UTILIZATION OF JOURNALS BY THE FACULTY MEMBERS OF ENGINEERING COLLEGES IN NELLORE DISTRICT, A.P: A STUDY

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ABSTRACT

This paper is aimed at an intensive study on the utilization of journals in engineering college libraries. The prime objective of the study is to find out how the faculty members access and utilize journals. The study makes a comprehensive assessment of the scope and extent of the utilization of journal and factors that have bearing on the use of available data by the faculty members of engineering colleges in Nellore District. In this study, a detailed attempt has been made to investigate about awareness, frequency, and purpose of journals in engineering college libraries.

KEYWORDS: Utilization, Journals, Faculty Members, Engineering Colleges, ICT Applications.

INTRODUCTION

The information is processed data that is communicated, transmitted and disseminated from a wide range of sources in various formats to the end users which is available in print, electronic, digital and further towards virtual. Academic libraries play a crucial role in fulfilling the information needs of users by providing contemporarily relevant and retrospective information to the young minds. The journals only provide such information and it facilitates the improvement of quality in academic environments.

Engineering education plays a vital role in the emerging higher education sector. It expands technical knowledge and training to the people by imparting technical education and generates opportunities to the needy people. It gives enough knowledge towards performing certain tasks. It has made rapid strides because the scientific and technological advancement reflects the development and growth of a nation.

Need and Significance of the Study

Journals play a crucial role in enhancing and widening knowledge of faculty members and assists heavily for necessary information and keep themselves up-to-date in their subject area. This study has been conducted to know the utilization of journals by the faculty members of engineering college libraries in Nellore district of Andhra Pradesh for getting the required information and to ascertain whether the libraries are enough to provide necessary and needful information for faculty members to update their academic knowledge.

Scope of the Study

The study is conducted to know how the libraries in engineering colleges are updating journal sources to meet the academic needs of faculty members. The study is also conducted to examine the levels of awareness about journals, the
frequency of use and purpose of use by the faculty members in engineering college libraries. Asst. Professors, Assoc. Professors and Professors working in 16 engineering colleges established on or before 2008 in Nellore district only are considered for the present study.

OBJECTIVES

- To get an idea of gender and designation wise faculty members
- To study the frequency of library visit by the faculty members
- To get aware of the availability of journals in the libraries
- To know the frequency of using journals by the faculty members
- To know the purpose of using journals in the libraries

REVIEW OF LITERATURE

Numerous studies have been carried out to assess and analyze the importance of journals and its use by the faculty members of higher learning institutions in various places in and outside India. The following is the brief account of studies conducted earlier for the last several years. Anasuya\(^7\) conducted a study on the use of electronic resources that medical respondents stood top with respect to use of e-resources followed by dental respondents. Nanda and Archita\(^8\) study on purpose of using e-journals by research scholars and faculty members that majority faculty members and research scholars were using e-journals for research work followed by writing articles and conference papers. It reflects that e-journals subscribed by the library are effectively used for research work of the university. Sohail and Ahmad\(^9\) opine on the frequency of using e-journals that majority library users visited the library daily and lowest number of users visited two to three times a week. Wijetunge\(^10\) conducted a study on the purpose of usage of electronic resources by librarians in Srilankan Universities. It reveals that the resources are mainly used for research followed by postgraduate studies and teaching. Prakash and Charya\(^11\) highlight a study on the role of LIS professionals in promoting electronic information literacy among users. Kaur and Tholkappian\(^12\) conducted a survey on the library services and facilities of 150 engineering colleges in Vellore district of Tamil Nadu state. The study reveals that majority respondents visited the library and books, Periodicals were sufficiently available and also the library collection was adequate for their needs. Most of the users satisfied with physical facilities available in their libraries but were negative with regard to e-resources. Sing and Kataria\(^13\) describes that majority of research scholars and faculty members were aware of e-journals and they access e-journals for their research and development work. Anil Kumar and Pulla Reddy\(^14\) study reveal that less number of research scholars visited the library for accessing e-journals. Majority of research scholars refer to print journals for their research work. Dilrukshi\(^15\) attempts a survey on the online journal usage of all the fourth year undergraduates of agriculture in Sri Lankan Universities, reported that 52% prefer online journals while the remaining 48% prefer printed journals. The study further recognized that the absence of training in using online resources, lack of time to engage in searching due to heavy workload, poor knowledge of online journals, and lack of computer facilities for faculty affected the usage of online journals. The author recommended comprehensive training and awareness programmes, allocation of time to use the library, and increased library facilities in the faculty. Islam Khan\(^16\) depicts that students and research scholars accessing e-journals for their study and research. Nisha and Ali\(^17\) study reveal that e-journals were used for updating knowledge and also used for their research work, publishing paper, preparing assignments, presentations, and seminars etc.
Shukla and Mishra\textsuperscript{18} examine that research scholars prefer e-resources against print resources because of its various good features for their good research progress and are looking in future to have more e-resources access within university campus with better internet connectivity. Hamade and Saud\textsuperscript{19} study reveal that majority respondents preferred journal articles, web pages, and books but despite the availability of electronic resources and full-text databases, the majority preferred print forms in contrast to less number of respondents preferred electronic resources. Madhusudan\textsuperscript{20} opines that number of users use e-resources for research and there is a clear need to increase subscription to LIS material. The study recommends that subscription to more LIS resources, training and infrastructure development, better promotion and awareness programmes.

