
INTERDISCIPLINARY DIFFERENCES IN ATTITUDES TOWARDS SELF-ARCHIVING: PERSPECTIVES OF ACADEMIC SCHOLARS' OF UNIVERSITIES IN KARNATAKA

MANJUNATHA, K AND SHAMRAO RAMANNA

Librarian GFGC Kyathanahally, Mandy Dist Karnataka state, India
Librarian GFGC Kamalapur, Gulbarga Dist, Karnataka state, India

Abstract

This paper discusses interdisciplinary differences in behavior on self-archiving practices and related issues and help in enhance the awareness among faculty, research scholar and post-graduate students.

KEYWORDS

open access; scholarly communication; self-archiving; User attitude

1. INTRODUCTION

From the past twenty years, much has changed in dissemination of scholarly work. Information technologies have changed the method and economics of dissemination as well as the expectations of authors and readers. Shrinking readerships resulting from the rising cost of scholarly journals and the proven impact advantage of providing free online access to scholarly work have converged in a worldwide open access movement. Higher education institution is engaged in efforts to help faculty manage their copyrights and provide open access to their work. University libraries offer orientation programs to raise faculty awareness of the importance of open access in disseminating and increasing the impact of their research work. Self-archiving is nothing but making electronic preprints and post prints available on author home pages or depositing them in digital archives and repositories. Self-archiving serves two main purposes, a) it allows authors to disseminate their research articles for free over the internet, and b) it helps to ensure the preservation of those articles in a rapidly evolving digital environment

2.0 LITERATURE REVIEW

Swan & Brown (2005) says Self-archiving does not require a lot of time once an author is familiar with the process; however, an important barrier to self-archiving is “the perceived time required and possible technical difficulties”. Swan and Sheridan (2005) conducted one of the largest studies of author self-archiving when they surveyed 1286 authors from many disciplines including LIS, about their open access archiving practices. They define self-archiving as an adjunct, complementary activity to scholarly journal publishing and practice, this means depositing the file, which is usually the author's final version of the article after peer review has been completed, in an open access archive or repository.” However, in the survey instrument they expand it to six ways in which a researcher can provide open access to articles by self archiving. Antelmen (2004) says faculty feel they may not benefit from self-publishing research in a digital repository given the requirements of their career promotion for which only peer reviewed publications, mostly in print journals, are valued. Some findings by librarians suggested that moving

publications online will create more opportunities for them to be read and cited, and, thus, will increase the visibility of the authors among peers which is considered important by scholars in their career development. Theo Andrew (2003) Studies suggest that the attitudes of faculty toward self archiving vary from discipline to discipline. In some disciplines, sharing pre-prints among peers has been an accepted norm of information exchange so that scholars feel comfortable about depositing their research, pre-print, or post-print in databases. Jihyun Kim (2007) study is concerned with respondents' self-archiving experience outside the IR. Twenty-two (71%) respondents had deposited their research/teaching materials on publicly accessible web sites other than the IR. Out of the 22 self-archiving respondents, 6 were aware of the IR and 9 planned to contribute to it. Therefore, most respondents had some IR awareness, and a majority of those who planned to contribute, already had experience with self-archiving. In addition, 3 respondents who were aware of the IR, planned to contribute in the future, and already had self-archiving experience in venues other than the IR. A. Abrizah (2009) conducted survey and responses were received from 131 academics from 14 faculties, institutes and centres at the university. Science-based faculty members were overwhelmingly in favor of permitting the deposit of research work. More than 60% of the respondents mentioned allowing the deposit of theses and dissertations. Findings indicated that, as users, the academics wanted to find many more types of material in the repository and as authors, they were willing to deposit. Complete theses, post-prints and conference papers were acceptable to be deposited in the IR. Respondents' support of open access principle and altruism in making their scholarly work publicly accessible were the most important motivators for the academics depositing their work, closely followed by the prospect of an increase in the accessibility of their work.

3.0 OBJECTIVES

This study focuses on the interdisciplinary differences in self-archiving practices and academic behavior, awareness on self-archiving practices of researchers of universities in Karnataka. Further, an attempt has been made to enhance the awareness of among researchers

- i) To study the academic scholars' awareness about self-archiving
- ii) To know the interdisciplinary differences on self-archiving practices.
- iii) To identify the motivation factors to deposit in institutional repositories among research scholars.

