

FINAL RESEARCH REPORT

1. (a) **Contract Number** : RG/96/IS/02
- (b) **Title of Project** : Information needs and information gathering behaviour of researchers in the Humanities, Social Sciences, Language studies and Culture (Arts scholars) in the Universities of Sri Lanka.
- (c) **Institution** : University of Peradeniya.
- (d) **Chief Scientific Investigator** : Sriyani Ileperuma
- (e) **Date of award** : 1st September, 1996. (However, work commenced in October, 1996 as the research student was employed and funds received during this time.
- (f) **Date of completion** : 01.03.98.
- (g) **Total Allocation** : Rs. 85,000.00
- (h) **Total spent** : Rs. 82,000.00
- (i) **Number of research assistants and period of service** : One, one year.
- (j) **Whether RA has registered for, or obtained, post-graduate degree** : No.

2. DESCRIPTION OF RESEARCH CARRIED OUT :

Introduction

Research in, as well as popular understanding of human relations- in all their aspects- is widely recognised today as essential for world order and progress. This concern is more relevant at present, indeed imperative, than it was in any previous historical period. The critical need for a concerted use of these disciplines in analysing every aspect of human relations is so obvious today. User studies in library and information science are based on the premise that effective library services must begin with a clear understanding of the actual needs of information users. Day-to-day contact with users can provide some of this understanding, but for a deeper insight into the information needs, more formal studies are required. As White¹ states if academic librarians are to attempt realistically to serve academic researchers, they must recognise the changing needs and the variations in information gathering which they generate and then provide the type of services that would be most useful to the researcher. The study of information needs and gathering behaviour dates back to 1948 with the paper presented by Bernal and others² at the 1948 Royal Society's conference on Scientific Information. The number of studies carried out in the social sciences and humanities compared to studies on scientists' information uses and needs is trivial, absolutely as well as comparatively^{3,4}. There have been some studies on the information needs of Agricultural scientists in Sri Lanka⁵ and pure scientists in Sri Lankan universities⁶ while no comparable study has been conducted on the corresponding needs of Arts scholars in Sri Lankan universities engaged in the areas of Humanities, Social Sciences, Language studies and Culture.

The Arts scholars in the above mentioned areas who constitute the study group in this survey require information for two widely different purposes, namely teaching and research. The availability of resources in university libraries makes a great impact on the

information seeking behaviour of Arts scholars. This survey provides an ideal source for surveying the information needs and gathering behaviour of Arts scholars in a wide variety of disciplines in the universities of Sri Lanka. Once the requirements and means of information gathering are understood, the role of the library in terms of collection and services could be optimised.

Objectives of the study

- (a) To identify information needs of the researchers concerned in this project, who are permanent members of the academic staff in the faculties of Arts, Humanities and Social Sciences in Sri Lankan Universities;
- (b) Their main areas of subject specialisation;
- (c) Their main areas of research (current, past and potential future requirements) and the areas in which they have published works;
- (d) Their other areas of academic and research interests (fringe subjects);
- (e) Their involvement in teaching programmes;
- (f) To analyse their information gathering behaviour in terms of:
 - (i) purpose for which information is gathered
 - (ii) means of obtaining information
 - (iii) sources and types of information used
 - (iv) information services and the extent to which the university libraries are used to obtain information
 - (v) evaluating problems and the satisfaction of respondents in information gathering.
- (vi) To find means of improving information services in the university libraries in Sri Lanka.

With these objectives in mind, research issues were formulated to facilitate data gathering. The questionnaire was designed along these issues to fulfil the objectives of the research project. The variables in the current problem were identified considering information needs and information gathering behaviour separately. Data pertaining to the following variables were collected through the first part of the questionnaire : qualifications of respondents, areas of subject specialisation, fields of main research interest, peripheral areas of academic and research interests and involvement in teaching programmes. Data collection on the information gathering behaviour which is the dependent variable, was on the following: means of obtaining, tools for current awareness, location of sources, approach to information sources, use of the university library for the fulfilment of information needs and suggestions of respondents on the improvement of library resources and services.

Limitations and delimitations of the study

- (a) A common limitation when questionnaires are administered is the willingness and the ability of respondents to respond at all or to respond in a timely manner. Due to this factor the time schedule of this survey extended beyond expected limits and hence led to the delay in submitting the final report.
- (b) Honesty of subjects in responding to library use due to self egoism may have effected

the study.

- (c) In this study, the context of information has been divided into formal, semi-formal and informal sources of information for convenience as explained in the operational definitions.
- (d) Due to the prevailing civil unrest in the northern and eastern provinces of Sri Lanka the distribution of questionnaires was hindered and hence, the University of Jaffna and Eastern University of Sri Lanka could not be included in this study.

Operational definitions

Arts scholars: A confirmed faculty member with postgraduate qualifications in the fields pertaining to Humanities, Social Sciences, Language studies and Culture holding a full time appointment⁷. This term was formulated to bring together all the above mentioned areas after consulting works of Line⁸, Ogburn⁹, Slayter¹⁰ and Stone¹¹.

Information: Knowledge, intelligence, facts or data which can be used, transferred or communicated. It may be derived from experience, observation, interaction and reading. It has several basic qualities, viz. existence, availability, language or recognisable representation and meaning¹².

Information gathering behaviour: Ways and means used by scholars to collect information¹³.

Information needs: Any piece of information, recorded as well as unrecorded that a scholar may need (as distinct from want, demand and use) in connection with his study, teaching and research activities¹⁴.

Information sources: Verbal or recorded information available to scholars which may be grouped under three categories¹⁵;

- (a) **Formal channels** - journal articles and reprints, handbooks, textbooks, reviews, conference proceedings, abstracts, indices and bibliographies, card catalogues, selective dissemination of information services, current awareness services, audio-visual media, databases, bulletin board systems, e-mail, etc.
- (b) **Informal channels** - "invisible college", private correspondence, local and foreign meetings and seminars.
- (c) **Semi-formal channels** - unpublished reports and theses, draft manuscripts, unpublished conference presentations and copies of presentations, suppliers' catalogues and trade magazines.

Information services: A system of resources, personal activities and materials for providing specific users with data, information, counsel, document(s) etc.¹⁶.

Invisible college: Groups of collaborators in a research area, linked together through their leaders, who communicate with one another and transmit information on new research findings informally before publication¹⁷.

Methodology

Survey research method was applied for this investigation of information needs and information gathering behaviour of academic scholars in the Humanities, Social Sciences Language studies and Culture in the universities of Sri Lanka.

Respondents of the study

The following sources were consulted to identify and select the population of this study.

- (A) Lists of Faculty board members in the faculties of Arts, Commerce & Finance, Education, Humanities, Management Studies & Commerce and Social Sciences who are confirmed academic staff members in such faculties at the following universities; University of Colombo, University of Kelaniya, University of Peradeniya, University of Ruhuna, University of Sri Jayawardanapura and the Open University of Sri Lanka.
- (B) Faculty Handbooks and Prospectuses (where available) of the above mentioned universities.
- (C) Personal contacts.

These sources indicated that there is a total population of 415 academic scholars in the areas of Humanities, Social Sciences, Language studies and Culture in the permanent cadre of Universities excluding the Eastern University of Sri Lanka and the University of Jaffna. Owing to communication difficulties resulting from the civil unrest in these areas, scholars from the latter two universities could not be included in this survey.

As experienced by Line¹⁸, Slayter¹⁹ and Stone²⁰ in their studies carried out on Humanists and Social scientists, clear definitions of these fields are elusive unlike in the sciences. These studies have also shown that boundaries of these fields are fuzzy. Therefore, Scholars in the Arts fields in this study have been categorised taking the faculties to which they are attached into account and also adapting the definitions by Line²¹, Ogburn²², Slayter²³ and Stone²⁴.

Fig.1 shows the distribution of respondents by category of university.

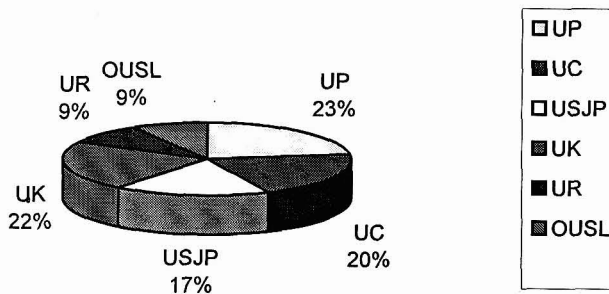


Fig.1 Distribution of Arts scholars in each University

Out of a total number of 151 Arts scholars considered for this study from the six universities, Peradeniya had the highest number (22.65%) while University of Ruhuna and the Open University of Sri Lanka scored the lower numbers (8.91% and 8.67% respectively).

