CHALLENGES OF THE RESEARCH MANAGEMENT OFFICE IN HIGHER EDUCATIONAL INSTITUTIONS (HEIS): LOCAL AND GLOBAL PERSPECTIVES

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ABSTRACT

What is new?	With the growing interest in managing research and sponsored programmes, HEIs are recognizing the need for research support services. For many HEIs in sub-Saharan Africa, this means up-skilling research administration and management expertise, project management proficiency, and good governance structures by setting up a research management office in these institutions to champion the cause of expanding the institutional research frontier. While subjective evidence suggests that setting up a research management office can be quite difficult, few studies have discussed the specific challenges involved.
What was the approach?	To address this gap in the existing body of knowledge, the researchers conducted desk research to (1) understand the role of a research management office in HEIs, (2) identify the challenges of the research management office and the research manager through a purposive sampling of available data on the subject, rank these challenges according to dominance and (4) offer pragmatic recommendations that will aid the office and the manager to deliver on their mandate.
What is the academic impact?	The study addresses challenges associated with the research management office in sub-Saharan Africa and offers a deeper understanding of these challenges as well as chart a course to surmount these challenges and reposition the office and managers of research to effectively and efficiently deliver on their mandate.
What is the wider impact?	The paper wakes up a call for a professional framework for career and skills development among research management practitioners and by extension, the office, and its resources, infrastructure, systems, and

procedures needed for effective research management support not only in HEIs in Sub-Saharan Africa but also worldwide.

INTRODUCTION

One of the pivots around which Higher Education Institutions (HEIs) thrive is research. In recent times, stakeholders in higher education have placed much more emphasis on research and its output as one of the engines of growth. However, one consequence of this has been how research is managed in HEIs to maximise output and expand frontiers (Ayyar & Jameel, 2019). It is instructive to note that the extent to which HEIs manage their research varies from institution to institution.

According to a study titled 'Benefits of Research Management and Administration for African Universities: The Way Forward' (Akindele & Kerridge, 2019), the researchers pointed out that the key driver for improving research capacity is the professionalization of research management and administration and most African universities lack the human infrastructure to support research activity. They were of the view that the infrastructure developed for faculty of many African universities does not fully deliver research management and administration. Discussion on research management and administration using the ten parameters of the Higher Education Institutional Capacity Assessment Tool (HEICAT) concluded that attention to weak links could lead to improvements in the research management capacities of African universities, which can translate to an increase in quality and quantity of funding research (Akindele & Kerridge, 2019). A 2010 report titled 'Research managers uncovered: Changing roles and "shifting arenas" in the academy' also indicated that the profession is now becoming a global arena and there has been some advancement in some regions as compared to others (Shelley, 2010).

Another study in 'Research Managers Uncovered: Changing Roles and Shifting Arenas on the Academy' draws on findings from a previous study that explored the Changing Roles and Career Experience of Research Managers and Research Administrators in English Universities. The researchers explored how research support has evolved during a period when the higher education sector was responding to changing science and higher education policy by drawing on Bourdieu's theory of social practice to understand these changes and identifies a shared space of tension where the research manager field crosses into the academic field (Shelley, 2010). Yet in another study titled 'Strengthening Institutional Research Administration in Uganda', researchers confirmed the need to strengthen research administration through the provision of infrastructural, organizational, and human resources development to match the dynamic research environment and funding requirements. They emphatically stated that there were limitations with grantsmanship and aimed to develop cadres of research administrators to address current and future funding agencies' policies and procedures, as well as strengthening the institutional central research coordination office and short-term training (Kakande et al., 2012). Several other studies have alluded to the fact that effective systems, procedures and requisite research management skills are necessary for successfully managing

research. These structures have however developed with force over the years to sustained research (Freeman et al., 2014; Harste et al., 2021; Jackson, 2017; Young, 1978). Nonetheless, subjective evidence suggests that HEIs in developed countries have an urge over HEIs in developing countries such as those in the Sub-Saharan Africa in the global market for academic research management as a result of lack of or inadequate infrastructure, research policies and standard operating procedures, general research environment and other resource constraints. But are these constraints peculiar to only HEIs in developing countries like institutions in sub-Saharan Africa? The research team set out to examine challenges that have been identified by researchers in HEIs in Sub-Saharan Africa and HEIs worldwide and ranked them according to dominance.

METHODOLOGY

The researchers conducted desk research where databases were searched. A systematic sampling technique using a purposive technique was adopted in searching through available literature to identify studies that looked into challenges of research management in HEIs among other variables. The researchers however focused on only challenges that confront the research management office and its managers in HEIs in Sub-Saharan Africa and Worldwide. The researchers also considered the implications of these challenges in relation to the role of the office and factors that do not propel the growth of the research manager.

