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RELATIONSHIP BETWEEN QUALITY ASSURANCE OFFICERS' TRAINING AND CUSTOMER SATISFACTION IN PUBLIC UNIVERSITIES IN KENYA

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Abstract

Purpose: The purpose of the study was to investigate the relationship between Quality Assurance Officers' training and Customer Satisfaction in Public Universities in Kenya.

Methodology: The researcher employed Correlation research design using mixed methods approach. This study was undertaken in public universities in Kenya. There were 31 public universities in Kenya. These universities are spread across the country. Out of these, 15 had been awarded ISO 9001 QMS certification (Kenya Bureau of Standards, 2019). A sample of 8 universities was used for the study. All universities are regulated by CUE hence the same standards ought to apply in regard QMS. Data was analyzed using both descriptive statistics such as frequencies, mean, mode, median and inferential statistics such as linear regression. Data was presented using tables and figures.

Findings: The study shows a weak relationship exist between QAOs training and customer satisfaction ($\beta = 0.210$). The relationship was not significant at 95% level of significance ($P\text{-value} < 0.050$). This finding implied that an improvement in training of QAOs by one unit led to a 0.210-unit improvement in customer satisfaction. There is a need to improve quality of training offered to quality assurance officers alongside ISO standards

Unique contribution to theory, practice and policy: The results of this research will inform both the public universities and the Ministry of Education in Kenya so that they may appreciate the gaps in quality of training of staffs so as to enhance customer satisfaction. Universities management may also benefit from the results of the study because it may expose the gaps in training and preparation of QAOs in execution of their mandate/duties. Organizations receive ISO 9001 certification that specifies the requirements for a quality management system where an organization needs to demonstrate its ability to consistently produce quality products and services. ISO 9001 certification also aims to enhance the quality of services through effective application of the system continual improvement, the assurance of conformity to customers and applicable statutory and regulatory requirements. Furthermore, the findings of this study may generate useful theoretical literature for further studies and the necessary actions that will be undertaken in order to address the issue of quality services in our public universities.

Keywords: *Quality Assurance, Officers' Training, Customer Satisfaction, Public Universities*

1.0 INTRODUCTION

The shortage of financial resources, a decline in quality of those who graduate, insufficient number of staff and faculty with requisite training and qualification, and an increase in competition between various public and private colleges and universities (Ariff, Zaidin & Sulong, 2013). In a bid to curb the challenges they face, HEIs have adopted Quality Management Systems (QMS). Some of them include devices such as performance indicators, accreditation, assessment of program and institution, and quality audits. Attempts have also been made to incorporate models from the private sector into higher education systems and institutions in a bid to enhance their service delivery (Sarrico, Rosaa, Texeira & Cardoso, 2010).

Shrestha and Chalidabhongse (2016) surveyed 300 employees who worked in 60 Thai companies on the extent to which job satisfaction is influenced by the existing performance appraisal system which these companies use. The study concluded that the performance appraisal system, if not satisfactorily controlled, would lead to employees reporting lower performance. This is because performance appraisal system had been incorporated into the company's running processes. Customers expect quality services from organizations that have been awarded ISO 9001 certification. This is because the main objective for the adoption is to project the organization as adhering to quality processes and policies.

According Shrestha and Chalidabhongse (2016), despite efforts by higher educational institutions to improve the quality of their services, complaints from their customers on the quality of services still abound. Numerous complaints by employers about half-baked graduates as well as from the customers of the public universities about the services offered which were not of good quality seen in the strikes and riots necessitated this study. These are indicators to probable issues of quality in the organization showing that more needs to be done so that the customers may be satisfied. The paucity of research findings on ISO 9001 certification in higher education services leading to customer satisfaction necessitated this study.

Brown and Clignet (2014), noted that universities have not taken seriously the issue of customer satisfaction as it has been viewed as a reserve of business enterprises only. However, they observe that the measurement of customer satisfaction is now an issue that has to be looked into by academic institutions. This led them to point out seven factors that explained difference in customer satisfaction in universities. These factors include customer's positive experience, commitment of staff, availability of staff, recommendation of alternative processes, alternative sources of information by staff, approachability of management and assistance provided by the centre staff to customers.

ISO 9001 clause 8.2.1 requires that organizations should monitor information that relate to customer perception to determine if customer requirements have been met. A lot of emphasis is laid on ensuring that clients are indeed satisfied. Though it does not specify how to assess or measure whether clients are satisfied, conducting customer satisfaction surveys, implementing a robust and workable complaints handling process, implementing a process to monitor trends in customer data and implementing a process for reviewing customer data are some of the suggested ways (ISO 9001: 2008).

Training is the imparting of requisite skills, competencies and knowledge through teaching or instruction (Harris, Willis, Simons & Underwood, 2011). The main aim of training is to improve

one's ability, capacity and accomplishment at the place of work. According to Harris et al. (2011), Quality Assurance Officers/ Directors of Quality play a very important role in ensuring that institutions offer quality services to its customers. They ensure that the institutions adhere to the set quality standards. Their training is therefore very important because it equips them with requisite knowledge and skills to carry out their duties effectively. Provision of quality services will enhance customer satisfaction. Training is categorized into two. These are on-the-job and off-the-job training.

