft books made available on the University's portal, many complain of failure to access these resources due to system failure, and some due to unavailability or intermittent supply of internet services from their home towns.

Leadership is a pre-requisite for organization success in various areas of operations including in ensuring quality and achieving the main objectives of quality improvements. The quality objectives at ZCAS University are a no exception. Without the commitment of senior management, very little can be done in ensuring expected quality levels are attained. The results of the research also have indicated that a positive correlation exists between management actions in spearheading the affairs of an organization and achievement of quality of service. Johnson *et al* (2011) further elaborates, "effective leaders are those that track real time information about the needs of customers and prefer immediate information from current operations rather than statistical trends and forecasts."

An estimated 43% of the respondents feel the commitment of management is very good and an estimated 17% of the respondents feel senior management commitment to quality is excellent, giving a total 60% on the extreme positive side. About 29% think an average commitment exists while a small number representing only 11% think there is no leadership over quality improvement at ZCAS University.

The researcher, through interview established that management commitment to quality includes their initiation of a quality assurance policy that has been developed and put in place. The main objectives among others include formation of basis for quality improvement and a source of development, implementation and enhancement of Quality Assurance services.

ZCAS management in line with the policy is committed to a philosophy of quality assurance which they have indicated shall be embedded in all aspects of the institution including governance, management and operating processes. Management's quest to engage students in such a way that the students are given the mandate to freely report to management any shortcomings in the quality issues of the University especially that impacted negatively on their learning and teaching experiences, shows management commitment to improving quality at the institution (ZCAS Quality Assurance Policy 2019).

Further, the researcher was made preview to the fact that management at ZCAS University had instituted an audit committee to review the appropriateness of the Quality assurance policy periodically to establish its usefulness in line with operations at any one point. Further, the management team that focuses on clients' needs endeavors to provide facilities and services they embrace along with the main product. In the case of ZCAS University, the main product is tuition of high quality but other amenities will equally contribute to having students stick around if they are happy with service levels. For example, without good health facilities, ailing students will find it very difficult to learn as they may be required to go out of campus to seek medical attention from far flung facilities.

Having facilities provided with most commonly sought services offered reduces time students spend out of campus and increases time they are engaged in learning. This is in turn likely to contribute to better performance during exams which will undoubtedly contribute to the raising of the flag high for overall service quality and most important students' performance.

According to Sakthivel et al (2005), continuous support and commitments from top management in relation to TQM implementation within higher tertiary institutions would certainly facilitate students' satisfaction. Furthermore, the result is consistent with the findings of Yi wen *et al* (2009) who says, "pleasing the customers involve making the right management decisions." There is an impression that those at the top of an organization ought to have a right vision, mutual to the needs of

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an organization coupled with strong commitment that trickles down to all members in an organization. About health facilities at the centre, more than 70% of respondents were extremely happy with the service. This TQM practice is unique in that it does not only please the business customers but employees who work in an environment that is well equipped with health facilities will equally feel it is more beneficial to work in the environment longer hence employee retention. The research shows employees are happy with the facility and this inevitably contributes to quality of service rendered as ZCAS University is able to retain employees who have gathered all relevant experience.

Salami and Akpobire (2013) postulates that, "the concepts of TQM have proved so powerful that educators now apply the philosophy to schools. Universities, however, have been slower to see the value of using TQM in their operations. One factor that is most critical to the success or failure of a TQM implementation effort is the universal endorsement, particularly at the top." If management is not completely sold on TQM, it is unlikely that the effort will be successful. The question of quality in education is directly related to the quality of teachers, students and infrastructure provided to them by the system. It can be argued that within the context of TQM it is the system that fails, not the individuals. TQM should be built upon a set of core values and concepts, (Salami and Akpobire 2013). A set of fundamental core values which form the building blocks of TQM include leadership and quality culture, continuous improvement and innovation in educational processes, fast response and management of information and partnership development, both internally and externally. TQM is capable of providing opportunity to conceptualize a systematic change in the education subsector.

