Research and Development: A Focus on the Level of Research Publications in Journals by Lecturers

Abstract

This study sought to assess the level of research publication in Journal by University Lecturers. The subjects consisted of 90 lecturers drawn from University of Calabar and Cross River University of Technology (Unical and Crutech). The instrument for data collection was the structured questionnaire while percentages and chi-square ratio were used to analysis the data. The findings of the study revealed that 62% of the lecturers had no publications in international Journals while only 15% had 6-10 publications in local Journals. 70% had barely 1-5 publications in local Journals. The implication of this finding is that there is low publication of research work through international Journals. Suggestions were made to stimulate dissemination of research results for sustainable academic and industrial growth in Nigeria.

Keywords:
Research, Development, Publication, Journal, Lecturers Focus

Corresponding Author:
Felix Ojong
Background to the Study
The mathematics assertion “Research Development” can hardly be contested. This fitting equation is predicated on factual, demonstrable and visible evidence quite familiar to all of us. Research plays a diagnostic role to initiate development. We can rightly nickname it a precursor and harbinger of development. It is for this reason that the present lack of research funding especially in tertiary institutions charged with this serious responsibility for the nation, tends to elicit vociferous protests and unrest among lecturers. Research forms the baseline for qualitative and relevant education, which in turn constitute the foundation for socio-economic, political, technological, industrial and aesthetic developments. These spheres of development together generate total development in the new world order. Many of the contemporary problems, which have plagued our society so profoundly in recent times, require some sound research to arrive at lasting solutions. The destructive effects of cultism, ethnic conflicts and violence, armed robbery, child abuse, terrorism, toxic corruption, chronic poverty, impeachment virus, functional illiteracy and youth’s decadence are just a few examples that made lecturers to be keen through research into their possible causes. These views tend to block development and therefore may prove absolutely risky, not only for Nigeria but also for the entire new world order.

Concept of Research
Research is defined as a systematic activity directed towards the acquisition of dependable-objective and verifiable body of scientific knowledge or information. Viewed differently, research is defined as a discipline inquiry into natural and human phenomena. Deng and Ali (1998) regard research as a road map into the investigation of what actually is and not what ought to be, or possible might be. Also Deng (2002) adds that the famous and correct routes followed by researchers is to:
   i. Recognize a problem or problematic situation
   ii. Define the problem in clear specific terms
   iii. Develop testable hypotheses
   iv. Development valid and reliable measuring instruments to collect valid data
   v. Collection and analyse data, using appropriate test statistics
   vi. Analyses and interpret data, making relevant references, deductions and recommendations for further action.

According to Osuala (1982) research is the process of arriving at reliable solutions to problems through planned and systematic collection, analysis, and interpretation of data. Research is a systematic inquiry aimed at providing information to solve problems. Research is oriented towards the discovery of the relationship that exists between man and his environment and also to fine out the condition under which a certain phenomenon may or may not likely occur. Research is the most important tool for advancing knowledge and for progress it helps man to relate more effectively to his environment, accomplish his purposes and resolve his conflicts (Olawuyi and Pamojuro, 1998). Research is reserved for activities designed to discover facts and relationships that will make knowledge more effective. A major objective of educational research is that of improving the efficiency of the educational process and/or providing a
guide for possible change in educational practice. Educational research is done to study pupil’s growth and development, study relationships among various educational factors, evaluate current educational practices, provide information which will help education decision makers, develop instruments for use in education evaluation.

**Purpose of Research Evaluation**
The basic purpose of research is to provide useful information to the management for decision-making it provides a chance to widen already existing knowledge. Research is used to acquire and analysis information and to make recommendations to the management on problem solving.

Chike-Okoli (2003) present the following as the primary objectives of research:

1. To generate new ideas
2. To explore conflicting views
3. To indicate general trend
4. To give answer to problem
5. To try out new methods treatments

**Research and Development**
Relevant research is purported to bring about sustainable development by way of finished products. This development can be achieved in the following ways: Large-scale instead of small-scale research on the production of teachers (for example) will furnish abundant qualitative manpower for national development. Team research is thus strongly advocated. Long-term research is more profitable in the long run than short-term research. Research and development programme is aim at long-term goals rather than short-term goals.