Harris et al. (2011) said that on-the-job training is done in a normal working situation, with the use of actual tools, equipment, documents or materials that trainees use when they are fully trained. This kind of training is thought to be effective especially for vocational work. Off-the-job training is carried out away from the normal working environment. This means that the employee when undergoing such training does not productively work. It is advantageous because employees are able to dedicate their time to training without the thought of going to work. In addition, this type of training is thought to be more effective since employees can understand better the ideas and concepts they are taught.

Thompson and Kolsky (2012) emphasize that training brings about job satisfaction among the employees thus enabling them to perform better. They further note that organizations which invest in training of its employees are likely to achieve better results in the long run. It was also observed by Nakauka (2010), that they are able to perform with excellence after training and that their desire to excel goes up after such trainings.

From the literature above, it is evident that there are benefits that accrue as a result of training. However, these may be countered if those being trained have other motives for undergoing the training. Furthermore, if the training is inadequate, ineffective and not timely it may not yield its intended benefits. This perhaps could be the reason complaints abound about dwindling quality of education in the public universities in Kenya despite the presence of Quality Assurance Officers. This therefore necessitated this study so as to address the issue of training for QAOs in public universities in Kenya.

Statement of the Problem

Customers expect quality services from organizations that have been awarded ISO 9001 certification. This is because the main objective for the adoption is to project the organization as adhering to quality processes and policies.

Despite efforts by higher educational institutions to improve the quality of their services, complaints from their customers on the quality of services still abound. Numerous complaints by employers about half-baked graduates as well as from the customers of the public universities about the services offered which were not of good quality seen in the strikes and riots necessitated this study. Issues of missing marks as well as poor syllabus coverage have been raised by the customers. These are indicators to probable issues of quality in the organization showing that more needs to be done so that the customers may be satisfied. The paucity of research findings on ISO 9001 certification in higher education services leading to customer satisfaction also necessitated this study.

1.2 Hypotheses of the Study

The following hypotheses were tested at 0.05 level of significance:

H₀ There is no statistically significant relationship between Quality Assurance Officers' training and customer satisfaction in public universities in Kenya.

H₁ There is statistically significant relationship between Quality Assurance Officers' training and customer satisfaction in public universities in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

This study was anchored on the following theories:

2.1.1 European Foundation for Quality Management Excellence Model

This research will be anchored on European Foundation for Quality Management (EFQM) Excellence Model advanced by Hendricks (1996). EFQM advocates for the utilization of a standard management model that can bring the organization to the level of excellence (Campatelli, Citti & Meneghin, 2011).

Calvo- Mora, Leal and Roldan (2005) note that EFQM model analyses how satisfaction can bring about excellence in the results of an organization, recognizing that through the adoption of different approaches, excellence may be sustainably achieved. According to the model, satisfaction of both customers and employees, and the impact on society result from leadership that facilitates and stimulates institutional strategies and the management of personnel, resources and processes.

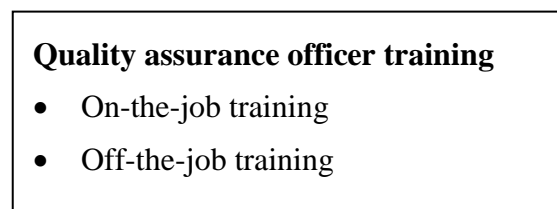
The Model (EFQM) is anchored on nine quality management criteria. These are five enablers (criteria that cover what a company does or is set to do) and four results (criteria that cover what a company realizes or achieves). These nine criteria are explained by the EFQM Model as: Focus on Results – company's stakeholders are supposed to be pleased with results achieved; Focus on Customers – customer satisfaction should be realized through the company's quality management; Constancy of Purpose and Consistent, Visionary Leadership, Process and Facts form the Management Focus – the management should break down everything into systems, processes and facts to ease monitoring and training; Involvement of Employees – employees should get opportunities for professional development and should be encouraged to continue being involved in the company's activities; Continuous Learning – everybody should be given an opportunity or opportunities for learning while in employment; Developing Partnerships – developing associations or partnerships that add value to the company's improvement process should be encouraged; Social Responsibility of the Corporation – the company should act responsibly towards the environment and community (Goetsch, 2013). The model criteria cover the quality standards required of an organization which will enhance customer satisfaction through the realization of quality results. This model was therefore appropriate to the study. Customers in any institution are supposed to be pleased or satisfied by the results. When quality services are rendered through consistency of processes and procedures, customers will be satisfied.

When the product or service is bought and used the expectations are compared with actual performance using a better than worse heuristic. Positive disconfirmation results if the product or service is better than the expected while worse than expected results in negative disconfirmation. Simple confirmation results when a product or service performs as expected. Satisfaction is expected to increase as positive disconfirmation increases (Goetsch ,2013). ISO certification is expected to result in better quality of product or service thus the customers have some expectations when an organization is certified which with time will result to positive or negative disconfirmation of the expectations. This made this theory very important in guiding the study.

