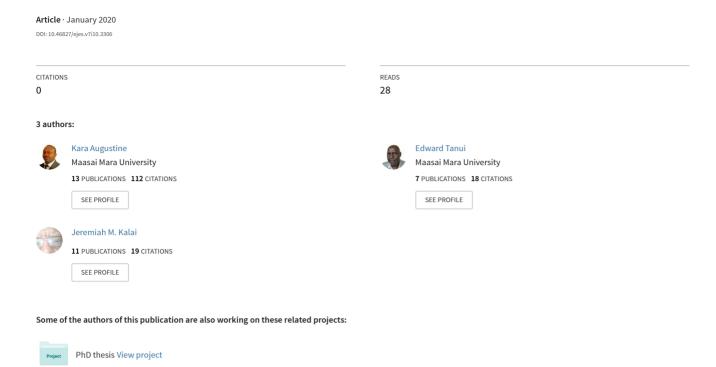
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LECTURER QUALITY IN PUBLIC UNIVERSITIES IN KENYA

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Abstract:

Universities play a critical in preparing human resources for sustainable development of nations. There have been persistent concerns that public universities in Kenya are producing graduates inadequately prepared to effectively transition from learning to earning. Lecturers are the core agents in facilitating the development of relevant professional competencies and skills essential for graduates' successful transition into the workplace. The debate on the quality of the graduate cannot ignore the quality of the lecturer. The purpose of this study is to examine lecturer quality in public universities in Kenya. The study used cross sectional research design. Eight universities representing 36.0% of public universities were sampled. A stratified proportionate random sample of 1,107 third and fourth year undergraduate students responded to the study. Thirty one key informants who included deans of schools, registrars in charge of academic affairs, directors of quality assurance, and chairpersons of students' union participated in the study. Data were collected using a questionnaire for students and interview guide for key informants. The tools were subjected to validity and reliability analysis. Quantitative data were analysed using factor analysis, Pearson product-moment correlation coefficient and descriptive statistics. Qualitative data were analysed using frequency counts, percentages and content analysis. The research determined two valid and reliable dimensions which accounted for 62.95% of the variations in lecturer quality. The dimensions are lecturer's professional attributes and instructional practices with professional attributes being the most important. Lecturer's professional attributes is strongly related to instructional practices (r = 0.597, p<.05). The study found that the majority of lecturers had the desired professional qualities and engaged in quality instructional practices. The study

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recommends that the universities should consider lecturer's professional attributes as a key parameter during recruitment and in professional development programmes for existing faculty.

Keywords: lecturer, quality, professional attributes, instructional practices

1. Introduction

It is widely acknowledged that university education is one of the powerhouses that transform the world for the current and future generations. Indeed, the breadth and scope of a nation's development largely depend on the quality of human capital generated through university education. Universities are mandated to train and mentor graduates for productive engagement with industry. In addition, universities are required to prepare graduates with proper knowledge, skills, values, attitudes and experiences that will facilitate a seamless transition from learning to enterprise creation for sustainable livelihoods. Consequently, the World Bank (2010a) challenges universities to provide high quality educational services as this will impact not only on the graduates' future productivity and competitiveness in an ever evolving market but also in development of nations. The capacity to deliver relevant higher education service is determined by various factors such as the quality of curriculum and infrastructure, financing, quality of lecturers, appropriateness and effectiveness of instructional methods, governance, quality assurance systems and institutional linkage/collaborations (Sultana, Yousuf, Naseer & Rehman, 2009).

As the debate on the quality of higher education service proliferates, there is concurrence that teaching, research and community service are highly dependent on the quality and effectiveness of lecturers (Uche, 2012; Deepa & Manisha, 2014). Keelson (2011) submits that lecturers are important stakeholders towards the achievement of the objectives, transformation and maintaining the standards of university education. According to Aithal and Kumar (2016), lecturer quality determines curriculum formulation, implementation and modification in universities. In addition, lecturers enable and advise universities to make best use of available infrastructure and learning resources. They also contribute to students' support and academic progression. Lecturers provide leadership and governance which are drivers of innovations, best practices and institutional transformation. Lierse (2016) submits that university education entrusted to outstanding lecturers will produce graduates capable of critical thinking and with an understanding of how to transform the society. Thus, the extent to which universities realize their vision and mission is also influenced by lecturer quality.

Researchers have largely focused on specific attributes that students desire in lecturers involved in delivering instruction in programmes they are pursuing. A study by Su and Wood (2012) in Universities in United Kingdom found that students preferred lecturers who are knowledgeable in subject matter, relate their subject matter with the current trends, and demonstrate proper use of technology. In addition, lecturers should display a sense of humour, engage students in the teaching and learning process and

reflect on their instructional practices. Osinski and Hernández (2013) study in Spain identified the following desirable qualities in a lecturer; closeness to students, clarity of presentation, communication skills, command of subject matter, lecturer's responsibility, respect towards students, organization of subject, friendliness, motivating, didactic resources, group management, learning assessment, teacher's image, being open and cultural competence. Another study in Spain (Martín, 2019) found that students highly rated lecturers who demonstrated the following qualities; respectful attitude towards students, ability to give clear explanations, a good command of the subject, good communication skills, the use of practical and authentic examples, good preparation, being a good listener and empathy with the students.

Gee (2018) research in a university in Malaysia submits that students desire lecturers who build a good relationship with students, provide assignment that are related to their course, provide quality lecture notes and emphasize on course objective. The lecturers should have skills in organizing different types of class activities, ensure fairness in marking examination, give useful and timely feedback, are punctual and deliver classroom instruction in clear and knowledgeable manner. Chireshe's (2011) study in Zimbabwe found that students perceived effective lecturers as those who are well organized, competent, always involve students in the teaching and learning process, are friendly and readily available to respond to students' queries and to mentor them. Effective lecturers were also regarded as fair in setting of examinations and grading. Adomi (2007) submits that a lecturer should be an excellent communicator and a facilitator of discussion and engagement. In addition, they should have an adequate command of the language of instruction in order to facilitate proper knowledge transmission and creativity among students.