With regards to response time of attending to client needs, the researcher made some observations in some areas of operation at the centre and this reviewed that response time was acceptable as only when more clients were to be attended to by the same individual, were they required to wait, but waiting time was not longer than necessary. Overall, all clients were attended to as they just walked in the students administration office. This without doubt contributed to satisfaction of service level provision to clients.

For front office, the researcher observed that the responsible staff was swift to re-direct clients to requested departments as well as attend to their need right at the front office.

Research question 3: to what extent do the TQM practices at ZCAS University lead to customer satisfaction and hence Loyalty

A total of 89% of the respondents are satisfied with service level delivery and only 11 % feel otherwise. This is not little achievement as far as achievement of quality is concerned. This satisfaction is evidenced by the increase in student numbers as well as reduction in real terms in attrition rate achieved over the years from 2016 to first half of 2019 in which student numbers increased from 1,500 in 2016 to about 2,600 in 20 18/2019. This amounts to increase in numbers from 20% to 28% and improvement in retention rate from 85% to 90%.

The rate of retention on average stands at 87.5 over the 4 years. This entails that generally ZCAS University students are satisfied with levels of quality of service the institution renders. Of the 12.5% that may not return to complete their programs, the researcher gathered through interview with resource persons common reasons that those that fail to return give. Some recorded reasons include: (1) financial challenges faced by students; (2) high levels of work responsibilities especially for part-time evening students; (3) exclusion due to failure; (4) psych-social problems.

As it can be seen from the regression analysis in the previous chapter, the greatest of all TQM practices is the practice by ZCAS management to strictly

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monitor the teaching and learning activities. This results in enhanced commitment from staff members who in turn lead to improved performance of the organization as a whole. It has been observed equally from this research that public relations practices are not directly linked to service quality at ZCAS University.

Research question 4: What areas of operation at ZCAS University do you feel quality is compromised?

In all areas identified as areas used in ensuring quality at ZCAS University, a few respondents had their views otherwise, meaning they feel the level of service delivery is not much to ensure quality. These small proportions of respondents' judgment may be attributed to many other factors. For example, some are excluded from studies due to their failure to achieve minimum required level of performance per university guidelines but an easy way to get away with it is to find a reason for their failure that excludes themselves.

Interview with the student counselor reviewed that some students' poor performance has been due to social-psycho problems emerging from their respective homes. Some recover through counseling services offered at the university except in cases that are beyond the university boundaries for purpose of resolve.

Specific to the problem of compromised areas was health facility that does not operate 24 hours. The students in boarding feel this is lack of consideration for them as sickness sometimes comes in the night when the clinic is closed. However, availability of matron cushions any adverse effect as she has capacity to arrange for other medical services whenever a case of student being sick in the night arises.

5.2 Application of OQM model to ZCAS situation

The researcher attempted to apply the OQM model applies to ZCAS University situation as various

functional areas where quality matter have been identified. According to ZCAS Quality Assurance policy (2019, "A philosophy of quality assurance shall be embedded in all aspects of the institution including governance, management and operating processes. All internal processes and activities will be repeatedly monitored and evaluated for quality assurance using the set standards."

The policy further elaborates that, to ensure that a suitable quality assurance system is set up, an audit to review the existing policies, regulations and procedures of each unit of the institution would be initiated. Following the audit, appropriate policies, regulations and procedures for each unit would be developed, together with the relevant quality assurance manuals. All established processes and activities of ZCAS shall be monitored and evaluated for quality assurance using internal and external mechanisms.

The policy document further states that, "it will be the basis for the development, implementation and enhancement of quality assurance at ZCAS." Its objective is to promote quality assurance and foster a culture of continuous improvement throughout the institution.

