

Full Length Research Paper

Perceptions of academic staff on research and publishing in Kenyan universities

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Academic research represents the backbone of human activity in improving the quality of life through expanding frontiers of academic knowledge, and making further research possible throughout the world. Academic research aims at providing solutions for many current problems. Research is a vital and necessary part of modern university education, where universities are perceived to be producers of new knowledge. The Kenya government is restructuring tertiary education with a view to re align it to the country's economic blue print, the vision 2030, and the new constitution. This calls for universities to be more innovative and research focused. Universities that do not build and strengthen their research capacity will be severely restricted hence; academics must carry out more research and publish. This study was designed to assess the perceptions of academic staff in Kenyan universities towards research and publishing, and to find out if the expressed perceptions were influenced by academic staff's characteristics such as gender, type of university, age group, rank, highest degree obtained, years since last highest degree was obtained and associated university. Survey research design was employed in this study. The questionnaire was used to collect information from university academic staff drawn from 11 public and private universities. Seven hypotheses were tested. The information was analyzed by use of descriptive statistics. Scientific package for social sciences (SPSS, Version 15) was used to analyse descriptive statistics while analysis of variance (ANOVA) was used in hypothesis testing. The results obtained from this study indicate that there was a lower perception towards research and publishing by younger generation lecturers compared to the older academics. The main recommendation made by this study is for each individual university to be encouraged to foster a deliberate positive research and publishing culture in their institutions.

Key words: Research productivity, publication productivity, universities, perception.

INTRODUCTION

There is a growing body of scholars interested in research productivity of academic staff at the university level across the globe (Dundar et al., 1998; Hughes, 1999; Sax, 2004; Seyed et al., 2004). These studies are informed by the fact that universities are supposed to play a triological role or teaching, research and service to community (Lertputtalak, 2008). There is evidence that universities are skiving these noble missions to concentrate more on teaching as the main and only focus

(United Nations Educational, Scientific and Cultural Organization (UNESCO), 2006)).

The current academic climate in higher education in Kenya threatens the Kenyan universities' ability to sustain the conditions that support research productivity. Increased demands on government and private funding, a deteriorating physical infrastructure, increased pressure on undergraduate programs, university expansion strategies and general economic climate in the country have raised concerns about the continued capacity of universities to maintain teaching, research productivity and service to the community. This mandates deliberate efforts made to find out the progress made in the

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research arena at all times to know whether it is making any meaningful scientific progress or not (Migosi, 2009).

Governments world over expect universities to become more efficient and effective in teaching, research and community service. However, there appears to be many obstructions to research productivity that in turn cause low levels of research outcomes (Lertputtarak, 2008). According to the 1915 "Declaration of American Association of University Professors" (AAUP), the functions of colleges and universities are to promote inquiry and advance the sum of human knowledge, to provide general instruction to the students, and to develop experts for various branches of the public service (Joughin, 1969). These roles can be summed up as teaching, research and community service.

The teaching, research and community service roles of faculty members overlap conceptually and practically. For example, instruction in a particular discipline or skill yields a community service in the form of educated or appropriately trained persons, while outreach to a farmer or small business owner may lead to an applied research project undertaken by the faculty member. Perhaps the most famous recent model has been Ernest's (1990) stipulation of discovery, application, integration, and teaching as separate but related forms of scholarship. Among other outcomes, these models address concerns regarding the implicit hierarchy that grants the most prestige to research and the least to community service (Education Encyclopedia, 2008). Nyaigotti (2004; 6) makes the following observation: Research is one of the core pillars of any university system; Publication of research findings in reputable journals is one of the ways in which these findings are widely disseminated to stakeholders. Studies show that research and publishing by faculty has sharply dropped over the last few years. Due to heavy teaching responsibilities, brought about by the rising student numbers, plus the need to moonlight so as to make some extra money to supplement the meager pay – faculties are not keen on undertaking meaningful research and publishing their work.

Kenya has been doing well in terms of research and publishing. Ngome (2003) observes that in the 1970s and early 1980s, the volume of research carried out at the University of Nairobi, the oldest and largest public university in the country was one of the highest in Africa. He observed that one of the key factors that stunted the growth of research in the Kenyan university system was lack of adequate research funds. The large portion of support (although inadequate) for postgraduate and staff training and research work came from donors and international organizations. According to Ngome, lack of adequate qualified researchers constituted the second major constraint to research expansion.

UNESCO (2006) has raised serious concerns over the nature of university education in the developing countries. It is argued that most universities are under immense pressure to increase their enrolment in order to meet the

human resource development targets of their respective countries. This has led to teaching becoming their first priority and often their only pursuit.

Muchie (2008) noted that research universities are critical levers, along with government and industry needed to shape a knowledge economy in any part of the world. Kelchtermans (2005) wondered on what makes someone a top researcher, why a substantial part of academics hardly ever publish anything, what factors explain differences in research productivity and the nature of the research system. He questioned why some top performers managed to sustain their high productivity level while others peak in scientific output only sporadically or never. This calls for considerable effort in understanding insights and dynamics in the factors that drive differences in research performance. This study's concentration on the academics perceptions to research and publishing may illuminate some of the questions posed earlier.

Statement of the problem

The Kenya government is restructuring tertiary education in a view to re align it to the country's economic blue print, the vision 2030 and the new constitution. This calls for universities to be more innovative and research focused. Universities that do not build and strengthen their research capacity will be severely restricted. Hence, academics must publish more research.

A considerable number of scholars agree that engagement in research and publication is central to an academics life-world (Greenwood, 1998; Print and Hattie, 1997). Sullivan (1996) observes that publishing is the prime indicators of academic worth which opens doors for more rewarding opportunities such as promotions, rewards, tenure and research funding.