From the cited research, it is evident that lecturer quality is a multidimensional construct. As such, lecturer quality indicates performance of lecturers in terms of subject matter expertise, professional attributes and instructional practices which contribute to students' learning and institutional transformation. However, there is lack of consensus on the dimensions which constitute lecturer quality. Most of the studies tend to focus on specific attributes of a lecturer without an attempt to analyze the underlying structure of the attributes as to create knowledge and activate debate on the dimensions of lecturer quality in universities. Considering the important role of lecturers as major stakeholders in the university education, the dimensions of lecturer quality must be determined, monitored and guaranteed. Students are the primary customers in universities. Consequently, their perceptions are central in determining the dimensions of lecturer quality for purposes of development of knowledge and continuous improvement of educational service quality in universities (Su and Wood, 2012).

In Kenya, public universities are mandated to produce a cadre of highly qualified, relevant and useful manpower equipped with requisite skills for the growth and sustainability of the economy (Republic of Kenya [ROK], 2005). However, there are concerns regarding the capacity of the universities to achieve the mandate in the context of wide scale commercialization of academic programmes and over production of graduates (ROK, 2012). Consequently, stakeholders have persistently argued, and in

some cases with facts, that Kenyan universities are producing graduates who are ill-equipped for the ever-changing market. Employers therefore incur unexpected and unnecessary expenses retraining the graduates (Odhiambo, 2011; Kagondu and Malwa, 2017). Kara, Tanui and Kalai (2016) found that lecturer quality is one of the reliable dimensions of educational service quality in public universities in Kenya. Lecturer quality was also significantly related to students' satisfaction. As stakeholders demand that universities produce graduates who will readily fit into the labour market and the world of enterprise creation, there is need for deeper scrutiny on the mediator of the process – the lecturer. The current study, building on Kara *et al* (2016), empirically analyzed the dimensions of lecturer quality as key agents in facilitating graduates acquisition of desired competencies and skills in the universities. The research questions were formulated as follows:

- 1) What are the dimensions of lecturer quality in public universities in Kenya?
- 2) How do students' rate the dimensions of lecturer quality in public universities in Kenya?

2. Research Methodology

The study used cross sectional research design. The design enabled the researchers to collect data at a single point in time on lecturer quality in the universities. The population of study was 276,159 third and fourth year undergraduate students enrolled in 22 public universities in Kenya. Mugenda and Mugenda (2003) recommend that a sample size of 10.0%-30.0% of the accessible population is adequate for a cross sectional study. Consequently, the study used a sample size of eight (8) universities representing 36.0% of the accessible population. The sample size was therefore considered adequate because it was higher than the sample size recommended by the research experts. In order to determine the sample size of the fourth and third year undergraduate students to participate in the study, Yamane (1973) formula was used:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size, N = the population size, and e = confidence interval.

The study used a confidence interval of 0.03 in order to increase the chance that the sample size obtained represented the true population value. From the formula provided, the sample size for the students was calculated as follows:

$$n = \frac{276159}{1 + 276159 (0.03)^2} = 1,107 \text{ students.}$$

Proportionate stratified random sampling was applied in determining the sample size for the students in each of the eight sampled universities. Thirty one (31) key informants from the eight sampled universities participated in the study. Their opinions were sought in order to corroborate the quantitative data provided by the students hence providing deeper understanding on lecturer quality in the universities. In each university, the key informants included two deans of schools - one from sciences and one from arts related degree programmes, registrar academic affairs, director of quality assurance and chairperson of students' union. Data from the students were collected using a questionnaire which was divided into two sections. Section one captured students' background characteristics of gender, age, degree programme and year of study. Section two contained thirteen (13) items measuring lecturer quality. The items were placed on a five point Likert and Likert type scale where: 1= strongly disagree (SD), 2 = disagree (D), 3= not sure (NS), 4 = agree (A) and 5 = strongly agree (SA). To collect data from the key informants, an interview guide having items on lecturer quality drawn from the students' questionnaire was used. Both the lecturer quality scale and the interview guide were subjected to validity and reliability analysis in pursuit of quality and accurate data.

According to Drost (2011), validity is the extent to which an instrument actually measures what it purports to measure. Consequently, the lecturer quality scale was subjected to content and construct validity. Cohen, Manion and Morrison (2008) define content validity as a form of validity which ensures that the items used for collecting data are a fair presentation of the phenomena under investigation in depth and breadth. Content validity was achieved through review of prior studies on lecturer quality in universities in order to ensure that the items selected to measure lecturer quality were consistent with the indicators used by other researchers. Construct validity is the degree to which an instrument measures the construct it is intended to measure (Martin, Cohen & Champion, 2013). Discriminant and convergent have been applied to determine construct validity in various studies (Gu, Guo, Liang, Lu, *et al*, 2019; Pervan, Curak & Kramaric, 2017; Ali, Zwetsloot & Nada, 2019).

According to Alarcón and Sánchez (2015), convergent validity is the degree of confidence that a trait is well measured by its indicators. Discriminant validity is the degree to which measures of different traits are unrelated. Composite reliability [CR] and average variance extracted [AVE] are often used to analyze and verify convergent and discriminant validity (Wei, 2019; Gu, et al, 2019). Composite reliability is an indicator of the shared variance among the variables used as an indicator of a latent construct and the acceptable value is 0.7 and above. AVE measures the amount of variance attributed to the construct relative to the amount due to measurement error and values above 0.7 are considered very good, whereas, the level of 0.5 is acceptable. By meeting the stated criteria for CR and AVE, convergent validity of a scale is assumed to have been achieved (Pervan, Curak & Kramaric, 2017; Alarcón & Sánchez, 2015). Discriminate validity is

examined through assessing the square root of AVE for each construct and cross loadings. The square roots of each AVE should be higher than the correlations between the other latent variables. The cross-loadings of each item's outer loading on the related construct should be greater as compared to all of its loadings on other constructs (Ali, Zwetsloot & Nada, 2019).

Kelso (2008) defines reliability is the extent to which a measurement procedure is free of error. Reliability of the lecturer quality scale was assessed using Cronbach's alpha coefficient of reliability with .700 as the threshold (Pallant, 2005). To examine reliability and construct validity, exploratory factor analysis using Principal Component Analysis [PCA] with Varimax rotations was applied. Factor loading indices from the exploratory analysis were used to compute CR and AVE using the following formulae:

$$CR = \frac{\left(\sum_{i=1}^{n} \lambda_{yi}\right)^{2}}{\left(\sum_{i=1}^{n} \lambda_{yi}\right)^{2} + \left(\sum_{i=1}^{\rho} Var(\varepsilon_{i})\right)}$$

Where:

CR = composite reliability;

 λ_{γ} = the standardized factor loading;

 $Var\left(\mathcal{E}_{i}\right)$ = the variance due to the measurement error.

$$AVE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n}$$

Where:

AVE =Average variance extract;

 λi = the standardized factor loading;

n = the number of items in a factor (Ali, Azam, & Hunjra, 2017; Alarcón & Sánchez, 2015).