Simple random sampling method was applied to the total population of 415 Arts scholars considering each university as a cluster since the size of the population in each faculty pertaining to Arts disciplines in the six universities is a variable number. The questionnaire was mailed to approximately half of the Arts scholars in each university to include at least 50% of the permanent academic staff members in each of the departments. The total number of questionnaires distributed was 218 out of which 151 duly completed questionnaires were received which indicates an overall response rate of 69.27%. The response rate varied among individual universities. University of Colombo and the Open University of Sri Lanka have recorded a response rate of 72%. There was a response rate of 71% from the University of Peradeniya, 70% from the University of Ruhuna, 67% from the University of Sri Jayawardanapura and 66% from the University of Kelaniya (Fig.2).

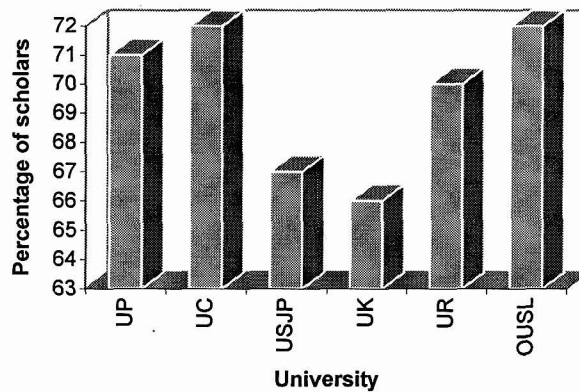


Fig.2 Distribution of respondent Arts scholars in each University

The distribution of respondents by category of the three groups of disciplines in the six universities studied is illustrated in Fig.3.

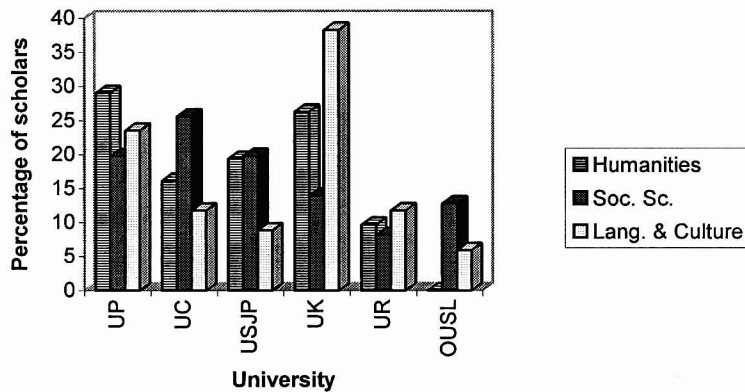


Fig.3 Distribution of respondent Arts scholars by category of discipline in Universities of Sri Lanka

All subjects in the sample covered by this study are distributed in the following faculties in the six universities:

University of Colombo - • Faculty of Arts

- Faculty of Education
- Faculty of Management & Finance

University of Kelaniya - • Faculty of Humanities

- Faculty of Social Science

University of Peradeniya - • Faculty of Arts

University of Sri Jayawardanapura - • Faculty of Arts

- Faculty of Management Studies & Commerce

University of Ruhuna - • Faculty of Humanities and Social Sciences

Open University of Sri Lanka - • Faculty of Humanities & Social Sciences

These academic scholars in the sample were classified into three main categories of disciplines.

1. Humanities
2. Social Sciences
3. Language studies & Culture

(I) **Humanists:** This category includes scholars working in the departments of Arabic & Islamic civilisation, Archaeology, Fine arts, History, Pali & Buddhist studies, Philosophy & Psychology. The total number of scholars in this category in the sample were 42 out of which 31 responded. This number constitutes 20.53% of the total study group.

(II) **Social Scientists:** This category includes scholars attached to the departments of Anthropology, Commerce, Economics, Education, Geography, Library & Information Science, Management & Finance, Mass Communication, Political Science and

Sociology. The total number in this category was 121 out of which 86 responded. This constitutes 56.95% of the total study group.

(III)**Language studies & Culture Scholars** : The permanent academic staff members attached to the departments of Classical languages, English, Hindi, Cultural studies, Linguistics, Modern languages, Sanskrit, Sinhala, Tamil, Western classical culture in the universities were included in this category. The total number in this category was 55 out of which 34 responded. This constitutes 22.52% of the total number of respondents.

Research Design

The research design is cross-sectional answering the question as to what the characteristics of information needs and gathering behaviour of academic scholars in the Humanities, Social Sciences and Language & Culture in the universities of Sri Lanka are.

Research Instrument

The main research instrument applied in this study was a self administered mailed questionnaire consisting of structured, open-ended as well as dichotomous questions. It was patterned adapting questionnaires used by Melvin J. Voigt²⁵ for his study on the information gathering habits of Danish and Scandinavian scientists and by Maurice B. Line, J. Michael Brittain and Frank A. Cranmer²⁶ for the investigation into information requirements of the Social Sciences.

This questionnaire consists of five sections;

1. Personal data
2. Information gathering behaviour
3. Information sources
4. Information services

Section 1 : Personal data

This includes personal data of the respondents such as qualifications, duties, age group and area of specialisation.

Section 2 : Information gathering behaviour

This section was designed to collect data on fields of subject specialities, purposes of seeking information and means of locating new information. Respondents were asked to rank the generally accepted purposes of seeking information. Ways in which respondents collect and organise information was also included in this section.

Section 3 : Information sources

This section was designed in order to study the information gathering behaviour of respondent Arts scholars in relation to their use of their respective libraries. They were asked to evaluate various aspects of library services extended to them and rank them according to their usefulness.

Data collection

The questionnaire was pre-tested among a random sample of 25 subjects to check for its clarity after which it was modified. Questionnaires were mailed to individual scholars in the sample population. The questionnaire was followed by visits to the six universities to interview subjects in the sample in order to clarify responses and difficulties the subjects have encountered in filling the questionnaire. Reminders had to be sent several times and numerous visits had to be made to collect the duly completed research tool.

Analysis of data

In this study qualitative as well as quantitative data were collected through the questionnaire. Descriptive statistical methods were applied in the analysis of data. Univariate and bivariate methods of analysis were used for dichotomous and ordinal categories of data respectively. Raw data collected were reduced, tabulated and evaluated as per requirements of the study.

The refined data were analysed by using frequencies, percentages and rank order. For all questions on ranking, Kendall's coefficient of concordance "W" method²⁷ was used to study the correlation among the rankings indicated by data collected. Chi square test was applied to test the significance of the value of "W". Research findings are presented in the form of a pie chart, a line graph, bar charts and tables.

3. RESULTS OBTAINED :

Fig.4 illustrates qualifications of respondent Arts scholars by category of discipline. It is evident that only in the Social Sciences a majority of the respondents (67.44%) holds Masters qualifications than Ph.D. degrees whereas in the Humanities and Language and Culture it is vice versa (61.29% Humanists and 70.59% Language & Culture scholars holding Ph.D. degrees). None of the respondents appears to hold a D.Litt. degree.

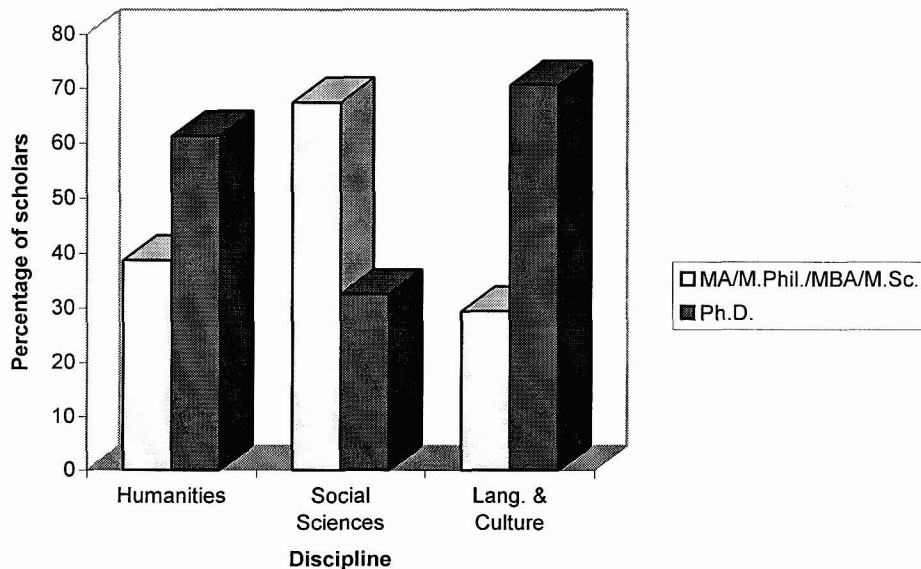


Fig.4 Qualifications of respondent scholars by category of discipline

The academic Arts scholars under consideration in this study are engaged in three basic types of activities; viz., teaching, research and administration. All the respondents in the Humanities category indicated that they are involved in both teaching and research. Social scientists and scholars in the Language and Culture categories showed that their involvement in research is less than the Humanities category. 17.65% were engaged in administrative duties such as holding positions of the Dean of faculty, heads of departments, etc. in addition to teaching and research. Comparatively low percentage of subjects (8.82%) indicated their involvement in other activities (Fig.5). Respondents were asked to indicate other lines of work in addition to teaching, research and administration. The response to this question indicated involvement in activities such as writing books, student counsellors, consultants, delivering public lectures, social work and coordination of programmes and projects.