**METHODOLOGY**

The study was conducted to assess faculty members on the utilization of journals in engineering college libraries in Nellore district. Out of various methods adopted for the survey, questionnaire method was followed in which all the questions prepared well in advance relevant to the present study. A stratified simple random technique was adopted for distribution of questionnaires among three designations of faculty members i.e. Asst. Professors, Assoc. Professors and Professors working in all engineering colleges.

The sample respondents were selected for the present study from the total faculty members (1250) consisting of Asst. Professors (730), Assoc. Professors (350) and Professors (170) who is approximately in 4:2:1 proportion and the sample was drawn accordingly. A sample of 825 (66\%) faculty members is drawn from the total faculty population. The researcher distributed 825 questionnaires individually to the faculty members and 649 (78.7\%) filled in questionnaires were received with the necessary feedback.

The collected data were presented in the form of tables. Chi-square values were calculated wherever necessary. At the end, citations are referenced following the American Psychological Association (APA) style

**ANALYSIS AND DISCUSSIONS**

The collected data was analyzed based on the responses were given by the faculty members and the conclusions were drawn. Careful attention has been paid to the analysis by employing adequate sample techniques.

Nowadays both male and female are working together and working equally in all walks of life. The women professionals are also outstanding in teaching and research. The below table shows different male and female faculty members working with designations at various engineering colleges.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total(N=649)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>Male</td>
<td>255(63.9)</td>
<td>188(75.2)</td>
<td>443(68.3)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate Professor</td>
<td>Male</td>
<td>86(21.6)</td>
<td>51(20.4)</td>
<td>137(21.1)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>Male</td>
<td>58(14.5)</td>
<td>11(4.4)</td>
<td>69(10.6)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Male</td>
<td>399(100)</td>
<td>250(100)</td>
<td>649(100)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses denote percentages

It is evident from the above table that majority respondents (68.3\%) working in engineering colleges are Asst. Professors followed by Assoc. Professors (21.1\%) and the lowest number of respondents is Professors (10.6\%).

\[ \text{Impact Factor}(\text{JCC}) \text{: } 3.7985 \text{- } \text{This article can be downloaded from } \text{www.impactjournals.us} \]
It is also observed that the majority male respondents are Asst. Professors (63.9%) and the lowest number of female respondents are Professors (4.4%). It is understood that male faculty members are more in number in all engineering colleges.

It can be concluded that majority respondents (68.3%) working in engineering colleges are Asst. Professors.

Faculty members visit the library frequently because the library is a place where all types of current and retrospective information are available in the form of journals, newsletters, magazines, reports, books etc. The following table gives the frequency of library visit by the faculty members.

Table 2: Frequency of Library Visit

<table>
<thead>
<tr>
<th>Library visit</th>
<th>Male (N=339)</th>
<th>Female (N=250)</th>
<th>Assistant Professor (N=443)</th>
<th>Associate Professor (N=137)</th>
<th>Professor (N=69)</th>
<th>Total (N=649)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>226(56.6)</td>
<td>121(48.4)</td>
<td>233(52.6)</td>
<td>67(48.9)</td>
<td>47(68.1)</td>
<td>347(53.5)</td>
</tr>
<tr>
<td>Twice in a week</td>
<td>59(14.8)</td>
<td>46(18.4)</td>
<td>68(15.3)</td>
<td>26(19.0)</td>
<td>11(15.9)</td>
<td>105(16.2)</td>
</tr>
<tr>
<td>Once in a week</td>
<td>104(26.1)</td>
<td>80(32.0)</td>
<td>131(29.6)</td>
<td>42(30.7)</td>
<td>11(15.9)</td>
<td>184(28.4)</td>
</tr>
<tr>
<td>Rarely</td>
<td>10(2.5)</td>
<td>3(1.2)</td>
<td>11(2.5)</td>
<td>2(1.5)</td>
<td>0(0.0)</td>
<td>13(2.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>399(100)</strong></td>
<td><strong>250(100)</strong></td>
<td><strong>443(100)</strong></td>
<td><strong>137(100)</strong></td>
<td><strong>69(100)</strong></td>
<td><strong>649(100)</strong></td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses denote percentages

\( \chi^2 \) (Male– Female) : 6.411 (p=0.093) df= 3 \( TV = 7.81 \) Not Significant

\( \chi^2 \) (Asst. – Associate ) : 1.656 (p=0.647) df= 3 \( TV = 7.81 \) Not Significant

\( \chi^2 \) (Asst. – Professor) : 8.355 (p=0.039) df= 3 \( TV = 7.81 \) Significant at 0.05 level.