Pearson product moment correlation coefficient analysis was used to determine the correlation between the extracted dimensions of lecturer quality.

The validity of the interview guides was achieved in three stages of guides development, data collection, data analysis and reporting. At the development stage, validity of the interview guides was achieved through peer review of the interview questions for clarity, relevance and adequacy. During the data collection stage, the validity of the interview guides was achieved through triangulation, appropriate sampling and objectivity in choice of interview items (Morse, Barrett, Mayan, Olson and Spiers, 2012; Bryman, 2004). During the data analysis and reporting phase, validity was achieved through quoting of rich, thick, descriptive information on the respondents' experiences and opinions on lecturer quality. Bryman (2004) persuades that the citation of descriptive information from the respondents enables consumers of the report to find the account provided as credible. In addition, the readers may make judgments on the applicability of the findings to settings they have experienced or could experience.

Singleton and Straits (1999) contend that measurement error in interviews may be minimized by presenting questions to the respondents in the same order and using the same wording. An interview guide should therefore have very specific objectives, be highly standardized, and consistently applied among the respondents. The current study adopted a similar strategy during interview guide design and actual interviews in order to minimize measurement error. Quantitative data from the main study were analysed using factor analysis and descriptive statistics. To analyze qualitative data, frequency counts, percentages and content analysis were used. All the key informants' responses per interview item were categorized into themes and consistencies and differences in the emerging themes sought. Some of the key informants' voices were quoted to reinforce the emerging themes.

3. Results and Discussion

3.1 Response Rate

A total of 1107 questionnaires were administered in eight public universities out of which 1092 questionnaires were returned. This resulted to a questionnaire return rate of 99.0% which was considered adequate. Following data editing process, 1062 questionnaires were found usable.

3.2 Background Characteristics of the Students

Background data of the students was sought in order to familiarize the researchers with their general characteristics. Data presented in Table 1 show that there were 625 (58.9%) males and 437 (41.1%) females. Majority of the students who participated in the study were therefore males and a clear indicator of gender disparity in access to public universities in Kenya. The finding of gender disparity in favor of males in public universities in Kenya is consistent with earlier findings (Owino, 2013). Majority of the surveyed students 940 (88.5%) were aged between 21 and 25 years suggesting that they were young adults. Ensuring that this population is taught and mentored by quality lecturers is central to development of quality human resources and nurturing positive attitude towards service delivery (World Bank, 2010b). A proportion 494 (46.5%) of the students were pursuing degrees programmes in arts and social sciences, 343 (32.3%) were pursuing degrees in sciences and 225 (21.2%) were pursuing degrees in education. There was deliberate effort to capture students' rating of lecturer quality from a representative sample of the broad areas of specialization offered in public universities in Kenya. Majority of the students 588 (55.4%) were in fourth year or above and a sizeable portion 474 (44.6%) were in third year of study. This sample set was the most appropriate for the study as they had cumulative encounter with the lecturers in the universities.

Table 1: Background Characteristics of the Students

Background characteristic	Labels	Frequency	Percent	
Gender	Female	437	41.1	
	Male	625	58.9	
	Total	1062	100.0	
Age	Below 20 years	78	7.3	
	21-25 years	940	88.5	
	26 years and above	44	4.1	
	Total	1062	100.0	
Degree programme	Arts and social sciences	494	46.5	
	Sciences	343	32.3	
	Education	225	21.2	
	Total	1062	100.0	
Year of study	3 rd year	474	44.6	
	4 th year or above	588	55.4	
	Total	1062	100.0	

3.3 Validity and Reliability of Lecturer Quality Scale

Principal Component Analysis (PCA) aided by Statistical Package for Social Sciences (SPSS) was applied to determine the underlying structure of the scaled items and also examine construct validity and reliability. The data were first examined for factorability using Kaiser-Meyer-Olkin [KMO] measure of sampling adequacy, Bartlett's test of sphericity and value of communalities. KMO test examined whether adequate number of the scale items predicted each dimension of lecturer quality. Bartlett's test was used to examine whether the scale items were correlated highly enough as to provide a reasonable basis for factor analysis (Field, 2009). The analysis found that the KMO measure of sampling adequacy for the scale was .917. The score was considered adequate because it indicated that enough items grouped into distinct dimensions of lecturer quality (Leech, Barret and Morgan, 2005).

The Bartlett's test results indicated Chi-Square value χ^2 (78) = 5680.265 which is statistically significant at p<.05. According to Field (2009), a significant Bartlett's test infers that the variables in the scale had high correlation as to provide a reasonable basis for factor extraction. According to Field (2008), the value of communality represents the total amount of variance shared between a variable and all the other variables. Osborne (2005) recommends that the minimum indices of communality for a variable should be .500 in order to generate stable dimensions. Table 2 shows that the indices of communalities for the items; lecturers use latest technologies such as laptops and projectors in class, my course have lecturers who are prominent researchers, lecturers ensure they complete the syllabus, and lecturers integrate both theory and practical learning experiences were deleted since they were below the set threshold for communalities.

Table 2: Communalities in Lecturer Quality Scale

Scale items	Initial	Extraction				
Lecturers use latest technologies such as laptops and projectors in class	1.000	.476				
Lecturers are knowledgeable in their areas of specialization	1.000	.576				
Lecturers are passionate, committed and enthusiastic in teaching	1.000	.623				
Lecturers try to be respected by students by being professional and ethical	1.000	.542				
Lecturers have excellent communication skills	1.000	.564				
My course have lecturers who are prominent researchers	1.000	.477				
Lecturers ensure they complete the syllabus	1.000	.458				
Lecturers demonstrate adequate preparation for the lessons	1.000	.564				
Lecturers stimulate students thinking by asking challenging questions	1.000	.555				
Lecturers provide course outlines at the beginning of the semester	1.000	.544				
Lecturers provide clear expectations on course work and assessment at the	1.000	.598				
beginning of a semester						
Lecturers set assessment tasks that challenge students to learn	1.000	.531				
Lecturers integrate both theory and practical learning experiences	1.000	.477				
Extraction Method: Principal Component Analysis.						