As seen in figure 5.1 below, the model's areas are well defined and small enough to see whether an appropriate set of measures is taken. All measures are chosen in the context of a quality area and based on an analysis of the requirements and based on a risk analysis. It is therefore clear why a measure is chosen. The scope or coverage of the framework is chosen by the users themselves. For exam, ZCAS university scope of coverage include approval and accreditation of new programs, changes to existing programs, student engagement, student performance evaluation, staff performance evaluation, use of external examiners, annual review of programs among others. This makes under or over-coverage less likely. The model is flexible in this respect. The ZCAS University framework is custom-made and rich in structure. The administrative burden is

limited. No superfluous activities are necessary. Also the result of the application of the model is easy to maintain and change management can be applied at a rate that suits the institution.

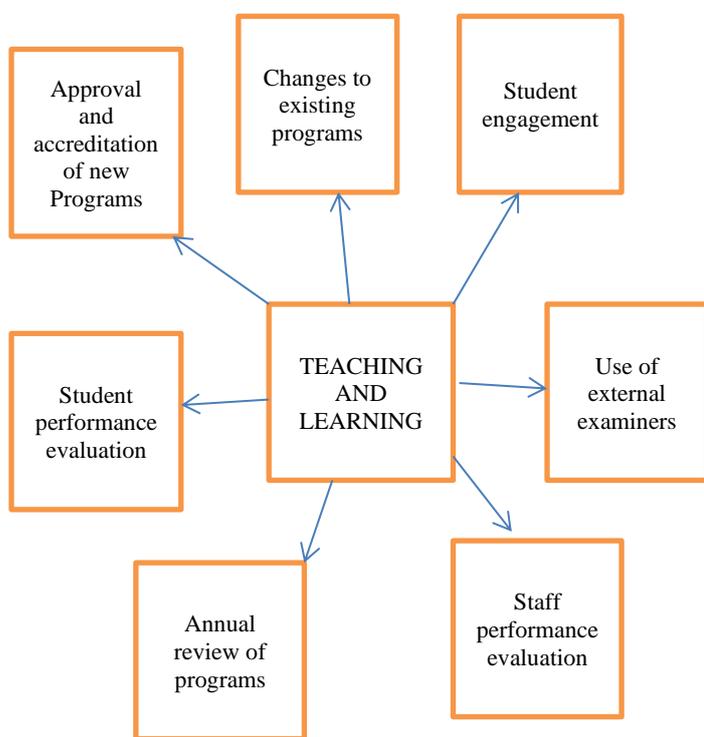The following OQM model can be simulated for ZCAS scenario:

Figure 5.1 ZCAS OQM model for quality area teaching and learning

5.3 Quality Assurance in Teaching and Learning

5.3.1 Approval and Accreditation of Programmes

New learning programmes will be approved through an established approval process, which includes the involvement of an external subject specialist. The approval will be done in accordance with the University's Policy on the approval of new programmes.

Learning programmes will be submitted for external approval, accreditation and registration in accordance with the requirements of national law governing accreditation of higher education

programmes. Renewal of accreditation will also be done as required.

5.3.2 Changes to existing programmes

Amending of existing learning programmes, including their withdrawals and suspensions will be guided by the processes and procedures outlined in the institution's Policy on changes to programmes. The whole purpose why this change is sometimes inevitable was disclosed to the researcher as so as to offer courses that are relevant to current job markets. Sometimes, existing courses are improved upon to again suit the market and job needs out there.

5.3.3 Student engagement

Students are to be engaged in quality assurance processes through their involvement in wide-ranging activities including, student evaluations, satisfaction surveys, student complaint procedure and representation in University committees and programmes. The researcher was informed that there is a tradition at ZCAS of course meetings. These take place once per semester for each course, where the students' representatives are invited to meeting with respective lecturers and are given a platform to openly share the view of the class regarding quality of teaching from their lecturer.

By virtue of this program being in place, lecturers would definitely not leave anything to chance and they ensure by all means possible, all quality checks are well balanced as they would not want themselves embarrassed in these open critique meetings.