However many scholars have raised innumerable criticisms to the publishing process in general. They have raised several concerns that they believe hinders academic advancement through publishing in refereed journals. Peer reviewing for example can be a barrier to publishing particularly in reducing complete manuscripts for publication (Waddell, 2002). The long process that a scholar has to wait for before an article is finally ready for publication is discouraging to scholars. This has contributed to a significant rejection rates of manuscripts. Some scholars argue that the writing process is too cumbersome and time consuming (Skolnik, 2000).

According to Hourcade and Anderson (1998), some academics do not submit their completed manuscripts for peer review. They argue that the publishing process is problematic. It is important to acknowledge that peer reviews are important quality control mechanisms used by the scholarly community and most scholarly journals to establish the suitability of a manuscript for publication in a journal. Put another way, "no analysis of research

publishing can avoid underlining the critical role of editing and peer review in the maintenance of the global system of knowledge production, accumulation and use" (Pouris, 2006). The writers in this category write very little due to the perceived challenges that they face, they have negative perceptions towards publishing. These are some of the reasons that discourage scholars from publishing.

Writing is considered by some academics as hard work (Boice, 1990; Silvia, 2007) and it requires adequate preparation. Sometimes, scholars expect that inspiration will just appear and make their writing magical overnight. It is important to recognize that scholarly writing is a gradual process that should be guided by personal commitment and stringent personal discipline.

Ocholla (2008) argues that since academic or scholarly journals are the main conveyors of knowledge or research output, they often undergo rigorous evaluation leading to their ranking both or either nationally and internationally. Therefore, publishing is no longer optional but mandatory to an aspiring scientist in both developed and developing countries.

On the other hand, scholars who have confidence in publishing do not have a problem in publishing their completed manuscripts. For example Seyed et al. (2004) found that more productive academicians, compared with less productive scholars, displayed greater confidence in their ability to carry out research work, convert research findings into publishable form.

The aforementioned evidence suggests a possible mixed reaction to research and publishing by scholars. This study therefore sought to understand the perceptions of Kenyan scholars towards this subject.

Rationale of the study

Tertiary institutions can use this constructive information to build a research culture and improve research output among these academics, by changing perceptions where needed and empowering academics to conduct research in their areas of specialisation.

Research objective

The research objective that guided this study was to determine the Kenyan university academics perceptions towards research and publishing.

Research hypotheses

The study was guided by the following hypotheses;

1) There is no significant difference in perceptions of

male and female academics towards research and publishing.

2) There is no significant difference in perceptions of academics in public and private universities towards research and publishing.

3) There is no significant difference in perceptions of academics' age groups towards research and publishing.

4) There is no significant difference in perceptions of academics' ranks to research and publishing.

5) There is no significant difference in perceptions of academics' highest degree obtained and research and publishing.

6) There is no significant difference of academics' years since highest degree was obtained and perceptions towards research and publishing.

7) There is no significant difference in perceptions of academics' type of universities towards research and publishing.

LITERATURE REVIEW

An important reason for research concentration among a few academics is closely related to the high rejection rate of manuscripts, especially those by first attempt authors. Worsham (2008: 2) confirm that the acceptance rate of any good scholarly journal is typically quite low, so the chance of rejection is always relatively high. Summers (2001: 405), mentions that the rejection rate of leading international research journals currently averages around 90%. A study among editors of 73 accredited South African journals also confirmed an exceptionally high rejection rate (Kapp and Albertyn, 2007: 8).

A recent study in South African universities' academics perception on research and publishing indicate that the main limitations to research output are inadequate qualifications and a lack of skills with regard to conducting research (only 10% of the respondents possessed a doctoral degree), insufficient time for conducting research, financial factors, a lack of mentorship and departmental support, and difficulty finding research topics (Nieuwoudt and Wilcocks, 2005).

Other studies have explored the implications of the effective integration of research, teaching and learning for academic development through the lens of an international multi-institutional comparison of student perceptions of research and its impact on their learning environment (Turner et al., 2008).

As of 1989, 43% of women in US colleges and 20% in universities had never published a single journal article. The same was true of only 23% of men in colleges and 7% in universities (Schneider, 1998). Gender gaps in productivity persist even when controlling for educational origin, academic rank, institutional type, and professional age (Creamer, 1998; Schneider, 1998). In addition, men continue to out publish women even in areas where women have been receiving the majority of Ph.D.s

(Creamer, 1998; Schneider, 1998).

Other explanations for the gender gap in academic publishing are that female faculty are more likely to work in non tenure-track, part-time, or temporary positions, to work at teaching colleges, and to lack access to the institutional support, resources, or time needed for prolific publishing (Schneider, 1998). Even when all else is equal, female faculty tend to be more involved than their male counterparts in activities that detract from research, such as advising, administrative work, and serving on departmental committees (Schneider, 1998).

METHODOLOGY

Survey research design was employed in this study. The survey design collects data at a particular point in time with the intention of describing the nature of the existing conditions, identifying the standards against which existing conditions can be compared and for determining the relationship that exists between specific events. This design was preferred because the researchers were interested in reaching as many academic staff as possible within a very short period. It was also possible to make a wide coverage of both public and private universities in Kenya in a short duration. The survey made it possible to get views of many academic staff as was possible. This approach has been used by other scholars who have addressed this issue (Reskin, 1977; Jones, 1998; Waworuntu, 1989; Wilson, 1989; Migosi, 2009; Brocato, 2005)

Stratified random sampling was used in this study because the population studied was heterogeneous. There are differences among the lecturers in terms of gender, rank and academic disciplines. A total of 400 questionnaires were administered to the university academic staff in the ratio of 70 to 30 for male and female academic staff respectively. This was meant to bring on board a proper representation of gender in this study.