4.0 METHODOLOGY

Questionnaire was used to collect data from respondents on significant factors that affect academic scholars' self-archiving behavior. The study was conducted at six state universities in Karnataka (India). The study targeted researchers from the ranks of post-graduate student level to professors' level. The survey data captured participants' motivations for self-archiving in a quantitative manner. The interviews probe more deeply into subjects' motivation and reasoning behind self-archive behaviors. Semi-structured questionnaires were distributed to the sample population of 1500 respondents who were selected through stratified random sampling from a population of 8681 academic scholars. Stratified random sampling was necessary to ensure the representation of the respondents on the basis of their designation and research discipline. Of the 1220 (81.33%) returned questionnaires, 1215 (81.00%) were found usable for analysis while five were discarded as incomplete.

5.0 ANALYSIS OF THE OBSERVED RESPONSES

The observed and responses received from one thousand two hundred fifteen academic scholars of higher education who are said to be the self-archiving practitioners belonging to the three main categories : Faculty, research scholars and post-graduate students from seven different disciplines have been well document and analysed in this study.

5.1 DISCIPLINE AND UNIVERSITY-WISE DISTRIBUTION OF QUESTIONNAIRE

University is the confluence of many disciplines, teachers, research scholars and post graduate students belong to various disciplines. To have representative samples from different disciplines the investigator distributed questionnaires to academic scholars of different disciplines. However they are grouped in seven broad disciplines viz., Arts & Humanities, social sciences, physical sciences, biological sciences, management, information science and law.

University	Arts & Humanities	Social Sciences	Physical Sciences	Biological Science	Management	Information Science	Law	Total
Mysore University	50	75	55	50	50	25	15	320
	21.28	21.43	21.2	19.6	25	22.73	16.7	21.3
Bangalore University	60	75	45	50	50	25	15	320
	25.53	21.43	17.3	19.6	25	22.73	16.7	21.3
Mangalore University	30	50	30	50	25	15	15	215
	12.77	14.29	11.5	19.6	12.5	13.64	16.7	14.3
Kuvempu University	30	50	30	50	25	15	15	215
	0.128	14.29	11.5	19.6	12.5	13.64	16.7	14.3
Gulbarga University	35	50	50	30	25	15	15	220
	14.89	14.29	19.2	11.8	12.5	13.64	16.7	14.7
Karnataka University	30	50	50	25	25	15	15	210
	12.77	14.29	19.2	9.8	12.5	13.64	16.7	14

Table 1: Discipline and University-wise Distribution of questionnaire and responses received

There were 1500 questionnaires distributed among the academic scholars of six universities in Karnataka. The study is restricted to faculty, research scholars and post-graduate students primarily because they are considered as the main self-archiving practitioners in the higher education level.

5.2 Awareness on self-archiving

With brief definition of self-archiving and asked researchers whether they were aware of it. Overall, the majority of people had not heard of self-archiving, with nearly 43.86% of those who answered the question knowing it and 56.31% of respondents had not heard of it at all.

Discipline	Yes					No				
	Faculty	Research Scholar	PG Student	Total	Total (%)	Faculty	Research Scholar	PG Student	Total	Total (%)
Arts & Humanities	11	27	10	48	9.01	3	36	132	171	25.07
Social Sciences	27	39	15	81	15.20	2	57	119	178	26.10
Physical Sciences	53	97	11	161	30.21	0	7	62	69	10.12
Biological Science	47	54	6	107	20.08	0	4	93	97	14.22
Management	31	23	12	66	12.38	0	3	72	75	11.00
Information Science	21	14	16	51	9.57	0	3	30	33	4.84
Law	6	11	2	19	3.56	0	12	47	59	8.65
Total	196	265	72	533	100	5	122	555	682	100.00

Table 2: Awareness on self-archiving

It may be seen from the table that 161 (30.21%) physical sciences academic scholars are more aware about self-archiving concept than any other disciplines.

5.2 Scholar's Publishing activities

Discipline	0 to 1	2 to 3	4 to 5	More than 5	Total	Total %
Arts & Humanities	121	61	26	11	219	18.02
Social Sciences	169	43	29	18	259	21.32
Physical Sciences	91	71	43	25	230	18.93
Biological Science	89	67	27	21	204	16.79
Management	59	40	29	13	141	11.60
Information Science	41	18	14	11	84	6.91
Law	60	8	6	4	78	6.42
Total	630	308	174	103	1215	100.00

Table 3: Publication activities of research scholars

Each year, 630 out of 1215(52%) respondents publish up to 1 article. 308 (25%) scholars publish 2-3 articles, 174 (14%) respondent publish 4-5 articles and 108 (0.8%)publish more than 5 articles. The discipline where most papers are published are Physical sciences Biological sciences and

social science discipline, Scholars in humanities, Law and information science publishes very few articles when compare to physical and biological sciences.