5.3.4 Teaching and learning

To ensure that quality of learning and teaching is maintained and developed, ZCAS will consistently implement the teaching observation scheme, student evaluations, individual staff evaluation and professional development opportunities.

5.3.5 Internal moderation

Internal moderation of final assessments will be done during each round of examinations in accordance

with institution's policy and procedures on internal moderation of assessments. It was revealed at one of the most recent meeting of lecturers that moderation of internal examinations will be peer reviewed to reduce on errors that may arise during examination execution. This is unlike in the past when every faculty member was responsible for its own internal moderations of examination.

5.3.6 External examiners

External examiners play a vital role in ensuring that the standards of both taught and research degree learning programmes are maintained. Moderation of examination papers will be done by external moderators in accordance with to the University's Policy and regulations governing external moderation. External assessment of scripts, theses and dissertations for both undergraduate and postgraduate programmes will be done according to the University's rules and regulations for external assessment.

5.3.7 Annual monitoring

Academic units will conduct annual monitoring and review of both taught and research degree programmes in accordance with the established Policies and Procedures on Annual Monitoring and Review and the Quality Assurance and Enhancement Framework for Research Degree Programmes.

5.3.8 Periodic Review

Critical internal self-evaluation for academic departments is subject to a six-yearly periodic review, undertaken by a team of peers that includes both an external academic and a student member in line with the University program self-evaluation guidelines

Evaluation of professional programs will be done by external professional bodies according to the time schedule, criteria, standards and procedures of the relevant body in collaboration with ZCAS' normal process. Where no professional body is available, professional programs will be evaluated in accordance with the normal ZCAS processes.

Another quality area for which OQM model would be applied to ZCAS is support services.

5.4 Quality Assurance in Support Services

Secondary data obtained from unstructured interview with responsible personnel revealed that the quality of support services shall be evaluated regularly to ascertain the adequacy and appropriateness of services provided to students and staff through provision of academic social counseling; study materials, space and teaching/learning infrastructure; social amenities, including health, catering, recreational and other services.

Additionally, it was gathered in similar manner that self-evaluation of support functions shall take place at least every six years, followed by external peer review. The evaluation processes shall result in the creation of an improvement plan with actions aimed at addressing the weaknesses identified. These improvement plans shall be monitored through progress reports. This is indicative of the management commitment to continuous improvement in the level of service delivery to its clientele. See figure 5.2 below:
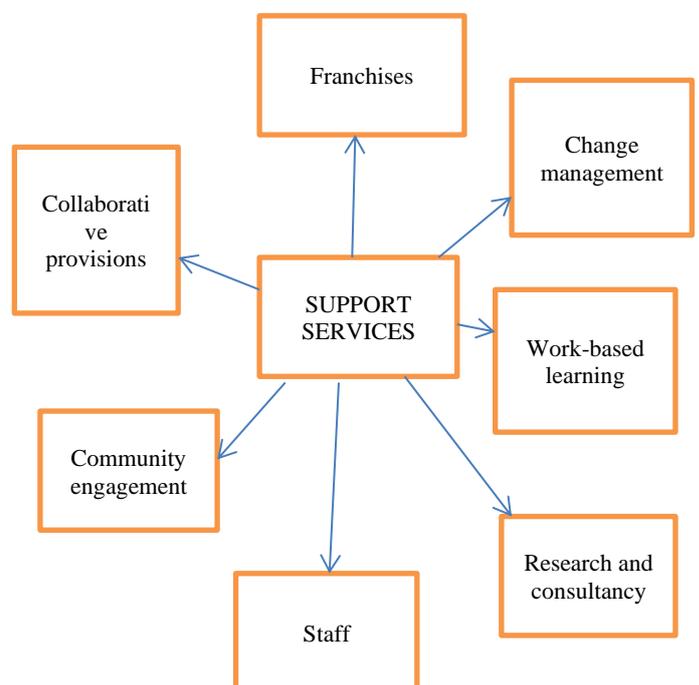
5.4.1 Quality Assurance of Work-Based and Placement Learning

