The Influence of Teaching, Research and Consultancy Services on Efficiency Assessment: Experience from Tanzanian Universities

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This study aimed at examining the influence of teaching, research and consultancy on efficiency assessment of Tanzanian Universities. It involved 263 University faculties for questionnaire responses and 22 heads of department were interviewed as per 2014 survey. In order to accomplish the research objectives a mixed methods research (MMR) approach was employed to have an in-depth understanding of the phenomenon. Findings based on Linear Regression analysis suggest that there is a significant correlation between classroom teaching and examination performance with education level of faculties in influencing Universities' efficiency. However, student rating, number of publications, quality of publications, consultation and community services did not show any significant correlation with education level in determining the Universities' efficiency. It is also affirmed from interviews that teaching is given more precedence than research and consultancy in Universities. Additionally, the lack of funds, skills, and low motivation hampers research and consultancy practices in Universities. And so, Universities need to invest in research and consultancy so as to enhance efficiency and improve quality of teaching. Balancing the three core university functions will bridge the gap between theories and practice; hence foster the quality of university graduates.

Keywords: *Higher education, mixed methods research, University efficiency, University-industry collaboration.*

INTRODUCTION

As the importance of higher education takes pace Worldwide the evaluation of efficiency and performance has become more important than ever before. This is one of the necessities for the Universities to prevail and remain competitive. In this regard, the Universities are struggling to maintain their efficiency through various ways (Mason et al, 2006). There are different parameters used to gauge the Universities' efficiency which may vary from place to place depending on a specific objective to be measured. Some of these parameters include graduates' efficiency, graduate employability, research and consultancy, teaching hours, teachers student ratio and examination performance to name some (Smith et al, 2000). Predominantly, all these parameters are within the three core Universities' objectives namely; teaching, research and consultancy. However, teaching is given precedence with the aim of producing skilled man power (Flegg et al, 2003). On the other hand, research and consultancy in higher education are essential in understanding social, political and economic implications. Some of the Universities use research productivity as criteria for budget allocation to various departments. The department or school with higher research output can receive more budgets and research grants. Importantly, research output has also been considered as a yard

stick in promotion of faculties. Thus, it is emphasized that these three objectives are interwoven. The link between teaching, research and consultancy is significant in improving quality of teaching. Faculties who engage in research and consultancy, they are well informed about the subject matter than those who do not. They are able to link between teaching and the real life situation on the ground. Despite the essence of this link, still there is a gap between what Universities teach and the job market demand. This is evidenced by employers' complaints about graduates' incompetence (Makulilo, 2012). To redress this situation therefore, engaging faculties in research and consultancy can bring attention to curriculum changes in line with the job requirements. It has been learned from this study that the Universities do not engage fully in research and consultancy. As result, teaching is given primacy without producing work-readiness graduates.

The current study therefore, attempted to examine the influence of teaching, research and consultancy in measuring Universities' efficiency in Tanzania. Specifically, the study intended to ascertain the faculties' perceptions on how the three objectives contribute to the efficiency of Universities. Moreover, the reasons for the existing imbalance are also identified.

LITERATURE REVIEW

Efficiency evaluation in higher education is not given a required attention despite its essence in revealing setbacks and maintaining quality (Alam, 2009). To address this challenge, many studies have focuses on external criteria for improvement of teaching and research in Universities (Silva, 2000). It is learned that the government support in research and consultancy is important for a better result. In Brazil public Universities, these two objectives seem to be more valued and useful in measuring efficiency. Thus, the government is argued to support the Universities to full fill their obligations and sustain production of quality knowledge through teaching and research. Molefe (2010) suggest some internationally adopted approaches to faculties' efficiency assessment. Some of these include interpersonal skills, communication, research, leadership, subject masterly, assessment skills, listening skills, commitment to quality and decision making to name a few. However, the Universities may include more or less of the identified dimensions. Additionally, in the attempt of explaining efficiency of Universities, Molefe (2012) identified other seven dimensions, namely; knowledge, student-teacher relations, organization skills, communication skills, subject relevance, assessment procedure and utility of assignment were used. All these dimensions focus on individual lecturers' efficiency that eventually is used to evaluate the University efficiency.