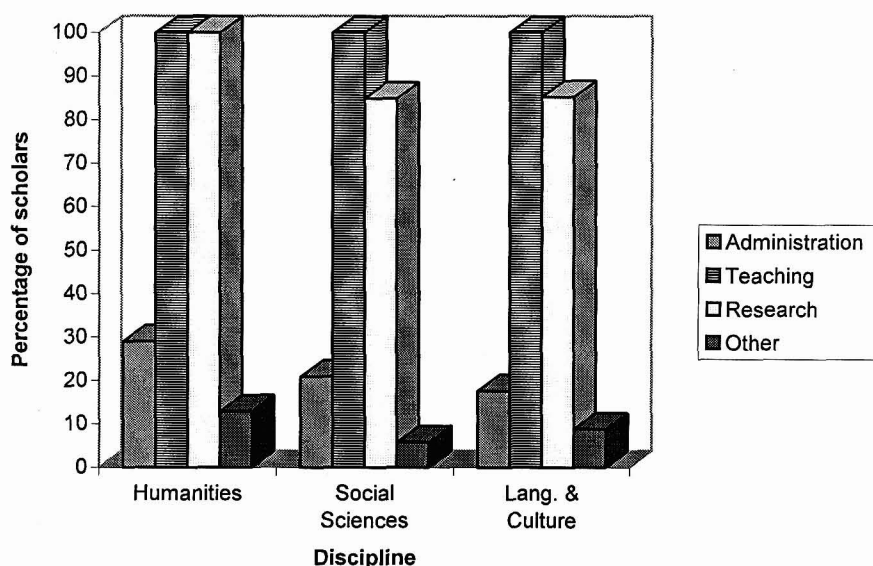


Fig.5 Category of work of respondent Arts scholars in Universities of Sri Lanka (Multiple responses allowed)

This study shows that information practices of Arts scholars strongly depend on the line of work and its relative importance. Scholars who are strongly involved in research will require journals, reviews, abstracting journals, monographs and access to relevant databases and other advanced electronic media to keep abreast of the latest developments in their areas of research interest. In the case of a scholar whose main involvement is teaching, the availability of the latest textbooks, handbooks, government publications, etc. could determine his/her information seeking behaviour. Consideration should be given to peripheral areas of interest in addition to the main interest.

It is important from the point of view of the library to ascertain the broad needs of users. This requires the breakdown of the requirements of scholars with respect to teaching and

research. An attempt was made in this study to solicit information with respect of the above question by asking respondents to specify separately, the percentage of time spent in the library on teaching and research related activities. Fig.6 shows the variation of the percentage time spent in the library devoted to teaching activities against the percentage respondents by category of discipline. This graph illustrates that for all categories of disciplines, the highest number of respondents spend 45-55% of their time in the library on teaching related activities.

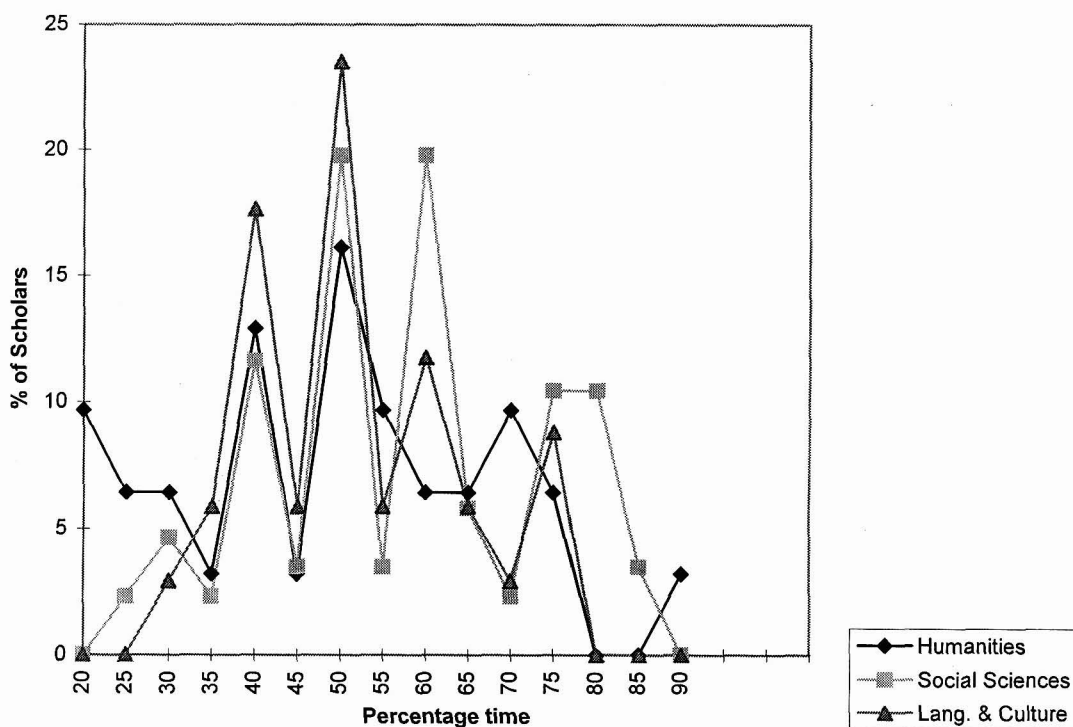


Fig.6 Percentage time spent in the library on teaching related activities by respondent Arts scholars

Results of the data collected on the areas of subject specialisation, areas in which they have published works and their past, current and potential research projects are summarised in Tables 1-3. These show that there are individual differences even within one specialised field. Research areas differ to a great extent from an individual scholar to another in the same field as illustrated in the tables consisting of a wide variety of subject areas. Analysis of the questionnaire reveals that there is a tendency among the Arts scholars to change fields, for example, from Sociology of Ethnic Relations to Conflict Management, Vedic Literature & Culture to French. However, there are also some areas in all three categories, for example, International trade, Political Anthropology, Sanskrit,

Tamil, Maritime Archaeology where respondents seem to continue work in their area of specialisation. It is an important revelation here that there is intermixing of subject areas among the three main categories; for example, Gender Studies in the Humanities; Cultural Anthropology in the Social Sciences etc.

Information gathering behaviour of Arts scholars

Scholars in the Arts based disciplines use a variety of widely different approaches to fulfil their information needs. The information gathering behaviour depends on the

Table 1 Subject specialisation, main research interests & peripheral areas of interest of respondent scholars in Humanities in Sri Lankan Universities.

(N=31)

Subject areas	Subject Specialisation	Main Res. Interests	Peripheral Areas
1. Ancient Educational Institutes	-	3.22	6.45
2. Archaeological Explorations	-	3.22	-
3. Archival Education	-	3.22	-
4. Buddhist Civilisation	6.45	3.22	3.22
5. Buddhist Culture	-	6.45	-
6. Buddhist Philosophy	9.68	6.45	6.45
7. Comparative Religious Studies	3.22	3.22	3.22
8. Conflict Management	-	-	9.68
9. Constitutional Studies	3.22	3.22	-
10. Gender Studies	3.22	6.45	-
11. Hindu Civilisation	6.45	6.45	-
12. Indo-Sri Lanka History	3.22	-	-
13. International Relations & History	3.22	-	3.22
14. International Relations	6.45	9.68	3.22
15. Islamic Civilisation	3.22	-	-
16. Maritime Archaeology	3.22	3.22	-
17. Micro-hydro Projects	-	3.22	-
18. Modern History	3.22	-	-
19. Non-aligned Politics	-	-	6.45
20. Peace Research	-	3.22	-
21. Philosophy	16.13	9.68	6.45
22. Psychology	9.68	6.45	9.68
23. Separatist Issues	-	-	3.22
24. Social & Cultural History	3.22	3.22	-
25. South Asian Archaeology	3.22	-	-
26. Sri Lanka Foreign Policy	-	6.45	-
27. Sri Lanka History (modern)	6.45	6.45	-
28. Sri Lanka History (pre-modern)	3.22	3.22	-

Table 2 Subject specialisation, main research interests & peripheral areas of interest of respondent scholars in Social Sciences in Sri Lankan Universities.

