

# Shift in the Ratio of Teaching to Administrative Staff and Implementation of the Core Mandates of Public Universities in Kenya.

By

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## Abstract

The ratio of teaching to administrative staff refers to the quotient of teaching and administrative staff expressed as a ratio in its simplest form. It is used to compare the institution's spending on instruction relative to administration which is an important indicator of a university budget priorities. When combined with other measures, it can also serve as a warning that the institution's administrative operations risk growing disproportionately in relation to its core academic functions, placing upward pressure on the cost of tuition and required fees. The shortfalls in funding emanating from the implementation of Differentiated Unit Cost (DUC) funding formula compelled the researcher to assess the shift in the ratio of teaching to administrative staff from 3:1 in order to understand how the universities spent their capitation. Data was collected from heads of faculties/schools/ institutes and Vice Chancellors of public universities in Kenya. The study's target population was three hundred and sixty. Thirty percent of the target population rule was used to get a sample of one hundred and eight comprising nine Vice Chancellors and ninety- nine heads of faculties/ schools/ institutes. Stratified random sampling was used to pick nine universities of study. Questionnaire, interview, and observation were used for data collection. Validity was ascertained by expert judgement by lecturers in the department of Educational Management, Garissa University. Reliability of questionnaire items was analysed using Cronbach's alpha index. Questionnaire's data were analysed using Pearson r. Interview Schedule's data were analysed descriptively while data from observation were analysed based on interpretation by the researcher. This study findings indicated that: public universities experience administrative bloat. Results for the correlation between shift in the ratio of teaching to administrative staff in government funding and implementation of the core mandates of public universities in Kenyan indicated that the two variables were weakly correlated ( $r(68) = .124, p > .05$ ). This study recommended that universities stick to 3: 1 ratio of teaching to administrative staff to ensure prudent expenditure of resources and implementation of their core mandates.

**Keywords:** Ratio; Administrative staff; Teaching Staff; Differentiated Unit Cost Formula; Correlation, Pearson r,

## 1.0 Introduction

Universities for a long time have been places of knowledge acquisition, production of new knowledge, and community outreach (Watson et al., 2011). Public higher institutions of learning, according to Campos & Sotelo (2001) are pace setters when it comes academic standards through launching alterations in teaching, research and faculty professional growth in the areas they work, and sustain centers of excellence in the same fields and professions. They also offer programs for students beyond undergraduate studies and specialization for scholars, scientists, writers, artists, and other professionals. In addition, they carry out research in several areas of specialization, thereby subscribing to circulation and use of knowledge (Kitawi, 2009). As if that is not enough, universities are at the fore front when it comes to community service besides scholarly and technical assistance to government, they offer learning and training services to the private sector (Martin & Etzkowitz, 2000; Sawyer, 2002).

Besides teaching and research, universities also participate in community service (Lorenzo & Francesca, 2020). Community service in this context implies purposeful efforts which are aimed at developing the competences of collective life and action (Leliugiene & Barsauskiene, 2003). It is argued further by Leliugiene & Barsauskiene (2003) that these efforts are of two types: Oriented directly at developing the competences; and directed at creating conditions for developing the competences in the community. Community service especially in territorial

communities requires competences in the areas of partnership, organizing, project development and management, entrepreneurship, harmonization of the educational environment, Culturalism and social work (Yombi, Chouaïbou, & Agoume, 2019).

In order for public universities to carry out their mandates, the government of Kenya funds all public universities (Gudo, 2014). The government therefore sets up rules on how the money advanced to universities shall be spent. One such rule is on recruitment and placement of both teaching and non-teaching. The rule is based on the ratio seventy teaching staff to thirty administrative staff. It is used to compare the institution's spending on administration relative to instruction which is an important indicator of a university budget priorities (Scafidi, 2013). When combined with other measures, it can also serve as a warning that the institution's administrative operations risk growing disproportionately in relation to its core academic functions, placing upward pressure on the cost of tuition and required fees (Brinkman, 1981; Martin & Hill, 2012).

In UK, universities have been growing for decades, but most of the resources fuelling that growth have gone into expanding university administration and not faculty (Andre, 2017). In another study in USA, conducted between 1975 and 2008 established that the number of faculty had grown by 10% while the number of administrators had grown by 221%. As the average cost of university education continues to rise, many have criticized universities for "administrative bloat" as one of the potential culprits (Rogers, 2012; Kaplan, 2019).