According to Commonwealth (2013) the three University objectives are over emphasized. It is argued that the Universities contribution to economic development is not limited to teaching and research, but also through engagement and collaboration with the industry and other external entities. Reviewing research efficiency reports and other official documents is a suggested way of understanding the impact of Universities. The experience shows that there has been a narrow linkage between the Universities and industries. So, the University research outputs remain in libraries without being exposed and used in solving various socio-economic problems. Despite this ignorance of patents, efficiency measurements based on University's core objectives remain imperative for economic growth.

Based on various identified efficiency dimensions, it is observed that the focus is on the internal criteria and the external are ignored. Thus, it is vital to assess faculties, students and management systems in the Universities to ensure quality and sustainability. It is affirmed that the process is incomplete without including external environment where the Universities output go (Darling-Hammond, 2010). Therefore, the Universities need to measure their

efficiency in terms of services or impact they cause to the society. This can be done in terms of research, consultancy and community services. Consequently, the Universities can easily get feedback on their efficiency and performance. It is the intent of this study therefore, to assess efficiency perceptions based on the three University objectives that focus on both the internal and the external dimensions.

METHODOLOGY AND DATA

The study employs a Mixed Method Research (MMR) paradigm, guided by pragmatism philosophy. This approach combines both quantitative and qualitative paradigms. Though each of the paradigm claims to be superior to the other, none of them is error free (Cameron, 2011; Lund, 2012; Johnson, 2013). Therefore, in this study, the proposed MMR research design is a dominant concurrent method (QUANT +qual) similar to mixed approach by Johnson and Onwuegbuzie (2004). The main purpose of MMR in this study is convergence where concurrent design fit to this purpose as again suggested by Onwuegbuzie and Collins (2007). Questionnaire technique is used for quantitative method while interviews represent qualitative approach. Data of these two approaches were concurrently collected and analysed. Finally the results compared and convergence or divergence is ascertained prior to conclusion.

DATA SOURCES AND ANALYSIS

Data were obtained from faculties and heads of departments, who were purposeful selected from 32 Universities both public and private. A total of 263 faculties selected from different departments filled the questionnaire and returned them, whereas 22 heads of department were interviewed. The solicited questionnaire responses were exposed to factor analysis (FA) processes for validation purposes and hypothesis testing. On the other hand, a thematic analysis (TA) was used to analyse the information obtained from interview sessions.

ANALYSIS OF QUESTIONNAIRE

An adapted standardized rickets scaled questionnaire was used, and all necessary procedures for questionnaire analysis were done through SPSS. The factor analysis (FA) was followed by a simple linear regression (LR) analysis to determine the significant correlation between independent and dependant variables in evaluating the University efficiency. The FA was also preceded by T-Test used to test for the difference of mean among respondents. One sample T-Test was used to determine if the mean of a sample is different from a particular value at $\alpha = .05$. To justify the following Ho tested:

H_o There is no significant difference between respondents who wish to agree and those who wish to disagree.

H_1 There is a significant difference between respondents who wish to agree and those who wish to disagree.

The output of T-test from SPSS analysis (see Figure 1.2) indicates p-values of 0.000 in all 7 variables. Since the p-value is < 0.05 level of significance we have enough evidence to reject the null hypothesis and retain the alternative hypothesis. The implication we get is that all variables are significantly different from each other hence; they qualify to be retained until further test proves otherwise.

RELIABILITY AND VARIDITY TESTS

The computed Cronbach's alpha for the seven items is .78 which indicates that the items form a scale that has practical internal consistency reliability as indicated in Figure 1.1.

KMO AND BARTELETT'S SPHERICITY

The recommended KMO obtained is .74 which is > .50 which lies within the acceptable range (Reech et al, 2005). On the other hand, the Bartlett's Test of Sphericity is also significant (< .05), implying that the correlation matrix is significant different from identity matrix indicated by 0.000 correlation between variables at 5% level. Consequently, the null hypothesis H0 that "None of the variables are correlated in the population" is rejected while the alternative hypothesis H1 is accepted that "At least some of the variables are correlated in the population".