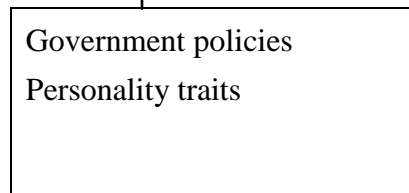
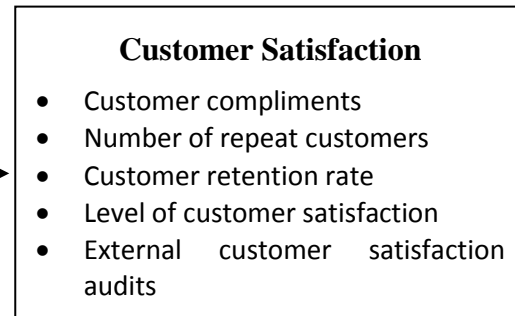
2.2 Conceptual Framework

Figure 1 below shows how QAOs’ training influences customer satisfaction in public universities in Kenya. Figure 1.0 summarizes the conceptual framework in the study.

Independent Variables



Dependent Variable



Intervening variables

Figure 1: Conceptual framework on the Relationship between ISO 9001 Quality Management System Certification and Customer Satisfaction in Public Universities in Kenya

Source: The Author (2020).

The study adopted the above conceptual framework. As perceived in the review of the literature, the independent variables for the study include quality assurance officers’ training. The dependent variable was customer satisfaction in public universities. The intervening variables were government policies and personality traits. Government policies and personality’s traits intervene the relationship between ISO 9001 Certification and customer satisfaction in public universities in Kenya,

3.0 MATERIAL AND METHODS

3.1 Study Design

A research design is the arrangement of conditions for collection and analysis of data with a view to combining relevance to the purpose of the research (Kothari, 2009). It provides the road map for the collection, measurement and analysis of data (Mathooko, 2015). Kothari (2009) adds that a research design is made up of the decisions about what, where, when, how much and by what means. This study adopted correlation research design and utilized both qualitative and quantitative approaches (mixed methods) to investigate the relationship between ISO 9001 Certification and Customer Satisfaction in Public Universities in Kenya. Creswell (2013) notes that a mixed method research is whereby a researcher collects, analyzes and mixes quantitative and qualitative data in a single study or series of studies to understand a research problem. This design was suitable for this research since it enabled the researcher to obtain well organized information on the relationship between independent and dependent variables.

3.2 Population

Mugenda and Mugenda (2003) argue that population is a complete set of individuals, cases or subjects with common observable characteristics. A target population is a large population from which sample populations are drawn. The target population for this study was 227,088 students and 15 QAOs.

According to Commission for University Education (2017), there are 31 public universities in Kenya. From these universities, Kenya Bureau of Standards (2019) listed 15 public universities in Kenya that had been awarded ISO 9001 QMS certification. In this study 50% of the public universities that had been awarded ISO 9001 Certification were used for optimum results (Mugenda & Mugenda, 2003). This would be 8 universities out of 15 which had been awarded ISO 9001 QMS certification.

3.3 Sampling Technique

Each of these universities had 1 QAO which made a total of 8. The researcher used the formula generated by Krejcie and Morgan (1970) and adapted by The Research Advisors (2006) as a sampling table to get the number of students to act as respondents. The researcher selected 383 respondents for the study.

Stratified random sampling was used to select the students who formed the sample to be studied. Students were stratified into 8 public universities which had been awarded ISO 9001 Certification. To get the sample for each university, the number of the students in the university was divided by the total number of the students in the sampled universities to yield factor x which was then multiplied by 383.

The unit of sampling were public universities in Kenya that had been awarded ISO 9001 QMS certification. There were 31 public universities in Kenya. Of these, 15 had been awarded ISO 9001 certification (Kenya Bureau of Standards, 2019). The researcher used 8 universities for the study which constituted 50% of the target population. These universities were selected randomly where each of the 15 universities that had been awarded ISO 9001 certification was assigned a number. The researcher wrote numbers representing the universities on 15 pieces of paper which

were then folded and put in a container. They were then mixed and 8 pieces of paper were picked each representing a university.

3.4 Research Instruments

The researcher utilized two instruments to gather both qualitative and quantitative data. The instruments are described in more details in the subsequent sections. These instruments are Questionnaires for Students and QAOs.

The questionnaire had both open-ended and closed questions as well as Likert scale type of questions based on the research objectives. Creswell (2013) and Kothari (2009) advocate for questionnaires as a preferred tool to collect data since it allows faster, efficient and convenient data collection.

3.5 Data Collection Procedure

Data collection was undertaken in three phases. The first phase involved obtaining a research permit from National Commission for Science, Technology and Innovation (NACOSTI) with an introductory letter from the Directorate of Graduate Studies, University of Kabianga. After the permit had been granted, the researcher made reconnaissance trip to the research area, met with the relevant officers of the universities to explain the purpose of the research, sought permission and set the date which was appropriate to administer the tools that were used in the study.

The second phase involved making data collection instruments. Piloting and testing of the instruments used the same category of participants from two public universities that did not form the sample of the study but are ISO 9001 certified. The pilot study was undertaken to determine if the data collection instruments were clear to the respondents. Restructuring, removal or addition of the items was made where necessary. The researcher organized training for 2 enumerators who would assist the lead researcher in data collection. The third and last phase involved data collection. The procedure for data collection involved drop and pick for the questionnaire where by the questionnaire tools were left with the respondents for a week to be picked as stipulated. The researcher booked appointments with the ISO Coordinators for them to give an appropriate time to do the interviews.