The queries and search terms used were;

> (Challenges* OR Problems*) AND (Research Support* or "Research Management")
>
> OR
>
> ("Challenges" OR "Problems") AND (Research Support* or "Grant management")
>
> OR
>
> ("Challenges") AND ("Research Administration" or "Grant management")

The databases searched were the SCOPUS database of Elsevier (https://www.scopus.com), (accessed on 27th July 2021), Google Scholar (https://scholar.google.com) and the SWOV-library (http://library.swov.nl) (accessed on 28th July 2021).

These queries were used to gather data on broader research management challenges and narrowed to the research management office and its service delivery as well as the research manager's job. The variables studied included the role of the research management office, institutional commitment towards the growth of the office, research management human resource capacity, faculty perception on the pursuit of grants for research projects against academic publications, and the challenges of the research manager as a resource for effective management of funded projects.

After having expunged the false positives (e.g. studies on management and academics), fifty (50) studies were identified. Ranking of challenges was done on a dominant basis using Microsoft Excel to ascertain the highest and lowest among the challenges for both HEIs in the Sub-Saharan Africa and Worldwide. This was done by comparing challenges from different

papers with the aid of QuillBot AI to paraphrase words and sentences to deduce similarities and differences of words and sentences to ensure non-repetition of challenges.

RESULTS

Out of the fifty (50) studies considered, the researchers reviewed the role of the Research Management Office, identified the top five (5) challenges of the research management office and its managers in Sub-Saharan Africa HEIs (Table 1) and the top three (3) challenges worldwide (Table 2). These challenges were ranked in order of dominance.

THE ROLE OF A RESEARCH MANAGEMENT OFFICE IN HEIS

In order to facilitate successful research outcomes, universities and public research institutions are increasingly focused on providing adequate capacity in research administration and management (Nguyen and Meek, 2015). Within institutions, the research management office plays a leading role in the grant cycle including searching for funding opportunities, development and submission of proposals, grant preparation and negotiation, implementation of funded projects, and project closure. Other functions include identifying research collaborators for joint projects and supporting commercialisation of research results and knowledge transfer through patenting, copyright and other forms of protection of intellectual property while upholding high standards of operating procedures and best practices in research and project management. Research managers and administrators, as an occupational group within HEIs, play an important role in facilitating the processes enumerated above. Nonetheless, the research manager is seen as a "man or woman in the middle". He or she often sees himself / herself as the liaison between the interests of the researcher and the research institution. Despite the importance of their contribution to HEI research and research output, their identity has remained under-researched. As McInnis (1998) noted, there has been remarkably little systematic research study of university administrative staff in general, a situation sometimes ascribed to the fact that administrators have been deemed the 'poor relations' within academia, and consequently unworthy of sustained research or analysis by either academics or senior management (Evatt Foundation, 1994).

CHALLENGES OF RESEARCH MANAGEMENT OFFICE AND RESEARCH MANAGERS

Table 1: Top five Challenges identified in Sub-Saharan Africa HEIs

No.	Top Five (5) Challenges in Sub-Saharan Africa HEIs
1.	Low levels of institutional grasp and support for research management function and services
2.	Weak identity and low status of the research manager
3.	Lack of understanding of HEI's reliance on research managers to support and sustain the business of doing research
4.	Poor skill-set or knowledge in research management processes in line with best practices on the part of some managers of research management office

5.	Lack of career progression opportunities for research administrators and managers

From Table 1, it could be deduced that HEIs in Sub-Saharan Africa are confronted with challenges in spite of efforts of research managers and administrators to effectively manage research in their respective institutions. For instance, the challenge of low levels of institutional grasp and support for research management functions and services does not lend to effective support service delivery. Secondly, lack of understanding of the role of the office on the part of HEIs' management makes it difficult for the research management office to execute its mandate effectively. This is so because institutional top management support plays a significant role in getting the office fully functional. Furthermore, from research management practice, most of the researchers in these institutions have the erroneous impression that they can manage research and grants without the support of research managers. For example, participants' comment in a study conducted by Okonji et al, (2018) suggest that while research management offices are rapidly evolving in universities across developed countries, this concept is emerging and yet to be embraced by many HEIs in Nigeria. Some directors of research management offices in the study opined that:

> *"Majority of faculty and staff members were not keen on consulting the research management office and simply had the impression that the creation of research offices was unnecessary."*

This impression, by inference, does not position the research manager well to bring his or her knowledge, expertise and experience to impact research and researchers to rake in the benefits.

