IMPACT OF INFORMATION USE ON PUBLICATION PRODUCTIVITY OF FACULTY MEMBERS OF AGRICULTURAL SCIENCES.

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ABSTRACT

The present study was designed to find out the relationship between the use of the information sources and services , and publication productivity of faculty members of agricultural sciences. The research population comprises of 235 faculty members working in Acharya N.G.Ranga Agricultural University, A.P. To collect data questionnaire were employed. Findings revealed that there is a positive correlation between publication productivity and use of information sources and services.

Key words: Information use**,** Publication productivity, Scientific Productivity, Agricultural faculty members.

INTRODUCTION

The realization among various nations now is that information is power and is an indispensable resource for the development of all types. For the continuous improvement of every facet of agriculture and farming, information remains an essential input. The success of a communication system or an information system depends largely on the accurate knowledge about the user, his information needs, and his information gathering habits. Hence, there is need to study the information use, generation and transfer of agricultural faculty members so that effective measures can be undertaken to increase their research productivity and its transfer, and to suggest the better ways of providing the required information to them by the libraries.

OBJECTIVES

The present study was designed to answer the following questions: To what extent the faculty members depend on information sources and services? Is there any relationship between the use of the library and information generation and transfer of faculty members.

METHODOLOGY

The population in this study consists of Professors, Associate Professors and Assistant Professors working in the colleges of Acharya N.G.Ranga Agriculural University (ANGRAU) in Andhra Pradesh. A sample of 235 persons has been drawn out of 307 faculty members by simple random method. A comprehensive questionnaire was developed for data collection. After collecting information from respondents, the data were analysed according to the objectives and statistics such as Karl Pearson's coefficient of correlation, and Chi-square tests were employed.

To measure the amount of information generation and transfer (publication productivity), and dependency on information sources and services, different instruments have been constructed and used as explained in Appendix.

RESULTS AND DISCUSSION

Dependency on information sources

The faculty members depend on various information sources for their teaching, research and extension activities. In order to know the level of dependency of faculty members on different information sources, a question has been put to them and the relative dependency on information sources indicated by faculty members is shown in Table 1.

Spearman rank correlation coefficient : To test the agreement in the rank order of relative dependency on various information sources between various groups of faculty members, the Spearman rank correlation coefficient is calculated. The correlation coefficient values between men and women, Professors and Associate Professors, Associate Professors and Assistant Professors, and P.G and Ph.D degree holders are 0.945, 0.745, 0.891 and 0.855 respectively, which are significant at .05 level. That means there is statistically significant agreement among these groups in the rank order of relative dependency on various information sources. However, there is no significant agreement between Professors and Assistant Professors in this regard as the Spearman rank correlation coefficient value is 0.536, which is not significant at 0.05 level.

Dependency on information services

The library provides various information services to the faculty members for their teaching, research and extension activities. In order to know the level of dependency of faculty members on different information services, a question has been put to them and the relative dependency on information services indicated by faculty members is shown in Table 2.

Spearman rank correlation coefficient: To test the agreement in the rank order of relative dependency on information services between various groups of faculty members, the Spearman rank correlation coefficient is calculated. The Spearman rank correlation coefficients between faculty members of men and women, and Professors and Associate Professors are 0.964 and 0.964 respectively, which are significant at 0.05 level. That means there is statistically significant agreement between these groups in the rank order of dependency on information services. However, there is no statistically significant agreement in this regard between Professors and Assistant Professors, Associate Professors and Assistant Professors, and P.G and Ph.D degree holders as the values of Spearman rank correlation coefficient are 0.750, 0.679 and 0.750 respectively, which are not significant at 05 level.

Publication Productivity

The faculty members carry out research and generate information. The information so generated is then transferred into various forms such as research articles in journals, books, monographs, papers in seminar and conference proceedings, chapters in books, popular articles in magazines and newspapers, review articles, technical/extension bulletins. In order to know the amount of information transferred by faculty members, a question has been put to them. The scores have

been assigned for various types of publications as explained in Appendix based on the scores proposed for Academic Performance Indicators by UGC. The total score of a person has been calculated by adding the scores obtained for each of the various types of publications and it has been named as information generation and transfer score. This can also be known as publication productivity score. Hence these terms are used synonymously. The distribution of faculty members according to their publication productivity score is presented in Table 3.

Table 3 :Distribution of faculty members according to their publication productivity score (in percentage)

Publication productivity score	Faculty members
Below 250	54.9
251- 500	27.2
501- 750	9.8
Above 750	8.1
Total	**100** **N=235** **100**

It is evident from Table 3 that the majority of faculty members (54.9%) obtained publication productivity score of less than 250, 27.2% of them 251-500, 9.8% of them 501-750 and the remaining 8.1% of them obtained more than 750 score.