3.6 Analysis and Presentation

According to Mugenda and Mugenda (2003) the filled and collected questionnaires were checked for completeness, errors and omissions. They were tabulated and coded. Data analysis involved qualitative data from open-ended questions and quantitative procedures for data collected using closed-ended questions in the questionnaires. Quantitative procedures involved both descriptive and inferential statistics. This started by first describing the background information of the respondents in the questionnaire to profile their characteristics as well as establishing Customer Satisfaction in public universities in Kenya which was the dependent variable of the study. This was based on assessing customer satisfaction of students as a perception using 3 point likert scale Disagree= 1, Neutral = 2 and Agree = 3. The preceding sections in the questionnaire was descriptive statistics of the study objective as follows:

The objective sought the opinion of respondents on extent of the relationship between Quality Assurance Officers training and Customer Satisfaction. The 3point Likert scale was used to measure the level where 1 = Agree (A), 2 = Neutral (N), 3 =Disagree (D), this is ordinal scale

data which was analysed first using descriptive statistics which include frequency and percentages.

4.0 FINDINGS

This section presents findings on background information of respondents and relationship between Quality Assurance Officers' Training and customer satisfaction in public universities in Kenya. These include both descriptive and inferential statistics.

4.1 Descriptive statistics

4.1.1 Qualification of QAOs

The target population for this research were 15 QAOs in universities in Kenya that have been awarded ISO 9001 certification. The study sampled 8 QAOs. The response rate for the study was 100.0%. The findings presented in Figure 1 shows the qualifications of QAOs before appointment to current position at the university.

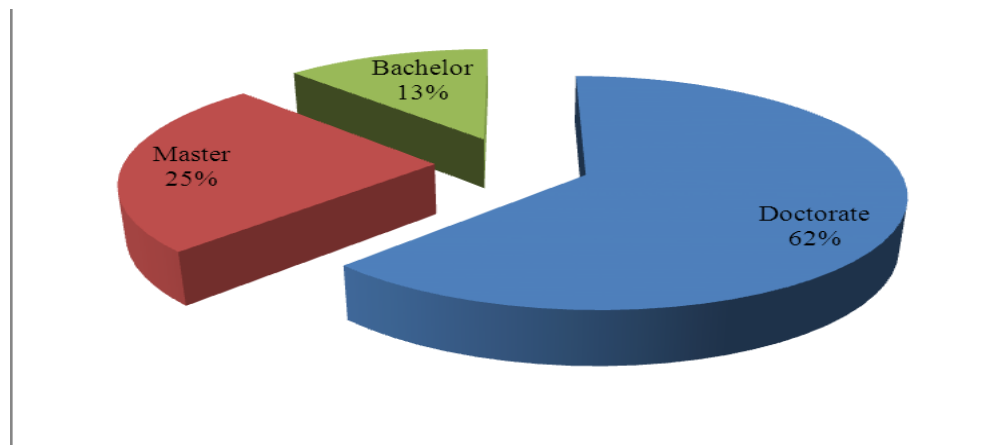


Figure 1: Qualification of QAOs

It was established that most of QAOs accounting to 5 (62.5%) had attained doctorate degree, followed by master's degree at 2 (25.0%) and bachelors degree at 1 (12.5%) prior to being appointed to the position of QAOs in various universities. This implies that most QAOs had requisite and relevant qualification prior to the appointment to their current position. The finding implies that most universities that participated in the study had hired qualified QAOS prior to their appointment.

4.1.2 Duration Prior to Appointment as QAOs

The study sought to establish how long QAOs had worked with respective universities that participated in the study before being appointed QAO.