Kenyan public universities exist as two universities- in- one, whereby there is the administrative and academic universities both existing parallel to each other (Kanyinga, 2021). Of the two universities, the administrative university comprises administrators, finance officers and support staff and is the most powerful and influential besides being the largest and having staff that are several times more than the teaching staff. A back-of envelope calculation of the recurrent costs absorbed by the administrative support is over 60% because of the similarities in their salaries when compared with those of lecturers (Kanyinka, 2021). Although the core business of administrative staff is not teaching, in the 1990's the administrative staff compelled the university councils to give them professor-equivalent and lecturer-equivalent titles and salaries (Kanyinka, 2021).

### 1.1 Statement of the Problem

Enrolment in to degree programs at Kenya's public universities has been increasing dramatically, rising by 41%, and 37 % for the years 2018/2019 and 2019/2020; 2019/2020 and 2020/2021 respectively (KUCCPS). But unlike in almost every other growing industry, higher education in Kenya has not been efficient. Instead, universities now have more administrative staff and spend more on administration to educate every single student. In fact, for every one hundred Kenya Shillings spend on education, sixty-six shillings is spent on administrative staff and only forty shillings is spent on instruction (Kanyinka, 2021).

As a consequence of administrative bloat, universities that experience administrative bloat have adopted an overprotective culture that pampers students' feelings and self-esteem which has led to entitled consumer attitude in students hampering educational progress in students but fosters the "five-year party" mindset by universities. In the last three decades there has been a mindset shift in which administrators look at themselves and what they see is that they are also as educators on equal terms with the rest of the teaching staff. Because many administrators see their role as that of helping students become good and active "citizens" and overcome their biases, they take it upon themselves to re-teach them. All these things combine to form a massive distraction from the real reason universities exist in the first place. All other stuff administrators are directing students' and faculty members' attention to, only crowds out education. This redirecting of focus has led to higher education's core mission to be centred again. It's now more about activism for trendy causes and less about intellectual development.

### 1.2 Objectives of the Study

The objective of the study was to assess the shift in the ratio of administrative to teaching staff in government funding and its relationship with implementation of the core mandates of public universities in Kenya.

### 1.3 Research Question

To guide the study, the following research question was used;

"How does the shift in the ratio of Teaching to Administrative staff in government funding relate to implementation of the core mandates of public universities in Kenya?"

### 1.4 Research Hypotheses

The following hypothesis was used to guide the study:

H<sub>0</sub>: There is no significant relationship between shift in the ratio of teaching to administrative staff in government funding and implementation of the core mandates of public universities in Kenya.

### 1.5 Theoretical Framework

Resource dependence theory states that, behaviours of organizations are shaped by availability of external resources upon which organizations rely for survival (Fowles, 2014). Fowles (2014) observes further that resource dependence theory presents another way of explaining the behaviours of public higher education institutions. Resource dependency suggests that institutions deprived of critical resources will try to get same or new ones from elsewhere (Slaughter & Leslie 1997). Outside agencies are able to exert some degree of influence over an organization when they control scarce resources that the organization cannot obtain elsewhere.

Remarkable institutional measures, move, in the direction of discussions to head for market and stay away from public sources in order to guarantee uninterrupted accessibility of much needed supplies. In addition, official institutional roles such as technology transfer or legal departments, are used to assist in containing and stabilize exchange of resources between the institution and its surrounding. When an institution tries to gain control over the activities of external entities that can provide it with the necessary supplies, it must be ready to surrender some of its own independency in exchange. In this way, institutions run in to conflict between the wish to maintain institutional independency and the pining to reduce uncertainty that come with the lack of a steady resource stream.

Pfeffer and Salancik (1978) states resource dependency acknowledges that alliances within institutions have varying returns. those members of the institution who need external resources will tend to control and influence the institution. Thus, power within an institution comes with the attainment of critical and scarce resources. As long as an institution is indebted to external funding party, it will remain semi- autonomous unless there is deliberate shift in revenue structure away from public appropriations and towards increased reliance on tuition fees payments (Fowles, 2014). The rationale for using this theory was to underscore the importance of institutional independence how higher education institutions can use the theory to embark on a journey towards resource independence. Independent universities will then be able to hire staff that they needed without paying attention to the ratio of teaching to administrative staff of 5:2. This ratio is a condition given to universities by the public financier to limit universities on how they can use the resources given to them by the government.

### 1.6 Conceptual Framework

A conceptual framework is a graphic organizer explaining the main things to be studied (Miles & Huberman, 1994).