There are only 3 factors retained out of seven. Only factors with total Eigenvalues > 1.0 are extracted. The results show that more than half of the variance is accounted by three extracted factors. The Varimax rotation extracted only three factors. From the rotation, the first, second and third factor accounted for 26.4%, 20.7% and 15.0% of the variance respectively. This made a cumulative percentage of 62% (Figure 1.4). Based on rotated matrix, all the seven items have loaded in three factors and they are uncorrelated with each other. The first three variables are highly loaded in the first factor, followed by another group of two variables being loaded in factor number two and finally two variables are moderately loaded in the third factor. The teaching factor is highly explained, followed by research and consultancy. Also, it is learned that the classroom teaching (85.4%), examination performance (84.3%) and student rating (83.5%) are explained by teaching factor. Similarly, factor 2 of research, predicts 76.4% number of publications and 67.7% quality of publications. Finally, the third factor explains two variable of consultation (64.2%) and public services which is explained by 76.5%.

ORDINARY LEAST SQUIRE (OLS) ESTIMATE OF LINEAR REGRESSION

The objective of Simple Ordinary Least Squire (OLS) Linear Regression (LR) analysis is to establish if there is any significant correlation between items forming each of the three extracted factors with the University efficiency. The relationship is built based on the education level (Biodata) of faculties and the seven items that eventually determines the University efficiency. Thus, each item is used as a dependent variable, whereas education level of faculties is taken as a factor variable. It was hypothesized that there is no significance correlation between the education level of faculties and the items that explain the Universities efficiency. Thus, for each item statement there is a constructed hypothesis to be tasted. The regression analyses

APPENDICES

Figure 1.1 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.781	.780	7

Source: Own Calculation

Figure 1.2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.736
Bartlett's Test of Sphericity	Approx. Chi-Square	31.408
	Df	21
	Sig.	.000

Source: Own Calculation

outputs are shown in Table 3 indicating if the correlation is significant or not significant. The decision criteria for regression analysis is P-values ($p < 0.05$) which allows to accept Ho and reject the alternative hypothesis H1 , and the vice versa.

THE GENERAL LINEAR REGRESSION EQUATION

$y_i = \alpha_0 + \alpha_1 x_i + \xi$

i=1, 2,…….n

y_i = regressed or dependent variable;

x_i = regressant/repressors, explanatory / independent variable;

ξ = Error Term

Outcome < – y < - x cause

Ordinary Least squares, or Least Squares is the most commonly used method.

α_0, α_1 are the parameters. Parameters are specialized constants, these have the constant value for a given data set, but the values generally differ between different data sets.

Model 1: Regression of Classroom Teaching and Education Level

H_o: There is no correlation between classroom teaching and education level.

H_1: There is a correlation between classroom teaching and education level.

Table 3 above shows that the p-value (.011) of model 1 is significant since it is less than .05 and the slope of the regression equation is a not zero ($\beta \neq 0$); hence the null hypothesis (H_o) is rejected whereas ; the alternative hypothesis (H_1) is accepted .Therefore , there is a correlation between classroom teaching and education level .

The actual regression equation is given by ;

Classroom Teaching $(Y_i) = 4.830 + 0.156 (Edu) + \xi$

The implication is that for any change of education level will increase the level of classroom teaching . This suggests that there might be other factors not included in this study that contribute largely to classroom teaching apart from education level of faculties .

Table 1.1: Combined Results for Regression Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	4.830 (0.000)	3.384 (0.000)	3.256 (0.000)	3.712 (0.000)	3.392 (0.000)	3.442 (0.000)	2.912 (0.000)
Education level	-.121** (0.011)	.035*** (0.005)	.060 (0.499)	.070 (0.325)	.049 (0.594)	-.005 (0.958)	.104 (0.287)
Beta	-.156	.022	.042	.061	.033	-.003	.066
N	263	263	263	263	263	263	263
The values attached to the coefficient ***, ** and * represent levels of significance at 1%, 5%, and 10% constructed from two tailed hypotheses							

Source: Researcher's Calculations

Model 2 : Regression of Examination Efficiency and Education Level

H_o : There is no correlation between examination efficiency and education level .