A number of learning programs incorporate placements or work-based learning. ZCAS has a deliberate policy of assisting its trainees to secure places with renowned organizations for their placements. ZCAS, additionally does attach students in its needy departments for their acquisition of experience in their area of study. Quality of work-based and placement learning is monitored and evaluated regularly in accordance with the placement policy. Students find the university very appropriate place to study as majority do not struggle getting work-based experience on their own

5.4.2 Quality Assurance of Research and Consultancy

Interviews with employees from Research and Consultancy department showed that ZCAS is committed to developing and maintaining the research capacity at a level commensurate to the aspiration of becoming a leading global research and consultancy institution. Research interventions will be developed and implemented within the framework of the institutional research policy, research ethics policy, intellectual property policy and their relevant guidelines. Research outputs will be subjected to external or internal peer evaluation as well as peer input in accordance with the rules of best practice of research.

In addition, the researcher learnt that the requirement for lecturer involvement in research and publication will be used by the Higher Education Qualification Authority (HEQA) to place University lecturers in their appropriate positions and so this area is likely to experience high level activity for ZCAS and hence chances of the university improving its performance are very high arising from research results.

5.4.3 Quality Assurance of Staff

The researcher was notified that suitably qualified and competent staff are recruited and employed in accordance with the established policies and procedures of the institution. Development and implementation of staff orientation sessions for new staff members and other relevant staff development programs identified as critical and in accordance with the Staff Development Policy. The researcher was informed that on average, two training sessions of staff are carried out in a semester as a strategy to keep members braised with quality requirements of the University. Continuous development of staff takes place according to the terms of the Staff Development Policy and Procedure of the institution (ZCAS 2019). At ZCAS, the researcher learnt that all new employees are required to undergo detailed orientation to acquaint them with internal procedures for improved or better performance.

5.4.4 Quality Assurance of Community Engagement

It was established that the quality of the institution's contribution to community services will be monitored and evaluated to ensure it is relevant, adequate and impacting communities in line with institution's strategic intent of ZCAS. ZCAS has t, time and again participated in community activities voluntarily and would continue to take part as a good corporate citizen.

5.4.5 Quality Assurance of Collaborative Provisions

ZCAS recognizes several types of partnership provision, including accreditation, articulation, co-delivery, franchise and validation. A partner register is maintained with complete details of existing partnerships, their location, course or programme of study, and the nature of the relationship.

All collaborative provisions shall be approved in accordance with the policies and procedures of the institution, and shall be subject to quality assurance reviews.

Overall, ZCAS has commitment to recover the huge investments it makes in education administration and authorities feel it is only by ensuring quality is

embedded in everything that the centre does, that recovery of massive investment will be enhanced. ZCAS is also committed to an aasserstion that education and training is essential to economic recovery, growth, and competitiveness; and as such, approaches training with a business mind. As a result of being business minded, the institution is committed to establishing monitoring mechanisms as part of an overall strategy for making informed decisions about planning the quality of education.

5.4.6 Change Management

As ZCAS became a university formally recently, it is at the peak of making a lot of changes to its programs, procedures and staff allocations. In this quest, ZCAS has always strived for the best quality from previous procedures.

5.4.7 Franchises

With the recent expansion of its programs on distance education, ZCAS University has embarked on creating partnerships with institutions in other places for easy administration of its examinations to students in far flung areas.

5.5 Limitations of the study

A lot of limitations of this research study must be noted. This will allow determination of research opportunities in the future. To begin with, the findings of this research should not be taken casually. It may be that the respondents may not have clearly understood the research questions and provided inappropriate responses especially that most questions were close ended. In future, a balanced combination of closed and open ended questions may be more appropriate to allow respondents provide wide views on various matters surrounding the research topic.

