Influence of Training in Determining Academic Staff Performance in Public Universities in Uganda

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ABSTRACT

In an effort by public universities to improve on the performance of lecturers in Uganda, universities are implementing various human resource management practices. Despite this move, ineffective teaching, low research and publication continue to prevail, making it difficult for public universities to produce the needed human resources for national development. This study investigated the relationship between staff training and teaching and research outputs of academic staff in selected public universities. A mixed-method design using convergent parallel approach was employed to collect and analyse data from a population of 4 Vice-Chancellors, 4 Directors of Human Resources and 1127 full-time academic staff. Four universities were selected using purposive sampling based on year of establishment before 2011. Analysis of quantitative data collected was done using Pearson’s Correlation, linear regression and factor analysis. Qualitative data were analysed based on thematic content analysis. Results indicated a moderate positive correlation between staff training and academic staff teaching output (r=0.476, p<0.01), a weak positive relationship between staff training and research output (r=0.347, p<0.01). It was recommended, university management should reformulate policies that help staff exploit relevant training opportunities to improve on the teaching and research output in public universities. Universities should partner with other centres of excellence to provide continuous training for the academic staff in pedagogy and research output.

APA CITATION

INTRODUCTION

This study investigated the relationship between training and academic staff performance in selected public universities in Uganda. This study was conceived to explore the relationship between training and academic staff teaching and research outputs in selected public universities in Uganda. It is universally agreed that public universities are critical in the transformation of a country and therefore, the need for higher performance output among their academic staff cannot be compromised (Kibwika, 2006).

The quality of universities according to Kabasa (2016) is further perceived in terms of their quality of research, academic reputation of faculties, quality of academic programmes, research contribution to society and preparation of tomorrow’s leaders and graduates. The level of academic staff output is perceived to be generally low in public universities in Uganda as reported by low teaching and research outputs (McGregor, 2007; NCHE, 2016).

Farndale, Vidovic and Rockey (2015), in a report on the status of human resource management practices in the United States of America noted that most organisations are implementing training as an aspect of human resource management practices. Rasheed, Aslam and Sarwar (2010) argue that staff training through national and international scholarships; have been used to enhance performance of teaching staff. Nsonzo and Matashu (2015) further noted that in South Africa, training is the major employee enhancing strategy used by organisations. Mutahih and Busienei (2015) show that in Kenya, training has been successfully used to boost the performance of public universities in this country.

Reports of poor lecturer performance in universities in Uganda continue to prevail (McGregor, 2007; NCHE, 2016). The issue has been mainly placed on public universities not fully implementing training as per their human resource manuals. In public universities, staff training is meant to promote a culture of learning and ensure that key human resources are trained and developed. Training is a key aspect in improving, re-tooling and updating the value and skills of staff required for greater productivity, efficiency and profitability. Training is a method of improving employee skills and knowledge to perform better in their work (Landa, 2018). Likewise, Imran and Elnaga (2013) also affirm that staff training enhances the knowledge, skills and attitude of employees in higher educational institutions of learning leading to effective performance.

Employees in universities are required to participate in activities that improve on their job performance through professional, academic and workplace skills related training opportunities. Training needs are usually derived from university mission and strategic objectives and mainly target employees confirmed in the university service (NHCE, 2011). James, Weiyan and Huiyuan (2015) observe that world-class universities in United States of America, China, United Kingdom and Australia use staff development to tackle critical issues in quality improvement, performance improvement and optimal technology delivery to model their higher education institutions. This is usually done in line
with the provisions on staff training made in the human resource manuals of public universities (Mbarara University, 2009; Makerere University, 2010; Kyambogo University, 2015 & Gulu University, 2016). Staff training in public universities in Uganda has been given support. The Ministry of Finance, Planning and Economic Development financial reports 2014/15, 2015/16 and 2016/17 show that the funds that were spent on academic and other training in public universities kept increasing from UGS 0.62 billion in 2015 to 24.604 billion in 2017 (Table 1).