H_1 : There is a correlation between examination efficiency and education level .

From the same Table 3 above it is indicated that the p -value (.005) of Model 2 is significant .In this case the null hypothesis is also rejected whereas ; the alternative hypothesis is accepted .Therefore ,it is confidently confirmed that there is a correlation between examination efficiency and education level . This entails that classroom teaching is determined by education level . Theoretically , classroom teaching and examination efficiency are assumed to have linear relationship with education level . However ,there is no theory which explains either positive or negative relationship between the two . Therefore ,the results are likely to take either of the two shapes . Literatures support that there is a positive correlation between classroom teaching and education level , as well as examination efficiency and education level of faculties (Northcote , 2009 ; Hé nard and Roseveare , 2012 ; Koedel & Betts , 2007 ; Hoffmann & Oreopoulos (2006) Paola ,2009 ;Harris & Sass ,2011) Thus ,the increased essence of HE in socio economic development call for quality teaching .Training of faculties is one of the suggested strategies to improve teaching and learning . Additionally , in Tanzanian Universities and other HEIs offering degrees , the level of education is an important criterion for recruitment and selection of faculties . For example ,a Tutorial Assistant (TAS) needs to have a bachelor degree with a Grade Point Average (GPA) of 3 8 and above .

Furthermore ,several studies support that student achievement is the result of teacher 'education level and experiences .Some of them include Clotfelter et al (2006) Clotfelter et al (2007) Aaronson et al (2007) Goel (2007) Harris & Sass (2007) Kukla - Acevedo (2009) Ladd &Sorensen (2014) Rockstroh (2013) and Zhang (2008) They generally accept that there is a significant relationship between education level of teachers and student achievements .

Model 3 : Regression of Student Rating and Education Level

H_o :There is no correlation between student rating and education level .

H_1 :There is a correlation between student rating and education level .

Model 3 of the student rating and education level , also indicates that it is not significant .The p -value (.499) in Table 1 1 is greater than the decision p - value (.05) This provides sufficient evidence to accept the null hypothesis and reject the alternative hypothesis . Thus , it is true that there is no correlation between student rating and education level . Student rating as one of efficiency indicators is still subjective .In this case ,teachers play a very important role since they actively participate in the teaching and learning .There are variations in the rating process among them despite the given rating standards Angelo &Cross ,1993) This depends on the type and nature of rating .If the rating is objective , then variation is minimized since every faculty uses the same rating scale and the vice versa is also correct .

Despite the process of student rating being illusive , researchers conclusions are almost universal .Like in the previous models , it is again affirmed that student rating needs to be done by using multiple sources of data .Therefore ,data based on faculties ' education alone are insufficient to guarantee the quality rating .This system is suggested to be very comprehensive to capture a variety of data sources (Alemon ,1999) .

Model 4 : Regression of number of publications and education level

H_o : There is no correlation between number of publications and education level .

H_1 : There is a correlation between number of publications and education level .

Model 4 in Table 1 4 indicates that the obtained p - value (325) is statistically insignificant , hence suggesting that the Ho is to be accepted and reject H1 . Therefore , it evident to say that there is no correlation between the number of publications and education level .

Model 5 : Regression of quality of publications and education level

H_o : There is no correlation between quality of publication and education level .

H_1 : There is a correlation between quality of publication and education level .

In model 5 in the same Table 1 4 , it is also noted that the calculated p value (594) is not significant to reject the null hypothesis . Similarly , its corresponding R2 is almost zero indicating no contribution of this factor to quality of publications . So , it is again evident to say that there is no correlation between quality of publications and education level .