Again, research is seen as a strong personal activity that is sturdily dependent on the ideas and imagination of individuals or groups of individuals and therefore does not lend itself to management, especially from someone outside the team of researchers. In the researchers' opinion from practice however, in this competitive world of higher education, research management areas such as grant hunting, research impact assessment, research results dissemination, technology transfer and utilization of research outputs by industry and other stakeholders require the application of management skills. In addition, lack of progression opportunities for research managers to navigate their way through the ladder of progression do not encourage others to take that career path. Poor skill-set or knowledge in research management processes in line with best practices on the part of some research managers and administrators is also a bane on effective service delivery. This could be attributed to HEIs' management unpreparedness to develop the capacity of this crop of employees as a result of not understanding the role of the research management office in the scheme of research and the benefits thereof. It is sufficient to opine that research managers and administrators become skillful in their craft by practice. However, research managers and administrators do not always get the chance to practice as a result of researchers wanting to develop and write proposals for external funding and manage the resultant grants all by themselves without

giving the research manager and administrator the opportunity to prove themselves on the job.

Table 2: Top three (3) Challenges identified in HEIs Worldwide

No.	Top three (3) Challenges in HEIs Worldwide
1.	Not all HEIs give attention to the pursuit of internal and external funding for research in the same way that they do for publications or the development of new courses for academic programmes.
2.	Ever-changing demands on research managers due to changes in funding requirements, policies and procedures by different funding agencies and the dynamic research environment.
3.	Weak identity and low status of the role of the research manager.

The study also revealed challenges associated with research management office across the globe (Table 2). The challenge of Faculty in HEIs not giving the same importance of publications and development of new courses and programmes to the pursuit of grants for research came top of the three (3) challenges identified. This, in the opinion of the researchers, could cripple the research management office in the discharge of its duties as Faculty would not find it necessary to work with the office. Furthermore, Faculty in some institutions, especially HEIs in Sub-Saharan Africa, are yet to come to terms with the new wind of the concept of research management as a catalyst to achieving high research output. Perhaps the research and development unit in HEIs should champion this cause to sensitize researchers to the need to give equal attention to acquiring grants for research and writing for publications as both are necessary for one's academic pursuit.

The ever-changing demands on research managers due to changes in funding requirements, policies and procedures by different funding agencies and the dynamic research environment are tests for research managers and administrators. From practice, research managers and administrators especially those working directly with researchers to secure grants ought to upgrade their knowledge and skills in research management practice and processes of acquiring grant support for projects all the time as funding agencies and institutions tighten lose ends to ensure that funds are advanced to deserving applicants and institutions whose capability and ability to manage these funds are guaranteed. As Young (1978) discovered among other factors in a study to isolate conditions and factors associated with successful federal grants, institutional objectives, institutional credibility, a well-prepared project proposal, a full-time federal relations officer, careful targeting of proposals and close contact with federal agencies are some of the factors with successful federal grants. To further expand the discussion, Kirkland, (2008) also asserts that "Changing demands on research managers as a result of dynamics of the research environment, especially managers who have not built research management capacity are found wanting when it comes to delivery". Hence, room is created for HEIs' pessimism in giving maximum attention to what the research manager can offer.

Challenges in HEIs in Sub-Saharan Africa and HEIs worldwide are presented in a graph (Figure 1) to depict their dominance.
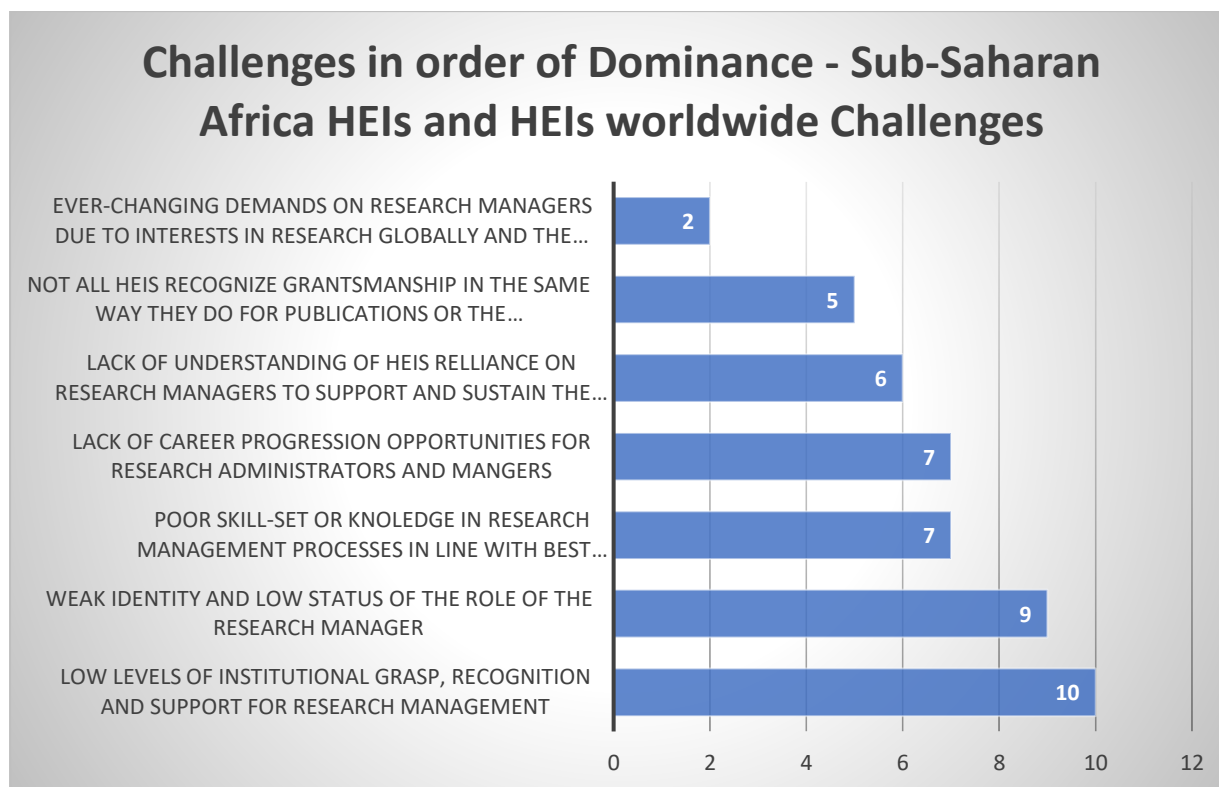