Table 1: Public Universities Expenditure on PhD and other Training

<table>
<thead>
<tr>
<th>University</th>
<th>FY 2014-15 ‘000 Billion UGS</th>
<th>FY 2015-16 ‘000 Billion UGS</th>
<th>FY 2016-17 ‘000 Billion UGS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PhD and Other Trainings</td>
<td>PhD and Other Trainings</td>
<td>PhD and Other Trainings</td>
</tr>
<tr>
<td>Busitema</td>
<td>0.24</td>
<td>0.52</td>
<td>0.293</td>
</tr>
<tr>
<td>Kyambogo</td>
<td>0.05</td>
<td>0.05</td>
<td>1.531</td>
</tr>
<tr>
<td>Muni</td>
<td>0.08</td>
<td>0.06</td>
<td>0.11</td>
</tr>
<tr>
<td>Makerere</td>
<td>0.14</td>
<td>0.14</td>
<td>22.37</td>
</tr>
<tr>
<td>Mbarara</td>
<td>0.07</td>
<td>0.07</td>
<td>0.24</td>
</tr>
<tr>
<td>Gulu</td>
<td>0.04</td>
<td>0.02</td>
<td>0.06</td>
</tr>
<tr>
<td>Total</td>
<td>0.62</td>
<td>0.86</td>
<td>24.604</td>
</tr>
</tbody>
</table>


This study was interested in how academic staff in public universities carry out their duties in relation to teaching of allocated hours, timely assessment of students, time taken to complete marking of scripts and timely submission of results to the department. It also considered output of research as the total number of publications; papers presented in conferences both locally and internationally, and supervised and mentored number of students to completion at all levels from undergraduate to graduate levels.

Statement of the Problem

Public universities in Uganda are struggling to implement some key human resource management practices like training to enhance academic staff performance as provided in their human resource manuals. Public universities are also implementing the recommendations by the NCHE (2016) on staff training, as key Human Resource Management Practices among others to improve academic staff performance in universities. All organisations survive on well-established staff training programmes to ensure employee performance and higher educational institutions in Ugandan public universities are no exception. The national goals and visions of Uganda are also embedded in the capacity of universities to produce high-level human resources for national development. Budget performance frameworks for financial years 2014/15, 2015/16 and 2016/17 for public universities in Uganda, reveal an increase in allocation of funds to staff training, salary increments and research activities.

Despite these moves, performance of academic staff in these institutions has not improved to the expected standards. Reports of poor lecturer performance in terms of ineffective teaching, low records of publications and inability to attract and win projects continue to prevail in most public universities in Uganda (McGregor, 2007; NCHE, 2016). Neglecting this situation may give rise to a failing future for public universities in Uganda. The country risks having university graduates who may fail to compete effectively in the global job market. This scenario has created the felt need for a study to be developed to establish whether there is any relationship between training and academic staff performance in Ugandan public universities.

The study objectives were to: establish the relationship between training and academic staff teaching output in selected public universities in Uganda and determine the relationship between training and academic staff research output in selected public universities in Uganda. The study had two Null research hypotheses.
The study used the social exchange theory espoused by Homans (1958) and reviewed by Blau (1964). This theory explains what influences social behaviour in terms of interchange between material goods and non-material ones. According to Blau (1964), social exchange theory is a fundamental unit of social life, in which social structures are entrenched. He examined the process of exchange as the micro-foundation of macro-sociological occurrences. Organisations that give much to their employees in form of training get much from them, in form of high level of job performance. It also added that employees would be under pressure to give back to their employers in terms of superior performance as per the target set.

Reciprocal obligations are initiated in social relations and interactions as people engage in bonds that are mutually acceptable and rewarding. Marescaux, De Winne and Sels, (2013) further elaborated that through the management in organisations, staff training initiates a positive and acceptable exchange relation. The relationship triggers positive attitudes and behaviour in employees to reciprocate and pay back the organisation. It is often reflected in the behaviour of employees through performance output to ensure that set goals and objectives of organisations are realised. As the workers receive economic, health care and socio-emotional support from their employers and institutions; they get compelled to respond in kind and pay back the organisation.

**THEORETICAL FRAMEWORK**

The study reviewed the social exchange theory by Blau (1964). This theory explains what influences social behaviour in terms of interchange between material goods and non-material ones. According to Blau (1964), social exchange theory is a fundamental unit of social life, in which social structures are entrenched. He examined the process of exchange as the micro-foundation of macro-sociological occurrences. Organisations that give much to their employees in form of training get much from them, in form of high level of job performance. It also added that employees would be under pressure to give back to their employers in terms of superior performance as per the target set.