Basing on model 4 and model 5 , it can be argued that there are numerous factors that influence the number of publications and quality of publications in the Tanzanian Universities . As it has been discussed earlier in other models , there is no straight forward theory to rule out the quantity and quality of publications .Depending on the type and source of data a researcher employs there can be some contributions of education level to these factors .This might be contradicting to the general expectations . Highly educated faculties are expected to engage more in research activities than junior ones . As result , their contribution in terms of number and quality of publications could also be high .Empirical studies however , disclose mixed results on these correlations . A strong relationship between education level and number of publication is strongly supported by Zainab (1999) and Aksnes (2015) .It is avowed that as the University academicians climb the academic ladder their research productivity increases due to their experiences .Professors are said to be more prolific than Associate Professors , Senior Lecturer , Lecturer , Assistant Lecturers and Tutorial Assistants in that order .

Therefore , the current findings supports that faculties do not largely engage in research , hence they failed to relate its essence in measuring the University 's efficiency .Research publication is one of the major causes of the Universities ' inefficiency if it is not done effectively (Kipesha and Msigwa ,2013 ; Bangi and Sahay ,2014) .

The argument to whether research support teaching is still debatable . Studies indicate unconsensus between the two contenting sides . Those who support the assertion they strongly accept that research findings are brought into classroom teaching .The practical knowledge is disseminated to learners who link between theory and practice (Prince et al , 2007) .It is also emphasized that research is used for hiring , tenure and promotion in Universities . Moreover , through research the course content and thinking curiosity have been kept up to date .In contrast , some scholars argue that the correlation between research and teaching is negligible .They have pin pointed some empirical studies such as Rugarcia (1991) and Felder (1994) that research and teaching have different goals and require different skills and knowledge .While the

primary goal of research is to advance knowledge ; the goal of teaching is to develop and enhance abilities . Therefore , the link between the two is reported to be very small (Feldman ,1987) In the same line the number and quality of publications does not always depend on ones education level alone .In this case therefore , other factors such as commitment , time , interest and skills to name some , contribute to research publications . In the Tanzanian Universities for example , doctors and professors are appointed to hold various leadership positions in their institutions or government . Eventually , they do not have sufficient time to concentrate on research activities .

Model 6 : Regression of consultation and education level

H_o : There is no correlation between consultation and education level .

H_1 : There is a correlation between consultation and education level .

Model 6 is identified statistically insignificant due to its p value being greater than 05 . Thus , the null hypothesis is accepted whereas ; the alternative hypothesis is rejected connoting that there is no correlation between consultation and education level .

Model 7 : Regression of community service and education level

H_o : There is no correlation between community service and education level .

H_1 : There is a correlation between community service and education level .

Likewise , Model 7 is statistically insignificant due to its p value which is greater than 05 . Thus , the null hypothesis is accepted and the alternative hypothesis is rejected .It is confirmed therefore , that there is no correlation between community service and education level .

Model 6 and model 7 are related themes under the same construct which is also the third objective of the Universities .It is also a measure of their outputs to the community , and a means of getting feedback from them .In this context consultancy refers to a provision of any advice , information , "in company" training acting as a subject matter to external organization for fee .Similarly , community services refers to those activities the University engage to the community for the purpose of educating , providing services based on their knowledge in various fields . It is a community University partnership which translates theory into practice (Holland ,2003) .Thus , there is a strong relationship between the Universities and other HEIs with the community services .

Despite the importance of community services provided by the Universities , still there is no clear evidence if the level of education of faculties has significance correlation . The findings from empirical studies are still mixed .This depends on the type of service provided , which will also dictate the education level required for a particular service .

Therefore , findings from linear regression analysis suggest that classroom teaching and examination efficiency are statistical significant to Universities ' efficiency determined by the education level of faculties . However , the literature reveals contradictory results on the correlation between classroom teaching and examination efficiency with education level .Thus , the type of data and scope might have caused such variation .On the contrary , student rating , number of publications , quality of publications , consultation and community services did not show any significant correlation with education level of faculties in an endeavourer to assess the Universities ' efficiency .