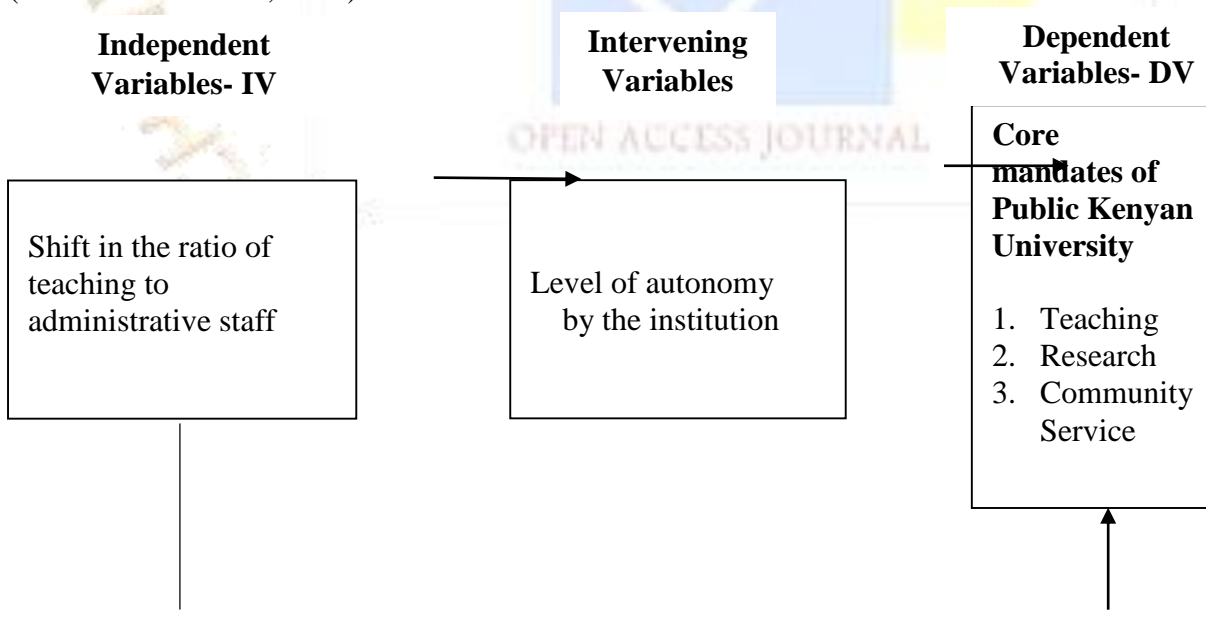


Figure 2: Conceptual Framework

The implementation of the core mandates of public universities is influenced by the Shift in the ratio of teaching to administrative staff both directly and indirectly.

## 2.0 Literature Review

The ratio of teaching to administrative staff relates to the quotient of teaching staff and administrative staff expressed as a ratio in its simplest form (Zhang & Schmidtz, 2013; Francisco, 2020). It is used to compare the institution's spending on administration relative to instruction which is an important indicator of a university budget priorities (Scafidi, 2013). When combined with other measures, it can also serve as a warning that the institution's administrative operations risk growing disproportionately in relation to its core academic functions, placing upward pressure on the cost of tuition and required fees (Brinkman, 1981; Martin & Hill, 2012). According to Schaffhauser (2017), instructional costs encompass direct instructional support, as well as academic administration (academic deans); libraries, Museum and galleries; and anything else related to supporting the institution's primary mission. On the other hand, administrative costs covered those expenses tied to daily operational support, including general administrative services, executive direction and planning, legal and fiscal operations and public relations and development (Schaffhauser, 2017).

In UK, universities have been growing for decades, but most of the resources fuelling that growth have gone into expending university administration and not faculty (Andre, 2017). One US study found that between 1975 and 2008, the number of faculty had grown by 10% while the number of administrators had grown by 221%. According to Andre (2017), nearly 67% of higher education institutions in the UK had more administrative staff than academic staff. Andre argues further that the expansion of administration has led to minimal or no activity leading to a rise in operational costs. As the average cost of university education continues to rise, many have criticized universities for "administrative bloat" as one of the potential culprits (Rogers, 2012; Kaplan, 2019).