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**LITERATURE REVIEW**

Using respondents from Kyambogo University (Uganda), Kasule and Neema (2014); observed in their research that lack of coherent staff development system, inadequate capacity to train PhD and unsuitable training and policy on development greatly hindered the university from realising its vision of being an epicentre of professional and academic excellence. Furthermore, Lutalo and Mafabi (2016) reported on a national innovation survey 2011-2014 under human capital development and retention. The Ugandan education system is too theoretical with little depth of science and technical skills which is critical in technological innovation. This study explored the training opportunities available and how they impact on academic staff performance.

Jacob, Xiong and Ye (2015) in their article examined professional development programs in America, China, Britain and Australia. These countries were considered to have world-class universities such as University of Pennsylvania and Pittsburgh University, Carnegie Mellon University, Hong Kong University, London School of Economics and Political Science, Oxford University, Australian National University and Melbourne University. The case study design was used to draw eight samples of the universities considered world-class. It was found that in each of them they had valued inclusion, reputation, citations per faculty, the proportion of students per faculty and diversity of students based on international criteria and faculty. The study further noted that there was no representation in terms of global ranking of the top 100 universities from Latin America and Africa. The study conclusions were: effective certified centre of professional development demand support from the high echelon of administration in organisations.

Similarly, Umar (2017) examined the impact of on-the-job training needs on the output of teaching staff in Nigerian colleges of education for sustainable development in the North-West geo-political zone. The study purposed to establish the job training needs of teachers in colleges of business education to ensure effective performance of job and sustainable development. Two research hypotheses were formulated; training in the conference has no substantial impact on the performance of lecturers and training in the workshop does not significantly impact on lecturer performance in Nigerian colleges of education. The survey research design was adopted. Using the results, it emerged that, in-service training, workshops and intensive training had tremendously influenced the lecturers’ performance in the colleges of education northwest
geopolitical zone Nigeria. It was, therefore, suggested that every university teacher be given in-service training to enhance the performance of their job. Similarly, this research focused on the linkage between the availed training program and its impact on the involved academic staff teaching and research output in the given area of study.

In-service training was further supported by Sendawula et al., (2018) on the role of training and engagement on the performance of employees by use of evidence from the health sector in Uganda. Results of the research revealed training and staff engagement did substantially foretell workers performance by 44%. The engagement of workers formed a major predictor of the performance of employees in relation to training. It emerged that a positive linkage existed between training and staff output ($r=0.542$, $p<0.05$). It further showed an important connection between employee engagement as well as staff output ($r=0.624$, $p<0.05$). The study recommended institutional managers to provide more on job training opportunities to employees.

Namutebi (2019) conducted a study on instructional leadership and the performance of lecturers in Ugandan public universities. The research aimed to establish the current state of lecturers’ job output. It further analysed the way heads of departments defined their universities’ missions and influenced the performance of lecturers. The study revealed that generally, public universities are struggling with lecturers’ job performance. The undesired performance was in relation to the low level of research conducted and community service engagements were equally low. Study finding gives an insight into how the lecturers are not helping the graduates get moulded by public universities to initiate innovation and propel national development as expected. This research was designed to determine the linkage between training and performance of academic staff in relation to teaching and research outputs.

Another study was carried out by Ozurumba and Amasuomo (2015) on training and output in research by teaching staff in the Southern Nigerian state universities. Study hypotheses tested for the effect of in-service training, conference and attendance of workshop by staff on research output. The research design was ex-post facto. Findings signified an important influence of in-service training on the output of research ($F=1.688$, $p<0.05$). Results revealed that staff training in terms of conference attendance significantly influenced research output. The study recommended that the government in collaboration with educational stakeholders needs to provide adequate funding, policies and programs for staff training among academic staff (Ozurumba & Amasuomo, 2015). One can notice that the research design adopted was ex-post facto research design and this study employed a mixed-method particularly convergent parallel approach in order to ensure comprehensive data were collected. The nature of the correlation between training practice and academic staff research outputs was determined by the Pearson correlation coefficient in the selected public universities in Uganda.