The sampled universities consisted of 5 private and 6 public universities. For ethical purposes, the universities were randomly assigned letters A, B, C, D, E, F, G, H, J, K, and L. Letter I was skipped in this naming. Public universities were A, B, C, D, J, and K while the private universities were E, F, G, H and L. This confidentiality was maintained due to the nature of sensitivity associated with performance of universities. Other universities in the sample had also requested for the confidentiality of the findings. This confidentiality was important because there is no open access to research output by any university in Kenya. Any exposure of the universities research output can easily be mistaken to demean the performance of concerned universities and therefore this request was fully granted.

Questionnaires and document analysis were used to collect data in this study among the university lecturers. The questionnaire had both open and close ended items detailing the publication rate of academic staff and document analysis detailed an investigation of the research policies for each of the institutions that had developed them. The lecturers' perceptions were measured on a five point Likert scale where strongly Agree = 5, Agree = 4 Undecided = 3, Disagree = 2 and Strongly Disagree = 1. The scale was reversed in cases where the question was negatively constructed for easy computation of the resultant frequencies. The total score of frequencies for all responses from all respondents was calculated. This was used to calculate the mean perceptions score. It is this mean perceptions score that was used by SPSS Version 15 to run the one way ANOVA against the demographic variables identified.

The minimum total that a respondent could score was 16 (assuming that s/he scored SD = 1 in all the 16 items) and maximum score was 80 (assuming that the respondent ticked SA=5 in all the 16 items). On the other hand, the maximum score was

80 (assuming that the respondent strongly agreed in all the 16 items in the questionnaire). It is these totals that were used to calculate the mean scores for each of the following independent variables. The seven variables used in this study were; gender, type of university, age group, rank, highest degree, years since last highest degree and name of university.

Descriptive and inferential statistics were used to analyse the data. Quantitative data from responses to closed ended type of questions in the questionnaire were coded in the computer by applying the statistical package for social sciences (SPSS) version 15. Several statistical analysis were used. The quantitative data analysis was used to generate frequencies and percentages. Cross tabulation analysis of various independent variables like age group, gender, type of university, rank and highest degree obtained, with the participants' number of publications, were performed. Information obtained from the perceptions scale was used to test hypotheses using one way, ANOVA tested at 0.05, level of significance.

FINDINGS AND DISCUSSION

This segment summarizes and discusses the results of this study. The results basically captured responses of the respondents on their perceptions towards research and publishing.

Lecturers' overall perception on research and publishing

Table 1 displays the total frequency distribution of the lecturers' perception scores towards research and publication. It gives a general picture on the lecturers' perceptions towards the listed statements. From this information it can be seen that most of the lecturers fall in the category of undecided. Therefore, the analyses that follow will give a true picture of the lecturers' perceptions towards research and publishing.

The analysis of this part was done in relation to two aspects namely the individual percentages scored and the corresponding means. The means in the columns shown clearly indicate that the closer the mean is to 5, which is the ideal indicator means that the statement is strongly closer to strongly agree statement. On the other hand, the further the means are from the Figure 5 means the reverse for the statements given in the table.

Under the strongly agree items, there were several statements that scored highly. Notable ones were: publishing is important for any lecturer aspiring to grow professionally 70% with a mean of 4.60; while research and publishing increases the visibility of the university, 64.6% with a mean of 4.45. These two statements clearly indicate optimism on the part of the academic staff. It gives a feeling of aspiration and willingness of the academics in regard to research and publishing. On the other hand, the academic staff was in agreement that Universities should not spend money meant for research on improving salaries for lecturers; as confirmed by a mean score of 1.98. The academic staff is also against

Table 1. Frequency distribution of lecturers' perceptions scores on research and publications in their institutions.