Additionally, this research was confined to ZCAS University a single institution providing training. In future, a comparative report of a number of training institutions may have to be carried out so as to obtain wider views as to what customers consider quality of service and hence ascertain best service provider in the industry.

Time limitation cannot be overemphasized. This research was carried out under intense pressure, inadequate time between issuing questionnaires and submitting final report. As a result, the researcher could not give respondents more time to provide their feedback and hence using a small sample size to collect and analyze data.

No comparison was made between TQM practices and size of the organization, again due to time limitation. It is believed that levels of quality will equally be affected by size of organization. Small organizations usually have challenges to put in place quality practices and are automatically victims of poor quality services unlike large organizations who have the resources and manpower to implement TQM practices without much pressure resource wise. This part of analysis was not done on ZCAS University during this research hence a hope that future research could put this into account.

Finally, the constructs of customer satisfaction and service quality were purely measured from internal points of view, that is, students and employees of ZCAS University only. Future research could involve members of the public's point of view who may have had an encounter with ZCAS University in one or two dealings so as to increase perspective. This however borders on the same resource limitations and hence plan to restrict research to ZCAS University environment. Because of this, the generalization of the current findings could be evaluated further to provide more enhanced status quo.

Additionally, as the students were in their last days of their semester, it was not so easy to have access to them as formal gatherings in classes had come to an end.

5.6 Implications for ZCAS University Management

As a result of this highly competitive world, managers must preoccupy themselves on a continuous basis with means with which they can innovate service deliveries as customer expectations

keep changing at a very high rate. Managers need to appreciate that delivery of high quality services will inevitably lead to sustainable competitive advantage for a firm as a whole and outperform competitors.

This study provides some insights into the impact of TQM practices in ZCAS University on business improvement, which those in management should take into account for their incorporation in strategic management implementation. Customer focus needs increase as it is a backbone of customer satisfaction. Leadership inevitably provides a culture of quality and through effective communication and information systems, quality culture is easily embedded in all that ZCAS University does. It is necessary for any group of management to seriously consider customer feedback and complaints and make necessary adjustments in their quality improvement plan if they are to satisfy customers on a continuous basis.

The findings of this study also serve as a valuable guideline for top management to review the TQM working practices on a regular basis to ensure they continue to make a positive contribution towards service delivery improvement.

5.7 Theoretical implications

From the theoretical point of view, the elaboration of the role TQM practices play in enhancing quality and customer satisfaction in a learning institution such as ZCAS University fills the present gap in knowledge. The proposed theoretical model in this study especially emphasized TQM elements particularly important in a service organization like ZCAS University. This study is bound to attract attention of other researchers who may be interested in carrying out research in the same topic area to build on the knowledge or fill up the gap

5.8 Conclusion

In conclusion, the purpose of this study was to explore the relationship between Total Quality Management practices and service quality and how they link to customer satisfaction as perceived by employees and students at ZCAS University. Results have shown that customer focus, leadership, process management and Human resources practices all positively contribute to improved quality hence customer satisfaction and retention.

There are however certain levels of dissatisfaction by the customers at ZCAS University especially in the areas of human resource related processes and health facilities provided. The students in general feel the limitations of services the health facility in place provides are too much, for example, they do not operate the clinic after 17 hours and do not carry out most commonly demanded tests such as full blood count, x-rays etc. except simple tests such as malaria testing. The use of human resource personnel who are not full-time employees appear not to be received so well as their adherence fullest to TQM procedures and policies come with reservation as a result of lack of ownership of what they do.

Predominantly, it was found that senior management involvement in quality improvement practices and lecturers' preparedness for their academic assignments on day to day basis played a very significant role in enhancing quality of service.

5.9 Recommendations

Management may increase further levels of checks and balances for quality improvement as expressed by small proportions of respondents. Particularly, in this computer edge, there is need to intensify lecturer skills in delivering training, most especially to the distance learning students who require massive Information Technology skills from their tutors.