Curriculum revisions, innovation and diversification to cover a wide spectrum of developmental facets of the nation should be evolved. The school curriculum should be dynamic and responsive to development plants and aspirations. Skill-development in technological proportion will increase the per capita earnings of individuals and the nation at large. Research is also needed to change the attitude of the people in favour of hard work, investment, high productivity and an appetite for home made goods. Population research is a critical area of development. Population employment, technology and healthy labour obey different locos. Good research must find a common ground for these variables to co-exist. Research must lead to the production of books and other materials of demonstrable effectiveness for our educational system. Research should be geared toward human behaviours that tend to hinder development. Such behaviours may include political, social, psychological, economic and aesthetic. Violence and unrest are deleterious and inhibit development. Research should be adequately funded by government and findings fully used to facilitate development.

**Problems of Lecturers and why they are Not Publishing**

**Illiteracy:** illiteracy remains the most serious problem facing the people of Nigeria. Many of the illiterate Nigeria population are left out of research samples because of the difficulty of
obtaining pertinent data from them. This factor poses problems in the following area:

i. The attempt to get information relating to demographic variables like age, occupation, income, educational background, etc., are often resented because the researcher is mistaken for a government tax agent.

ii. Effective communication is difficult amongst the illiterate. Consequently, they are unable to complete research questionnaires.

Secret: Both individuals as well as government ministries and departments are known for keeping lots of information secrets, even information that is meant for public consumption. This makes research difficult.

Lack of Adequate Research Skills: Many would-be research solutions have devoted their skills to alternative careers, with the result that only secondary attention is given to research. Although universities offer courses in research methodology, the knowledge is seldom applied.

Finance: High cost of transportation in African countries hinders research activities, especially survey and descriptive research. Some researches often limit the scope of their research study because of the high cost of transportation. A worthwhile research is generally very expensive. It also requires extra time and energy. Because of this, most research studies are shabbily completed and their findings are unreliable.

Prejudice against researcher: In some African societies, there is prejudice against university teachers and their research, which they tend to believe, is too academic and has only limited practical application. Quite often, the public and even government, express misgivings about research findings. Some of the findings have been branded as ‘too academic’ even when they portray the facts and suggest workable solutions to problems.

Scanty statistics: Research in Nigeria is still in its infancy and a lot of the background data are not readily available. What is available is not reliable. This adversely affects attempts to do research. Even government programmers are initiated and implemented without sufficient research. As a result, programmes like WAI, UPE, SAP, have failed because of inadequate research work and data from research reports. The need for research is constantly felt by both the public and private sectors, but priority has often shifted to other competing needs because of Africa’s scarce resources. Many policymakers think that it is a waste of time thinking of research when many of the countries of West Africa lack adequate transportation, reliable water supply, electricity, and so forth. They failed to realize that scholarly research would help to make these things possible. The basic statistics that form the bedrock of research are often not available; where available, they are by no means reliable. This has often contributed a major bottleneck in carrying out empirical research.

Methodology
A structured questionnaire was constructed and validated by other professional colleagues in the institution. The subjects were drawn from a random sample of 100 lecturers (about 22% of the study population) from Unical and CRUTECH. Data for analysis were provided by 90 respondents (45 respondents for data collection consisted of two sections. Section 'A' was
used to elicit information from the respondent, about their name of institution, qualification, area of specialization, number of years served with institution, and source of fund for research. Section 'B' consisted of the number of researches carried out: number of publication in local journals and the number of publication in international journal. The data item (subjects) were categorized according to the number of publications (ranging between 0 and 25). Data were analyzed with simple descriptive percentages. In addition, chi-square test of independence and homogeneity was used to determine whether there was a significant difference in their publications in the local and international journals. The analysis was at the 0.05 a priori level of significance. The formula for chi-square is as follows:

\[ X' = \frac{\sum_{i=1}^{r} \sum_{j=1}^{c} (o_{ij} - p_{ij})^2}{\sum_{i=1}^{r} \sum_{j=1}^{c} E_{ij}} \]

\[ \text{Degree of freedom} = (r - 1)(c - 1) \]

The expected cell frequency is computed for the jth cell by multiplying the row total in which cell appears by the column total in which that cell also appears and dividing by the total number of observations in the entire contingency table.

\[ E_{ij} = \frac{\text{row total} \times \text{column totals}}{\text{No. of observations}} \]

The following hypothesis was tested. H1: There is no significant difference in the number of publication of lecturers in the local and international journals.

