CONSTRAINTS OF RESEARCH PRODUCTIVITY IN UNIVERSITIES IN TANZANIA: A CASE OF MWENGE CATHOLIC UNIVERSITY, TANZANIA

OGOTI EVANS OKENDO (PhD) SENIOR LECTURER
DEPARTMENT OF EDUCATION CURRICULUM AND INSTRUCTION
 MWENGE CATHOLIC UNIVERSITY P.O BOX 1226, MOSHI
TANZANIA (Email: eogoti17@ gmail.com)

ABSTRACT

Besides teaching, research has become a core function of universities around the world. Yet, like in many African countries, Tanzanian universities still lag behind in terms of research productivity, due to factors many researchers refer to as constraints. This study was conducted in Mwenge Catholic University to analyze resource constraints, institutional constraints, cultural constraints that influence research productivity in the University. The study was guided by expectancy theory which relates how individuals are motivated due to expected outcomes. The study employed concurrent parallel mixed methods research design. The target populations of the study were the research personnel of the three faculties of Mwenge Catholic University. Data were collected by use of questionnaires, interview guides and document analysis guide. The collected data were then analyzed using descriptive statistics for quantitative data and transcriptions and categorization of patterns and themes for qualitative data and the findings presented by use of tables, percentages and frequencies. The study concluded that resource constraints, institutional constrains and cultural constraints have a considerable influence on the research productivity in the University. The study further established that research productivity in Mwenge catholic university is at fairly adequate level. The study recommend improvement in research environment, funding, time availability to staff and resources in order to improve research productivity of Mwenge Catholic University.

KEY WORDS: Resource constraints, institutional constraints, cultural constraints and research productivity

Introduction

 The development of knowledge-societies, particularly in the developed countries, has made universities to be crucial national assets where many governments are looking to them to generate and share knowledge through research, produce short term practical outcomes, commercialize their intellectual property, and chase funding, no matter what it takes to win it (Group Eight, 2013). Consequently, the universities around the world have scaled up their regard for research from being a core function together with teaching, to becoming a dominant function for university prestige (Musiige, 2014).Nonetheless; this is completely a contrary situation in many universities in Africa. Research productivity is of vital significant not only for the university but also for the community surrounding the university and the nation at large. Universities are among of the organs where

societal problems get their solutions through studies which are conducted by the expertise in the universities. Many countries have developed socially, economically and even technologically due to investments on education and use of education expertise particularly from the universities. The productivity of each author and institution is calculated according to how many times they appeared in the database of international journals an average number of published research report in the last two years (Changsrisang, 2008). Thus researchers are very essential for the knowledge constructions in higher learning institutions.

Faculty members in higher education may have some individual needs which should be met to motivate them to take up research more seriously .When individuals do not fulfill their perceived needs, they will look for alternatives to satisfy the need, however, such initiatives may be influenced by variables such as, age of the researcher, their academic positions, research capacity, researcher ship process on mental and thought of researcher and lastly institution (policy, library expenditure and exist faculty commitment). UNESCO (2012) asserted that research and knowledge presume of University networking and cooperation became vital orders for the further development of research, but lack of cooperation between research resources, facilities, and research people lead to ineffectiveness of research process into the universities either because competition and cooperation was not mutually exclusive of the research agenda of a particular institution. According to Merchant (2009), effective university leaders can embed research culture into their universities and sub-units by valuing and rewarding research and utilizing a range of human resource management strategies to develop and encourage academics' research. Bland et.al (2009) goes further to state that research productivity is shaped by the interplay of the three vast compositions, and it is the progressive interaction of individual and institutional attributes, complemented with competent leadership, that results into efficient performance of individuals and departments.

Statement of the problem

Despite the fact that research productivity is one of the requirements for every lecturer in any university, there has been low turn up of lecturers to participate in writing and publishing research works especially in African universities. Decline in research productivity has been the major problem for different Universities. Sulo (2012) reported that Senior Lecturers at Moi Universities have remained in that position without being promoted to professorship because of failing to participating in research activities which include writing and publishing research work. Apart from being a criteria for promotion, research productivity has many different significances which include: development of new knowledge, shaping the existing knowledge, improving the effectiveness of teaching and promoting the discovery in the society yet there is less participation of lecturers in research activities.