| Perceptions statements | Strongly disagree | | Disagree | | Undecided | | Agree | | Strongly agree | | Means | SD |
|---|-------------------|------|----------|------|-----------|------|-------|------|----------------|------|-------|------|
| | f | % | f | % | f | % | f | % | f | % | | |
| 1 My department should offer additional pay for publishing | 128 | 46.2 | 64 | 23.1 | 19 | 6.9 | 33 | 11.9 | 25 | 9.0 | 3.88 | 1.37 |
| 2 Lecturers should be offered less teaching load for publishing in refereed journals. | 88 | 31.8 | 85 | 30.7 | 26 | 9.4 | 37 | 13.4 | 38 | 13.7 | 3.61 | 1.41 |
| 3 Universities should offer monetary rewards as an incentive for publishing in refereed journals. | 118 | 42.6 | 77 | 27.8 | 15 | 5.4 | 35 | 12.6 | 29 | 10.5 | 3.87 | 1.38 |
| 4 Universities should spend money meant for research on improving salaries for lecturers | 22 | 7.9 | 21 | 7.6 | 15 | 5.4 | 77 | 27.8 | 139 | 50.2 | 1.98 | 1.26 |
| 5 Promotions should be based on publishing alone | 20 | 7.2 | 26 | 9.4 | 14 | 5.1 | 123 | 44.4 | 88 | 31.8 | 2.16 | 1.19 |
| 6 Teaching alone without research is important | 52 | 18.8 | 45 | 16.2 | 22 | 7.9 | 59 | 21.3 | 88 | 31.8 | 2.65 | 1.55 |
| 7 Lecturers should spend family resources on research and publishing | 5 | 1.8 | 7 | 2.5 | 19 | 6.9 | 90 | 32.5 | 152 | 54.9 | 3.88 | 0.87 |
| 8 Research and publishing increases visibility of a university | 179 | 64.6 | 57 | 20.6 | 10 | 3.6 | 14 | 5.1 | 15 | 5.4 | 4.45 | 1.13 |
| 9 Publishing is important for any lecturer aspiring to grow professionally | 195 | 70.4 | 54 | 19.5 | 6 | 2.2 | 8 | 2.9 | 13 | 4.7 | 4.60 | 1.02 |
| 10 Universities should be ranked purely on the basis of their research productivity | 57 | 20.6 | 73 | 26.4 | 17 | 6.1 | 82 | 29.6 | 44 | 15.9 | 3.11 | 1.43 |
| 11 Teaching is more important than publishing | 18 | 6.5 | 16 | 5.8 | 35 | 12.6 | 104 | 37.5 | 97 | 35.0 | 2.10 | 1.15 |
| 12 I will rather spend my time as part time lecturer than on writing articles | 10 | 3.6 | 25 | 9.0 | 23 | 8.3 | 109 | 39.4 | 108 | 39.0 | 2.03 | 1.08 |
| 13 Appointment to senior university management should be based on academic writing | 52 | 18.8 | 89 | 32.1 | 29 | 10.5 | 64 | 23.1 | 41 | 14.8 | 3.24 | 1.37 |
| 14 Lecturers who do not publish have no business teaching in university | 50 | 18.1 | 52 | 18.8 | 40 | 14.4 | 74 | 26.7 | 61 | 22.0 | 2.93 | 1.43 |
| 15 It is advisable for lecturers to spend personal resources on research and publishing | 91 | 32.9 | 43 | 15.5 | 30 | 10.8 | 61 | 22.0 | 49 | 17.7 | 3.30 | 1.43 |
| 16 Developing countries need research more than developed countries | 72 | 26.0 | 66 | 23.8 | 19 | 6.9 | 57 | 20.6 | 61 | 22.0 | 3.18 | 1.54 |

n=289.

basing promotions solely on publishing alone. The Kenya's academic staff union has been in the forefront in agitating for better terms of service for its staff which is hoped to translate to higher research output.

University academic staff mean perceptions score towards research and publishing

The mean score for each question was worked out. All negatively stated items were reversed so that all the statements became positive for ease of computation. The responses were assigned scores as follows; SA = 5, A = 4, U = 3, D = 2, and SD = 1.

The minimum total that a respondent could score was 16 (assuming that s/he scored SD = 1 in all the 16 items). On the other hand, the maximum score was 80 (assuming that the respondents strongly agreed in all the 16 items in the questionnaire). It is these totals that were used to calculate the mean scores for each of the following independent variables.

Table 2 results indicate that both male and female academic staff members tend to have equal perception mean scores towards research and publishing. Both male and female are in agreement concerning their perception towards research and publishing. However, these means have to be tested in order to make meaningful conclusions.

Hypotheses testing

The H_0 was tested at, 0.05 level of significance. It stated that;

H_{01} There is no significant difference in perceptions between male and female academics towards research and publishing.

H_{a1} There is significant difference between male and female perceptions towards research and publishing.

In the results of the one way ANOVA in Table 3, the P-value for gender is 0.606. This is greater than the set 0.05 level of significance.

Decision: The null hypothesis is not rejected.

Conclusion: There is no significant difference in academic staff's perception towards research and publishing when categorized by gender. Therefore both male and female academic staffs have almost the same perception towards research and publishing. This is supported by total perceptions mean scores presented in Table 2. Their output for the 5 year period was about the same (Male mean, 49.8 and female mean, 49.2). In the one way ANOVA, Table 3, the lecturers' perceptions on

research and publishing when categorized by gender is 0.606. This is higher than the P Value of .05. This means that there is no significant difference in the perception of university academic staff on research and publishing when categorized by gender.

In other words, both male and female academic staff have the same views on research and publishing in the universities in Kenya. Studies on differences between gender and research productivity have been undertaken by various scholars. These studies have tended to have contradictory findings. For example, Bonnett (2004) analyzed 900 research articles in nine major evolutionary ecology journals in order to examine how gender influences research output. The study found that women and men differed in areas of research, with women much more likely to conduct projects on behavior rather than evolution or ecology. The findings of the present study have made a blanket finding among Kenyan scholars that there is no significant difference among male and female perceptions towards research and publishing.

Table 4 demonstrates that public university academic staff has a mean perception score which is higher than that of the private universities. This is in agreement with the age-group category's perceptions towards research and publishing. This may be explained by the large number of older academic staff teaching in public universities than at the private universities and the length of time that these institutions have been in operation since inception. Most public universities are older than most private universities in Kenya. This difference is not as significant though.

H_{02} There is no significant difference in perceptions between academics in public and private universities towards research and publishing

H_{a2} There is significant difference between public and private universities' academic staff perceptions towards research and publishing

The results of one way ANOVA in Table 5 show the P-value for type of university as 0.090. This is greater than the set 0.05 level of significance.

Decision: The null hypothesis is not rejected.

Conclusion: The null hypothesis indicates that there is no significant difference in academic staff's type of university and perceptions towards research and publishing. In other words the academic staff from both the public and the private universities has no differing perceptions towards research and publishing.