5.2 Sources of information on self-archiving

For anyone to adopt self-archiving practices he/she needs to possess certain skills which can be acquired through various means. Of the respondents 65(12.20%) got information while surfing internet, in which 16 out of 65 respondents were from physical sciences discipline.

	Arts & Humanities	Social Sciences	Physical Sciences	Biological Science	Management	Information Science	Law	Total	Total %
While surfing Internet	6	8	16	15	7	11	2	65	12.20
Through Journals	2	6	16	13	6	10	4	57	10.69
From Professional Friends	6	14	14	17	19	14	7	91	17.07
Information from Faculty	17	27	75	71	32	27	12	261	48.97
Information from Library	2	3	4	6	3	21	2	41	7.69
Others	1	2	5	4	2	2	2	18	3.38

Table 4: Sources of information on self-archiving

While 261(48.97%) academic scholars of various disciplines were got information about self-archiving from their respective faculty. (Table-4). The implication of the data is that a majority of the academic scholars of physical sciences discipline have got information on self-archiving from their respective faculty 71(27.20%) out of 261.

5.5 Motivations for self-archiving

	Arts & Humanities	Social Sciences	Physical Sciences	Biological Science	Management	Information Science	Law	Total	Total %
Self motivated	14	20	68	57	46	24	12	241	45.22
Encouragement from faculty	21	20	32	21	20	21	13	148	27.77
Encouragement from Library professionals	4	3	3	2	4	13	2	31	5.82
Self archiving articles have more impact factor than only subscription based journals	3	2	27	21	11	14	7	85	15.95
Encouragement from funding agency	1	3	9	6	3	4	2	28	5.25
Total	43	48	139	107	84	76	36	533	100.00

Table 5: Motivation factors for self-archiving

The main reasons or motivations for self-archiving were varied. A high proportion 241 (45.22%) of academic scholars are self-motivated. Similarly, encourage from faculty (148, 27.77%) was seen as an important reason for self-archiving. It was interesting to see that Self archiving articles have more impact factor than only subscription based journals (15.95%). Faculty from physical sciences (28.21%) is more self-motivated than any other discipline and self-motivated concept is very low in law as well as arts and humanities discipline.

5.6 Type of materials deposited by research scholars

Type of Material	Arts & Humanities	Social Sciences	Physical Sciences	Biological Science	Management	Information Science	Law	Total	Total %
Dissertation/Thesis	14	21	4	7	5	8	2	61	5.77
Conference papers	13	33	111	81	21	23	9	291	27.53
Post print	22	27	128	61	31	43	11	323	30.56
Preprint	2	5	9	13	6	7	3	45	4.26
Project Reports	2	6	37	33	51	31	8	168	15.89
Courseware	6	2	12	9	7	18	2	56	5.30
Book Chapter	14	8	7	6	3	4	3	45	4.26
Audio/video Files	3	21	15	18	4	5	2	68	6.43
	76	123	323	228	128	139	40	1057	100.00

Table 6: Type of research material deposited.

In the study, data regarding what types of research work that academic scholars would like to deposit were ascertained. 128 (40.00%) out of 323 respondents from physical sciences disciplines would like deposit post prints articles. Conference papers, Dissertation and thesis were also found to be the most frequently self-archiving materials, i.e., 61 (5.77%). However, academic scholars were less likely to self-archive courseware (5.30%), audio/video files (6.43%), and book chapters (4.26%) than they were to self-archive peer reviewed published articles.

5.0 Findings and Conclusion

The study, based on a set of survey data, has presented findings on interdisciplinary differences and faculty awareness on self-archiving, and reasons that may influence faculty's motivation for self-archiving, which will lead to the actual deposit into the institutional repositories. Findings suggest that more than 56% of the scholars are unaware of self-archiving practices, or are aware but remain detached from it. However, academic scholar's attitudes to self-archiving are generally positive. Overall, 44% of respondents from different disciplines in this survey had exposure to self-archiving practices.

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