On the other hand, Dawo, Simatwa and Okwatch (2012) evaluated academic staff training outcomes and job performance in certain Kenyan public universities. The study rationale was to find out why many modern organisations insist on employee training as a workforce strategy to curb deficiencies in performance. It is also a way of aligning their employees to the dynamism in workplaces. The study was also interested in comparing the influence of training on the output of lecturers who had doctorate degrees (Dawo, Simatwa & Okwatch, 2012). It was found that much as universities’ staff training policies were well documented, staff did not attest to their effectiveness. It was further observed that staff training in itself did not necessarily lead to significant improvement unless reinforced by recognition, promotion and salary increase (Dawo, Simatwa, & Okwatch, 2012). Though this study was conducted in Kenya, it only used participants who had doctorate degrees and also focused only on staff training practices. The study adopted some of its approaches to enrich the data collected.

In a study by Kasozi (2019) on the formation of an upcoming group of innovators and thinkers: training of doctors in universities in Uganda. He observed that higher educational institutions employ many techniques for training PhD candidates. Some of them include traditional research-PhD by thesis only (the British type); taught PhD including a
thesis (the American type); PhD by publication including written academic papers; the work-based or professional PhD and practice-based PhDs. He concluded that the aspect of teaching and research including training and hiring of staff should be decentralised to the academic departments in all universities. This study explored the practices used in training and its impact on the academic staff teaching and research outputs.

Nabunya, Mukwenda and Kyaligonza (2019) in research on the linkage between professional development and research, teaching and engagement in community service in the universities of Kampala International and Kyambogo. The cross-sectional survey design was employed. The collection of data was done using a questionnaire. Analysis of data was done using regression analysis. The conclusions showed a significant positive correlation between practices of professional development and delivery in the teaching service of lecturers in the universities of Kampala International and Kyambogo. Simple linear regression analysis results showed an insignificant relationship between professional development practices and research. Regression analysis results indicated that professional development practices are insignificantly related to community service delivery. It further elaborated that coaching; mentoring and study leaves did not influence community service delivery. The finding was in line with Kasozi (2009) that low research service delivery was more of low funding in universities.

**METHODOLOGY**

**Research Design**

This study adopted a quantitative dominant mixed methodology. A dominant quantitative methodology is quantitatively driven. The research approach chosen was quantitative with a positivist orientation. To enrich the study findings, the researchers recognised the addition of qualitative data approaches. In line with Kumar (2011), mixed research methodology was adopted because it seeks to have a broad, in-depth understanding and corroboration of findings.

**Study Variables**

The independent variable was academic staff training while the dependent variable was academic staff performance. The academic staff performance focused on teaching output as measured by teaching ten hours weekly; preparing course outlines; timely assessment of students; timely marking and return of scripts; timely submission of marks to the department. The other aspect of academic staff performance was research output as measured by research publications, papers presented, conference attended and students supervised to completion.

**Location of the Study**

This research was done in four Ugandan public universities. They were: Kyambogo University located in Central Uganda, Mbarara University of Science and Technology located in Western Uganda, Gulu University in Northern and Busitema University in the Eastern region of the country. These public universities were selected based on the assumption that they have implemented Human Resource Management Practices since 2011 and have good experiences and records. They also represented each region of the country. This helped in giving a more representative view of the public universities in Uganda.

**Target Population**

The target population clearly identifies which elements are included in the sample population and which elements are not included. The target population comprised all the academic staff, directors of human resources and Vice-Chancellors making a total of 1135. This includes all the 1127 full-time academic staff who are on the government payroll, all the four Vice-Chancellors and all the four directors of human resources in the selected public universities. Academic staff were included because they were the main focus of the study and human resource management practices directly targeted them. The directors of human resources and Vice-Chancellors were included because they formulate and implement human resource management practices in public universities. They had reliable information on the status of human resource management practices in public universities in Uganda. The Vice-Chancellors also
perform a key duty to ensure that academic staff are provided with the required conditions to enhance their performance.

**Sample Size**

To get the appropriate size of the sample for academic staff, Vice-Chancellor and director human resource, the table designed by Krejcie and Morgan (1970) was used to determine the sample size from the given population. The academic staff sample were 291 out of 1127. The total sample size was 299 respondents made up of 291 lecturers, four directors of human resources and four Vice Chancellors. This is summarised in Table 2.