After deleting the items, varimax orthogonal rotation was applied in order to establish the underlying structure of the remaining nine (9) scale items. According to Field (2009), varimax orthogonal rotation reduces the complexities of factors by maximizing variance of loadings on each factor and therefore generating a simple structure. Subsequently, the item "lecturers demonstrate adequate preparations for the lessons" was deleted for loading strongly on two dimensions and the analysis repeated. Table 3 summarizes the total variance accounted for by the principal components generated by the remaining eight (8) items in the lecturer quality scale.

Table 3: Total Variance Explained by the Components in Lecturer Quality Scale

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance Cumulative %		Total	% of Variance	Cumulative %	
1	4.035	50.435	50.435	4.035	50.435	50.435	
2	1.001	12.511	62.946	1.001	12.511	62.946	
3	.628	7.851	70.797				
8	.383	4.790	100.000				

Field (2008) explains that an Eigen value indicates the amount of variance explained by each principal component or each dimension. According to Leech *et al* (2005), a factor should have an Eigen value greater than one for it to be considered useful. As Table 3 reveals, two (2) components had an Eigen value greater than one. The results therefore suggest that the scale measured two (2) useful dimensions of lecturer quality in the universities. Table 4 summarizes the rotated component matrix for the scale and values for the computed AVE and CR guided by the formulae cited in Ali, Azam, and Hunjra (2017); Alarcón and Sánchez (2015).

Table 4: Rotated Component Matrix for Lecturer Quality Scale Items

Scale item	Component		Dimension Label, % variance,
	1	2	AVE and CR
Lecturers are passionate, committed and	.791	.251	Lecturer's professional attributes
enthusiastic in teaching	.,,,	.201	% variance 50.435
Lecturers try to be respected by students	.776	.266	AVE = .574
by being professional and ethical	.770	.200	CR = .843
Lecturers have excellent communication	.760	.196	
skills	.700	.190	
Lecturers are knowledgeable in their areas	.700	.309	
of specialization	.700	.309	
Lecturers provide course outlines at the	.162	.806	Lecturer's instructional practices
beginning of the semester	.162	.808	% variance 12.51
Lecturers provide clear expectations on			AVE = .550
course work and assessment at the beginning	.318	.759	CR = .830
of a semester			
Lecturers set assessment tasks that challenge	.252	.720	
students to learn	.232	.720	
Lecturers stimulate students thinking by			
asking	.286	.676	
challenging questions			
Cronbach's alpha coefficient (α)	.812	.779	Overall α = .868

Data summarized in Table 4 guided in assessing the convergent and discriminant validity of the dimensions. Dimensions one (1) had AVE indices of .574 and dimension two (2) had AVE value of .550 which were above the acceptable threshold of .500. The CR for dimension one (1) was .843 and for dimension two (2) was .830 and above the cutoff value of .70. It was therefore inferred that the convergent validity for the extracted dimensions of lecturer quality was acceptable (Pervan *et al*, 2017; Alarcón & Sánchez, 2015). Discriminant validity was assessed using the square root of AVE and also by scrutinizing the patterns of cross-loadings for the items in the extracted dimensions. It is recommended that the square root of average variance extracted should be greater than all inter-factor correlations (Ali, Zwetsloot & Nada, 2019). A comparison of the correlation of the extracted factors and the computed square root of AVE is summarized on Table 5 where the bolded figures are √AVE.

Table 5: Comparison of the Correlation of the Extracted Dimensions and √AVE

Lecturer Quality Dimension	PA	IP
Professional Attributes (PA)	0.756	
Instructional Practices (IP)	.597**	0.742

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Findings on Table 5 show that the $\sqrt{\text{AVE}}$ was higher than the correlations between factors with respect to each pair of constructs. Table 4 also shows that for each of the extracted dimension, the items in that dimension had greater loadings on that particular dimension compared to their loadings on the other dimension. It was therefore inferred that discriminant validity had been achieved for the extracted dimensions. Based on the

results for discriminant and convergent validity, construct validity for the extracted dimensions of lecturer quality was achieved. Cronbach's alpha coefficient of reliability (α) and composite reliability (CR) were used to assess the reliability of the extracted lecturer quality dimensions. Results on Table 4 show that Cronbach's alpha coefficient of reliability for the two scales ranged from .779 - .812. Overall, the coefficient was .868. The coefficients for the subscales and entire scales were above the .700 threshold (Pallant, 2005). The composite reliability indices for the three dimensions ranged from .830 - .843 and above the cutoff value of .70. The two dimensions were therefore inferred as internally consistent measures of lecturer quality in the universities. The following section discusses the dimensions of lecturer quality determined in the study.

3.4 Dimensions of Lecturer Quality in the Universities

Results summarized in Tables 3, 4 and 5 demonstrate that two valid and reliable dimensions of lecture quality were determined. The extracted dimensions explained 62.95% of the variations in lecture quality. Dimension one (1) had five items which included: Lecturers being enthusiastic, passionate and committed to teaching; lecturers securing respect from the students by being professional and ethical; having excellent communication skills; and being knowledgeable in their areas of specialization. The four items were interpreted as lecturer professional attributes and accounted for 50.43% of the variations in lecturer quality in the universities. Dimension two (2) had four items related to lecturers providing course outlines and guiding students on the objectives of the courses they are teaching, lecturers explaining to learners what is required of them to achieve the expected learning outcomes, lecturers engaging students during teaching and learning encounters and providing assessment tasks that challenge students to learn. The dimension was interpreted as lecturer's instructional practices and explained 11.13% of the variations in lecturer quality in the universities.

Although the study identified two internally consistent and valid dimensions, lecturer professional attributes was the most important dimension as it accounted for the largest variation (50.43%) in lecturer quality. The finding implies that students in public universities in Kenya are most concerned with the professional attributes of their lecturers. The students prefer lecturers who are passionate, enthusiastic and committed to their work. Students desire professional and ethical lecturers in addition to having excellent communication skills as to effectively facilitate learning experiences. Further, lecturers should be knowledgeable in their areas of specialization. As displayed in Table 5, it is empirically and statistically evident that lecturer's professional attributes is strongly related to instructional practices (r = 0.597, p < .05). The findings imply that lecturers with the desired professional qualities are more likely to provide quality instructions. Consequently, lecturers' professional attributes should be considered as a key parameter during recruitment of new entrants into university teaching and professional development activities of existing faculty.