\( \chi^2 \) (Assoc. – Professor) : 8.165 (p=0.040) df= 3 \( TV = 7.81 \) Significant at 0.05 level

It is observed from the above table that majority respondents (53.5%) visit the library daily followed by 28.4% of respondents visit once in a week and lowest number of respondents (2%) rarely visit the library. A similar trend can be observed in the case of male respondents (56.6%) who visit daily followed by 26.1% respondents visit once in a week and similarity can be observed in female respondents. It is also observed in the case of all three designations that majority Asst. Professors (52.6%) visit the library daily and an equal percentage of Professors (15.9%) visit the library twice in a week and once in a week.

It is proved by the Chi-square value, which is not significant at 0.05 level with 3degrees of freedom, that there is no difference between male and female respondents, Asst. Professors and Assoc. Professors. However, there is a significant difference at 0.05 level with 3 degrees of freedom between Asst. Professors and Professors and Assoc. Professors and Professors regarding frequency of visit to the library.

A thorough study of the table reveals that majority respondents (53.5%) visit the library daily.

Faculty members should aware of what kind of journals available in the library and how it is useful for their academic, research and professional development. The below table brief the journals availability in their libraries.
Table 3: Awareness on the Availability of Journals

<table>
<thead>
<tr>
<th>Response</th>
<th>Designation</th>
<th>Assistant Professor (N=443)</th>
<th>Associate Professor (N=137)</th>
<th>Professor (N=69)</th>
<th>Total (N=649)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>361 (81.5)</td>
<td>120 (87.6)</td>
<td>60 (87.0)</td>
<td>541 (83.4)</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>82 (18.5)</td>
<td>17 (12.4)</td>
<td>9 (13.0)</td>
<td>108 (16.6)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>443 (100)</td>
<td>137 (100)</td>
<td>69 (100)</td>
<td>649 (100)</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses denote percentages

χ² (Asst. – Associate ) = 2.752 (p=0.097) df= 1 TV = 3.84 Not Significant
χ² (Asst. -Professor) = 1.221 (p=0.269) df= 1 TV = 3.84 Not Significant
χ² (Associate. – Professor) = 0.017 (p=0.896) df= 1 TV = 3.84 Not Significant

It is evident from the above table that majority respondents (83.4%) replied in the affirmative about the availability of journals in their libraries and rest of them (16.6%) came out with a negative response. It is also observed in the case of all three categories of faculty members that Assoc. Professors (87.6%) are more in the number who are affirmative on the availability of journals. The lowest number of Assoc. Professors (12.4%) replied negatively on the availability of journals in their respective libraries.

The results of Chi-Square test are found to be statistically not significant at 0.05 levels with 1 degree of freedom which indicates that there is no difference among all three categories of faculty members regarding the awareness on the availability of journals in their libraries.

It can be concluded from the above analysis, that high percentage of respondents (83.4) is aware of the availability of journals in their respective libraries.

Faculty members are mostly depending upon various journals for latest developments in their field of study. The following table shows the frequency of using national and international journals for their necessary information.

Table 4: Frequency of using Journals

<table>
<thead>
<tr>
<th>Preference Level</th>
<th>Assistant Professor (N=443)</th>
<th>Associate Professor (N=137)</th>
<th>Professor (N=69)</th>
<th>Grand Total (N= 649)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>R</td>
<td>N</td>
<td>F</td>
</tr>
<tr>
<td>National</td>
<td>263 (59.4)</td>
<td>152 (34.3)</td>
<td>28 (6.3)</td>
<td>83 (60.6)</td>
</tr>
<tr>
<td>International</td>
<td>188 (42.4)</td>
<td>196 (44.2)</td>
<td>59 (13.3)</td>
<td>56 (40.9)</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses denote percentages

F- Frequently R- Rarely N-Never

The above table describes that majority respondents (59.6%) frequently use the national journals whereas 45.9% of respondents rarely go for international journals. 11.1% of respondents never prefer international journals. A similar trend can be observed in three categories of respondents, viz., Asst. Professors, Assoc. Professors and Professors.