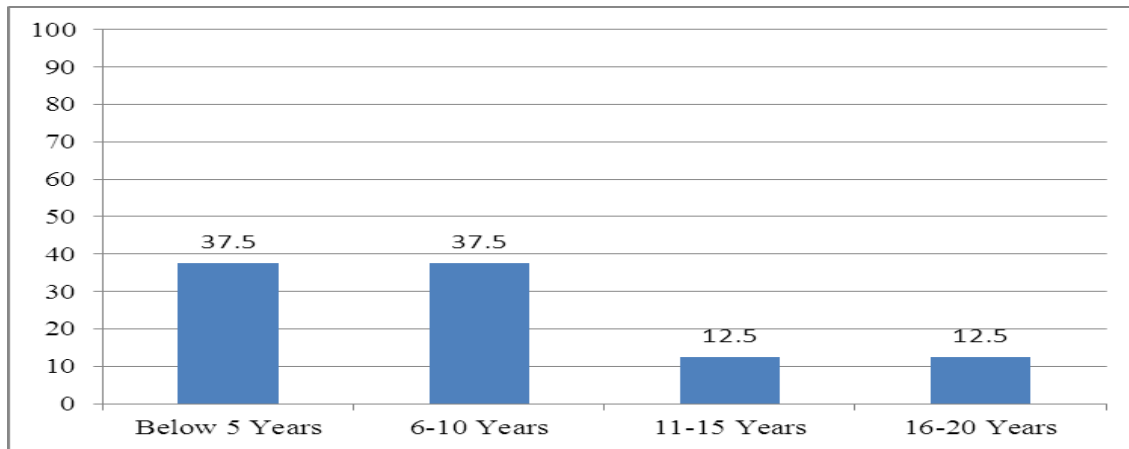


Figure 2: Duration Prior to Appointment as QAOs

This was important to establish their level of experience familiarizing themselves with operations and functions in the universities. The findings presented in Figure 1.2 show that a large component of QAOs who participated in the study had experience of less than 10 years (75.0%) while minority were found to have experience of either 11-15 or 16-20 years accounting to 1(12.5%) and 1 (12.5%) respectively. From the findings it was deduced that QAOs had experience prior to being hired to their current position at various universities.

4.1.3 Types of Training Received as QAOs

The figure 3 presents qualitative data which was summarized and presented in form of frequencies based on content analysis of themes emerging from the presentation.

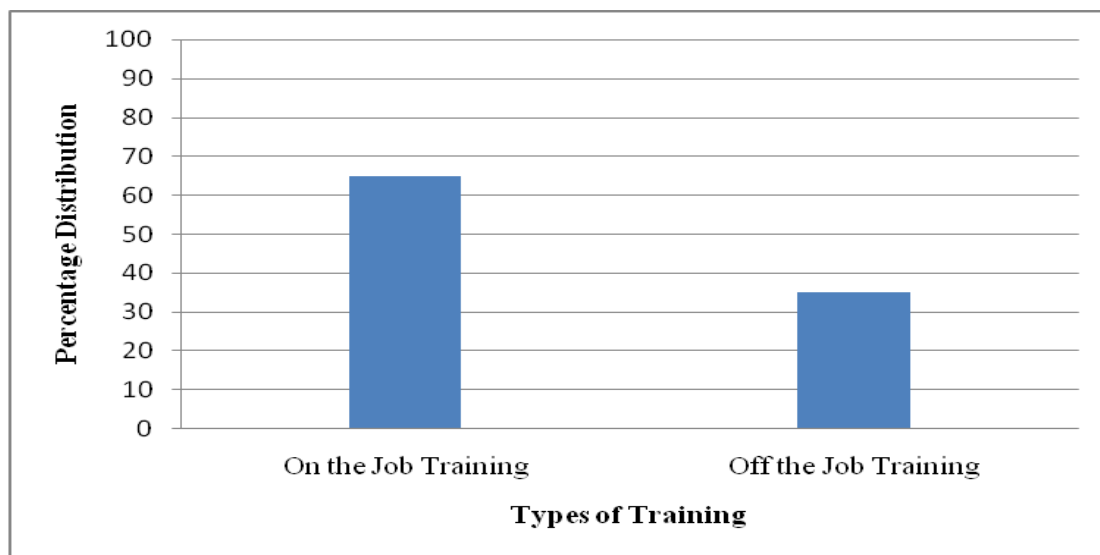


Figure 3: Types of Training Received as QAOs

The study sought to find out about type(s) of training QAOs had received to prepare to them for work. The study established that all the QAOs accounting to 8(100.0%) had been trained on Quality Management System. The study also established that 5(62.5%) of QAOs in 8 universities said to have undertaken on the job training while 3(37.5%) said to have undertaken off the job training. This findings indicated that large components of QAOs had undertaken on job training more than off job training.

4.1.4 Training of QAOs and Customer Satisfaction

The study sought to find out how the training received by QAOs affected customer satisfaction in the 8 universities with ISO 9001 certification.