We can therefore conclude that there is no significant difference in the perception of university academic staff on research and publishing when categorized by the type of university they are drawn from, that is public and the private universities. This finding therefore indicates that there is no significant difference in perceptions towards

Table 2. Academic staff gender mean perceptions score.

| Gender | n | Mean | Standard deviation |
|--------|-----|------|--------------------|
| Male | 169 | 49.8 | 9.83 |
| Female | 74 | 49.2 | 7.75 |
| Total | 243 | 49.6 | 9.23 |

Table 3. ANOVA test of difference in the gender mean perceptions scores towards research and publishing.

| Gender | Sum of squares | df | Mean square | F | Sig. |
|----------------|----------------|-----|-------------|-------|-------|
| Between groups | 22.844 | 1 | 22.8 | 0.267 | 0.606 |
| Within groups | 20606.078 | 241 | 85.5 | | |
| Total | 20628.922 | 242 | | | |

Table 4. Academic staffs' types of university mean perceptions score.

| Type of university | n | Mean | Standard deviation |
|--------------------|-----|------|--------------------|
| Public university | 171 | 50.3 | 10.4 |
| Private university | 74 | 48.1 | 5.58 |
| Total | 245 | 49.7 | 9.22 |

Table 5. ANOVA test of difference in academic staffs' type of university mean perceptions scores towards research and publishing.

| Type of university | Sum of squares | df | Mean Square | F | Sig. |
|--------------------|----------------|-----|-------------|-------|-------|
| Between groups | 244.288 | 1 | 244.3 | 2.895 | 0.090 |
| Within groups | 20505.222 | 243 | 84.4 | | |
| Total | 20749.510 | 244 | | | |

Table 6. Academic staffs' age groups mean perceptions score.

| Age group | n | Mean | Standard deviation |
|-----------|-----|------|--------------------|
| 20 to 29 | 26 | 45.7 | 7.58 |
| 30 to 39 | 70 | 47.0 | 7.52 |
| 40 to 49 | 90 | 49.8 | 7.94 |
| 50 to 59 | 48 | 53.5 | 10.5 |
| 60 to 69 | 11 | 58.2 | 14.9 |
| Total | 245 | 49.7 | 9.22 |

research and publishing by lecturers from the public or private universities in Kenya. Therefore, the type of university should not influence the amount of research output to be undertaken by the university academic staff. Table 6 suggests that the older the age group of a lecturer, the more the perception score one has towards research and publishing. This can be said to be a reflection of the appreciation that one develops as he/she

grows older in the profession. This is a common phenomenon even in other fields where young professionals are not fully satisfied with their jobs. They keep on searching for better jobs or the so called greener pastures.

The life-cycle model (Diamond, 1986; Hu and Gill, 2000) predicts that faculty research productivity will decline as an individual's academic experience

Table 7. ANOVA test of difference in academic staff age group mean perceptions scores towards research and publishing.

| Age group | Sum of squares | df | Mean square | F | Sig. |
|----------------|----------------|-----|-------------|-------|-------|
| Between groups | 2414.014 | 4 | 603.58 | 7.899 | 0.000 |
| Within groups | 18335.496 | 240 | 76.39 | | |
| Total | 20749.510 | 244 | | | |

Table 8. Academic staffs' rank mean perceptions score.

| Rank | n | Mean | Standard deviation |
|---------------------|-----|------|--------------------|
| Graduate assistant | 15 | 45.7 | 4.92 |
| Tutorial fellow | 18 | 49.4 | 7.72 |
| Assistant lecturer | 42 | 48.8 | 8.43 |
| Lecturer | 102 | 48.9 | 8.17 |
| Senior lecturer | 41 | 51.1 | 11.3 |
| Associate professor | 14 | 52.1 | 13.2 |
| Professor | 8 | 57.1 | 13.4 |
| Total | 240 | 49.6 | 9.28 |

increases. Sometimes, the estimated regression coefficient of the variable years of academic employment is negative. One plausible reason for this decline in research productivity in the developed countries is the decline of extrinsic motivation as a result of attainment of tenure and promotion and the proximity of retirement (Diamond, 1986). Another factor may be that senior faculty members tend to have more service and administrative responsibilities, which may hinder their research productivity. Overall, this cannot be concluded for the case of Kenya because it was not supported by data. Another possible reason is that there was no respondent above the 70 year mark in this study. Of particular interest in this study is the 60 to 69 age group which had a significant perceptions score standing at 58.2.

H₀₃: There is no significant difference in perceptions between academics' age groups towards research and publishing.

H_{a3}: There is a significant difference between age groups' perceptions towards research and publishing (Table 7).

The P-value for type of university is 0.000. This is less than the 0.05 level of significance.

Decision: The null hypothesis is rejected.

Conclusion: There is a significant difference in lecturers' age group and perceptions towards research and publishing. Thus one age-group has differing perceptions towards research and publishing. This means that there is a significant difference in academic staff's perceptions

on research and publishing as categorized by the age group of the respondents. It also means that each age group has differing opinions on the management of research and publishing in the universities.

This is confirmed by hypothesis testing done as reflected in Table 8. This is in agreement with the earlier data where the older age groups are seen to be more active in research and publishing than the other groups.

In another study, Tuner and Mairesse (2003) analyzed the impact of research productivity relative to age, gender and education of French condensed matter physicists. The study found that there was a quadratic relation between the age of the scientists and the number of publications, with researchers' productivity increasing before 50 and then declining after 51. This meant that older academics appreciated the role of research and publishing at the university level than the younger academics. In a way, the study results are in agreement with those by Mairesse (2003) (Table 8).

H₀₄: There is no significant difference in perceptions of academics' ranks to research and publishing.

H_{a4}: There is significant difference between an academic staff's rank perceptions mean scores to research and publishing.

In the results of the one way ANOVA in Table 9, the P-value for type of university is 0.089. This is greater than the set 0.05 level of significance.

Decision: The null hypothesis is not rejected.