Library correlates of publication productivity

An attempt has been made to describe the library correlates of publication productivity. The library correlates are dependency on information sources, and services. All these variables are measured in terms of scores as described in Appendix. The library correlates of publication productivity are shown in Table 4.

Table 4: Library correlates of publication productivity (N = 235)

		Dependency on information sources	Dependency on information services	**Publication productivity**
Dependency on information sources	Pearson Correlation Sig. (2-tailed)	1		
Dependency on information services	Pearson Correlation Sig. (2-tailed)	.048 .467	1	
Publication productivity	Pearson Correlation Sig. (2-tailed)	.244** .000	.135* .038	**1**

**Correlation is significant at 0.01 level (2-tailed).
*Correlation is significant at 0.05 level (2-tailed).

The coefficient of correlation between dependency on information sources and publication productivity is .244 which is significant at .01 level. The positive correlation between two variables indicates that higher the dependency on information sources, higher is the publication productivity and lower the dependency on information sources, lower is the publication productivity.

The coefficient of correlation between dependency on information services and publication productivity is .135 which is significant at .05 level. The positive correlation between these two variables indicates that higher the dependency on information services, the publication productivity is higher and lower the dependency on information services, the publication productivity is lower.

CONCLUSION

The study shows that there is a positive correlation between publication productivity and dependency on information sources and services. Hence, the authorities should take the necessary steps to improve the information sources and services of library by knowing the information requirements of faculty members in order to raise their publication productivity. They should also take necessary steps to enhance the use of information sources and services by conducting information literacy programmes to faculty members to increase their publication productivity.

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APPENDIX

SCORES ASSIGNED FOR DEPENDENCY ON INFORMATION SOURCES AND SERVICES, PUBLICATION PRODUCTIVITY.

Relative dependency on information sources

In order to know the relative dependency on various information sources by the faculty members, weightages of 3, 2 and 1 are assigned for the responses of frequently, rarely and never respectively. Total weightage is calculated for each information source. Mean weightage is calculated by dividing the total weightage by the number of persons included in the sample. Based on the mean weightages, the information sources have been ranked.

Relative dependency on information services

In order to know the relative dependency on various information services by the faculty members, weightages of 3,2 and 1 are assigned for the responses of frequently , rarely and never respectively. Total weightage is calculated for each information source. Mean weightage is calculated by dividing the total weightage by the number of persons included in the sample. Based on the mean weightages, the information services have been ranked.

Score of dependency on information sources

There are eleven categories of information sources. For each information source three responses are given viz., frequently, rarely and never. Weightages of 3,2, and 1 are assigned to them respectively. The total score obtained by each faculty member with regard to dependency on information sources is calculated by adding the weightages of all categories of information sources. This score is known as score of dependency on information sources.

Score of dependency on information services

There are seven categories of information services. For each information service, three responses are given viz., frequently, rarely and never. Weightages of 3, 2, and 1 are assigned to them respectively. The total score obtained by each faculty member with regard to dependency on information services is calculated by adding the weightages of all categories of information services. This score is known as score of dependency on information services.

Publication productivity

The scores assigned for different categories of publications are given below:

Category		Score
a. Books	:	25
b. Monographs	:	25
c. Journal articles	:	10
d. Seminar / conference papers	:	10
e. Review articles	:	10
f. Popular /newspaper articles	:	5
g. Chapters in books	:	5
h. Technical / extension bulletins	:	5

Table 1 : Relative dependency on information sources indicated by faculty members