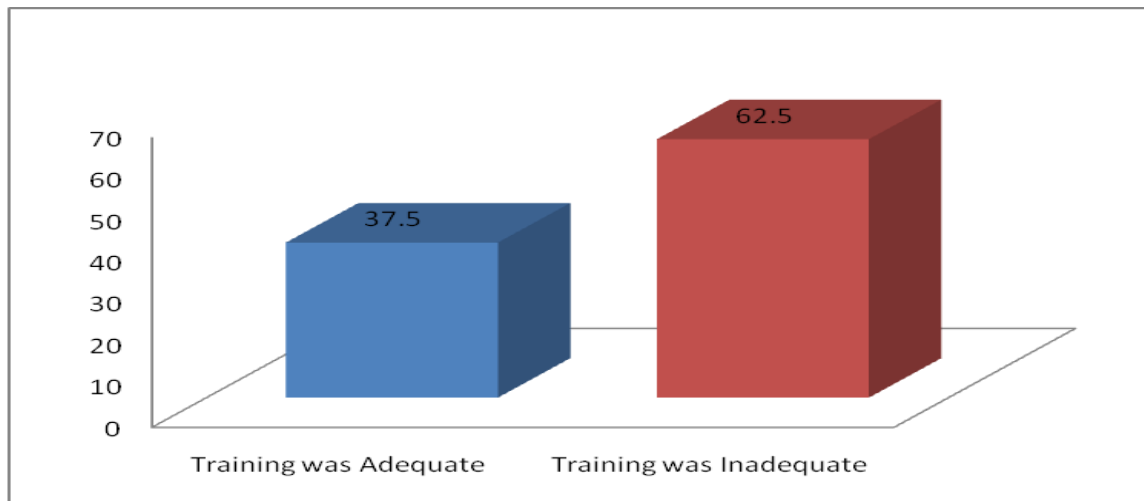


Figure 4. Effect of Training of QAOs and Customer Satisfaction

The study found that according to most of Quality Assurance Officers accounting to 4 (50.0%) were of the opinion that the training they received at various universities that participated in the study had helped to improve customer satisfaction in public universities in Kenya, as to opposed to 4(50.0%) who indicated that the training has helped improve customer satisfaction. They cited reasons as follows; that the training is not done regularly as would be expected in line with ISO standards, that the training are normally short and seems not to be at the standards that meet regulatory and statutory laws, that the training seems to be general and not geared towards support for key clients who are students, also they said that training done is not harmonized with other departments in the university to produce inter-functional across the departments in the universities. The study found that most of QAOs were of the view that training received at the universities is not adequate as indicated by 5(62.5%) of the QAOS as would be expected in ISO 9001 certified institutions of higher learning.

4.1.5 Quality Assurance Officers Training

The respondents were asked to rate their level of agreements on opinion that reflects the Quality Assurance Officers training in the various universities and how it relates to Customer Satisfaction. The 5 point Likert scale is used where 1 = Agree (A), 2 = Neutral, 3 = Disagree (D).

Table 1: Quality Assurance Officers Training in the Universities and how it Relates to Customer Satisfaction:

Quality Assurance Officers' Training N=8	1-A		2-N		3-D		Mean	SD
	F	%	F	%	F	%		
University encourages and supports QAOs training	1	12.5	1	12.5	6	75.0	2.56	1.1
Training of QAOs is carried out regularly	1	12.5	2	25.0	5	62.5	2.56	1.9
QAOs encouraged to undertake on-the-job training	4	50.0	3	37.5	1	12.5	4.00	0.9
QAOs encouraged to undertake off-the-job training	1	12.5	1	12.5	6	75.0	2.13	1.2
The trainings are meant to ensure quality services are offered at the university	7	87.5	1	12.5	0	0.0	4.50	1.4
The training of QAOs has a positive relationship with customer satisfaction at the university	4	50.0	0	0.0	4	50.0	4.61	1.9
The training programs of QAOs should be revised and updated	6	75.0	1	12.5	1	12.5	4.68	0.9
QAOS are rewarded after training	0	0.0	0	0.0	8	100.0	2.30	1.4
QAOs expect rewards and compensation after training	7	87.5	0	0.0	1	12.5	4.77	1.2

The findings in Table 1 show that large proportion of QAOs accounting to 6 (75.0%) who participated in the study dissented with the statement that the university encourages and supports training of QAOs, 1 (12.5%) was neutral while 1 (12.5%) agreed (Mean=2.56, SD=1.1). Universities should prioritize training of QAOs because they play a very crucial role in ensuring that services offered meet the needs of their clients. Training is the imparting of requisite skills, competencies and knowledge through teaching or instruction (Harris, Willis, Simons & Underwood, 2011). The main aim of training is to improve one's ability, capacity and accomplishment at the place of work. It is therefore imperative that QAOs be trained so that they can discharge their duties diligently and with confidence.

The study also established that the largest proportion of QAOs accounting to 5 (62.5%) dissented that training of QAOs is carried out regularly, however 1 (12.5%) agreed while 2 (25.0%) were neutral (Mean=2.54, SD=1.6). According to Harris et al. (2011), Quality Assurance Officers/ Directors of Quality play a very important role in ensuring that institutions offer quality services to its customers. They ensure that the institutions adhere to the set quality standards. Their training is therefore very important because it equips them with requisite knowledge and skills to carry out their duties effectively. They should therefore be regularly trained in order to cope with the ever-changing customer needs.

In regard to whether QAO is encouraged to undertake on-the-job training or off-the job training, the findings in table 4.4 shows that 4 (50.0%) of the respondents agreed that QAO is encouraged to undertake on-the-job training rather than off the job training at 1 (12.5%). Those who said QAOs are encouraged to undertake on job training had a Mean (SD) = 4.0(0.9) while off the job training had a Mean (SD) = 2.13(1.2). Harris et al. (2008) argue that on-the-job training is done

in a normal working situation, with the use of actual tools, equipment, documents or materials that trainees use when they are fully trained. This kind of training is thought to be effective especially for vocational work. Off-the-job training is carried out away from the normal working environment. This means that the employee when undergoing such training does not productively work.

The study also evaluated whether trainings undertaken at the universities by QAOs are meant to ensure quality services are offered at the universities. The findings showed that 7 (87.5 %) of the respondents agreed, while 1 (12.5%) were undecided and none dissented. Overall Mean (SD) =4.50(1.4). The study agrees with Thompson and Kolsky (2014) who emphasized that training brings about job satisfaction among the employees thus enabling them to perform better. They further note that organizations which invest in training of their employees are likely to achieve better results in the long run. Nakauka (2010), adds that Quality assurance employees are able to perform with excellence after training since their desire to excel goes up after such trainings.