Conclusion: There is no significant difference in academic staff's rank and perceptions towards research

Table 9. ANOVA test of difference in academic staff rank mean perceptions scores towards research and publishing.

| Rank | Sum of squares | df | Mean square | F | Sig. |
|----------------|----------------|-----|-------------|-------|-------|
| Between groups | 940.554 | 6 | 156.759 | 1.860 | 0.089 |
| Within groups | 19633.942 | 233 | 84.266 | | |
| Total | 20574.496 | 239 | | | |

Table 10. Academic staff highest degree mean perceptions score.

| Highest degree | n | Mean | Standard deviation |
|------------------|-----|------|--------------------|
| Bachelors degree | 16 | 46.9 | 4.63 |
| Masters degree | 133 | 48.7 | 8.36 |
| PhD | 91 | 51.5 | 10.8 |
| Total | 240 | 49.6 | 9.29 |

and publishing.

This hypothesis is therefore not rejected. This means that there is no significant difference in academic staff's perceptions on research and publishing as categorized by the rank of the respondents. This implies that the rank of academic staff has no differing opinions on the management of research and publishing in the universities. This is not in agreement with the earlier research where the older age groups are seen to be more active in research and publishing than the other groups.

The findings of this study clearly indicate that, rank of academic staff is significant in research productivity. These results are consistent with those of Fulton and Trow (1974) who observed that full professors published more than the junior academic staff in their disciplines over a two-year period. This work was supported by the findings of Bailey (1992) who pointed out that rank is a significant predictor of research productivity. Dundar and Lewis (1998) further found that departments with higher ranked faculty staff resulted in higher research productivity (Vasil, 1992). The perception of Kenyan university academics on research and publishing is therefore consistent with what has been found elsewhere in the world.

It is evident from Table 10, that Bachelors degree holders teaching at the university have a lower perception score towards research and publishing. On the other hand, the masters and PhD holders have a higher perceptions score towards research and publishing. However, the PhD holders have a higher perceptions score than their masters holders. This is a repeat of earlier scenarios where the persons who have served in the university environment for long, have favourable perceptions to research and publishing than those who have been in the university in a shorter period. Perhaps it will be interesting for universities to critically think on how the younger generation of academicians can be

motivated to appreciate research and publishing. Without any deliberate strategies laid to address this problem, the professors may find no one to take over their jobs sooner or later.

H₀₅: There is no significant difference in perceptions of academics' highest degree obtained and research and publishing.

Ha₅: There is significant difference between highest degree obtained and perceptions towards research and publishing.

In the results of the one way ANOVA in Table 11, the P-value for type of university is 0.039. This is less than the 0.05 level of significance.

Decision: The null hypothesis is rejected.

Conclusion: There is a significant difference in lecturers' highest degree obtained and perceptions towards research and publishing. This means that there is significant difference in perceptions of university academic staff on research and publishing, when categorized by highest degree obtained. In other words, both PhD and Masters Degree holders have differing views on research and publishing in the universities in Kenya. Tien (2000) researching within a Taiwanese context, has demonstrated that academics holding a doctoral qualification, compared with those holding lesser qualifications, were more inclined to publish articles in refereed journals. Hemmings and Kay (2007) using a structural equation modeling approach, have highlighted the direct and significant effect that qualifications can have on publication output. That is, those with doctorates, compared to those without doctorates, were more likely to produce greater umbers of peer reviewed works in the form of books, book chapters, conference papers, and journal articles. Hemmings and Kay also found that qualifications had an

Table 11. ANOVA test of difference in academic staff highest degree mean perceptions scores towards research and publishing.

| Highest degree | Sum of squares | df | Mean square | F | Sig. |
|----------------|----------------|-----|-------------|-------|-------|
| Between groups | 558.867 | 2 | 279.434 | 3.297 | 0.039 |
| Within groups | 20085.128 | 237 | 84.747 | | |
| Total | 20643.996 | 239 | | | |

Table 12. Academic staff years since highest degree was obtained mean perceptions score.

| Years since last highest degree | n | Mean | Standard deviation |
|---------------------------------|-----|------|--------------------|
| <5 years | 113 | 47.1 | 7.18 |
| 6 to 10 years | 63 | 50.5 | 10.7 |
| 11 to 15 years | 43 | 52.9 | 9.01 |
| 16 to 20 years | 12 | 51.8 | 9.91 |
| More than 20 years | 8 | 55.6 | 12.7 |
| No response | 3 | 51.7 | 5.86 |
| Total | 242 | 49.6 | 9.16 |

Table 13. ANOVA test of difference in academic staff years since highest degree was obtained mean perceptions scores towards research and publishing.

| Years since last highest degree | Sum of squares | df | Mean square | F | Sig. |
|---------------------------------|----------------|-----|-------------|-------|------|
| Between groups | 1608.602 | 5 | 321.720 | 4.083 | .001 |
| Within groups | 18596.703 | 236 | 78.800 | | |
| Total | 20205.306 | 241 | | | |

indirect effect on publication output by acting on a factor referred to as 'writing confidence'.

A consistent trend emerges when viewing the outcomes of studies examining the relationship between academic level (or seniority) and publication output. Both Blackburn and Lawrence (1995) and Sax et al. (2002), for example, conclude from their research that academics with greater seniority tend to have greater publication output than their more junior counterparts. It has been argued that this trend reflects, in particular, the advantage that senior academics have in relation to accessing networks and resources such as doctoral students (Dundar and Lewis, 1998). Though the null hypothesis has been rejected in this case, the finding is more rational and consistent with other scholars who have undertaken related studies (Blackburn and Lawrence, 1995; Sax et al., 2002; Dundar and Lewis, 1998; Hemmings and Kay, 2007; Tien, 2000).