Despite the fact that the number of universities in Tanzania has increased enormously in last decade, the influence on research productivity most Universities is comparatively slow. In fact, compared to South African Universities such as Cape Town, which is among the leading research universities in Africa, (Musiige, 2014). .Therefore, Mwenge Catholic University being the leading research institution in Kilimanjaro, has a major role in producing knowledge-based resources necessary to sustain the growth momentum. While many past studies assert financial inadequacy as the common constraint on research productivity in universities, several recent studies have begun to focus on organizational factors as powerful attributes to research productivity in universities (Dunder et.al). These factors, coupled with the generally acceptable financial constraint, impede research productivity in many universities and Mwenge Catholic University is not an exception.

Research questions
1. What resource constraints influence research productivity at Mwenge Catholic University?
2. What are the institutional constraints that influence research productivity in Mwenge Catholic University?
3. To what extent does cultural constrains influence research productivity at Mwenge Catholic University?

Theoretical Background

This study was guided by Expectancy theory which was proposed by Victor Vroom of the Yale School of Management in year 1964. The theory proposes an individual will behave or act in a certain way because they are motivated to select a specific behavior over other behaviors due to expected result and the motivation of behavior is determined by desirability of the outcome. Theory introduced three variables within the expectancy theory which are valence (V), expectancy (E) and instrumentality (I). Expectancy (effort and performance) is the belief that one's efforts that will result in attainment of desired performance goals, thus the expectancy have three categories which are self-efficacy, goal difficulty and perceived control. Instrumentality (Performance and Outcome) is among the variable of the expectancy theory, the belief that a person will receive a reward if the performance expectation is met. This reward may present itself in the form of a pay increase, promotion, recognition or sense of accomplishment. Instrumentality is low when the reward is the same for all performances given. Another way that instrumental outcomes work is commissions. With commissions performance is directly correlated with outcome as how much money is made. Factors associated with the individuals' instrumentality for outcomes are trust, control and policies: Trusting the people who will decide to gets what outcome, based on the performance, Control of how the decision is made, Policies understanding of the correlation between performance and outcomes. Valence is the value an individual places on the rewards of an outcome, which is based on their needs, goals, values and sources of motivation. Influential factors include one's values, needs, goals, preferences and sources that strengthen their motivation for a particular outcome. Valence is characterized by the extent to which a person values a given outcome or reward. This is not an actual level of satisfaction rather the expected satisfaction of a particular outcome.

RESEARCH DESIGN AND METHODOLOGY

The study adopted mixed research method approach. Utilizing the convergent parallel design the purpose of a convergent of Parallel mixed methods design was to simultaneously collect both qualitative and quantitative data, merge the data and use the results to understand a research problem. Mixed method approach not only allows the researchers to be more confident in the results of the study but also provides a clearer understanding of the phenomenon of the study (Jick 1979; Thurmond 2001; Johnson, Onwuegbuzie and Turner 2007). To illustrate, the researchers are able to use qualitative data as the critical counterpoint to quantitative data and by so doing, the quantitative analysis benefits from the perceptions emanating from the personal experiences and the firsthand observations of the qualitative approaches (Jick 1979). More specifically, by combining the quantitative and qualitative approaches, this study sought to not only bring out the major trends (patterns) and practices in research productivity but also to elicit specific voices from lecturers and academic managers and policy-makers. Utilizing mixed methods is not without limitations. For instance, it makes replication exceedingly difficult (Jick 1979; Thurmond 2001).

Data for this study was collected from 36 lecturers, two deans of faculties and two directors. Making a total of 40 respondents. The selection of lecturers was conducted through probability

sampling procedures that is simple random sampling and stratified random sampling to select 12 lecturers from each faculty. The deans and directors were selected through purposive sampling procedures as key informants. To supplement data collected from the primary respondents document analysis guide was used to collect secondary data from University official documents such as research and publication policy, promotion policy, strategic plan and teaching policy.

The bulk of the data realized by the study was managed and processed utilizing SPSS computer Software. The analysis occurred in two stages. The first stage involved the processing quantitative data from the questionnaire administered to the primary respondents of the study utilizing the SPSS quantitative data analysis software. During this stage, descriptive statistics especially frequency distributions, percentages and, where applicable, means were computed and utilized to display data patterns; that is, to construct a descriptive profile of the study sample and to depict the patterns in the influence of policies and practices targeted by the study. The second stage in the data management and analysis process involved the transcribing of in-depth interview guide and document analysis guide. These were transcribed and categorized by research questions. Patterns from these sources of data constituted a basis for the cross-validation of results (patterns) obtained from the quantitative data. Interpretation was based on themes which emerged from the data and were supported by selected quotes.