Kaplan (2019) argues that, while a surface level analysis might equate increased spending on administrative positions with higher student attendance costs, experts have suggested that this may not be the case. The relationship between administrative and instructional spending is not only central to institutional efficiency and reflective of institutional priorities, but it also raises issues of appearance, public image, and institutional morale (ACTA, 2017). A 2010 study of higher education costs at 198 leading public and private colleges and universities in USA also found a 39% increase in instructional spending for every student during the years 1993 to 2007. For the same period a 61% increase in administrative spending per student (ACTA, 2012). ACTA (2012) also found out that the ratio of academic staff and support staff positions per administrator had declined at public research universities from 3.5 in 1990 to 2.7 in 2000, and all the way down to 2.2 in 2012.

According to a study by Martin & Hill (2012), in which they attempted to quantify the factors that drive costs at 137 public research universities by examining cost effects on institutions due to external forces, like faculty and administrative salary trends, and internal decisions, like where to spend available money, the researchers found that college officials' own decisions accounted for a \$2 increase in cost for every \$1 increase caused by external factors which is in tandem with ACTA (2012) study in which they made similar analysis and arrived at 2.2 as the ratio of Faculty to one full time Administrator. However, Martin & Hill (2012), argued that for optimal performance by higher education institutions, a ratio of three is to one (3:1) is the Ideal.

Skewing the three-to-one ratio with too many administrators or too many faculty members would cause costs to climb (Martin & Hill, 2012). Martin and Hill (2012) posit that the imbalance between people who are actually in the trenches and those overseeing that is the reason why costs grew out of control for the last three decades. Although faculty salaries have remained relatively static, administrative salaries have not (Flaherty, 2020). A 2017 survey of American colleges and universities found that the average salary for full professors was \$102,402, compared to an average salary of \$334,617 for college and university presidents and \$202,048 for chief financial officers. With a high ratio, institutions risk signalling misplaced priorities, which can have adverse effects on their ability to grow in areas pertinent to their academic missions, such as attracting and retaining prominent faculty (Brinkman, 1981).

According to Kaplan (2019), the following factors have been proposed as causes for administrative expansions: Universities enrolling more diverse student bodies will require academic and social support services to serve these new student demographics adequately; As more and more; lower-income, racial and ethnic minority students come to campus, they often need additional services to succeed in college (Kelchen, 2015). Kelchen (2015) states further that when social justice movements continue to manifest on university campuses, forcing issues like sexual

assault and race relations onto the radar of both students and administrators, new staff positions have to be created to meet student demands.

For institutions of higher education to operate most effectively, they should employ three permanent lecturers for every one permanent administrator (Martin & Hill, 2012; Ginsberg, 2011). Shifting away from the 3:1 ratio makes the lecturers less noticeable while administrative staff get more noticeable (Ginsber, 2011). Attempting to tilt the toward teaching staff keeps universities focused on their core mandates (Vedder, 2019).

Lecturers’ salaries in Kenya differ on account of experience, level of education, and location for the same Grade level (Whownskenya, 2019). According to Whownskenya (2019), a lecturer in Kenya typically earns around Ksh179,839 average monthly salary, comprising of housing, transport, and other allowances. The table below shows Lecturers Gross monthly salary based on one’s experience.

Table 1.  
Lecturers’ Gross Monthly Salary Based on one’s experience

Experience level in years	Monthly gross salary	Percentage difference
Up to 2	97 240	.....
2-5	133 567	37
5-10	149 914	12
10-15	182 609	22
15-20	215 304	18
Above 20	248 906	16

Source:

Whownskenya, 2019

Table 4 shows the basic monthly salary scales for both academic and non-academic staff in Kenya Shillings.

Table 2.  
Comparison salaries within same grades for teaching staff and non- teaching staff

Grade	Non- Teaching Staff	Teaching Staff				
		Tutorial fellow	Lecturer	Senior Lecturer	Associate Professor	Full Professor
11	79 344-	83 598-	.....	.....	.....	.....
	112 312	118 348				
12	94 347-	.....	99 409-	.....	.....	.....
	131 736		140 683			
13	106 327-	.....	.....	112 038-	.....	.....
	149 940			159 720		
14	135 859-	.....	.....	.....	145 441-	.....
	189 813				203 605	
15	170 681-	.....	.....	.....	.....	170 681-
	248 898					248 898

Source: Laikipa University Website

Kenyan public universities exist as two universities- in- one, whereby there is the administrative and academic universities both existing parallel to each other (Kanyinga, 2021). According to Kanyinga (2021) the universities have different interests, powers and influence. Arguing further, Kanyinka (2021) states that, of the two universities, the administrative university comprises administrators, finance officers and support staff and is the most powerful and influential besides being the largest and having staff that are several times more than the teaching staff. A back-of envelope calculation of the recurrent costs absorbed by the administrative support is over 60% because of the similarities in their salaries when compared with those of lecturers (Kanyinka, 2021). Although the core business of administrative staff is not teaching, in the 1990’s the administrative staff compelled the university councils to give them professor-equivalent and lecturer-equivalent titles and salaries (Kanyinka, 2021). Kanyinka (2021) posits further that the administrators coveted those titles because they too wanted to import vehicles without paying import tax, a privilege that was later withdrawn by President Mwai Kibaki.