3.5 Students' Rating of the Dimensions of Lecturer Quality

After determining the dimensions of lecturer quality in the universities, students' ratings of items measuring the dimensions of lecturer quality were analysed. The frequency and percent of students' ratings of each of the items were computed. The cumulative frequency and percent of the students who disagreed (both SD and D) and agreed (both A and SA) was determined in order to establish the overall pattern of ratings on the items. Further, the composite mean of each of the dimensions of lecturer quality was computed. Opinions of the key informants were analysed to corroborate findings from the students. The following section discusses findings on students' rating of lecturers' professional attributes.

3.5.1 Lecturers' Professional Attributes

Students' ratings of lecturers' professional attributes were as summarized in Table 6.

Table 6: Students' Rating of Lecturers' Professional Attributes

	Rating				Cumulative		Total	
	1	2	3	4	5	D	A	
Lecturers are passionate, committed and enthusiastic in teaching	92 8.7%	193 18.2%	142 13.4%	528 49.7%	107 10.1%	285 26.9%	635 59.8%	1062 100%
Lecturers try to be respected by students by being professional and ethical	76 7.2%	131 12.3%	164 15.4%	570 53.7%	121 11.4%	207 19.5%	691 65.1%	1062 100%
Lecturers have excellent communication skills	69 6.5%	173 16.3%	171 16.1%	519 48.9%	130 12.2%	242 22.8%	649 61.1%	1062 100%
Lecturers are knowledgeable in their areas of specialization Mean (<i>M</i>) lecturers' professional	62 5.8%	167 15.7%	117 11.0%	616 58.0%	100 9.4%	229 21.5%	716 67.4%	1062 100%

On a scale of one (1) to five (5), the study found that students in the universities had above average rating of lecturers' professional attributes (M = 3.44, SD = 0.874) as summarized in Table 6. The finding implies that the universities had lecturers with the desired professional attributes. In terms of specific items analysis, the study found that the majority 635 (59.8%) of the students concurred that lecturers are passionate, committed and display enthusiasm in teaching. However, most 23 (74.2%) of the key informants were neutral citing poor remuneration. Confronted with poor pay, lecturers resorted to part time teaching in order to generate additional income. It emerged that in some cases, part time lecturers attended classes unprepared, fatigued, focused more on what they would examine, and did not have time for students' consultation and mentorship. Shortage of lecturers due to rapid expansion of the universities also contributed to demand for part time teaching as revealed in the following excerpts from a registrar in charge of academic affairs, a dean of a school and a students' leader:

"We have full time lecturers who are also part time elsewhere. Such a lecturer will experience burn out, will come to class unprepared among other issues. But sometimes, it is about what lecturers are paid and for some, part time teaching is the only way to make additional money and survive through hard economic times as we are currently experiencing. In universities where lecturers rely just on the salary, the motivation and commitment levels may be low." (Registrar academic affairs in a public university in Kenya)

"Public universities have suffered a lot because of part time lecturers. A lecturer will come, rush through the lecture, give you a hand out so that they can rush to a class in a different university. Others will come to class and just sit down, fatigue is evident and they struggle to teach through the lesson or just stop before the lecture is over. The time that a lecture should spend with the students has been diminishing and often, some lecturers are concentrating on what they will examine." (Student leader in a public university in Kenya)

"We have lecturers who are full time employees here and part timing elsewhere just as we are also attracting lecturers from other universities to part time for us. This has been a practice that has been there for a long time and generally, we can say that lecturers are on high demand, they are overworked and consequently they do not deliver at an optimal level. The ideal situation would be where students have access to lecturers for consultation and mentorship. Today, a lecturer finishes a class and before you know, they are out of the university rushing for a class in another university." (Dean of a school in a public university in Kenya)

Majority 691 (65.1%) of the students and 26 (83.9%) of the key informants affirmed that lecturers deliberately seek to earn students' by being ethical and professional. The finding implies that the universities have lecturers who uphold professional ethics and discipline that is required in a learning environment. However, some key informants revealed that there were a few cases of unethical and unprofessional behaviour from the lecturers which did not adequately reinforce the mission, vision and core values of a university. Such incidents included rudeness, harassment and failure to appreciate students' diverse needs resulting to constrained relationship between the students and the lecturers involved:

"Some lecturers are rude and do not respect students' diversity. For instance, we had a case of a lecture who commented about a student who had come with some doughnuts to class. The lecturer repeatedly commented about the student in class and at the end of the semester, the student had a supplementary in that unit yet she performed very well in all the other subjects. There is a case where a lecturer beat up a student because a phone had rang in the lecture room." (Student leader in a public university in Kenya)

The finding is contrary to Ongong'a and Akaranga (2013) who maintain that at higher education institutions, lecturers should not only encourage their students to pursue education but should also mentor them by upholding the desired professional and ethical standards including respect for students. It emerged that the universities have put in place mechanisms to ensure that lecturers upheld ethics and professionalism at work. Such measures include creating awareness among students on the desired students – lecturer relationship. During orientation programmes for first years, students are sensitized on expectations with regard to interpersonal relationship with the faculty. There are also channels such as the student – lecturer evaluations and public complaints committee for students to report unethical and unprofessional behavior among lecturers. The universities also have a code of conduct and ethics for staff and sanctions for unethical and unprofessional lecturers are enforced in order to deter recurrence as the following excerpts show:

"So far, we have not had any cases of unethical behaviour or unprofessional conduct reported to our office. During orientation, we are very open to the students about interpersonal relationships between a lecturer and a student. We have an open door policy to ensure that such cases are reported. We have public complaints committee and also a committee on anti-corruption. These committees collect public complaints including complaints from students on any malpractices that contribute to unethical behaviour. The university code of conduct, rules and regulations have also spelt out standards of ethical behaviour and the consequences are known to the members." (Director of quality assurance in a public university in Kenya)

"We have a few of such cases such as harassment and rudeness which we get from students' course evaluations and complaints box. The course and lecturer evaluation form is structured in a way that students can make additional comments with regard to the behaviour of the lecturer. Staff implicated with such issues are taken through the disciplinary process. For part time lectures, they are not contracted again." (Director of quality assurance in a public university in Kenya)

Further, the study found that majority 649 (61.1%) of the students and all 31 (100.0%) of the key informants believed that the lecturers had requisite communication skills. The findings imply that the universities had lecturers with relevant communication skills as to perform their teaching roles effectively. This is line with Adomi (2007) who contends that a lecturer should be a good communicator who can interact with students and facilitate productive debate and discussion. The study also found that the majority 716 (67.4%) of the students and a high proportion 27 (87.1%) of the key informants concurred that lecturers were knowledgeable in their areas of specialization. It was therefore inferred that majority of the lecturers in the universities were knowledgeable in their areas of specialization as to facilitate quality teaching service. Interviews with the respondents revealed that the universities were improving the quality of their lecturers

through staff exchange programmes, provision of pedagogical training, and facilitating them to attend conferences, seminars and workshops.