<table>
<thead>
<tr>
<th>Public University</th>
<th>Regional Location</th>
<th>Category of respondents</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mbarara</td>
<td>Western</td>
<td>Academic staff</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice-Chancellor</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director HR</td>
<td>01</td>
</tr>
<tr>
<td>Gulu</td>
<td>Northern</td>
<td>Academic staff</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice-Chancellor</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director HR</td>
<td>01</td>
</tr>
<tr>
<td>Kyambogo</td>
<td>Central</td>
<td>Academic staff</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice-Chancellor</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director HR</td>
<td>01</td>
</tr>
<tr>
<td>Busitema</td>
<td>Eastern</td>
<td>Academic staff</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice-Chancellor</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director HR</td>
<td>01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>299</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Research Instruments**

In a mixed study design, researchers usually apply both quantitative and qualitative data collection instruments. This involved the use of a semi-structured self-administered questionnaire (SAQ). Qualitative data collection instruments involve collecting a large amount of data on a rather small, purposive sample. This study applied in-depth interviews (Gaiser & Schreiner, 2009). A pilot test was conducted on all the instruments that were used and on the procedure of data collection. The pilot test ensured that the instruments were valid and reliable and that the participants would respond in accordance with the instructions. The pilot study also examined the best way to handle unanticipated problems and gauged how long the respondents would respond to the instruments.

The validity of the questionnaires was determined by two professors who are experts in human resource management in universities. One of the Professors came from Makerere University the Uganda’s oldest university and the other from Makerere University Business School in Uganda. The views of these two professors were adequate in validating the items in the instruments prepared for the collection of data collection. The items were evaluated on a scale of 1= relevant and 2= not relevant. Relevant items were considered by the experts as having the ability to measure the variables under study. A Content Validity Index (CVI) was further employed to determine the validity of the instruments. The formula used in determining content validity index was CVI=n/N; where n is the number of items which were confirmed relevant; N is the total number of items in the instrument. A CVI of 0.7 and above was considered acceptable as noted by (Amin, 2005).

<table>
<thead>
<tr>
<th>Expert</th>
<th>Content Validity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert 1</td>
<td>0.84</td>
</tr>
<tr>
<td>Expert 2</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>0.87</strong></td>
</tr>
</tbody>
</table>

As presented in Table 3, all the CVIs were above 0.7, meaning the items were relevant to the study variables. On average, the Content Validity Index
The findings as in Table 4 showed that staff training had an alpha coefficient of .732, financial rewards .733, performance appraisal .956, teaching output .877 and research output .720. The average reliability alpha coefficient was .804. All the alpha coefficient values were above 0.7 as recommended by Ahuja, Coff and Lee (2005) and therefore, the instrument was deemed reliable to be used for data collection.

Data Analysis

The analyses of quantitative data were done based on descriptive statistics including frequencies and means. The Pearson Product Moment Correlation Coefficient was employed to determine the nature of the correlation between the variables through testing of the null hypotheses at a level of significance of 0.01. Pearson Product Moment Correlation Coefficient was used to determine the level of significance of the correlation between the predictor and outcome variables. This relationship stated in the null hypothesis was determined based on the following coefficient values: r= 1.0 Perfect relationship, 0.7 to 0.99 High relationship, 0.4-0.69 Moderate relationship, r=0.2-0.39 Weak relationship, r=0.01-0.19 Very weak relationship and 0=No correlation (Creswell, 2014). At the multivariate level, analysis using multiple regression was further employed to establish the predictability of the independent variables on the outcome variables. Qualitative responses recorded in the notebook were analysed based on relevant themes. The themes were derived in line with the research objective as recommended by Trochim (2006) and narrated to support the quantitative data.

RESULTS AND DISCUSSION

The first objective of the research was to establish the relationship between training and academic staff teaching output in selected Ugandan public universities. The researcher had hypothesised that staff training had no statistically significant correlation with academic staff teaching output. The findings showed that a moderate positive relationship (r (2) = 0.476, p<0.01) existed between staff training and academic staff teaching output. This implied that to a reasonable extent when the university provides training in the form of seminar and workshops to academic staff, it enhances their...
knowledge and expertise which increases their pedagogical skills. This boosted the teaching output of academic staff. Therefore, this, means that the null hypothesis was rejected and restated as staff training has a statistically significant relationship with academic staff teaching output. Hence staff training was a significant factor in determining the teaching output of academic staff in public universities.

Aspects of Staff Training that Contributed to Teaching Output

Exploratory factor analysis was relied on to explore the components of staff training that strongly contributed to the relationship (r = 0.476) with teaching output. Aspects with eigenvalues greater than 1 were considered. An oblique solution was chosen, using a Varimax rotation, to have components that are correlated with one another. The components are presented in Table 5.