(N=86)

Subject areas	Subj. Special.	Main Res. Interests	Peripheral areas
1. Accounting	3.49	3.49	-
2. Agricultural Economics	6.98	6.98	1.16
3. Anthropology	2.32	2.32	-
4. Banking Economics	1.16	1.16	-
5. Commerce	4.65	3.49	-
6. Comparative Politics	3.49	1.16	-
7. Conflict Management	-	2.32	2.32
8. Cultural Anthropology	1.16	1.16	-
9. Demography	1.16	4.65	2.32
10. Econometrics	4.65	-	-
11. Economic Development	3.49	1.16	2.32
12. Economic Policies	3.49	2.32	1.16
13. Economics	2.32	2.32	1.16
14. Education	9.3	8.14	4.65
15. Employment	-	-	1.16
16. Environmental Economics	1.16	4.65	4.65
17. Environmental Geography	9.3	9.3	2.32
18. Finance	3.49	2.32	-
19. Foreign Investments	-	2.32	-
20. Foreign Policy	-	2.32	-
21. Gender & Resource Management	-	-	1.16
22. Higher Education	-	2.32	-
23. Housing	1.16	-	-
24. Human Resources Management	1.16	3.49	2.32
25. Industrial Economics	-	1.16	-
26. Information Science	1.16	1.16	-
27. International Trade	2.32	2.32	-
28. International Relations	1.16	2.32	-
29. Macroeconomics	1.16	-	-
30. Mass Communication	-	4.65	4.65
31. Media History	-	1.16	1.16
32. Medical Sociology	2.32	2.32	-
33. Micro-organisational Behaviour	1.16	1.16	-
34. Political Anthropology	2.32	2.32	2.32
35. Poverty Alleviation	-	-	1.16
36. Public Debt	-	-	1.16
37. Rural Development	9.3	5.81	3.49
38. Separatist Struggle	-	1.16	1.16
39. Settlement Geography	4.65	4.65	2.32
40. Sociology	1.16	1.16	-
41. Sociology of Ethnic Relations	2.32	-	1.16
42. Stock Market Studies	-	1.16	1.16
43. Tourism	1.16	-	1.16
44. Urban Planning	1.16	-	-
45. Valuation	1.16	1.16	-

specific requirements of an individual scholar. This includes why a scholar seeks information in the first place and also how this information is acquired. Thus information seeking behaviour includes the purposes for seeking information, the means, tools, information sources, approaches and the library facilities used.

Table 3 Subject specialisation, main research interests & peripheral areas of interest of respondent scholars in Language & Culture in Sri Lankan Universities. (N=34)

Subject Areas	Subject Specialisation	Main Research Interests	Peripheral Areas
1. Arabic	5.88	2.94	2.94
2. Christian Culture	-	2.94	-
3. English	5.88	2.94	-
4. Fine Arts	2.94	-	2.94
5. French	2.94	5.88	5.88
6. Greek	2.94	2.94	-
7. Japanese	5.88	-	2.94
8. Latin	2.94	-	2.94
9. Linguistics	5.88	2.94	-
10. Pali	8.82	2.94	5.88
11. Post-colonial Literature in English	5.88	2.94	2.94
12. Sanskrit	2.94	2.94	11.76
13. Sinhala	14.7	8.82	-
14. Sinhala Literary Criticism	8.82	2.94	-
15. Tamil	2.94	2.94	-
16. Vedic Literature & Culture	5.88	-	-
17. Western Classical Culture	2.94	-	2.94

To collect data on the purposes for which Arts scholars seek information, respondents were asked to rank the following five main purposes for which they seek information :

- (a) to support research work
- (b) to keep up with current developments
- (c) to develop competence
- (d) to develop educational material
- (e) to carry out administrative tasks

Table 4 illustrates the ranking of the above five purposes by the respondents in the three categories. "To keep up with current developments" was ranked first by both the Social Scientists and Language & Culture scholars while Humanists considered Supporting research work as most important. Scholars in the Lang. & Culture ranked supporting research work in the fourth place. Respondents in all three categories of disciplines ranked "to develop educational material" third. Developing competence was ranked fourth by Humanists and Social Scientists while the scholars in the Lang. & Culture ranked this aspect second. Lowest priority was given to the purpose of carrying out

administrative tasks. This is in accordance with the results of question number 1.3 regarding the category of work the respondents engage themselves in. Even the 8.82% who are involved in administrative duties ranked the purpose “to carry out administrative tasks” with the lowest priority.

Table 4 Purpose of respondent scholars for seeking information by rank & category of discipline (N=151)

PURPOSES	HUMANITIES N=31		SOC. SC. N=86		LANG. & CULTURE N=34		SR	D	D ²
	MEAN	RANK	MEAN	RANK	MEAN	RANK			
1. To support research work.	1.2	1	2.37	2	3.95	4	7	2	4
2. To keep up with current developments.	2.6	2	1.77	1	1.72	1	4	5	25
3. To develop competence.	3.6	4	4.18	4	2.45	2	10	1	1
4. To develop educational materials.	2.94	3	3.04	3	3.01	3	9	0	0
5. To carry out administrative tasks.	4.94	5	5.0	5	4.91	5	15	6	36

Σ SR (Sum of Ranks) = 45

Average SR = 9

Degrees of freedom - 4

Σ D² = 66

W = 0.73

Significance - 0.0663

$\chi^2 = 8.8$

In order to test the validity of the results, they were subjected to statistical analysis using rank order correlation methods. Here, Kendall's coefficient of concordance, W was employed to evaluate the results. When the five purposes for seeking information by categories of discipline were subjected to this method, the value of W gained was 0.0663. cCi square test (χ^2) applied to this value indicated that this result is not significant and hence there is no agreement among the three categories of arts scholars regarding the importance of the various purposes for seeking information. Table 4 shows that all three groups of scholars agree only on developing educational materials and carrying out administrative tasks but not on the first three purposes. However, findings of the studies carried out on Sri Lankan agricultural scientists²⁸ as well as on chemists²⁹ working in the universities and the private sector in Sri Lanka indicated that there was agreement on the importance of the purposes for seeking information among the various groups of scientists.

Current awareness and tools used for locating information

In this study attempts were made to find out further facts on information sources and specifically on how the scholars discover information needed for keeping abreast of new developments in their respective subject specialities. At this stage an attempt was made to determine which secondary sources the scholars depend on most to lead them to printed information. To facilitate this requirement, respondents were asked to rank the most frequently used tools for current awareness. Table 5 shows the mean scores and rank orders of these tools with respect of the categories of scholars involved.

Table 5 Current awareness and information searching tools used by respondent Arts scholars (N=151)

CURRENT AWARENESS TOOLS	HUMANITIES n=31		SOCIAL SCIENCES n=86		LANG. & CULT. n=34		SR	D	D ²
	MEAN	RANK	MEAN	RANK	MEAN	RANK			
1. Acquisitions lists prepared by the library	7.01	7	7.28	7	7.14	7	21	10	100
2. Browsing through book shelves	3.95	4	4.92	6	5.28	5	15	1	1
3. Library indices	5.17	5	4.21	4	3.12	3	12	0	0
4. Reviewing media	6.24	6	8.25	8	8.71	8	22	10	100
5. Abstracting journals	2.15	2	2.21	2	2.15	2	6	5	25
6. Bibliographies	7.86	8	4.92	5	6.31	6	19	2	4
7. Publishers' catalogues	1.32	1	1.27	1	1.41	1	3	10	100
8. References in journal articles	3.1	3	3.24	3	3.97	4	10	3	9
9. Informal sources	8.38	9	8.93	9	8.71	9	27	5	25

Sum of Ranks (SR) = 135

Average SR = 15

Degrees of freedom - 8

$\Sigma D^2 = 364$

$W = 0.9333$

$\chi^2 = 22.4$

Significance - 0.0042

Publishers' catalogues were ranked as the most important source for making scholars aware of new developments in the relevant fields. Abstracting journals were ranked second by scholars in all three categories of disciplines. References in journal articles were ranked third by respondent Humanists & Social Scientists while the Lang. & Culture scholars ranked this tool in the fourth position. Acquisitions lists prepared by libraries received the seventh ranking. This may be due to non-availability of current awareness publications produced by libraries. Informal sources received the lowest priority from all three categories of disciplines. This shows that the Arts scholars do not depend much on

private correspondence, informal discussions with peers, participation at seminars, lectures. Other means of current awareness such as browsing through bookshelves, use of library indices, reviewing media and bibliographies received mixed rankings (ranging from 5 to 8) from scholars in the different categories of disciplines. The value of W for the correlation of ranks is 0.9333 and when tested for significance of the agreement among the three categories indicated that there is a fine agreement. These results are contrary to the findings of Hopkins³⁰ who revealed that literary scholars depend of bibliographic tools to a greater extent in seeking information. The overall rank order observed in the order of decreasing importance is as follows:

1. Publishers' catalogues
2. Abstracting journals
3. References in journal articles
4. Library indices
5. Browsing through bookshelves
6. Bibliographies
7. Acquisitions lists prepared by the Library
8. Reviewing media
9. Informal sources

This pattern shows a deviation from the results of the information seeking behaviour of agricultural scientists³¹ where abstracting journals were ranked first and library indices as least important.