From Table 12, it is evident that those members of academic staff, who got their last highest degree in less than 5 years, have unfavourable perceptions towards research and publishing than those who obtained their highest degree more than six years ago. Therefore, it can be said that the longer one takes after last highest degree obtained, the more she/he appreciates research and

publishing. This therefore leads to favourable perceptions towards research and publishing.

H_{06} : There is no significant difference between years since highest degree was obtained and perceptions towards research and publishing.

H_{a6} : There is significant difference between years since highest degree was obtained and perceptions towards research and publishing.

In the results of the one way ANOVA in Table 13, the P-value for type of university is 0.001. This is less than the 0.05 level of significance.

Decision: The null hypothesis is rejected.

Conclusion: There is a significant difference in lecturers' years since last highest degree was obtained and perceptions towards research and publishing.

From the results of Table 14, it is evident that University B has a higher perception towards research and publishing than the other universities in the study. A majority of the universities had a perception score of less than 50 towards research and publishing.

H_{07} : There is no significant difference between

Table 14. Academic staff's university means perception score.

| Name of university | n | Mean | Standard deviation |
|--------------------|-----|------|--------------------|
| A | 34 | 46.8 | 6.2 |
| B | 67 | 55.4 | 11.9 |
| C | 19 | 51.1 | 9.70 |
| D | 12 | 42.6 | 11.3 |
| L | 3 | 47.3 | 6.41 |
| E | 11 | 47.3 | 3.98 |
| F | 8 | 45.9 | 5.06 |
| G | 26 | 49.7 | 5.64 |
| H | 26 | 47.7 | 6.15 |
| J | 22 | 47.1 | 5.49 |
| K | 17 | 45.9 | 5.74 |
| Total | 245 | 49.7 | 9.22 |

Table 15. ANOVA test of difference in academic staff's university mean perceptions scores towards research and publishing.

| Name of university | Sum of squares | df | Mean square | F | Sig. |
|--------------------|----------------|-----|-------------|-------|-------|
| Between groups | 3781.416 | 10 | 378.142 | 5.215 | 0.000 |
| Within groups | 16968.095 | 234 | 72.513 | | |
| Total | 20749.510 | 244 | | | |

academics' type of universities and perceptions towards research and publishing.

H_{a7} : There is a significant difference between universities and perceptions towards research and publishing.

In the results of the one way ANOVA in Table 15, the P-value for type of university is 0.000. This is less than the 0.05 level of significance.

Decision: The null hypothesis is rejected.

Conclusion: There is a significant difference in different universities perceptions towards research and publishing. This is an interesting result since it indicates that academics from different universities across the country, when categorized by either public or private, do have differing perceptions on research and publishing. Although most of the Kenya university academic staff is on somewhat similar terms of service and employment structure, the workload is somewhat different. The public universities tend to have a lighter workload than their private counterparts. This may have contributed to the differing perceptions of the university academic staff especially when categorized by type of the university where they work.

Conclusion

This study concludes, among others, that there were lower perceptions towards research and publishing by

younger generation lecturers compared to the older academics. The youthful academicians were characterized in terms of lower rank in the academic structure, bachelors and masters degree holders, lower age bracket and even little experience in university academic work.

RECOMMENDATION

The results so obtained from this study indicate mixed perceptions towards research and publishing in the Kenyan universities. There is need therefore to sensitize the academic staff in the universities on the need to appreciate research and publishing in their career life and, more so for the individual institutions and universities to be engaged in ambitious plans to create a research and publishing culture in their institutions. Fostering a positive culture of research and publishing involves advocacy and publicity to popularize and encourage appreciation of research and publishing.

REFERENCES

- Bailey TG (1992). Faculty Research Productivity. Minneapolis, MN: Association for the Study of Higher Education Annual Meeting (ERIC Document Reproduction Service No. ED352895).
- Blackburn RT, Lawrence JH (1995). Faculty at work: Motivation, expectation, satisfaction. Baltimore, MD: The Johns Hopkins University Press.