Since no detailed research has ever been conducted, on the cause of attrition rate, management to consider a detailed research in future on the subject matter. The research ought to consider program by program survey so that it will be more revealing and more pointing to specific areas requiring extra attention by management. The researcher hereby recommends that intensity of supervision to be up as it is a serious pre-requisite to ensuring consistency of quality in all services provided by the university. ZCAS

management needs to enhance its support for especially Distance education students where attrition appears high compared to other categories of the University's students.

More time is required to carry out such research work and if the project can be financed so the research is carried out on a wider scale.

The study was confined to internal customers of ZCAS University, future studies may incorporate extended trade contacts of the institution.

ZCAS University should further up the HR practices in terms of recruitment criteria so as to employ only highly competent personnel who will be able to push forward the TQM agenda of the University.

It is additionally recommended that the government of the republic of Zambia could provide deliberate technical support that would ensure adequate sensitization to entities on the importance of engaging in TQM practices so that economic development through growth of entities could be enhanced.

7. *REFERENCES*

[1] Agus, A & Hassan, Z. (2000). "**Exploring the Relationship Between the Length of QM Adoption and Financial Performance: An Empirical Study in Malaysia.**" International Journal of Management, 17(3), 323-333.

[2] Agus, A., & Hassan, Z. F. (2011). **"Enhancing Production Performance and Customer Performance Through Total Quality Management (TQM): Strategies for Competitive Advantage."** Procedia-Social and Behavioral Sciences, 24, 1650-1662.

[3] Bonstingl JJ (2001). **Schools of Quality (3rd ed**). Thousand Oaks, California

[4] Boselie, P and Van Der Wiele, T (2001), "**Employee Perceptions of HRM And TQM And the Effects on Satisfaction and Intention to Leave**"**,** ERIM Report services research in Management, ERS 2001-42-ORG, Erasmus Research Institute of Management, RSM. Erasmus University.

[5] Crosby, P (1986), **"Quality Is Free",** Cambridge, MIT Press.

[6] Deming WE (1986). **Out of Crisis Cambridge University Press.**

[7] Denzin, NN. K and Lincoln, Y.S (2005). **"The SAGE Handbook of Qualitative Research."** 3^(RD) Edition, Sage Publishers, London.

[8] Francis A (2011), "**Business Mathematics and Statistics.**" 5th Edition. London: DP Publishers.

[9] Ghauri, P. and Gronhaug, K. (2010) "**Research Methods in Business Studies**." 4th Edition. England: Pearson Education Limited.

[10] Gordon, J. and Sohal, A.S. (2001), "**Assessing Manufacturing Plant Competitiveness: An Empirical Field Study",** International Journal of Operations & Production Management, Vol. 21 Nos 1/2, pp. 233-53.

[11] Hasegawa, T (2006), "**A study on Organizational Reinforcement through Total Quality Management in the Health and Medical Care Sector**." Department of Policy Sciences, National Institute of Public Health.

[12] Hendricks, K. and Singhal, V. (2001) **"The Long Run Stock Price Performance of Firms with Effective TQM Programs**", Management Science, Vol. 47 No 3 pp. 359-368.

[13] Hogan, R (2012), "**Transnational Distance Learning and Building New Markets for Universities."** Information Science Reference, USA.

[14] Jablonski, J. R. (1992). **"Implementing TQM: Competing in The Nineties Through Total Quality Management."**

[15] Johnson, G., Whittington, R. & Scholes, K (2011), "**Exploring Strategy**", 9th edition. England. Pearson Education Ltd.

[16] Jun, M., & Cai, S. (2010). **"Examining the Relationships Between Internal Service Quality and Its Dimensions, And Internal Customer Satisfaction."** Total Quality Management, 21(2), 205-223.

[17] Juran, M.J. (1986), "**Quality Trilogy",** Quality progress, August, pp. 14-24. {Google scholar}

[18] Juran, J. M. (1993**). "Made In USA: A Renaissance in Quality."** Harvard Business Review, 71(4), 42.