Results and Discussion
The data in table 3 indicate that all the subjects for the study had been carrying out research activities in the universities. Thus, it is expected that they know that publication of research findings was part of their professional responsibilities. Among the subjects (table 3), sixty two percent (62%) had no publication in international journal while 35% had barely 1 to 5 publications in international journals. 70% had barely 1 to 5 publications in local journals while 15% had 6 to 10 publications in the local journals. An attempt was made to determine whether there was significant difference in the number of publications in local and international journals. The chi-square test result is shown in table 4. This revealed a significant difference in the number of publication in local and international journals (\(X' = 53.66 > X^2 = 11.070\)). This shows that the subjects had more publications in local and international journals. The implication of this is that quite a number of research findings among these subjects were not reposition in the national science and technology information service for industrial growth. This is because foreign (international) journ provide easy access to international and national science and technology information. (Garba 2000)
Conclusion and Recommendations

The findings revealed that University lecturers in the University of Calabar and Cross River University of Technology have more publications in local journals than in international journals. This provides access to international journals. This is so in spite of the fact that foreign journals provide easy access to international and national science and technology information. The 21st century poses an increasing important challenge to seek to improve the volume of research findings available through international journals for sustainable industrial growth in Nigeria. To induce and sustain strong and viable link between the outputs of the research community and the potential users of those outputs (commercial industrial interests), it is imperative to stimulate the publication productivity of our university lecturers. There is need to rediscover the National Science and Technological Information Service (NSTIS) to ser a technological data repository and clearing – house. Its functions would be expedited by statu requiring that all data and reports emanating from research centers and supported in any form by p funds should be deposited with NSTIS for reproduction and public dissemination. A second approach research – industry linkage promotion, which should be encouraged is the emergence of Research Development Advisory Service (RDAS) in the universities to foster the development and exploration structural linkage between researchers, and industry for the purpose of promoting the commercialization dissemination of research results.

Table 1: Qualification of University Lecturers

<table>
<thead>
<tr>
<th>Qualifications of lecturers</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc</td>
<td>18</td>
<td>19.0</td>
</tr>
<tr>
<td>M.Sc</td>
<td>66</td>
<td>73.0</td>
</tr>
<tr>
<td>Ph.D</td>
<td>16</td>
<td>18.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: Number of years served with institution by lecturers

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3</td>
<td>41</td>
<td>45.0</td>
</tr>
<tr>
<td>6 – 10</td>
<td>34</td>
<td>38.0</td>
</tr>
<tr>
<td>11 – 13</td>
<td>10</td>
<td>11.0</td>
</tr>
<tr>
<td>16 – 20</td>
<td>5</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3: Number of research findings published in journals by University lecturers

<table>
<thead>
<tr>
<th>No of publications</th>
<th>Local journals</th>
<th>International journals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>1 – 5</td>
<td>63</td>
<td>70</td>
</tr>
<tr>
<td>6 – 10</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>11 – 15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16 – 20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21 – 25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None (0)</td>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>
Table 4: Chi-square analysis of difference in the number of publication in local and international journals.

<table>
<thead>
<tr>
<th>Publications</th>
<th>Calculated Chi-square</th>
<th>Critical value at 0.09</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local and International</td>
<td>53.66</td>
<td>11.075</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Conclusion**

This heuristic account simply serves as a whets one to sharpen the focus. Research is viewed as a dynamic instrument of change in kinetic rather than static world. A good knowledge of research is a means of resolving problems that hinder development in the new world order. Our research efforts must lead to sustainable development, which is desperately needed by all development nations.

**References**