It was found that the universities had constraints attracting and retaining knowledgeable and experienced faculty. Rapid expansion of the universities had created a human resource crises for the institutions resulting to competition for quality lecturers who were also few. This resulted to high turnover of the teaching staff occasioned by high demand and lecturers pursuing promotion prospects elsewhere as the following excerpt from a dean of a school shows:

"We have quality lecturers in the sense that they have minimum qualifications which is a masters degree. Though we have few Doctor of Philosophy (PhD) holders, we have quite a number who are pursuing their PhDs. We also have a few professors and in some areas we do not have. We have been losing lecturers due to rapid expansion of the universities especially when opportunities for promotion are not forth coming." (Dean of a school in a public university in Kenya)

The finding on shortage of lecturers in the universities concurs with Obwogi (2011) who reported teaching staff capacity constraints in both the established universities and their constituent colleges as a result of inadequate financing. Boit and Kipkoech (2012) also found that that there is a critical shortage of academic staff in Kenya particularly PhD holders for recruitment into teaching positions. Wangenge-Ouma (2007) also observes that almost all universities have been offering similar competitive programmes and the human resource base has not expanded to match the needs for these programmes. Although rapid expansion of the universities had resulted to shortage of lecturers across all disciplines in the universities, sciences appeared to have additional challenges. Interviews with deans in science related disciplines pointed out that lecturers in sciences wished to be remunerated differently from the arts and social sciences citing the efforts required to attain the minimum qualifications required to teach sciences in a university. The respondents also argued that university salaries were not very attractive compared to the salaries available in other industries. Consequently, only scientists with a passion for teaching pursue further education that would earn them a place in the university academia as the following excerpt from a dean of a school offering science related courses reveals:

"Attracting and retaining quality lecturers in sciences is a problem. The biggest challenge is the salaries science lecturers are being paid. It has even become very difficult to attract students in engineering to come back for post graduate studies and take up teaching positions. It is only those people who have given themselves to serve as educators remain. If we looked at it closely, many of our scientists are not willing to forfeit the benefits of being in industry to join the noble teaching profession." (Dean of a School in a public university in Kenya)

On the other hand, universities located in rural areas had challenges attracting and retaining lecturer with the desired professional attributes. This was probably because rural areas are least developed and may not have critical social welfare amenities compared to urban areas as the following excerpt from registrar academics from one of the universities reveals:

"The rural location of our university poses a challenge in attracting and retaining high caliber lecturers. For instance, recently we wished to recruit professors in the school of education and in some areas of specialization, there were no applicants." (Registrar academic affairs in a public university in Kenya)

The following section presents and discusses findings on students' rating of lecturers' instructional practices.

3.5.2 Lecturers' Instructional Practices

Students' ratings of lecturer instructional practices summarized in Table 7 reveal that students had above average ratings of lecturers' instructional practices in the universities (M = 3.71, SD = 0.981). The findings imply that the universities have lecturers who engaged in instructional practices aimed at facilitating the realization of course objectives for the various programmes of study offered.

Table 7: Students' Rating of Lecturers' Instructional Practices

	Rating					Cumulative		Total
Item	1	2	3	4	5	D	A	
Lecturers provide course	38	109	74	615	226	147	841	1062
outlines at the beginning	3.6%	10.3%	7.0%	57.9%	21.3%	13.9%	79.2%	100%
of the semester								
Lecturers provide clear	73	123	97	568	201	196	769	1062
expectations on course	6.9%	11.6%	9.1%	53.5%	18.9%	18.5%	72.4%	100%
work and assessment at								
the beginning of a								
semester								
Lecturers set assessment	109	148	97	559	149	275	708	1062
tasks that challenge	10.3%	13.9%	9.1%	52.6%	14.0%	24.2%	66.6%	100%
students to learn								
Lecturers stimulate	60	143	127	598	134	203	732	1062
students thinking by	5.6%	13.5%	12.0%	56.3%	12.6%	19.1%	68.9%	100%
asking challenging								
questions								
Mean (M) lecturers' instructional practices = 3.71, Standard Deviation (SD) = 0.981								

Majority 841 (79.2%) of the students and 24 (77.4%) of the key informants concurred that lecturers provided course outlines at the beginning of the semester. A high proportion 769 (72.4%) of the students also agreed that lecturers provide clear objectives on course work and assessment at the commencement of a semester. The findings imply that most of the lecturers provided course outlines and explained to students about expectations

on course work and assessment at the beginning of a semester. Interviews with the key informants revealed that issuing of course outline on the first day of lecturers' contact with students was a requirement explicitly stated in the teaching procedures of the universities. However, there were instances where lecturers delayed issuing course outlines and in some cases, some did not. Non-conformities were attributed to challenges in enforcing the teaching procedures due to failure of some lecturers to fully embrace change presented by Total Quality Management systems as the following interview with a dean of a school reveals:

"A course outline is a contract between the instructor and the students. As a lecturer issue a course outline, it is expected that they will not just leave it behind but will go through the outline with the students. When we do course evaluations at the end of a semester, it has emerged that some lecturers delay before issuing the course outlines. There are no clear mechanisms to ensure that course outlines are issued at the right time. There is urgent need to have lecturers acculturated to the new way of doing things in a university environment." (Dean of a school in a public university in Kenya)

Majority 732 (68.9%) of the students agreed that lecturers in the universities stimulated students' thinking by asking perceptive questions. The results imply that most of the lecturers promote active construction of knowledge, encourage critical thinking and also enlighten learners on the concepts being taught. However, results from the key informants conveyed that large classes and use of lecture method in the universities did not adequately provide opportunities for lecturer-learner interaction as suggested by the following excerpts from dean of a school and a students' leader:

"Some lecturers try to engage the students by asking questions and involving them in group discussions. However, use of lecture method of teaching due to the large classes limits active engagement between the learner and the lecturer." (Dean of school in a public university in Kenya).