Use of personal card indices and reprint files

Most academic scholars maintain personal card indices which are essentially intended for organising the information gathered in the process of information seeking. This practice makes relocation of literature quick and more convenient. In this study respondents were queried as to whether they use their own card index files and reprint files. Tables 6(a) and 6(b) represent the maintenance of these two types of indices. It revealed that a majority of the scholars (73.53%) do not maintain their own card index files. Out of the three categories of scholars, Social scientists showed the highest percentage of (36.05%) respondents using card indices while the other two categories came out with almost equal

Table 6 (a) Use of card index by respondent Arts scholars (N=151)

CARD INDEX FILES	HUMANITIES n = 31		SOCIAL SCIENCES n = 86		LANG. & CULTURE n = 34		TOTAL N = 151	
	F	%	F	%	F	%	F	%
Maintain own file	8	25.81	31	36.05	9	26.47	48	31.79
Do not maintain own file	23	74.19	55	63.95	25	73.53	103	68.21
TOTAL	31	100.00	86	100.00	34	100.00	151	100.00

Table 6 (b) Use of reprint files by respondents for organising relevant literature (N=151)

REPERINT FILES	HUMANITIES n = 31		SOCIAL SCIENCES n = 86		LANG. & CULTURE n = 34		TOTAL N = 151	
	F	%	F	%	F	%	F	%
Maintain own reprint file	10	32.26	24	27.91	6	17.65	40	26.49
Do not maintain own reprint file	21	67.74	62	72.09	28	82.35	111	73.51
TOTAL	31	100.00	86	100.00	34	100.00	151	100.00

percentages. Respondents also revealed that the collections contain reference cards ranging from 2 to 2000 while the reprint files contain 13 to 3000 reprint cards. With regards to reprint files, the Humanists scored the highest percentage (32.26%) maintaining reprint files while the scholars in the Lang. & Culture category indicated the lowest percentage (17.65%). Taking all respondents into account in the maintenance of own card index files and reprint files, the total percentages are 31.79% and 26.49% respectively. These results are contrary to the findings of studies carried out on pure and applied scientists where higher percentages indicated maintenance of personal card index and reprint files.

Use of assistance in literature searches

In this study an attempt was made to determine the extent of help obtained from assistants, information officers or librarians in looking for literature. Table 7 summarises the results of the query as to who carries out the literature search. It is revealed that approximately 65% of the respondent Arts scholars carried out literature surveys themselves. It is evident that the respondents are reluctant to seek for assistance in the process of literature searching. The percentage of scholars resorting to even 25% assistance is less than 15%. This is in accordance with the findings of Steig³² and Hopkins³³ who have also found the reluctance of literary scholars to delegate literature searching which has been related to their expectation of serendipitous findings. Assistance acquired through other sources is also very low (4%) where literature is sought from friends and colleagues from abroad. Low assistance gained from the librarians too is similar to findings of Case³⁴ and Steig³⁵ on studies carried out on historians.

Table 7 Use of assistance in literature searches by respondent scholars (N=151)

MODE OF ASSISTANCE	25% %	50% %	75% %	100% %	TOTAL %
By Scholar -					
Humanities	-	3.22	25.81	70.97	100
Social Sciences	1.16	2.32	41.86	54.65	100
Lang. & Culture	-	5.88	11.76	82.35	100
Total	0.66	3.31	31.79	64.24	100
By research assistants -					
Humanities	9.68	-	-	-	9.68
Social Sciences	20.93	-	-	-	20.93
Lang. & Culture	8.82	-	-	-	8.82
Total	15.89	-	-	-	15.89
By Librarian -					
Humanities	12.9	-	-	-	12.9
Social Science	18.6	-	1.16	-	19.76
Lang. & Culture	5.88	-	-	-	5.88
Total	14.57	-	0.66	-	15.23
Other means -					
Humanities	3.22	-	-	-	3.22
Social Sciences	3.49	-	-	-	3.49
Lang. & Culture	5.88	-	-	-	5.88
Total	3.97	-	-	-	3.97

Information approaches and sources

In this section an attempt was made to collect data on the information sources of Arts scholars and more specifically on how scholars learn of the information they finally use. Using Voigt's³⁶ method, an attempt was made to relate the approaches to information to the purpose for which it is sought and finally to determine which secondary sources scholars depend on most to lead them to printed information. Voigt has proposed that purposes for use of literature could be divided into three approaches; namely, current approach, everyday approach and exhaustive approach. Menzel³⁷ has added an additional approach to the three approaches by Voigt; namely, "brush up on a field". Table 8 summarises the mean scores and rank orders indicated by the respondent Arts scholars on the query on Formal Information Sources for the four approaches. All respondents ranked journals first indicating the importance of these sources to keep up with one's subject field. Maps/ atlases and access to databases were considered least important. This pattern is similar to the formal sources in the everyday and brush up approaches. However, in the exhaustive approach, there is a slight deviation from the other three approaches. In the case of semi-formal sources, all four approaches indicated similar trends with the current

Table 8 Mean scores and rank order of information sources used by respondent Arts scholars by type and approach (N=151)

TYPE OF SOURCE	CURRENT APPROACH		EVERYDAY APPROACH		EXHAUSTIVE APPROACH		BRUSH-UP APPROACH		SUM OF RANKS (SR)	D	D ²	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank				
Formal Sources												
1. Journals	1.12	1	1.31	1	1.21	1	1.14	1	4	20	400	
2. Abstracting journals	3.06	3	3.95	4	2.32	2	2.12	2	11	13	169	
3. Review publications	3.97	4	5.01	5	3.34	3	2.98	3	15	9	81	
4. Current Awareness publications	5.01	5	3.1	3	5.1	5	5.13	5	18	6	36	
5. Textbooks / monographs	2.35	2	2.24	2	4.12	4	4.1	4	12	12	144	
6. Reference materials	6.13	6	5.89	6	5.97	6	5.83	6	24	0	0	
7. Maps / Atlases	10.74	11	9.92	10	9.78	10	10.11	10	41	17	289	
8. Government publications	6.81	7	8.1	8	10.8	11	8.15	8	34	10	100	
9. Indices, guides	8.98	9	8.97	9	6.75	7	9.16	9	34	10	100	
10. Newspapers	8.2	8	7.02	7	8.92	9	6.86	7	31	7	49	
11. Access to databases	9.58	10	10.78	11	7.83	8	10.97	11	40	16	256	
Semi-formal Sources										$\Sigma 264$	16	$\Sigma 1624$
1. Reports	2.02	2	1.24	1	1.31	1	1.11	1	5	5	25	
2. Theses	2.85	3	2.67	3	2.86	3	2.68	3	12	2	4	
3. Conference papers	1.81	1	1.96	2	2.12	2	1.90	2	7	3	9	
4. Palm-leaf manuscripts	3.92	4	3.74	4	3.95	4	3.89	4	16	6	36	
Informal Sources										$\Sigma 40$	6	$\Sigma 74$
1. Conversations with peers	3.01	3	1.75	1	3.75	3	1.24	1	8	2	4	
2. Symposia, meetings	2.07	2	3.01	3	1.23	1	2.32	2	8	2	4	
3. Lectures, seminars	1.14	1	2.43	2	2.51	2	3.82	4	9	1	1	
4. Communications with peers	3.98	4	3.95	4	3.91	4	3.01	3	15	5	25	
Average = 10										$\Sigma 40$	5	$\Sigma 34$

Formal Sources: W = 0.9227
Degrees of freedom = 10
 $\chi^2 = 37.9091$ Significance - 0.0001

Semi-formal Sources: W = 0.925
Degrees of freedom - 3
 $\chi^2 = 11.1$ Significance - 0.0112

Informal Sources: W = 0.425
Degrees of freedom - 3
 $\chi^2 = 5.1$ Significance - 0.1646

approach showing a small deviation from the rest. As regards to the informal approaches, all four types of approaches indicate different patterns. However, here communications with peers have received the lowest priority where as discussions with peers and attendance at symposia and meetings etc. were noted to be more important. In contrast to the findings of McCaghy and Purcell³⁸ in their study on use of government publications, respondents in the present study indicated that the use of such materials is trivial. Statistical analysis of results have suggested that for formal and semi-formal approaches, all three categories of respondents are in agreement where as for informal approach, there is no agreement. A significant feature revealed here is the insignificant importance of the “invisible college” indicated by the respondents. However, Orbach³⁹ has shown in his study that “invisible college” plays an important role among American historians. In order to determine the most important source of information out of formal, semi-formal and informal approaches, the respondents were separately asked to select the most important one out of the three. Table 9 shows that approximately 90% of the respondents have evaluated formal information sources in the form of printed material as the most useful source for them.