INTERVIEWS ANALYSIS

According to Miles and Huberman (1994) there are three important steps in thematic analysis which include data display, data reduction and data drawing and conclusions. In the first stage of data reduction orally and recorded data was organized, compressed and assembled to permit drawing conclusions. To allow easily interpretations, figures, quotations and tabulations were used to present different ideas as suggested by Gibbs (2002) and Yin (2010). The data from interview sessions were preliminary coded in relation to the study requirements. These preliminary codes were then reduced into final coding in the second stage by merging some of the related codes in one theme for easily descriptions.

All the interview responses from 22 Universities' heads of departments were first presented in a raw data together with preliminary codes for each as shown in Table 1.2.

The second stage of data reduction involves sharpening, sorting, discarding and organization of data in such a way that final conclusion is drawn and verified. This is a continuation of the preceding stage of data displaying. The data given in Table 1.3 was sorted and organized into specific themes and defined before interpretation and conclusion.

Three input and three output themes were identified from the interviews data that focused on the three University objectives. The condensed themes indicated in table 1.3 were further summarized into 6 major themes for easily interpretations and conclusion as shown in Figure 1.4.

Table 1.2: Input

1. Enrolment	
High enrolment	Enrolment increases without corresponding increase of resources.
Qualification	Most students in private Universities have low qualifications.
Allocation	Unfair allocation done by TCU.
Learning facilities	Shortage of learning facilities as result of increased enrolment.
Resource	Low enrolment reduces University resources.
2. Faculties	
Teacher student ratio (TSR)	There is low teacher student ratio.
Training	In public Universities, faculty training is mandatory while in private Universities is not given priority.
Motivation	Faculties are not motivated to engage in research and consultancy services.
Qualifications	Most of the faculties have low qualifications.
Reputation	Faculties in public Universities are more reputable than that of private Universities.
Employment terms	Most faculties in private Universities are temporary employed than in public Universities.
3. Non-academic Staff	
Management	Management is not fulfilling its obligations leading to misuse of resources.
Others	Interviews did not reveal any other information related to non-academic staff.

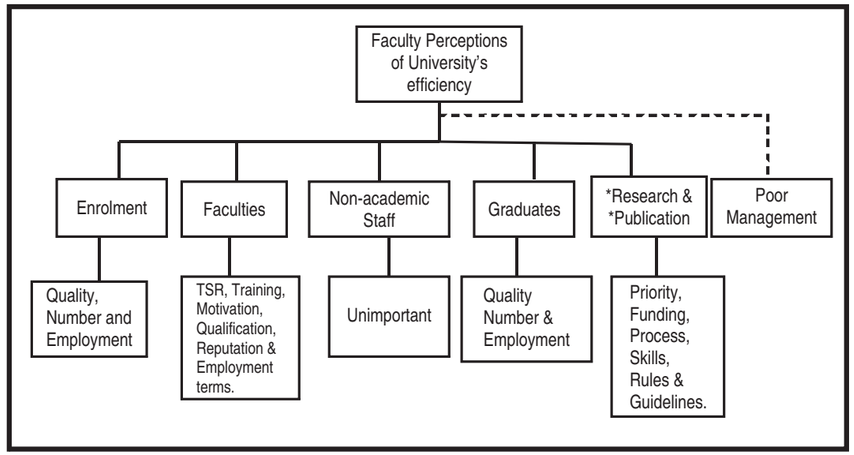
Source: Researcher's Compilations

Table 1.3: Output

1. Graduates	**Definitions**
Quality	Most graduates have low qualifications.
Number	The number of graduates has increased.
Employment	Those from reputable Universities are easy employed.
2. Research publications	
Priority	Teaching is prioritized than research.
Funding	There is shortage of research funds.
Process	It is not effectively done.
Research skills	Faculties lack research skills.
Rules and Regulations	Many faculties conduct research individually.
3. Consultancy services	
Process	It is not effectively done.
Funding	There is shortage of consultancy funds.
Consultancy skills	Faculties lack consultancy skills.
Rules and Regulations	Many faculties conduct consultancies individually.
Workshops and seminars.	Only experienced faculties are involved.