"Some lecturers try to engage the students by asking questions. However, lecturers use the lecturer method more and students have limited chance to engage with the lecturers during class." (Student leader in a public university in Kenya)

According to Markwell (2003), large classes where the lecture method of instruction is the most widely applied is a reality that universities globally must deal with in the context of rising demand and limited funding for public university education. Universities must therefore strive to creatively meet the learning needs of students in the large classes if meaningful teaching and learning is expected to take place. However, Brown and Manogue (2001) advance that if lectures are the only method used to impart knowledge among students in universities, then the students are not being well prepared for their future roles because it does not encourage learners to become independent, creative, self-motivated as well as critical thinkers. Contrary to this assertion, Ndebele

and Maphosa (2013) review of the prospects and challenges of promoting active learning in large class university teaching propose the use of strategies such as brainstorming, questioning, students' focused listing of what they know of the topic being covered, and asking students to share ideas in response to a given question. Comments from the key informant therefore confirm the misconceptions that the lecture method of teaching presents minimal chances of promoting students' engagement in learning. Provision of appropriate pedagogical training could possibly empower the lecturers to respond to the needs of their students in the dynamic environment presented by universities today.

4. Conclusion

The study explored the dimensions of lecturer quality in the universities and proceeded to analyze students' ratings of the extracted dimensions. Key informants opinions were sought in order to corroborate the quantitative data provided by the students hence providing deeper understanding on lecturer quality in the universities. The study concluded that lecturer quality is multidimensional. Two valid and reliable dimensions of lecturer professional attributes and lecturer instructional practices were extracted. The two dimensions explained 62.95% of the variations in lecture quality in the universities. Lecturer professional attributes was the most important dimension as it accounted for the largest variation (50.43%) in lecturer quality. This is an indicator that students in public universities in Kenya are most concerned with the professional attributes of their lecturers. Lecturer's professional attributes is strongly related to instructional practices (r = 0.597, p < .05). Lecturers with the desired professional attributes are therefore more likely to facilitate quality instructions leading to actualization of purpose and expected learning outcomes of academic programmes in the universities.

Students had above average rating of lecturers' professional attributes (M = 3.44, SD = 0.874) and it was concluded that the universities had lecturers with the desired professional attributes. Areas of concern identified by the key informants included: Poor remuneration; part time teaching leading to diminishing professional quality of the faculty; shortage of lecturers due to rapid expansion of the universities; incidences of unethical and unprofessional behaviour; constraints in attracting and retaining lecturers in science disciplines due to low remuneration compared to other employers; and competitive faculty not showing interest or taking up appointments in universities located in rural areas. Students had above average ratings of lecturers' instructional practices in the universities (M = 3.71, SD = 0.981). It was therefore concluded that the universities have lecturers who engaged in instructional practices aimed at facilitating the expected learning outcomes. Areas of attention identified by the key informants included non-conformities to teaching quality management practices and large classes which were perceived not to provide opportunities for lecturer learner interaction.

5. Recommendations

Based on the findings and conclusions from the study, managers of public universities should consider lecturer's professional attributes as a key parameter for recruitment of faculty into university teaching and for professional development programmes for existing faculty. Beyond the minimum academic qualifications aimed at ensuring that faculty are knowledgeable in their areas of specialization, university managers should strive to recruit lecturers who can effectively communicate with an audience. Human resource managers should conduct background checks for faculty to ensure that only lecturers who have consistently demonstrated commitment, passion for duty, ethical and professional behaviour befitting a learning environment are recruited. Universities should strengthen the directorates of quality assurance for them to effectively perform their roles of collecting and disseminating regular and timely data on conformity to Quality Management Systems including procedures relating to quality instructional practices. The managers should train lecturers on quality management systems especially on procedures in the academic division. This will create awareness and support implementation. Universities should develop policies on part time teaching in their universities. In the current funding crises and rapid expansion of universities, part time lecturers have a role to play in helping the universities pursue their mission and vision. Proper policies on part time teaching will therefore play a critical role in defining the interaction between part time lecturers and the universities. Managers of the universities should provide pedagogical training to lecturers to empower them to promote active engagement of learners in the context of large classes which continues to be the new norm due to increasing demand for higher education.

References

- Adomi E E, 2007. Student expectations of faculty in a Nigerian LIS School. *Library Philosophy and Practice*, 1 4.
- Aithal P S, Kumar P M, 2016. Maintaining teacher quality in higher education institutions. *International Journal of Current Research and Modern Education*, 1(1), 701-712.
- Alarcón D, Sánchez J A, 2015. Assessing convergent and discriminant validity in the ADHD-R IV rating scale: User-written commands for Average Variance Extracted (AVE), Composite Reliability (CR), and Heterotrait-Monotrait ratio of correlations (HTMT).
 - https://www.stata.com/meeting/spain15/abstracts/materials/spain15_alarcon.pdf. Accessed 30th July 2020.
- Ali S, Begum S, Nor H, 2013. Students' evaluation of the desired teaching qualities among lecturers of higher learning institutions in East Coast Malaysia. *Asian Journal of Humanities and Social Sciences*, 1(3), 51-58.
- Ali T, Azam R, & Hunjra A I, 2017. Revision and validation of retail service quality scale in branchless banking. *Business & Economic Review*, 9(3), 1 30.