[19] Kombo, D.K. and Tromp, D.L. (2014) "**Proposal and Thesis Writing: An Introduction**", Kenya, Pauline's Publications Africa.

[20] Kotler, P., Leong, S., Aug, S. and Tan, C. (1996), **"Marketing Management: An Asian perspective**", Singapore, Prentice Hall.

[21] Koyi, G. Mushiba, N $ Mulenga, P (2016), International Growth Center (IGC); **"Quality Management, Productivity and Profitability in Zambia"**. F-41303-zmb-1.

[22] Mehra, S. and Ranganathan, S. (2008), "**Implementing Total Quality Management with A Focus on Enhancing Customer Satisfaction**", International Journal of Quality and Reliability Management, Vol. 25 issue: 9, pp. 913-927.

[23] Ministry of Health (2009) "**Quality Report on Health**" Tanzania.

[24] Orodho, A.J (2003) "**Essentials of Educational and Social Sciences Research Method**." Nairobi: Masola Publishers.

[25] Pallant, J. (2010), "**SPSS Survival Manual**", 4th edition. England, McGraw Hill Publishing House.

[26] Pearson, J. M., McCahon, C. S., & Hightower, R. T. (1995). **"Total Quality Management. Are Information Systems Managers Ready?"**. Information & management, 29(5), 251-263.

[27] Pfau, L.D. (1989), "**Total Quality Management Gives Companies A Way to Enhance Position in The Global Market Place**", Industrial Engineering, Vol 4 No. 1, pp.17-18.

[28] Porter, M.E (2009), "**Competitive Strategy**", New York, Free Press.

[29] Prajogo, D. I., & Sohal, A. S. (2006). "**The Relationship Between Organization Strategy, Total Quality Management (TQM), And Organization Performance—The Mediating Role Of TQM.**" European Journal of Operational Research, 168(1), 35-50.

[30] Tang, V., & Roy, B. (1995). "**Beyond Strategic Advantage & TQM, Competitive Dominance**." New York, Van Nostrand Reinhold.

[31] Sakthivel, P.B., Rajendran, G. and Raju, R. (2005), "**TQM Implementation: TQ Implementation and Students' Satisfaction of Academic Performance**", The TQM Magazine, Vol 17 No. 6, pp. 573-89.

[32] Salami CGE (2009). **"Assessing Quality Assurance in Nigerian Universities", Oniong: A Contemporary Studies,** 1(1): 141-155.

[33] Sangeeta (2004). "**Conceptualizing Total Quality Management in Higher Education**", the TQM Magazine, 16(2): 149-159

[34] Shahin, A. and Nikneshan, P. (2008), "I**ntegration of CRM and QFD**: **A Novel Model for Enhancing Customer Participation in Design and Delivery**", The TQM Journal, Vol. 20 No 1, pp.68-86.

[35] Sheikholeslam, M. and Emamian, S. (2016), **"TQM And Customer Satisfaction Towards Business Excellence."** International Journal of Learning Management Systems. Vol 4 No 1 pg. 35-42 2016.

[36] Strachan, G. and Burgess, J. (2009), **Managing Diversity in Australia: Theory and Practice**. 1st Edition. McGraw-Hill Education.

[37] Yi, W., Boon, K., Lin, B. and Chong, A. (2009), **"TQM and Customer Satisfaction in Malaysia Service Sector"**, Industrial Management and Data Systems, Vol. 109, issue 7, pp. 957-975.

[38] Yohanes, K., Miam, M. and Maqsood, S. (2012), "A**dopting TQM Approach to Achieve Customer Satisfaction: A Flour Milling Company Case Study",** The TQM Journal, Vol. 24 issue: 1 pp. 29-46.

[39] ZCAS (2019), "ZCAS Quality Assurance and Enhancement Policy" Zambia.