Source: Researcher's Compilations

Figure 1.4: Developed Thematic Map Showing Five Themes



Source: Researcher's Compilations

Table 1.4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.648	26.406	26.406	1.648	26.406	26.406	1.600	25.721	25.721
2	1.448	20.681	47.087	1.448	20.681	47.087	1.472	21.029	46.750
3	1.125	14.921	62.008	1.125	14.921	62.008	1.132	15.258	62.008
4	.927	13.237	75.245						
5	.714	10.203	85.448						
6	.666	9.516	94.964						
7	.352	5.036	100.000						
Extraction Method: Principal Component Analysis.									

Source: Researcher's Calculations

Figure 1.5: Rotated Component Matrix[a]

	Component		
	1	2	3
Q6 Classroom teaching	.854		
Q4 Exam. Performance	.843		
Q7 Student Rating	.835		
Q2 Number of publications		.764	
Q3 Quality of Publications		.765	
Q1 Consultation			.677
Q5 Community Services			.642
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 4 iterations.			

Source: Researcher's Compilation

Among the identified major themes, five of the themes were included in questionnaire. The sixth theme emerged during interview and was found to be interesting and important in explaining Universities efficiency. This is poor management which have great impact on Universities' efficiency. While the interview result indicated the importance of all the five themes in determining efficiency, non-academic staff showed no importance.

DATA DRAWING AND CONCLUSION

Data drawing in Thematic Analysis (TA) is based on the six identified themes. These themes are student

enrolment, teaching, research and consultancy, quality of graduates and poor management.

STUDENT ENROLMENT: this theme was valued by all Universities respondents regardless of their categories. In contrast however, while respondents from public Universities complain of high enrolment, those in private complain of enrolments decrease. It was added that enrolment increase in public Universities supersede available resources. As such, teaching and learning deteriorates. At the same time in private Universities facilities are misused due to low enrolment. These causes a big loss since student fees is the main source of income. To emphasize this, the Registrar in one of the private University stressed:

> ….as we are getting few students our income decreases from tuition fees and other imposed fees. We have decided to postpone some activities because of that. However, we are aware that the centralised admission system is not on our favour. …we know that some Universities do not use this system and they enrol students on their own. Anyway, even some politics behind this system are involved. If you collude with the Tanzania Council of Universities (TCU) you are likely to receive more students. (J. Gangilonga, March 24, 2014).

This respondent lamented due to unfair procedures of the centralised admission system by TCU. It is alleged that the system give priority to public Universities at the expense of private ones in enrolling students. However, there is no concrete evidence to these accusations. However, data from TCU indicates a big difference of enrolment between public and private Universities. Contrary to that the preference of applicants is observed to be in public Universities than private. Reasons for such situation are based on brand, experience and marketability of public Universities as they have been in the market for decades. Therefore, enrolment is noted to be a big challenge to both public and private Universities in a reciprocal way. Nevertheless, it learned from the interviews that enrolment influences Universities' efficiency.

TEACHING: Teaching has been identified as the most important activity in Universities compared to research and consultancy. For the teaching and learning to be successful, among other things, qualified faculties play an important role. During interviews it was acknowledged that most of faculties in public Universities have better qualities than those working in private Universities. Faculties in public Universities have long experiences and even produce human capital for private Universities. While public Universities have a training schedule to its faculties, private Universities do not have any support to faculties career development. They prefer hiring retirees from public Universities plus part timers who do not require any further training. In public Universities the challenge emanate from mismatch between high enrolment and teaching learning facilities, plus shortage of faculties. Contrary to that private Universities have low enrolment, somehow sufficient resources but low qualified staff. Thus, their low enrolment does not guarantee quality of outputs due to unqualified staff and low quality facilities.