Table 5: Rotated Factor Matrix for Staff Training

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant training programs provided</td>
<td>0.574</td>
</tr>
<tr>
<td>Academic staff consulted on training programs</td>
<td>0.940</td>
</tr>
<tr>
<td>Training improves pedagogical skills</td>
<td>0.457</td>
</tr>
<tr>
<td>Workshop conducted to improve Job Performance</td>
<td>0.487</td>
</tr>
<tr>
<td>Seminars for research publications organised for Academic Staff</td>
<td>0.607</td>
</tr>
<tr>
<td><strong>Eigen values</strong></td>
<td><strong>1.51</strong></td>
</tr>
<tr>
<td><strong>Percentage of total variance</strong></td>
<td><strong>16.76</strong></td>
</tr>
<tr>
<td><strong>Cumulative percentage</strong></td>
<td><strong>16.76</strong></td>
</tr>
</tbody>
</table>

An inspection of the extracted components indicated that component 1 was teaching and performance skills, and accounts for 16.8% of the variation, component two was problem-specific training accounted for 16.7% of the variation. The two components accounted for 33.5% of the variation in staff training. This implied that staff training that met the real needs of academic staff accounted for 33.5% of improvements in the teaching output of academic staff.

Simple linear regression was done to ascertain the influence of staff training on teaching output. Scores on staff training (Mean=31.58, SD= 7.26) were regressed with scores on teaching output (Mean=35.14, SD= 6.01) as presented in Table 6.

Table 6: Simple regression results of staff training versus teaching output

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Ad R²</th>
<th>B</th>
<th>Beta</th>
<th>F Stat</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.476</td>
<td>0.226</td>
<td>0.223</td>
<td>22.723</td>
<td>.476</td>
<td>79.177</td>
<td>.000*</td>
</tr>
</tbody>
</table>

*Values significant at 0.05 level (2-tailed)

Findings in Table 6 showed that staff training impacted on teaching output by $R^2 = 0.226$. This implied that staff training made a 22.6% (multiplied .226 by 100%) improvement in teaching output. In other words, teaching output is dependent on staff training by 22.6%. The beta and F-statistics (79.117, p< 0.05) being positive implied that staff training positively predicted teaching output. The Vice-Chancellors reported that regular training of academic staff had the potential to improve on academic staff teaching output. One of the Vice-Chancellors said:

"...for universities to improve on the performance of academic staff more relevant seminars, workshops and short courses need to be regularly and consistently done by faculties, schools and respective departments. The training should focus on pedagogical issues and research skills..... Departments and Faculties have been encouraged to exhaust their votes on
training in order to refresh the teaching staff. When properly organised, it has the potential to greatly increase the teaching and research outputs in the university.”

In respect to this view, one of the Directors of human resources reported that:

“Training needs have to be initiated and determined by the academic staff in their departments and faculties... faculties are mandated to coordinate training programmes in their sections and departments. Faculties know the needs of its members and this should be effectively handled at that level. This will also help to handle academic staff training needs at a personal level. It will further encourage academic staff to actively participate in order to perform as expected.”

This finding was further supported by Kasule and Neema (2014) who argued that among other strategies appropriate staff training greatly enables universities to be centres of academic and professional excellence. Landa (2018) also affirms that seminars, conferences, provide opportunities for university lecturers to acquire and get up to date information in line with current trends. These are instrumental in enhancing academic staff performance in universities. Results obtained in the research are further supported by Jacob, Xiong and Ye (2015) who reported that academic staff job performance could be improved through availing opportunities for both short and long-term training sessions. In this respect, all the employees of the university whether novice, young, old, experienced and well exposed can polish already possessed competence to be relevant in their job position. The employees will further be able to collaborate and partner with other experts through the exchange of ideas, information and networking in all areas of the job aspect. The overall aim of academic staff training should be to improve individual and institutional effectiveness through improved performance.

**Training and Academic Staff Research Output**

In the second objective, the researcher established the relationship between training and academic staff research output in selected public universities in Uganda. The researcher had hypothesised that staff training had no statistically significant relationship with academic staff research output. The findings indicated that a weak positive relationship (r = 0.347, p<0.01) existed between staff training and research output. The stated null hypothesis was rejected and restated as staff training had a statistically significant relationship with academic staff output in research in public universities. Therefore, to an extent, when academic staff received training on research skills, their involvement in doing research and publications increased. This means that staff training is important in contributing to the research output of academic staff. Simple linear regression was done to ascertain the contribution of staff training on the research output of academic staff. Scores on staff training (Mean=31.58 SD=7.26) were regressed with scores on research output (Mean=25.97, SD=4.52) as depicted in Table 7.