The study also sought to establish whether training of QAO has a positive relationship with customer satisfaction at the university where 4 (50.0%) of the respondents agreed, while 4 (50.0%) of the respondents disagreed. Mean (SD) =4.61(1.9). The findings concur with Nakauka (2010) that training of quality assurance staff aims at improving work processes, desirable quality and makes them to be able to perform their duties better hence bringing about customer satisfaction

The study found that largest proportion of QAOs 6 (75.0%) were in agreement that training should be revised or updated to enhance the capacity of QAO to address issues of quality in the university, 12.5% were undecided while 12.5% dissented. The Mean and standard deviation obtained was Mean (SD) =4.68(0.9).

Other findings obtained were that all 8 (100.0%) QAOs disagreed that university enhances rewards and compensation for QAOs after the training with Mean (SD) =4.68 (0.9). However, majority of QAOs accounting to 7 (87.5%) agreed that QAO expects enhanced rewards and compensation from the university after training. The Mean and standard deviation obtained was Mean (SD) =4.77(1.2). The study agrees with Shrestha & Chalidabhongse (2016) that after training or development, employees usually expect rewards especially because they have used more effort or have acquired better skills. The reward can be increase in pay, promotion or being appointed to a more demanding and a higher status job.

4.1.6 Frequency of Training

The study sought to establish whether QAOs sampled from 8 universities have attended any training on QAOs in the last one year, and how useful the training was in relation to customer satisfaction at the university as well as what their thoughts were in relations to whether the training is useful for customer satisfaction at the university.

Table 2: Frequency of Training

	N=8		NO		YES	
	F	%	F	%	F	%
Attendance to training on QMS in the last one year.	3	37.5	5	62.5		
Quality Assurance Officers' training relates to Customer satisfaction in public universities in Kenya	4	50.0	4	50.0		

The study found that most of QAOs in the 8 universities with ISO certification had undertaken training in the last one year as accounted for by 5 (62.5%) of the respondents. Concerning whether or not Quality Assurance Officers' training relates to customer satisfaction in public universities in Kenya, 4 (50.0%) of respondents dissented with the statement while 4 (50.0%) agreed and therefore it could be deduced that half of Quality Assurance Officers were of the opinion that training has a positive relationship to customer satisfaction in public universities in Kenya.

4.1.7 Customer Satisfaction

ISO 9001 clause 8.2.1 requires that organizations should monitor information that relate to customer perception to determine if customer requirements have been met. A lot of emphasis is laid on ensuring that clients are indeed satisfied

The table 3 show that Customer Satisfaction mean score of students in University that participated in the study.

Table 3: Level of Customer Satisfaction

	Descriptive Statistics				
	Median	Minimum	Maximum	Mean	Std. Deviation
Customer Satisfaction with University	82.800	37.00	106.00	87.0889	16.40052
Valid N (listwise)	300				

Aggregate score of competitor focus level was arrived at by total score based on a Likert scale of 1-3 where; 1- Disagree, 2-Neutral while 3-Disagree multiplied by 36 questions scale, therefore the highest or maximum possible score or level for customer satisfaction could be 108 score (36 x 3) while the minimum score for customer satisfaction could be 36 points (1x36).

The table 4 show that Customer Satisfaction mean score of students in University that participated in the study.

Table 4: Cut off for Satisfaction

		Customer Satisfaction			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low Score of Customer Satisfaction	272	90.7	90.7	90.7
	High Score of Customer Satisfaction	28	9.3	9.3	100.0
	Total	300	100.0	100.0	

The Table 4.0, show that Customer Satisfaction mean score of students in University that participated in the study was 87.088 and with a median of 82.800. Maximum score was 106.0 against a possible score of 108 and minimum was 36, this implies that majority of students were having lower scores of customer satisfaction. Using the cutoff of the mean, the researcher sought to find out the frequency of customers who had high score of satisfaction as compared to lower score. Findings from Table show that majority of students accounting to 90.7% have lower score of customer satisfaction and only 9.3% were having high score for customer satisfaction

4.2 Inferential Statistics

4.2.1 Correlation Analysis

Pearson Correlation analysis and regression analysis was carried out to test the degree and level of relationship between training and customer satisfaction.

Table 5: Correlation between Training and Customer Satisfaction

		Customer Satisfaction	On the Job Training	Off the Job Training
Customer Satisfaction	Pearson Correlation	1	.106	.193
	Sig		.091	.074
Total		8	8	8
On the Job Training	Pearson Correlation	.106	1	.104
	Sig	.091		.324
Off the Job Training	n	8	8	8
	Pearson Correlation	.193	.104	1
	Sig	.074	.324	
	n	8	8	8

** Correlation is significant at the 0.01 (2-tailed)
 * Correlation is significant at the 0.05 (2-tailed)

H₀1 There is no statistically significant relationship between Quality Assurance Officers' training and customer satisfaction in public universities in Kenya.