It can be concluded that majority respondents (59.6%) frequently use national journals and the significant number of respondents (45.9%) rarely use international journals. A significant number of respondents are not frequently using journals so that all the librarians should motivate the faculty members to enhance the frequency of usage journals by converting the rare users into frequent users.

Faculty members visit the library for different purposes to obtain necessary and needful information. The below table provides information about the purpose of using journals by the faculty members.
Table 5: Purpose of Using Journals

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Designation</th>
<th>Assistant Professor (N = 443)</th>
<th>Associate Professor (N = 137)</th>
<th>Professor (N = 69)</th>
<th>Grand Total (N = 649)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Seeking</td>
<td></td>
<td>115 (25.96)</td>
<td>49 (35.77)</td>
<td>20 (28.99)</td>
<td>184 (28.35)</td>
</tr>
<tr>
<td>Update subject knowledge</td>
<td></td>
<td>71 (16.03)</td>
<td>27 (19.71)</td>
<td>11 (15.94)</td>
<td>109 (16.8)</td>
</tr>
<tr>
<td>Career development</td>
<td></td>
<td>73 (16.48)</td>
<td>14 (10.22)</td>
<td>17 (24.64)</td>
<td>104 (16.02)</td>
</tr>
<tr>
<td>Personal Research Work</td>
<td></td>
<td>48 (10.84)</td>
<td>9 (6.57)</td>
<td>5 (7.25)</td>
<td>62 (9.55)</td>
</tr>
<tr>
<td>Preparation for course work</td>
<td></td>
<td>42 (9.48)</td>
<td>15 (10.95)</td>
<td>3 (4.35)</td>
<td>60 (9.24)</td>
</tr>
<tr>
<td>Papers for Seminars/ Conf.</td>
<td></td>
<td>39 (8.80)</td>
<td>10 (7.30)</td>
<td>6 (8.70)</td>
<td>55 (8.47)</td>
</tr>
<tr>
<td>Up-to-date Information</td>
<td></td>
<td>21 (4.74)</td>
<td>5 (3.65)</td>
<td>3 (4.35)</td>
<td>29 (4.47)</td>
</tr>
<tr>
<td>Guide the students projects</td>
<td></td>
<td>34 (7.67)</td>
<td>8 (5.84)</td>
<td>4 (5.80)</td>
<td>46 (7.09)</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses denote percentages

The above table states that the significant number of respondents (28.35%) are using journals for seeking information followed by 16.8% of the respondents are using for updating subject knowledge and least number of respondents (4.47%) are using for up-to-date information.

It is also observed that a substantial number of Professors (28.99%) are using journals for seeking information followed by 24.64% of respondents for Career development. The considerable number of Assoc. Professors (35.77%) are also visiting for seeking information followed by 19.71% of respondents using for update subject knowledge and also a good number of Asst. Professors (25.96) are consulting journals for information seeking followed by 16.43% of respondents for career development. It is also observed that the least number of Asst. Professors (4.74%), Assoc. Professors (3.65%) and Professors (4.35%) are consulting journals for getting up-to-date information.

It can be concluded that the significant number of respondents (28.35%) are using journals for seeking information.

**FINDINGS**

- Majority respondents are Asst. Professors (68.3%) working in all engineering colleges followed by Associate Professors.
- Majority respondents (53.5%) visit the library every day.
- Majority respondents (62.9%) frequently visit the libraries to refer books and newspapers.
- Most of the respondents (83.4%) are aware of the availability of journals in their respective libraries.
- Majority respondents (54.5%) frequently refer journals/magazines to get updated with the latest information on their specialization.
- A significant number of respondents (28.35%) refer journals for seeking information.

**RECOMMENDATIONS**

Based on the analysis and findings of the study, the following recommendations are made for better utilization of journals including print and e-sources by the faculty members in their respective engineering college libraries.
It is evident from the analysis that even in the digital information environment, the majority of the respondents visit the library daily for reading books, journals, and newspapers. A significant number of respondents visits the library twice in a week and once a week. Proper measures should be initiated for enhancing library usage and it is suggested that all the libraries should equip with the latest collection of books and journals covering all disciplines in the libraries. Library staff should concentrate on improving the service standards to enhance the usage of libraries.

CONCLUSIONS

Journals play a crucial role in disseminating the latest information in various fields especially in engineering, science, and technology. Engineering college libraries are expected to offer cost-effective and reliable service by using state of the art technology tools. The present-day libraries expand their services to the remote users. The libraries make an attempt to promote the reading habits among user community for teaching and research in their areas of specialization. ICT in all walks of life is influencing for a positive impact on the users of higher education especially in engineering and technical education.

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