RESEARCH FINDINGS AND DISCUSSIONS
Resource constraints that influence research productivity at Mwenge Catholic University
The first research question was to determine resources constraints that influence research productivity in Mwenge Catholic University. The results from questionnaire for lecturers and interview guide for deans and directors were analyzed and presented in Table 1

Table 1. Resource constraints that influence research productivity at Mwenge Catholic University

Resource constraint	A		D	
	F %		F	%
1. My university has few lecturers with PhDs to spear head research productivity	20	55.6	16	44.4
2. The salary of the teaching staff in my university does not encourage faculty staff to engage in research activities	34	94.4	2	5.6
3. The university has limited equipment and material for undertaking research activities	18	50.0	18	50.0
4. The University does not allocate 2% of its income for research activities	28	77.8	8	22.2
5. The teaching policy in my university does not factor time lecturers should spend in research activities when calculating the teaching workload	22	61.1	14	38.9
6. The university does not have adequate computer application software resources for data analysis	21	58.3	15	41.7
7. The university does not have collaborative initiative of staff research in teams	16	44.4	20	54.6
8. The university does not provide institutional/ departmental support on research initiatives	23	63.9	13	36.1

The data in Table 1 indicates that the participants who took part in the study agreed with more than 50% that the university has few lecturers with PhDs to spear head research productivity, the salary of the teaching staff does not encourage faculty staff to actively engage in research activities, the university does not allocate 2% of its income for research, the teaching policy does not factor time lecturers spend in research activities when calculating the teaching workload, the university does not have adequate computer application software for data analysis and the university does not provide institutional / departmental support on research initiatives are key resource constraints in Mwenge Catholic University. However, the participants disagreed with the assertion that the university does not have initiatives of staff in research teams and that the university has limited equipment and material for undertaking research activities are not key resource constraints in the University. These findings were consistent with the views of deans and directors who indicated that the university had resource constraints that has slowed down research productivity one of the deans said;

> *The current structure of laboratories cannot support serious scientific research by faculty*
> *Members unless the new laboratories under construction are completed and equipped.*

While one director said that;

> *The university does not benefit from the national research fund like other public university*
> *And therefore its research budget is usually less than the 2% required while the library*
> *Budget is usually less than 10% of the total university income.*

This views were consistent with RIN and RLUK (2011) report, library expenditures measures represent one of the important institutional attributes to research productivity. Libraries are critically important in helping researchers to exploit the full benefits and opportunities of the networked world, including such developments as open access and social media. In this way, Libraries go a long way in establishing stronger links with researchers and in refocusing their services to promote and exploit new technologies and new models of scholarly communication and Lertputtarak (2008) highlights that there is strong relationship between increased expenditure on library facilities and the increased research productivity of the faculty staff. In the overall, the amount of time spent by a faculty member in research activity has a strong relationship with his or her research productivity (Jung, 2012).

Institutional constraints that influence research productivity in Mwenge Catholic University
The second research question was to determine institutional constraints that influence research productivity in Mwenge Catholic University. The results from questionnaire for lecturers and interview guide for deans and directors were analyzed and presented in Table 2

Table 2, institutional constraints that influence research productivity at Mwenge Catholic University

Institutional constraints	A		D	
	F %		F	%
1. Teaching and research time influence to research productivity	24	66.7	12	33.3
2. Effective use of consultation time to meet the students by faculty members	14	38.9	22	61.1
3. Institutional management of reliable time schedule for research activities	22	61.1	14	38.9

4 Dedicated time of workshop and training in research activities by the university	10	27.8	26	72.2
5. Attendance of staff to professional research development activities both within and without the university	25	69.4	11	30.6
6. Use of email and internet services to provide feedback on matters concerning research initiates	13	36.1	23	63.9
7. Age and sex of staff influence research productivity of institution	16	44.4	20	55.6
8. Availability of sound policies to support research activities in the university	14	38.9	22	61.1
9. Creation of research infrastructural facilities such as research agenda , research teams and research institutes	23	63.9	13	36.1

The data in Table 2 indicates that the participants who took part in the study agreed with more than 50% that teaching and research time influence to research productivity, Institutional management of reliable time schedule for research activities, Attendance of staff to professional research development activities both within and without the university and Creation of research infrastructural facilities such as research agenda, research teams and research institutes are the major institutional constraints in Mwenge Catholic University. However, the participants disagreed with the assertion that Effective use of consultation time to meet the students by faculty members, Dedicated time of workshop and training in research activities by the university, Use of email and internet services to provide feedback on matters concerning research initiates, Age and sex of staff influence research productivity of institution and Availability of sound policies to support research activities in the university are not key institutional. Constraints in the University. These findings were consistent with the views of deans and directors who indicated that the university had institutional constraints that has slowed down research productivity one of the deans said;

> *Majority of the faculty members are currently having a workload of more than 12*
> *Hours per week which cannot enable them to undertake research activities.*

While one director said;

> *The university should provide financial support for those faculty members attending*
> *Research conferences or seminars to encourage them to increase research productivity*

This views were consistent with Ju, (2010) who argues that the selection of new faculty members is the most critical process for developing and strengthening a culture of research. Institutions with high Doctoral prestige produce the graduates that are the best sources for other institutions to recruit productive faculty members. This is of particular relevance because universities also value research from the standpoint of prominence of their faculty members in obtaining competitive research grant funding, which increases the reputation of the institution.