### 3.0 Research Methodology

Concurrent mixed methods design was adopted for use in this study because it allows triangulation and sanctions the gathering of methodical data set that allows comparison between cases of similar attributes (Malhotra, 2010; Bryman, 2012). According to Cavaye (1996), concurrent mixed methods is a verifiable inquiry that looks in to present-day occurrences within their authentic surroundings, more so when the borderline between occurrences of interest and their surroundings are unnoticeably interlaced. It involves data relating to the same variables collected from a group of respondents with similar characteristics (Czaja & Blair, 2005). The research instruments used to collect data were; questionnaires for heads of faculties/ schools/ institutes, observations schedule on physical facilities, and Vice Chancellors’ interview schedule. The location of the study was multiple and included; -the University of Nairobi, Moi University, Kibabii University, Garissa University, Kenyatta University, Machakos University, and Cooperative University of Kenya.

### 3.1 Validity of Research Instrument

The researcher considered content, face, and construct validity. According to Content validity is done by expert judgement by the scholars in the area of educational management in the department of education, Garissa University. The expert judgement involved scrutinizing the instruments (Huck, 2000). The core of the judgement was on sections of the instrument that contain items which address the shift in the ratio of teaching to administrative staff and the core mandates of public universities to determine whether those items adequately addressed the objective of the study. Following next, was measurement of face validity by simply looking at the appearance (face value) of the test and deciding whether it measures what it claims to be measuring. This is the least sophisticated measure of validity. Tests can be considered to have high face validity or low face validity. High face validity test is one in which the purpose is clear, even to naive respondents while tests in which the purpose is unclear have low face validity (Nevo, 1985).

### 3.2 Data Analysis

Data collected was carefully scored and methodically arranged to enable data analysis (Gay, Mills & Airasian, 2006). It was then tabulated and coded to make them ready to be input into the computer using the Statistical Package for Social Sciences in order to derive meaning. Questionnaire data were analysed using Pearson r (because there was a linear relationship between the variables), while interviews data were analysed descriptively. Observations data were analysed based on the researcher’s interpretation (Bowen, 2009).

### 4.0 Results

Results for Quantitative data obtained from Pearson correlation analysis of the hypothesis (*There is no significant relationship between Shift in the ratio of Teaching to Administrative staff in government funding and implementation of the core mandates of public universities in Kenya*) at an alpha level of 0.05, 68 (70-2) df are presented in table 2.

Table 2.

*Pearson’s Correlation Analysis of the shift in the ratio of teaching to administrative staff in government funding*

		Correlations	
		Shift In the Ratio of Teaching to Administrative Staff in Government Funding	University Core Mandates
Shift In the Ratio of Teaching to Administrative Staff Government Funding	Pearson Correlation	1	.124
	Sig. (2-tailed)		.307
	N	70	70
University Core Mandates	Pearson Correlation	.124	1
	Sig. (2-tailed)	.307	
	N	70	70

With 68 (70-2) degrees of freedom (df) and alpha level of 0.05, the analysis produced an r value of .124 and a P-value of 0.307 (Table 2). The P- value of 0.307 is greater than the alpha level of 0.05. The indication of the results as displayed in Table 2 is that there is a positive correlation between the shift in the ratio of teaching to

administrative staff in government funding and implementation of the core mandates of public universities in Kenya. Never the less, the two variables were weakly correlated ( $r(68) = .124, p > .05$ ). From the results of the analysis, there is no significant relationship between shift in the ratio of teaching to administrative staff in government funding and implementation of the core mandates of public universities in Kenya. Consequently, the null Hypothesis retained.