**Table 7: Simple Regression results of Staff Training Versus Research output**

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Ad R²</th>
<th>B</th>
<th>Beta</th>
<th>F Stat</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.347</td>
<td>.120</td>
<td>.117</td>
<td>19.161</td>
<td>.347</td>
<td>37.073</td>
<td>.000*</td>
</tr>
</tbody>
</table>

*Values significant at 0.05 level (2-tailed)*

Findings in Table 7 showed that the contribution of staff training to research output was R²= 0.12. This implies that staff training made a 12% (multiplied .120 by 100%) variation in research output. In other words, research output is dependent on staff training by 12%. The beta and F-statistics (37.073, p< 0.05) were positive, implying that staff training positively predicted research output. The views of Vice-Chancellors agreed with the findings above that training plays critical importance in facilitating academic staff to produce output in research. One of the Vice-Chancellors said that,

“Faculties and departments need to regularly organise research workshops and seminars to cover issues of publications, research supervision, proposal writing, scholarly writing and collaborative research opportunities ...."
This would greatly improve the academic staff research output in public universities.”

In relation to this view, one of the directors of human resources added that,

“Some of the academic staff are less interested in research because they are overwhelmed with other commitments and yet it takes a lot of effort and time to write and publish credible research work.... However, the young academic staff seem to fully engage in research activities much better than the old and mature lecturers with few years to retire from university service.”

The findings above showed that the training of academic staff should also include research and publication skills. Interactions and findings from academic staff showed that regular research training provides academic staff with motivation to be both teachers and researchers. This agrees with Aziz and Akhter (2014) who say that research knowledge enhances knowledge of academic staff in their area of specialisation which enables them to teach with confidence. They add that regular conference attendance and presentations by academic staff significantly improve their research capabilities, by enabling them to acquire new methods and practices.

Ozurumba and Amasuomo (2015) also added that academic staff in universities should offer leadership in crafting programs for teaching, conducting research, publication and knowledge dissemination. This can only be accomplished if they are very knowledgeable in the methodology of conducting research. They should further be conversant with qualitative and quantitative methods of data collection and analysis. Also applied research conducted to resolve the specific needs of society is critical in evaluating the performance of academic staff. Community research outreaches that encompass participation in community development and leadership activities can be taught to academic staff during professional development training.

However, Dawo, Simatwa and Okwatch (2012) noted that staff training in itself did not necessarily lead to an improvement in employee performance unless it is reinforced by recognition, promotion and salary increase. This gives an insight to university top managers to consider among other things adopting reward strategies for academic staff that successfully undergo training so that universities can benefit from their training.

**CONCLUSIONS**

In regards to training and academic staff teaching output, the study found that in order for the training of staff to contribute to better teaching output, staff had to be involved in identifying their training needs. Public universities need to ensure effective implementation of regular and relevant seminars, workshops and short courses by faculties, schools and departments to meet these needs. Training initiatives that had very little input by academic staff were not well attended and those who attended were less likely to implement what they had learned.

In relation to training and academic staff research output, the study findings revealed that: to increase the involvement of academic staff in doing research; research training has to be, regular and organised by the respective departments and faculties since they are best located to know the training needs of their academic staff. It should cover the important aspects of publication, research supervision, proposal writing, scholarly writing and collaborative research opportunities. The study findings further revealed that training in itself might not improve on academic staff performance unless there are recognition, promotion and an automatic salary increase of academic staff.

**RECOMMENDATION**

The recommendations were based on the study results as guided by study findings and conclusions.

i) The university management should create more training opportunities to improve the teaching and research output in public universities.

ii) The training should also include skills on how to access fundable research opportunities.

iii) The university managers should partner with other centres of excellence to provide continuous training for the academic staff in pedagogy and research output.
iv) They need to ensure that their work environments can support participation in training more academic staff to increase the likelihood of contributing to work engagement.

v) The Ugandan Ministry of Education and Sports should provide more funding for training so that academic staff can be trained in modern pedagogy and research.

REFERENCES