Table 3.Cultural constrains influence research productivity at Mwenge Catholic University

Cultural constraints	A		D	
	F %		F	%
1. Availability of library facilities	12	33.3	24	66.7
2. Availability of internet services	16	44.4	20	55.6
3. Attitude of researchers towards research activities	22	61.1	14	38.9
4 Contribution of cultures towards research activities	23	63.9	13	36.1
5. Qualification influence of researchers in the university	17	47.2	19	52.8
6. Allocated time for research productivity in the university	22	61.1	14	38.9
7. Cooperation of the research teams	21	58.3	15	41.7
8. Publication capacity. of the research teams	13	36.1	23	63.9
9. Institution policy on research productivity.	12	33.3	24	66.7
10. Timely submission of progress report and closeout report	10	27.8	26	72.2
11 Sustainability support and coordination of faculty development initiatives	19	52.8	17	47.2
12 Provision of research information and authorization for external research	26	72.2	10	27.8

The data in Table 3 indicates that the participants who took part in the study agreed with more than 50% that Attitude of researchers towards research activities, Contribution of cultures towards research activities, Allocated time for research productivity in the university, Cooperation of the research teams, Sustainability support and coordination of faculty development initiatives and Provision of research information and authorization for external research are the major cultural constraints to research productivity in Mwenge catholic university. However. The participants disagreed that Availability of internet services, Qualification influence of researchers in the university, Publication capacity of the research teams, Institution policy on research productivity and Timely submission of progress report and closeout report are not key cultural constraints in the University. This findings were in consistent with MacPherson (2005) who argues that Research culture development requires significant allocation of resources to training and development. Institutions or departments with inadequacies in research skills and other personal development issues will definitely require training and other personal assistance in order to be proficient and Tash, (2006) who asserts that Universities and other institutions involved in research need to ensure there is good relationships among faculty members as this would go a long way in developing and maintaining research culture in their respective institutions as well as supporting inter-faculty mentoring initiatives.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion   resource factors that include; few lecturers with PhDs to spear head research productivity, the salary of the teaching staff does not encourage faculty staff to actively engage in research activities, the University does not allocate 2% of its income for research, the teaching policy does not factor time lecturers spend in research activities when calculating the teaching workload, the University does not have adequate computer application software for data analysis and plagiarism check and the University does not provide institutional / departmental support on research initiatives are key for the improvement of research productivity in Mwenge Catholic University

The study Further deduced that institutional factors such as teaching and research time, Institutional management of reliable time schedule for research activities, Attendance of staff to professional research development activities both within and without the University and Creation of research infrastructural facilities such as research agenda, research teams and research institutes play a greater role in enhancing research productivity in Mwenge Catholic University

Finally, the study concluded that, in order to increase research productivity in Mwenge Catholic University, Attitude of researchers towards research activities, Contribution of cultures towards research activities, Allocated time for research productivity in the university, Cooperation of the research teams, Sustainability support and coordination of faculty development initiatives and Provision of research information and authorization for external research play a greater role in enhancing research productivity of the Faculty staff of Mwenge Catholic University.

The study recommends that Mwenge Catholic University should double its efforts in sourcing for grants to finance research projects. This can be done through partnership with higher educational institutions within Tanzania and beyond, industries and non-governmental organizations that deal with crosscutting issues influencing research and community development. The University should come out with a published policy which adequately remunerate research staff as well as increase budget allocation to library, research projects and equipment and material that will be used to enhance research productivity among academic staff and graduate students.

The study further recommends that Mwenge Catholic University should come up with a clear policy on teaching, research and attendance of conferences and workshops for faculty staff both within and without the institution. This policy will act as a catalyst for enhanced research culture in the institution hence boosting research productivity of faculty members.

The study further recommends that Mwenge Catholic University should encourage faculty staff to develop a new culture on research, conference participation and publication to increase research productivity of the institution. This may be achieved by establishing the appropriate research infrastructure to transform the university into a research one university status, conducting capacity training programme for staff and enforcing policies that will compel faculty members to take research activities seriously.

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