- Ali Z, Zwetsloot I M, Nada N, 2019. An empirical study to explore the interplay of managerial and operational capabilities to infuse organizational innovation in SMEs. *Procedia Computer Science*, 158, 260 269.
- Arshad M, Rahmani S H, 2014. Customers' satisfaction on teaching facility at university level in Pakistan. *Far East Journal of Psychology and Business*, 11(1), 51 59.
- Baker T L, 1999. Doing social research. The McGraw-Hill, London.
- Biggs J, Tang C, 2011. *Teaching for Quality Learning at University*. (4th Ed.) Society for Research into Higher Education and Open University, London.
- Boit J M, Kipkoech L C, 2012. Liberalization of higher education in Kenya: Challenges and prospects. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 33 41.
- Brown G, Manogue M, 2001. AMEE medical education guide No. 22: Refreshing lecturing: a guide for lecturers. *Medical Teacher*, 23(3), 231 244.
- Bryman A 2004. Social Research Methods. (2nd Ed.). Oxford University Press, Oxford.
- Chireshe R, 2011. Effective and ineffective lecturers: University students' perspective in Zimbabwe. *Anthropologist*, 13(4), 265 269.
- Cohen L, Manion L, Morrison K, 2008. *Research Methods in Education*. (6th Ed.). Routledge, Taylor & Francis, London and New York.
- Deepa S I, Manisha S, 2014. An exploratory study of student perception of instructor traits in effective learning. Universal Journal of Management, 2(1), 1-8.
- Drost E A, 2011 Validity and reliability in social science research. *Education Research and Perspectives*, 38(1), 105 123.
- Field A, 2009. Discovering Statistics Using SPSS. Sage, Thousand Oaks, California.
- Gee N C, 2018. The impact of lecturers' competencies on students' satisfaction. *Journal of Arts & Social Sciences*, 1(2),74 86.
- Gu D, Guo J, Liang C, Lu W, et al 2019. Social media-based health management systems and sustained health engagement: TPB perspective. International Journal of Environmental Research and Public Health, 16, 1-15.
- Kagondu R, Malwa S M, 2017. Quality issues in Kenya's higher education institutions. JHEA/RESA, 15(1), 23 42.
- Kara A M, Tanui E, Kalai J M, 201). Educational service quality and students' satisfaction in public universities in Kenya. *International Journal of Education and Social Science*, 3(10), 37 48.
- Keelson S A, 2012. Student perception of teaching quality in business schools: Evidence from polytechnic institutions in Ghana. *Business Education and Accreditation*, 3(1), 77 89.
- Leech N L, Barrett K C, Morgan G A, 2005. SPSS for Intermediate Statistics: Use and Interpretation (2nd Ed.). Lawrence Erlbaum Associates, Mahwah, New Jersey.
- Lierse S, 2016. Outstanding university lecturers: Ambitious altruists or mavericks of the academy? *Australian Journal of Teacher Education*, 41(12), 1 -12.
- Markwell D, 2003. Improving teaching and learning in universities. The urgent challenge of world-class university teaching and learning. *B Hert News*, 18, 1 40.

- Martin R, Cohen J W, Champion D R, 2013. Conceptualization, operationalization, construct validity, and truth in advertising in criminological research. *Journal of Theoretical and Philosophical Criminology*, (1), 1 38.
- Martín P A, 2019. Student perceptions of a good university lecturer. http://dx.doi.org/10.1590/S1678-4634201945196029
- Morse J M, Barrett M, Mayan M, Olson K, Spiers J, 2012. Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 1 19.
- Mugenda O, Mugenda A, 2003. *Research methods: Qualitative and Quantitative Approaches*. Nairobi: Acts Press.
- Ndebele C, Maphosa C, 2013. Promoting active learning in large class university teaching: Prospects and challenges. *J Soc Sci*, 35(3), 151 262.
- Neill J, 2008. Writing up a Factor Analysis. Centre for Applied Psychology, University of Canberra.
- Obwogi J, 2011 Factors that affect quality of teaching staff in universities in Kenya. PhD Thesis, Jomo KenyattaUniversity of Agriculture and Technology, Juja, Kenya.
- Odhiambo G O, 2011. Higher education quality in Kenya: A critical reflection of key challenges. *Quality in Higher Education*, 17(3), 299 315.
- Ongong'a J J, Akaranga S I, 2013. Work ethics for lecturers: An example of Nairobi and Kenyatta universities. *International Journal of Arts and Commerce*, 2(8), 8 22.
- Osinski I C, Hernández M, 2013. Study of the qualities of a good University lecturer of Health Sciences. *Procedia Social and Behavioral Sciences*, 89, 342 350.
- Owino E O, 2013. The influence of service quality and corporate image on customer satisfaction among university students in Kenya. PhD Thesis, University of Nairobi, Nairobi, Kenya.
- Pallant J, 2005. SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows (Version 12). Allen and Unwin, Crows Nest NSW, Australia.
- Pervan M, Curak M, Kramaric T P, 2017. The influence of industry characteristics and dynamic capabilities on firms' profitability. *International Journal of Financial Studies*, 6(4), 1–19.
- Republic of Kenya, 2005. Sessional Paper No 1 of 2005. A Policy Framework for Education, Training and Research. Government Printers, Nairobi.
- Republic of Kenya, 2012. Task Force on the Re-Alignment of the Education Sector to the Constitution of Kenya 2010: Towards A Globally Competitive Quality Education for Sustainable Development. Government Printers, Nairobi.
- Singleton R A, Straits B C, 1999. *Approaches to Social Research* (3rd Ed.). Oxford University Press, New York.
- Stacey R D, 2001. Complex Responsive Processes in Organizations Learning and Knowledge Creation. Routledge, New York.
- Su F, Wood M, 2012. What makes a good university lecturer? Students' perceptions of teaching excellence. *Journal of Applied Research in Higher Education*, 4(2), 142 155.

- Sultana N, Yousuf M I, Naseer M, Rehman S, 2009. The higher the quality of teaching, the higher the quality of education. *Contemporary Issues in Education Research*, 2(3), 59 64.
- Uche C M, 2007. *Globalization and higher education administration in Southern Nigeria*. A paper presented at HERPNET Regional Conference, Ibadan, IITA 13th 15th August, 2007.
- Uche C M, 2012. Students' perception of academic staff quality: A measure of quality assurance in South-South Nigerian higher institutions. *Int J Edu Sci*, 4(2), 163 173.
- Wangenge-Ouma G, 2007. Higher education marketization and its discontents: The case of quality in Kenya. *Higher Education*, 56, 457 471.
- Wei Y K, 2019. The impact of service quality on customer satisfaction of a hotel at Johor Bahru, Malaysia. Journal of Arts & Social Sciences, 3(1), 34 46.
- World Bank, 2010a. *International Experience for Assessing the Quality of Educational Services at Higher Education Institutions: A Policy Note for the Government of Poland*. The World Bank, Washington DC.
- World Bank, 2010b. Financing Higher Education in Africa. Washington DC: The World Bank.
- Yamane T, 1973. *Statistics: An Introductory Analysis*. New York: Harper & Row.

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