Table 9 Evaluation of different information sources by respondent Arts scholars (N=151)

INFORMATION SOURCE	HUMANITIES n=31 %	SOCIAL SCIENCES n=86 %	LANG. & CULTURE n=34 %	TOTAL %
Formal Sources	93.55	87.21	91.18	89.40
Semi-formal sources	-	12.79	-	7.28
Informal sources	6.45	-	8.82	3.32
TOTAL	100.00	100.00	100.00	100.00

These results are in excellent agreement with the results of surveys carried out on agricultural scientists and chemists in Sri Lanka indicating high percentages of preferences for formal sources. However, these results contrast the finding of surveys carried out in developed countries. This may be due to the non-availability of efficient and advanced communication facilities such as e-mail, access to Internet, on-line databases etc.

Libraries used by respondent Arts scholars

All the respondent scholars had the services of a University library and in some cases a faculty library extended to them. It was revealed that libraries in other faculties and institutions in the close vicinity were the next preferred places visited by the respondents working in a particular location. Table 10 indicates the extent to which the respondents make use of external libraries other than their own university library. Although the geographic location seems to be an important factor in choosing libraries for reference work, specialised libraries situated far away from the working place are often sought by

**Table 10 Use of external libraries apart from University libraries by respondent scholars
(N=151)**

Multiple responses allowed.

NAME OF LIBRARY	HUMANITIES n=31 %	SOCIAL SCIENCES N=86 %	LANG. & CULT. N=34 %	TOTAL %
1. Agrarian Research & Training Inst. Library	-	2.32	-	1.32
2. Bandaranaike Centre for Intl. Studies Library	12.9	-	-	2.65
3. British Council Library	12.9	50.00	50.00	42.38
4. Buddhist Publications Society Library	12.9	-	-	2.65
5. Central Bank Library	-	2.32	-	1.32
6. Civic Rights Movement Library/ Colombo	-	2.32	-	1.32
7. Indian Embassy Library	-	-	14.70	3.31
8. Inst. of Intl. Studies Library	-	4.65	-	2.65
9. Inst. of Social Studies Library/ Colombo	-	4.65	-	2.65
10. Intl. Centre for Ethnic Studies Library	-	4.65	-	2.65
11. Intl. Labour Org. Library / Colombo	-	4.65	-	2.65
12. IRDP Office Library/ Kandy	-	2.32	-	1.32
13. Library of Ampitiya Seminary and Scholasticate	-	-	8.82	1.99
14. Library Services Board	3.22	-	-	0.66
15. Municipal Council Data Source	-	2.32	-	1.32
16. Museum Library/ Colombo	41.94	2.32	8.82	11.92
17. National Archives Library	48.39	10.46	-	17.22
18. National Inst. of Education Library	-	19.77	-	11.26
19. National Library	13.35	6.98	-	7.95
20. Other University / Faculty Libraries	22.58	34.88	41.18	33.77
21. Pirivena Libraries	16.13	-	-	9.27
22. Postgraduate Inst. of Agriculture Library	-	12.79	-	7.28
23. Postgraduate Inst. of Archaeology Library	22.58	4.65	-	7.28
24. Postgraduate Inst. of Pali & Buddhist Studies Library	9.68	-	-	1.99
25. Public Library/ Colombo	9.68	17.44	26.44	19.20
26. Royal Asiatic Society Library	19.35	-	-	3.97
27. Social Scientists' Association Library	-	4.65	-	2.65
28. Transport Planning Centre Library	-	2.32	-	1.32
29. UN Library	6.45	-	-	1.32
30. UNDP Library/ Colombo	-	2.32	-	1.32
31. US Information Res. Services Library (American Information Resources Centre)	12.9	20.09	14.70	18.54

active researchers. Thus a scholar specialising in Sociology of ethnic relations at University of Peradeniya may use the Institute of Social Studies Library in Colombo. British Council library appears to be the mostly consulted library specially by the Social scientists and scholars in Language and Culture. It is also evident that the Arts scholars tend to make use of other university or faculty libraries in their information gathering process. An interesting feature exhibited here is that the Humanists consult the Museum Library and the National Archives Library to a great extent. This may be due to the fact that the historians belong to this category. The other libraries commonly visited by the respondents are public library, Colombo, United States Information Resources Services Centre, National Archives Library. Use of foreign libraries is not indicated in the results which is a deviation from the information seeking pattern of the Pure Scientists. Another important finding from this table is the almost equal dependence on external libraries by respondents of this study. This could be a clear indication for the librarians to establish and improve resource sharing processes among university and other special libraries.

Evaluation of library services offered

In order to evaluate the various facilities provided by the universities, the respondents were asked to rank the usefulness of the following information services in their information gathering process; inter-library-loans, current awareness services (CAS), Selective Dissemination of Information (SDI), literature surveys. The university library system provides facilities for inter-library-loans but not for extensive literature searches. Current awareness services provided is mostly in the form of display of new acquisitions of books and journals. Distribution of library newsletters announcing newly acquired books and periodicals is not very common in university libraries.

Table 11 illustrates the results of the rating of library services offered to the respondents in this survey. Only 34 (22.52%) responded to this question out of the total of 151 subjects of this survey. It is noteworthy that, this question had the lowest response from the respondent scholars out of all questions in the questionnaire. This may be due to non-availability or poor performance of most of the services included in this question. The dissatisfaction of the subjects who responded to this question was quite evident in this study. Out of the services offered, current awareness services were ranked first followed by literature surveys. This finding is in accordance with the results obtained by Amsden⁴⁰ in her study on information problems of Anthropologists. The value of Kendall's coefficient of concordance (W) for the rankings of the three categories is 0.4667 and when tested for significance it produced 0.2407 which is not significant at 0.05 level. This means that the different types of information services ranked by the respondent scholars have no correlation among them. Such a result could be related to the non-uniformity of services provided by individual university libraries.

Problems in gathering information pertaining to Humanities, Social Sciences Language & Culture

University libraries catering to scholars in the Arts fields are faced with serious problems of providing their clientele with the information required for research. The "information

Table 11 Rating of library services offered to respondent Arts scholars in Sri Lankan Universities
N = 34

SERVICES OFFERED	HUMANITIES n=10		SOCIAL SCIENCES n=19		LANG. & CULTURE n=5		SR	D	D ²
	MEAN	RANK	MEAN	RANK	MEAN	RANK			
1. Inter-library loans	4.2	4	3.9	4	1.78	1	9	1.5	2.25
2. Current awareness services	1.6	1	1.1	1	2.32	2	4	3.5	12.25
3. Selective dissemination of information	3.1	3	3.2	3	3.89	4	10	2.5	6.25
4. Literature surveys	2.3	2	2.1	2	3.05	3	7	0.5	0.25

Σ Sum of Ranks (SR) = 30
Average SR = 7.5
Degrees of freedom - 3

ΣD² = 21
W = 0.467

χ² - 4.2

Significance - 0.2407

explosion”, rising costs of books and periodicals combined with inadequate funds have contributed to this problem.

In order to determine the problems encountered in obtaining information required by the respondents, they were asked to select the most important problem out of the three common problems in acquiring information. Table 12 represents the results of this survey which shows that 91 (60.26%) indicated that information is not current.

Table 12 Problems encountered by Arts scholars in Sri Lankan Universities in obtaining scholarly information (N=151)

PROBLEMS	HUMANITIES N=31 %	SOCIAL SCIENCES N=86 %	LANG. & CULTURE N=34 %	TOTAL %
Information not up to date	45.16	69.76	50.00	60.26
Information incomplete	22.58	15.12	41.18	22.52
Information source unknown	32.26	15.12	8.82	17.22
TOTAL	100.00	100.00	100.00	100.00

This is not surprising since due to financial restrictions, university libraries are unable to service subscriptions to important abstracting journals namely, Humanities Abstracts. In this survey 34 (22.52%) scholars indicated that the most important reason was “information incomplete” followed by 26 (17.22%) respondents claiming “information source unknown” to be the important reason.

These results are more or less similar to results of studies carried out on agricultural scientists and pure scientists. In order to further explore the more specific details on the inadequacies as noted in Table 12, respondents were asked to rank the specific weaknesses on library collections. Results are given in Table 13 which indicates the scholars in all three categories ranking “collections are not up to date” as the major weakness followed by “periodicals and journals are incomplete” in the second ranking and “bibliographic tools inadequate” in the third position. Weaknesses such as “Collections are not organised” and “Collections are not properly stored” have got mixed ratings from the three different categories of disciplines while “Reference materials insufficient” received an overall ranking of 5.

When the rank orders of different categories were subjected to Kendall’s coefficient of concordance the value for W obtained was 0.746 indicating that the ranks given by different categories of disciplines is significant at the 0.05 level. Hence, the ratings of weaknesses in university libraries by scholars in all three categories show a correlation.