- Boice R (1990). *Professors as writers: A self-guide to productive writing*. Stillwater, Oklahoma: New Forums Press.
- Boyer, Ernest L (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Brocato JJ, Mavis B (2005). *The Research Productivity of Faculty in Family Medicine Departments at U.S. Medical Schools: a National Study*. *Academic Medicine: J. Assoc. Am. Med. Coll. [Acad. Med.]* 80(3): 244-52. jbrocato@ohep.org.
- Creamer EG (1998). *Assessing faculty publication productivity: issues of equity*. ASHE-ERIC Higher Education Report 26(2). Washington, DC: Graduate School of Education and Human Development, George Washington University.
- Dundar H, Lewis DR (1998). *Determinants of research productivity in higher education*. *research in higher education*, 39: 607-630.
- Education Encyclopedia (2008). *Faculty Roles and Responsibilities - The Teaching Role, the Research Role, the Community service Role, Integration of Faculty Roles and Responsibilities: Education Encyclopedia - StateUniversity.com*.
- Fulton O, Trow M (1974). 'Research activities in American higher education', *Sociology of Education*, 47: 29-73.
- Hemmings B, Kay R (2010). *University lecturer publication output: Higher Education*, 45(3): 423-446. Available at <http://www.springerlink.com/content/2gghj1fqxvej0da/> (accessed 23 September, 2010). www.springerlink.com/content/m32528x655071457.
- Hughes C (1999). *Faculty publishing productivity. The emerging role of network connectivity, campus wide information systems*, 16: 30-38.
- Jones JE, Preusz GC, Finkelstein SN (1989). *Factors Associated with Clinical Dental Faculty Research Productivity*. *J. Dental Educ. [J. Dent. Educ.]*, 53(11): 638-645.
- Joughin, Louis ed (1969). *Academic Freedom and Tenure: A Handbook of the American Association of University Professors*. Madison: University of Wisconsin Press, pp. 163-164.
- Kapp A, Albertyn R (2008). 'Accepted or rejected: Editors' perspectives on common errors of authors', *Acta Academica*, 40(4): 270-288.
- Kelchtermans S, Veugelers R (2005). *Top Research Productivity and its Persistence*. Centre for Economic Policy Research (CEPR) Brussel: Catholic University of Leuven (KUL).
- Lertputtarak S (2008). *An Investigation of Factors Related to Research Productivity in a Public University in Thailand: A Case Study*. A PhD dissertation, School of Education, Faculty of Arts, Education and Human Development, Victoria University, Melbourne, Australia.
- Mairesse J, Turner L (2003). *Explaining Individual Productivity Differences in Scientific Research Productivity: How important are Institutional and Individual Determinants? An Econometric Analysis of the Publications of French CNRS Physicists in Condensed Matter (1980-1997)*. Submitted to *Annales d'Economie et de Statistiques* for the special issue in honor of Zvi Griliches.
- Migosi JA (2009). *Factors Influencing Research Productivity among Academic Staff in Selected Public and Private Universities in Kenya*. Unpublished PhD Thesis. The Catholic University of East Africa, Nairobi.
- Muchie M (2008). *Research Varsities Crucial to Development*. East Africa Standard September 12, 2008.
- Nieuwoudt MJ, Wilcocks JS (2005). "The perceptions and perceptions of South African accounting academics about research", *Meditari Account. Res.*, 13(2): 49-66.
- Ngome C (2003). "Kenya." *Country Higher Education Profiles*. In D. Teferra and P. G. Altbach (Eds.), *African higher education: An international reference handbook*. Bloomington: Indiana University Press, pp. 359-371.
- Nyaigotti C (2004). *Reforming Higher Education in Kenya Challenges, Lessons and Opportunities: State University of New York Workshop with the Parliamentary Committee on Education, Science and Technology*. Naivasha, Kenya.
- Ocholla DN (2008). *Common errors and challenges of publishing in a peer refereed Library and Information Journal of Library and Information Science*, University of Zululand, X1001, Kwa Dlangezwa, South Africa.
- Pouris A (2006). *A bibliometric assessment of South African research publications included in the internationally indexed database of Thompson ISI*. In: *Report on a Strategic Approach to Research Publishing in South Africa*. Pretoria, ASSAf. P. xv-xvi; 9-28 productivity: Exploring the role of gender and family-related factors. *Research in Qualifications, time, and confidence count*. *J. Higher Educ. Policy Manag. Satisfaction*, London: The Johns Hopkins University Press, 32(2): 185-197.
- Reskin, Barbara F (1977). *Scientific Productivity and the Reward Structure of Science*. *Am. Sociol. Rev.*, 42: 491-504.
- Sax LJ, Linda SH, Marisol A, Frank AD (2004). *Faculty Research Productivity: Exploring the Role of Gender and Family-Related Factors*. In *Research in Higher Education* Springer Netherlands ISSN 0361-0365 (Print), 1573-188X.
- Schneider A (1998). "Why Don't Women Publish as Much as Men? Some Blame Inequity in Academe; Others Say Quantity Doesn't Matter." *The Chronicle of Higher Education*, September 11, A14.
- Seyed F, Haji M (2004). *Determinant of business faculty research productivity in the Middle East*. Paper presented at the academy of world business marketing management development conference. Gold coast Qld, July.
- Silvia PJ (2007). *How to Write a Lot*. Washington DC: American Psychological Association.
- Skolnik M (2000). *Does counting publications provide any useful information about academic performance*. *Teach. Educ. Q.*, 27(2):15-25.
- Stack G (2004). *Gender Children and research productivity in higher education*, 45(8): 891-920
- Sullivan S (1996). *Scholarly publishing Trash or Treasure*, *Australian Academic and Research libraries*, 27(1): 40-46.
- Summers JO (2001). 'Guidelines for conducting research and publishing in marketing: From conceptualization through the review process', *J. Acad. Mark. Sci.*, 29(4): 405-415.
- Tien FF (2000). *To What Degree Does the Desire for Promotion Motivate Faculty to Perform Research? Testing the Expectancy Theory*, Publisher: Springer. *Research in Higher Education*, 41(6): 723-752.
- Turner N, Wuetherick B, Healey M (2008). *International perspectives on student awareness, experiences and perceptions of research: implications for academic developers in implementing research-based teaching and learning*. *Int. J. Acad. Dev.*, 13(3): 199-211.
- UNESCO (2006). *Forum on Higher Education, Research, and Knowledge. Global Colloquium on Research and Higher Education Policy Universities as Centers of Research and Knowledge Creation: An Endangered Species?* Paris: UNESCO.
- UNESCO (1998). *World conference on higher education*. Paris: UNESCO.
- Vasil L (1992). *Self-efficacy expectations and causal attributions for achievement among male and female university faculty*. *J. Voc. Behav.*, 41(3): 259-269.
- Waworuntu B, Holsinger DB (1989). *The Research Productivity of Indonesian Professors of Higher Education*. *J. Higher Educ.*, 18(2): 167-187.
- Wilson PM, Wilson J (1989). *Research Productivity of Home Economics Education Faculty: Administrators' Perspectives*. *Fam. Consumer Sci. Res. J.*, 18(2): 148-155.
- Waddell J (2002). *Peer review*. *Can. J. Surg.*, 1: 1-4.
- Worsham L (2008). 'What editors want', *Chronical of Higher Education*, 8 September. [Online] Available at: <http://chronicle.com>. Accessed: 21 July, 2011.