RESEARCH AND CONSULTANCY: As it has been stated earlier in this paper that research and consultancy services are part and parcel of Universities' core objectives. Surprisingly, evidence from interview indicates that this is not justly done. Lack of funds, experience and motivation are reported to be the main hurdles to these crucial activities. The Universities' management does not consider research and consultancy as important as teaching. Hence, either meagre or no funds are set aside for it. Few available experienced researchers do not gloom the novice staff. Consequently, disparities exist between skilled and unskilled researchers. Skilled researchers greedily use their skills in research and consultancies without acknowledging the management. The reason for that is said to be low motivation provided by Universities. Thus, beside reduction of research

publications, Universities also lose incomes, secretly generated by faculties. Justifying this scenario the one Head of Research and Consultancy had the following to say:

> ...it does not mean that research and consultancies are not done by teachers, but they work outside the University. The 30 percent imposed by the University is too high. Instead, people work silently without formalizing to the University, except for the big projects which may require more time and University confirmation. ….it is unfortunately that publications and consultancies are not considered in ones promotion. (Professor Kati, January 30, 2014).

This quote imply how Universities are not full engaging in research and consultancy forcing faculties to take their own way of doing it. In this regard, we strongly recommend the Universities management to review their research and consultancy policies to motivate faculties. Conclusively, research and consultancy are not considered as main University activities creating a gap between theory and practice. Without research and consultancy it is difficult to bridge the existing gap between Universities and industry. Significantly, the complaint of stakeholders about graduates' failure to meet their expectations will prevail unless this gap is bridged.

QUALITY OF GRADUATES: The quality of graduates is the main yard stick of University efficiency. Most of the interviewees were sceptical about the quality of their graduates. But, few of them recommended on the high credibility of their graduates. Nevertheless, evidence from literatures suggests that University graduates are not of the expected quality. Universities are not meeting employers' expectations Panagiotakopoulos (2012). Further, they face high enrolment, low quality faculties, deficiency of quality faculties, poor research and consultancies, which impedes quality graduates production.

Poor Management: Though, the issue of management was not directly mentioned by interviewees, still it plays a pivotal role in Universities' success or failure. It is reported that Universities' management do not motivate faculties in research activities, do not provide incentives and misuse of resources. One respondent explained the incidence of computer disappearance from the University premises when the Head of Law department said this:

> …it does not make sense, how computers and digital projectors can be stolen while the guards are always on. Yet the management has not taken an initiative to reveal the truth. We are blaming the management for not doing their job. ….even the remaining computers and other facilities are lapidated. (Dr Iringa, Personal communication, January 13, 2014)

On the other hand, the existence of research and consultancy policies does not guarantee practical implementations without involvement. Some interviewees were not even aware of the policy existence. Moreover, respondents from public Universities blame the government for untimely fund disbursement. To justify this one of planning Director said:

> "…..it is sad to say, the requested fund reaches us by the time closer to the next fiscal budget. This situation has made our plans to remain in papers without implementation. ….last year we were forced to reimburse the injected funds since it was too late to start any implementation. …..similarly, whenever we get funds on time it is less than half of the proposed budget. At all times, the ministry has not been helpful to us." (Dr Njombe, Personal communication, February 27, 2014)

In this case, government Universities are not only encountered by University management challenges alone, but also the government challenges via the responsible ministries. We are in the argument that

until and unless, the government and Universities managements co-operate, public Universities will continue suffering the same way, towards objectives achievement.

CONCLUSION AND RECOMMENDATIONS

The employed Mixed Methods Research findings suggest that there is convergence of results from questionnaire and interviews. First, results suggest that teaching is significant to the Universities' efficiency and is given precedence than the other two objectives. Implicitly, the Universities direct more resource in the production of graduates than in research and consultancy services. However, high enrolment, shortage of faculties, low quality of faculties and poor facilities affects teaching. Consequently, poor quality of graduates has been the case. To add more, shortage of funds, lack of skills, lack of training to junior staff and poor management are some of Universities' efficiency bottlenecks. Conclusively, it is affirmed that there is a high convergence of results obtained through questionnaire and interviews. Nevertheless, these results are limited to variables involved and scope. Other studies employing more sample, different variables and scope might reveal dissimilar findings. It is recommended that Universities need to engage in all three core objectives namely teaching research and consultancy. The identified gap of University-Industry collaboration need to be bridged hence, increase their efficiencies. These can only be successful through sustainable use of available resources.

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