**Table 13 Summary of Kendall's coefficient of concordance W, on rank order of weaknesses of university libraries used by respondent Arts scholars
N=151**

PROBLEMS	HUMANITIES	SOCIAL SCIENCES	LANG. & CULTURE	SR	D	D ²
	N=31 MEAN RANK	N=86 MEAN RANK	N=34 MEAN RANK			
1. Collections are not up to date	1.01 1	1.12 1	1.11 1	3	7.2	51.84
2. Periodicals & Jls. are incomplete	2.23 2	2.01 2	2.12 2	6	4.2	17.64
3. Bibliographic tools inadequate	5.89 6	3.23 3	3.1 3	10	0.2	0.04
4. Reference materials insufficient	4.97 5	5.1 5	4.21 4	14	3.8	14.44
5. Collections are not organised	4.02 4	5.99 6	5.23 5	15	4.8	23.04
6. Collections are not properly stored	3.12 3	4.1 4	5.89 6	13	2.8	7.8

Σ Sum of Ranks (SR) = 61
Average sum of ranks = 10.2
W = 0.746
Significance-0.0477

ΣD² = 114.8
Degrees of freedom = 5
χ² - 11.1905

Comparing these results with studies carried out on scientists in Sri Lanka and other developing countries (a survey carried out by Awogbami⁴¹ on Nigerian teaching faculty members' perception of librarians), it is evident that these are common problems faced by researchers.

Capabilities of university libraries in providing information to Arts scholars

All academic scholars studied in this survey had convenient access to at least one university library and some used several other outside libraries. While studying areas of specialisation, past, current and future research interests of the respondent arts scholars, it is evident that almost every scholar has unique requirements of information and it may not be possible for any library to provide 100% user satisfaction in their information gathering process. To gain an insight into the final goal of the information gathering behaviour of Arts scholars, a question was included in the questionnaire on the satisfaction in obtaining information in the Arts fields. This assisted in evaluating the capabilities of university libraries catering to Arts scholars in providing information by category of discipline. Respondents were asked to select the most suitable rating for the capabilities of libraries the university library they patronise. The rating provided in the questionnaire was as follows: very adequate (100-80%), more than adequate(80-60%), adequate(60-40%), less than adequate(40-20%) and inadequate. Table 14 expresses the evaluation of the capabilities of libraries by the respondents.

Table 14 Capabilities of University libraries catering to Arts Scholars in the provision of information by category of discipline (N=151)

CAPABILITY	HUMANITIES n=31 %	SOCIAL SCIENCES n=86 %	LANG. & CULTURE n=34 %	TOTAL
1. Very adequate (100-80%)	-	-	-	-
2. More than adequate (80-60%)	9.86	2.32	-	3.31
3. Adequate (60-40%)	19.35	24.42	17.65	21.85
4. Less than adequate (40-20%)	61.29	43.02	58.82	50.33
5. Inadequate (<20%)	9.68	30.23	23.53	24.51
TOTAL	100.00	100.00	100.00	100.00

The dissatisfaction of respondent scholars with the libraries as providers of information for Arts scholars is clearly visible in this table. There were no respondents in the very adequate category and only five (3.31%) respondents out of the total of 151 respondents claiming that the capabilities of libraries are more than adequate. Thirty three (21.85%)

respondents ranked the library capabilities as adequate, seventy six respondents (50.33%) as less than adequate and thirty seven (24.51%) respondents ranked the capabilities as inadequate. Thus, more than half of the subjects felt that libraries are less than adequately equipped to serve Arts scholars in Sri Lankan universities. These findings are in agreement with the results of the survey carried out on pure scientists in Sri Lankan universities where they too felt that university libraries are less than adequately capable of serving the research requirements of academic scholars.

Suggestions of respondents for the improvement of libraries in Sri Lankan universities catering to Arts scholars

As librarians and information officers become increasingly aware that the main function should be to provide an efficient service for their clientele, more attention should be paid to discovering what type of services are needed. This is based on the information needs of the users and as means of determining these, user studies on information gathering behaviour are important. Such knowledge is useful to determine which areas need improvement notwithstanding budgetary limitations and this also helps in future planning of library services.

Respondents were asked to make suggestions in the following broad categories; acquisitions, cataloguing, services, staff and others. Table 15 presents the findings from the present study on Arts scholars regarding suggestions for improving information services in relation to their information needs and practices.

Acquisitions

These findings also confirm the previously illustrated deficiencies identified by the respondents on the vast demand for the need to acquire more bibliographic tools, abstracts, reviews, and current awareness journals and to continue them. Thus 120 respondents (79.47%) indicated the need to acquire more bibliographic tools as the major service for improvement while 118 respondents (78.14%) felt that there is a need to acquire more reference materials on different disciplines. Nearly half of the total population suggested that more journals and current awareness publications should be ordered. A relatively low number of respondents (15.23%) implied the need to accelerate the process of accessioning and cataloguing of new publications acquired to the libraries. This is a deficiency which should concern the librarians and library staff where the progress of the above activity has been overlooked and could be easily rectified. It is also a significant indication that user studies directed for the evaluation of library sources and services are crucial.

Cataloguing

Access to information sources in most university libraries is customarily through card catalogues except for databases developed for various special collections, On-line Public Access Catalogues (OPAC's) are not available. Sixty respondents (39.73%) felt that easy access to library materials through computerised on-line catalogues and indices would be extremely convenient while fifty two respondents (34.43%) indicated the need to

Table 15 Suggestions for improvement of libraries in Sri Lankan Universities catering to scholars in Humanities, Social Sciences, Language & Culture (N=151)

Multiple responses allowed.

SUGGESTIONS	%
<p>* ACQUISITIONS</p> <p>1. Increase the number of periodicals on order. 49.67</p> <p>2. More reference materials on different disciplines. 78.14</p> <p>3. Need for more bibliographic tools. 79.47</p> <p>4. Need for more Current Awareness publications. 42.91</p> <p>5. Speed up accessioning & cataloguing of new publications. 15.23</p>	
<p>* CATALOGUING</p> <p>1. Computerisation of catalogues to establish OPAC's. 39.73</p> <p>2. Need for a title index. 34.43</p> <p>3. Proper maintenance of catalogues & indices. 28.48</p>	
<p>* SERVICES</p> <p>1. Develop audio-visual facilities. 6.62</p> <p>2. Extended library hours. 28.48</p> <p>3. Facility for computerised literature searches. 15.23</p> <p>4. Internet facilities in the library. 39.34</p> <p>5. Introduce Current Awareness & SDI services by the library. 28.48</p> <p>6. More efficient & speedy photocopying service. 31.79</p> <p>7. Provision of user education programmes. 21.19</p>	
<p>* STAFF</p> <p>1. Efficient training programmes for library staff members to provide a better & courteous service. 47.68</p>	
<p>* OTHER AREAS</p> <p>1. Assistance from donor agencies to be explored. 10.59</p> <p>2. Conservation and preservation of rare and old materials. 10.73</p> <p>3. Coordination between the library and the academic staff to be enhanced. 38.44</p> <p>4. Need to have separate faculty libraries. 21.12</p> <p>5. Organisation of library materials to be improved. 53.64</p> <p>6. Physical improvement; lighting, interior decor, etc. 35.76</p>	

establish a title index to the existing card catalogue. This may be in the libraries where the dictionary catalogue is adapted leaving the title index. However, if the university libraries are automated this requirement will be fulfilled as accessing facility is enormous in electronic catalogues.

Services

Establishing Internet facilities in university libraries was considered by fifty nine respondents (39.34%) as a vital requirement. There is also a considerable demand from the respondents (~ 30%) for extended library hours, introduction of in-house Current Awareness and Selective Dissemination of Information (SDI) and efficient and speedy photocopy service.

Staff

Approximately 50% of the total population strongly felt the need to organise training programmes for library staff to provide a better and courteous service. This is also a finding which would be of interest to librarians.

Suggestions for the improvement of other areas

Eighty one respondents (53.64%) felt that the organisation of library materials should be improved. It has been observed in libraries that even though the materials are properly catalogued and indices maintained properly, organisation of library materials will not be totally complete unless shelf maintenance is carried out efficiently. Fifty eight respondents (38.44%) implied the need to explore assistance from donor agencies as means of enhancing monetary reserves available to accomplish library requirements. The emphasis on conservation and preservation of rare and old materials is indicated by fifty four respondents (53.76%) is well understandable considering the value of these types of items to Arts scholars specially the Humanists.