Results from the Vice Chancellors responses on interview items i) has your university experienced enrolment of more diverse student bodies? ii) has your university experienced a rise in gender- based assaults? iii) has your university experienced enrolment of lower income students iv) What in your view is the effect of enrolment of more diverse student bodies, a rise in gender- based assaults, enrolment of lower income students on the teaching to administrative staff ratio? v) what is your university teaching to administrative staff ratio?, indicate that public universities in Kenya have experienced enrolment of more diverse student bodies which justifies them to hire more staff to address the needs of the diverse student bodies (Kaplan, 2019; Kelchen, 2015). Further results of this study revealed that public universities in Kenya have not experienced a rise in Gender- based assaults, but have experienced enrolment of lower income students. This study findings also established that Vice Chancellors of public universities in Kenya think that enrolment of more diverse student bodies, a rise in gender- based assaults, enrolment of lower income students has no effect on the teaching to administrative staff ratio. Additional results indicated that most public universities in Kenya have a skewed ratio in favor of administrative staff (1:2), which means, public universities in Kenya focused more on activities that are non-mission contrary to recommended ratio of 3:1 (ACTA, 2012).

This study also carried out observations on lecture halls, laboratories and libraries in terms of sanitation, safety, maintenance, space, and adequacy. Poorly sanitized, secured, maintained, spaced, and not adequate laboratories, lecture halls and libraries while administration is sparkling is an indicator of misplaced priority that shifts expenses away from the universities core mandates. Observation on sanitation of lecture halls, laboratories and libraries was based on the understanding that lecture halls, laboratories and workshops are the areas of the university that students spend most of their time. Having them clean is important for the development and the learning of students. Observation results on sanitation of lecture halls, laboratories and libraries indicated that most Kenyan public universities' lecture halls, laboratories and workshops have good sanitation.

Observations on safety of lecture halls, laboratories and libraries was informed by the rules of ergonomics upon which the design should follow in order to attain the good safety and health of the user, in particular the students and the lecturers (Abdul-Halim, 2009). The results of the observations indicated that most Kenyan public universities have safe lecture halls, laboratories and libraries. On maintenance, the researcher was guided by the understanding that Students and staff thrive in an orderly, clean, and safe environment. Lecture halls, Laboratories and workshops that are well ventilated, suitably lighted and properly maintained actually facilitate learning (Lyon, 2001; Morgan, 2000). According to Lyon (2001) and Morgan (2000), poor air quality, negatively affects alertness and results in increased student and teacher absences, which can have a corresponding impact on student achievement. Moreover, appropriate facility maintenance extends the life span of older facilities and maximizes the useful life of newer facilities. This study results on maintenance of lecture halls, laboratories and workshops indicated that public universities in Kenya have well maintained lecture halls, laboratories and libraries.

Observations on space in lecture halls, laboratories and libraries were done on the understanding that lecture halls are excellent for focusing the attention of a large group on a single point, either an instructor or an audio- visual presentation (Gordon, 2020), the amount of space taken up by furniture and what is left vis-à-vis the number of users per session. Spacious lecture halls, laboratories and libraries not only promote student learning but minimizes on absences by both students and lecturers. The results of the observations indicated that public universities in Kenya have spacious lecture halls, laboratories and libraries.

Observations on adequacy of lecture halls, laboratories and libraries were informed by the fact that lecture halls, laboratories and libraries are integral part of infrastructures required in institutions of higher learning that can impact students' learning experience. The results of the observations on adequacy of lecture halls indicated that newer public universities had inadequate lecture halls, which implied that newer universities in Kenya do not have adequate lecture halls

(Newer universities are those which were established between 2010 and 2017). Further results on of observations on laboratories and libraries indicated that public universities in Kenya have adequate laboratories and libraries.

## 5.0 Conclusion

The aim of this study was to assess the shift in the ratio of teaching to administrative staff in government funding and its relationship with implementation of the core mandates of public universities in Kenya found out that there was no significant relationship between the shift in the ratio of teaching to administrative staff in government funding and implementation of the core mandates of public universities in Kenya. Further results indicated that public universities in Kenya experience administrative bloat as evidenced by the shift in the ratio of teaching to administrative staff from 3:1 to 1:2 in favour of administrative staff. Additional findings indicate that public universities spend money on non- priority activities which were non- mission driven.

## 5.1 Recommendations

- i) The results of the study indicate that public universities experience “Administrative Bloat”, which has a negative impact on graduation rate caused by a shift in the lecturer to administrative staff ratio away from the standard 2.5:1 or 3:1 to 1:2. Universities should stick to their mandate and ensure that, for every, three teaching staff, there is one administrative staff.
- ii) The study results show that most public universities publish less than 1000 publications in a year. The government should introduce a research fund disbursed to universities based on the universities previous year’s research publications, but provide research start- up capital for new universities.

## 5.2 Suggestions for Future Research

- i) Investigating factors causing administrative bloat in public universities in Kenya.

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