The hypothesis was rejected or accepted at 95% level of confidence. The findings are displayed on Table 5, Pearson's r , which is also called Pearson product-moment correlation coefficient was used to measure correlation between variables which has value between +1 (total positive) and -1, (total negative)

The correlation analysis between customer satisfaction and job training for QAO was carried for two constructs of QAOs Training which was on-job training and off-job training. This was meant to establish whether there was any relationship between Quality Assurance Officers' training and customer satisfaction in public universities in Kenya at 95% level of confidence (P value ≤ 0.05). The findings in Table 5 established that a weak and insignificant relationship of $R = 0.193$ (19.3%) at $0.091 > 0.05$ existed between construct of on-job training and customer satisfaction in the university. The same with the construct of off the job training which performed poorer than the latter with Pearson $R = 0.106$ (10.6%) at $0.074 > 0.05$. The two variables used to measure QAOs training- on the job training and off the job training undertaken by QAOs do not help in improving customer satisfaction. Level of P value was above 0.05, which means the null hypothesis was accepted: There is no statistically significant relationship between Quality Assurance Officers' training and customer satisfaction in public universities in Kenya and therefore null hypothesis was accepted.

4.2.2 Regression Analysis

To explain the relationship between training and customer satisfaction regression analysis was used as shown in the section. The overall regression fitness of model to explain the relationship between training and customer satisfaction was calculated and interpreted using R Square.

Table 6: Regression Analysis

Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.151 ^a	.111	.102	.372
ANOVA	DF	F	Sig.	
	5	20.49	.09	
Coefficients	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
	B	Std. Error	Beta	
(Constant)	3.445	.148		.452
Training	.210	.085	-.120	-1.298

The coefficient of determination also known as the R-square of 0.111 was found. This means that training explains only 11.11% of the variations in the customer satisfaction at the universities that were studied. The ANOVA results indicate calculated F statistic of 20.49 which was greater than absolute f critical of 5.8 implying that the model was not statistically significant. Further, the results imply that the independent variable, training was not good predictor of customer satisfaction. This was also supported by the reported ANOVA $p = 0.09 > 0.05$ which was greater than the conventional probability of 0.05 significance level.

Table 6 also show weak relationship between QAOs training and customer satisfaction ($\beta = 0.210$). The relationship was also not significant at 95% level of significance ($P\text{-value} = 0.195 > 0.050$). This findings implied that an improvement in training of QAOs by one unit, leads to a 0.210-unit improvement in customer satisfaction. Thompson and Kolsky (2012) emphasize that training brings about job satisfaction among the employees thus enabling them to perform better however training need assessment before organizations invest in training is required of its employees to achieve better results in the long run. From the literature above, it is evident that there though there are benefits that accrue as a result of training. However, these may be countered if those being trained have other motives for undergoing the training. Furthermore, if the training is inadequate, ineffective and not timely it may not yield its intended benefits.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the findings

The study found that most of universities that participated in the study do not support training of QAOs despite the fact that training is a critical step in maintaining momentum for ISO 9001 certification since it helps to impart requisite skills and competencies aimed improving ability, capacity and accomplishment at the place of work. The study found that gaps in training exist which affect quality of training. Quality Assurance Officers/ Directors of Quality felt that training they receive is not standardized for ISO standards. Training need to be tailor made to ensure that the institutions adhere to the set quality standards. Their training gaps were noted and so very important to equips QAOs with requisite knowledge and skills to carry out their duties effectively.

Conclusions

Training of QAO is inadequate and for that reason universities are not equipping QAOs with required skills, competencies and knowledge to undertake their tasks. Most of QAOs recognize that training is important in order to improve their level of competencies and judgment in undertaking their functions as well as capacity to deliver ISO standards service delivery. The reason students complain of poor service delivery at universities can be traced to failure to train QAOs regularly which end up compromising the quality standards at the universities. Training of QAOs in line with ISO standards would help the institutions to adhere to set of quality standards given in the university charter and ISO standards. Training of QAOs would help the officers to develop capacity and knowhow to carry out duties effectively which in the end would improve provision of services and hence enhance customer satisfaction. The study found that training is done most as on-job training rather than off-job training as matter of formality than necessity, however training was found to be crucial by QAOs since it can help to improve their capacity, job satisfaction and eventually customer satisfaction.

Recommendations

Training programs for quality assurance officers need to be enhanced to make it more effective and timely so that it can meet the intended benefit of improving quality standards of services offered at the universities. This will enhance customer satisfaction. Organizations should invest in training of its employees since the study shows that they are likely to achieve better results

and job satisfaction in the long run. Study need to be done to establish the gaps in training of QAOs at various Universities since currently training being undertaken do not lead to improvement in performance alongside ISO standards. Training should lead to improvement in quality of services offered by staffs. Training should therefore be tailor-made for QAOs. Universities should promote a range of training programs in quality management to ensure that QMS improves customer satisfaction as well as address quality requirements of the customer as they help organization to comply with the relevant regulations. Universities should initiate intrinsic and extrinsic motivation and rewards to QAOs who undergoes training in order to make training effective, QAO who undergoes training and development expect rewards especially because they have used more effort or have acquired better skills. The reward can be increase in pay, promotion or being appointed to a more demanding and a higher status job. Public universities and the Ministry of Education in Kenya should appreciate the issue of quality of services so as to enhance customer satisfaction. In-depth theoretical review need to be done to generate useful theoretical literature for further studies and the necessary actions that should be undertaken in order to address the issue of quality services in our public universities.

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