Sources of information	Gender				Designation						Educational qualification				Mean weightage	Rank
	M		W		Prof.		Asso. Prof.		Asst. Prof.		P.G		Ph.D			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank		
Books	2.87 (0.39)	1	2.84 (0.44)	1	2.88 (0.37)	1	2.91 (0.38)	1	2.80 (0.45)	1	2.81 (0.39)	1	2.87 (0.41)	1	2.86 (0.40)	1
Reference books	2.59 (0.58)	3	2.62 (0.59)	4	2.69 (0.49)	3	2.73 (0.50)	3	2.40 (0.66)	5	2.40 (0.69)	6	2.65 (0.53)	3	2.60 (0.58)	3
Periodicals	2.73 (0.58)	2	2.75 (0.60)	2	2.81 (0.46)	2	2.80 (0.50)	2	2.62 (0.72)	2	2.53 (0.80)	2	2.80 (0.49)	2	2.74 (0.58)	2
Conference proceedings	2.32 (0.64)	9	2.13 (0.66)	10	2.36 (0.63)	8	2.34 (0.58)	8	2.09 (0.69)	9	2.13 (0.65)	8	2.29 (0.65)	9	2.26 (0.65)	9
Abstracting and indexing periodicals	2.44 (0.71)	6	2.44 (0.69)	6	2.32 (0.72)	11	2.55 (0.64)	5	2.44 (0.73)	4	2.43 (0.75)	5	2.44 (0.69)	6	2.44 (0.70)	6
Reviewing periodicals	2.35 (0.70)	8	2.27 (0.71)	8	2.62 (0.59)	4	2.35 (0.65)	7	2.05 (0.73)	10	1.96 (0.71)	11	2.43 (0.67)	7	2.32 (0.70)	8
Research reports	2.49 (0.66)	5	2.67 (0.50)	3	2.46 (0.67)	6	2.64 (0.54)	4	2.54 (0.64)	3	2.51 (0.67)	3	2.55 (0.61)	4	2.54 (0.62)	4
Theses / dissertations	2.37 (0.60)	7	2.32 (0.62)	7	2.42 (0.64)	7	2.34 (0.56)	9	2.31 (0.62)	7	2.30 (0.61)	7	2.37 (0.61)	8	2.35 (0.61)	7
Newspapers	2.20 (0.65)	11	2.19 (0.63)	9	2.33 (0.53)	10	2.25 (0.64)	11	2.03 (0.71)	11	2.05 (0.71)	10	2.24 (0.62)	11	2.18 (0.64)	11
CD-ROM / online databases	2.51 (0.57)	4	2.45 (0.62)	5	2.54 (0.58)	5	2.54 (0.55)	6	2.39 (0.62)	6	2.45 (0.61)	4	2.49 (0.58)	5	2.49 (0.59)	5
Laboratory manuals	2.28 (0.61)	10	2.11 (0.74)	11	2.35 (0.65)	9	2.26 (0.60)	10	2.09 (0.69)	8	2.13 (0.65)	9	2.25 (0.66)	10	2.23 (0.66)	10

Note : Figures in parentheses are S.D

Men and Women	: R S = 0.945	SIG. AT 0.05 LEVEL	
Prof. and Asso. Prof.	: R S = 0.745	SIG. AT 0.05 LEVEL	
Prof. and Asst. Prof.	: R S = 0.536	N S AT 0.05 LEVEL	
Asso.Prof. and Asst. Prof	: R S = 0.891	SIG. AT 0.05 LEVEL	
P.G and Ph.D	: R S = 0.855	SIG. AT 0.05 LEVEL	

Table 2 : Relative dependency on information services indicated by faculty members

Information Services	Gender				Designation						Educational qualification				Mean weightage	Rank
	M		W		Prof.		Asso. Prof.		Asst. Prof.		P.G		Ph.D			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank		
Abstracting and indexing services	2.52 (0.59)	3	2.56 (0.55)	2	2.46 (0.60)	4	2.50 (0.58)	4	2.63 (0.55)	2	2.58 (0.53)	2	2.52 (0.59)	4	2.54 (0.58)	2
Database searching service	2.54 (0.59)	2	2.52 (0.56)	3	2.58 (0.57)	2	2.61 (0.54)	2	2.43 (0.60)	5	2.34 (0.68)	5	2.59 (0.54)	2	2.53 (0.58)	3
Current awareness service	2.51 (0.58)	4	2.51 (0.60)	4	2.46 (0.62)	3	2.59 (0.52)	3	2.48 (0.61)	3	2.40 (0.60)	3	2.54 (0.58)	3	2.51 (0.59)	4
Reprographic services	2.22 (0.72)	7	2.11 (0.72)	7	2.23 (0.71)	7	2.27 (0.67)	7	2.08 (0.77)	7	2.06 (0.77)	7	2.23 (0.70)	7	2.19 (0.72)	7
Internet service	2.38 (0.68)	5	2.45 (0.62)	5	2.39 (0.64)	5	2.31 (0.74)	6	2.48 (0.61)	4	2.38 (0.63)	4	2.41 (0.67)	5	2.40 (0.66)	5
Borrowing facilities	2.65 (0.55)	1	2.74 (0.47)	1	2.62 (0.59)	1	2.72 (0.51)	1	2.70 (0.49)	1	2.68 (0.51)	1	2.68 (0.53)	1	2.68 (0.53)	1
Reference service	2.32 (0.65)	6	2.15 (0.66)	6	2.28 (0.69)	6	2.31 (0.60)	5	2.22 (0.67)	6	2.08 (0.68)	6	2.32 (0.64)	6	2.27 (0.65)	6

Note : Figures in parentheses are S.D.

Men and Women	: r s = 0.964	Sig. at 0.05 level
Prof. and Asso. Prof.	: r s = 0.964	Sig. at 0.05 level
Prof. and Asst. Prof.	: r s = 0.750	N S at 0.05 level
Asso.Prof. and Asst. Prof.	: r s = 0.679	N S at 0.05 level
P.G and Ph.D	: r s = 0.750	N S at 0.05 level

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