Figure. 1: Challenges in Sub-Saharan Africa HEIs and HEIs Worldwide in order of Dominance

It can be inferred from the graph that low levels of institutional grasp, recognition and support for research management dominate the challenges. There is therefore the need for re-orientation of the institutional mind to embrace research management in the scheme of academic work, embark on vigorous advocacy campaign to align the thinking of researchers and faculty into acknowledging the importance of research management and patronize the services on offer by the research management office to meet institution's research needs. The weak identity and low status of the role of the research manager follows in dominance of the challenges and this is buttressed by an assertion made by Idowu et al. (2017) that lack of working documents or blueprints, weak post-award management skills, staff training, worsened by information barriers, lack of capacity on the numerous research application granting processes and guides, and inadequate mobility experience among Research Administrators are common challenges that impede research management processes. This assertion, by implication, has a ripple effect on the role, identity and status of the research manager as well as career progression opportunities. This assertion corroborates Akindele & Kerridge's (2019) statement that "the key driver for improving research capacity is the professionalization of research management and administration and most African universities lack the human infrastructure to support research activity and that the infrastructure developed for faculty of many African universities does not fully deliver research management and administration". This assertion, in effect, affects the research manager as a resource for effective research management.

Lack of understanding of HEIs' reliance on research managers to support and sustain the business of doing research also adds to the woes of the research manager's quest to exert himself or herself on the job. The least dominant challenge is the ever-changing demands on research managers due to changes in funding requirements, policies and procedures by different funding agencies and the dynamic research environment. This may be due to research managers and administrators taking advantage of capacity building programmes and courses run by Research Management Associations worldwide to upgrade their knowledge and skills in managing research in their respective institutions.

CONCLUSION

The study clearly established that there are challenges associated with research management offices in HEIs in Sub-Saharan Africa and HEIs Worldwide. One significant finding associated with the job of a research manager in HEIs worth sharing is:

> *"There is huge frustration that we work in an educational sector, and we are professional people but we have been left to muddle through. The waste in the sector must be huge" (Green & Langley, 2009).*

The study clearly shows the need for HEIs to holistically give attention to research management and managers to expand the frontiers of research and propel higher ranking of HEIs. The recognition of long-term returns on investments in research management services should guide HEIs' management to be generous in ensuring that the research management office is well-positioned to play its role efficiently and effectively for the benefit of researchers and the institution as a whole.

IMPLICATIONS FOR PRACTICE

Based on these findings, the following are recommended to surmount the challenges associated with the research management office in HEIs in Sub-Saharan Africa and Worldwide.

1. It is important for HEIs to recognize that investment in research management services, though long term, yields good returns such as high ranking of HEIs, high research output in terms publications and quantum of grants, stronger collaboration with industry through facilitation of institutional patent and technology transfer processes as well as faculty and student innovations that create businesses for sustained economic development worldwide. Efforts should therefore be made to ensure an effective, efficient and vibrant research management office capable of championing this cause.

2. HEIs should support and strengthen research management services through infrastructural, organizational, and human resource development to meet the dynamic research environment and funding requirements.

3. Research managers and Research and Innovation Associations worldwide should push for a clear identity and career path for progression in HEIs. The impetus for this, however, is the relevance of the research management office.

4. Research Managers should make conscious efforts to build capacity in all facets of research management to remain a force to be reckoned with and relevant to the needs of research and researchers.

DISCLOSURE STATEMENT

The authors report there are no competing interests to declare.

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APPENDIX

LIST OF 50 ARTICLES REVIEWED

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