4. CONCLUSIONS DRAWN AND RECOMMENDATIONS FOR IMPLEMENTATION :

This study clearly indicates that the Arts scholars find the university libraries inadequate in catering to their requirements. This is true in the area of current printed information where scholars felt that journals, reviews, abstracts, etc. are insufficient. This is the foremost reason why 75% of the respondent Arts scholars found that library services and strengths are either less than adequate or inadequate. The use (direct or indirect) of foreign libraries by the respondent scholars is not exhibited in this survey. However, pure scientists in Sri Lankan universities appear to benefit much from this facility availed through informal channels⁴². It would be invaluable if a similar process could be established for the Arts disciplines as well.

When compared to the pure scientist population in the Sri Lankan universities which is approximately 250, the Arts scholars amount to 415 and it is evident that the original research output of Arts scholars is comparatively less. However, in depth studies into the assessment of research output is an area which has been neglected in the Sri Lankan

context . The important role citation studies play has been emphasised by Garfield⁴³ in his study on Arts and Humanities.

Analysis of Tables 7 & 8 suggests that respondent Arts scholars use informal source to a lesser extent. Table 7 indicates that respondent scholars the “use of assistance of others” to seek information is very low and the existence of “invisible college” was not distinctly evident. In contrast, the information gathering behaviour of scientists⁴⁴ shows that the involvement of the “invisible college” is prominent. This feature coupled with the inadequacy of available information to Arts scholars could be the reason for the low productivity. It is clear that university libraries too have an important role in enhancing the academic output of the institution.

A notable observation made during this study is the behaviour of Arts scholars in seeking and gathering information where they spend a longer period of time at each visit to the library. This is in contrast to the pure scientists who displayed a habit of spending less time in the library.

Means of improving library services to Arts scholars in Sri Lankan Universities

The salient factor in satisfying the information requirements of Arts scholars is the provision of more printed media in the form of journals, abstracts, reviews, etc. However, with the financial constraints encountered by the universities at present, this is not practically feasible. A closer examination of this study implies that certain measures could be taken to improve library services rendered to the academic communities in the Arts fields in the universities within the existing financial constraints. As implied by Weintraub⁴⁵ in his study on Humanistic scholar and the library, the academic libraries do not seem to involve faculty enough in library problems nor do enough to help students in intelligent use of the library. Weintraub stresses that an effective attack on the vast problems of the library and the development of the library of the future depends on a more effective interaction between the library professionals and academic scholars.

It is thus important to find out effective means to share the resources available at different universities. Responses from subjects have revealed that the inter-library-loan facility is not efficient and some academic scholars were unaware of the availability of this service. Information on materials available in other institutions too become important at this juncture. Establishment of information networks either electronic or manual could play a vital role in resource sharing. This could be facilitated by a coordinating committee of all librarians involved in disseminating literature on Arts based fields.

An efficient system to communicate with the different universities and libraries via telephone, e-mail or fax transmission and prompt response to requests of inter-library-loans would greatly enhance efficient dissemination of information in Arts fields. In this regard, closer collaboration between librarians of different university libraries and other institutions has to be developed and maintained. For this it is essential for librarians and information specialists in universities and institutions related to different fields to meet

periodically and discuss means of effective resource sharing and also find out how best to provide information to their clientele within the present constraints. Such information in turn should be provided to the end users by way of organising user seminars where new facilities and services available in libraries could be disseminated. The need for conducting more in depth studies on the broad pattern of information requirements, types of work individual scholars carry out and their information needs and day to day information habits and requirements of individual scholars in universities is strongly implied from this study.

It is equally important for the library staff to be aware of the modern developments in scientific communication. These include the use of CD-ROM facilities, accessing various databases and providing maximum service to the user community with variable interests and tapping the wealth of information available in the INTERNET. This could be achieved through regular workshops where experts in these areas could interact with library staff so that the adoption of the recent advances could be explored. It is also important that such knowledge be further disseminated to the academic scholars who constitute the end users. Developing a good two way communication mechanism between library staff on one hand and with the academic scholars on the other is a challenge faced by information professionals today.

5. (a) Citation of periodicals reporting work done under this contract, giving author, title, journal, volume and page number : None

(b) Other relevant literature references :

6. An explanation of any significant departure from the level of activity foreseen by the contract : None

REFERENCES

- ¹Marilyn Domas White, "The Communications behaviour of academic economists in research phases", *Library Quarterly* 45, (1975): 337-54.
- ²J. D. Bernal, "Scientific information and its users", *Aslib Proceedings* 12, (1960): 423-38.
- ³Richard Hopkins, "The Information seeking behaviour of literary scholars", *Canadian Library Journal* 46, (1989): 113-15.
- ⁴Maurice B. Line, "Information requirements in the Social Sciences: some preliminary considerations", *Journal of Librarianship* 1, (1969): 1-19.
- ⁵Irangani Mudannayake, "Information needs and practices of Agricultural scientists in Sri Lanka", (MLS Thesis, University of the Philippines, 1987), pp. 1-131.
- ⁶Sriyani Ileperuma, "Information needs and information gathering behaviour of Pure scientists in the universities of Sri Lanka", (MLS Thesis, University of Colombo, 1994), pp. 1-125.
- ⁷Author's operational definition used in the context of this study.
- ⁸Maurice B. Line, "Information requirements in the Social Sciences: some preliminary considerations", *Journal of Librarianship* 1, (1969): 1-19.
- ⁹William F. Ogburn, "The Social Sciences and the interrelations", in S.R. Ranganathan and Girja Kumar, ed. *Papers and summary proceedings of the library seminar on Research in Social Sciences, New Delhi, 2-4 Jan. 1959*, (New Delhi: Asia Publishing House, 1959), pp. 12-36.
- ¹⁰Magaret Slayter, "Social scientists' information needs in the 1980s", *Journal of Documentation* 44, (1988): 226-37.
- ¹¹Sue Stone, "Humanities scholars: information needs and uses", *Journal of Documentation* 38, (1982): 292-313.
- ¹²H. M. Weisman, "*Information systems services centres*", (New York: Wiley, 1972) p. 13.
- ¹³Author's operational definition used in the context of this study.
- ¹⁴J. E. Rowley and C. D. N. Turner, "*The Dissemination of information*", (London: Andre Deutch, 1978) p. 54.

- ¹⁵ Author's operational definition used in the context of this study.
- ¹⁶ H. M. Weisman, *"Information systems services centres"*, (New York: Wiley, 1972) p. 13.
- ¹⁷ H. Young, *The ALA glossary of library and information science*, (Chicago: American Library Association, 1983) p. 123.
- ¹⁸ Maurice B. Line, "Information requirements in the Social Sciences: some preliminary considerations", *Journal of Librarianship* 1, (1969): 1-19.
- ¹⁹ Margaret Slayter, "Social scientists' information needs in the 1980s", *Journal of Documentation* 44, (1988): 226-37.
- ²⁰ Sue Stone, "Humanities scholars: information needs and uses", *Journal of Documentation* 38, (1982): 292-313.
- ²¹ Maurice B. Line, "Information requirements in the Social Sciences: some preliminary considerations", *Journal of Librarianship* 1, (1969): 1-19.
- ²² William F. Ogburn, "The Social Sciences and the interrelations", in S.R. Ranganathan and Girja Kumar, ed. *Papers and summary proceedings of the library seminar on Research in Social Sciences, New Delhi, 2-4 Jan. 1959*, (New Delhi: Asia Publishing House, 1959), pp. 12-36.
- ²³ Margaret Slayter, "Social scientists' information needs in the 1980s", *Journal of Documentation* 44, (1988): 226-37.
- ²⁴ Sue Stone, "Humanities scholars: information needs and uses", *Journal of Documentation* 38, (1982): 292-313.
- ²⁵ Melvin J. Voigt, *Scientist's approaches to information*, (Chicago: American Library Association, 1961), (ACRL Monograph 24), pp. 20-33.
- ²⁶ Maurice B. Line, J. M. Brittain and F. A. Cranmer, *"Investigation into the information requirements of the Social Sciences, research Report no. 1: information requirements of researchers in Social Sciences, 2v.* Bath: Bath University Library, May 1971.
- ²⁷ Sidney Seigel, *Nonparametric statistics for the Behavioural Sciences*, (New York: McGraw Hill Book Company Inc., 1956) pp.123-128.
- ²⁸ Irangani Mudannayake, "Information needs and practices of Agricultural scientists in Sri Lanka", (MLS Thesis, University of the Philippines, 1987), pp. 1-131.

²⁹Sriyani Ileperuma, "Information needs and information gathering behaviour of Pure scientists in the universities of Sri Lanka", (MLS Thesis, University of Colombo, 1994), pp. 1-125.

³⁰Richard Hopkins, "The Information seeking behaviour of literary scholars", *Canadian Library Journal* 46 (1989): 113-15.

³¹Irangani Mudannayake, "Information needs and practices of Agricultural scientists in Sri Lanka", (MLS Thesis, University of the Philippines, 1987), pp. 1-131.

³²Magaret F. Steig, "The Information of needs of Historians", *College and Research Libraries* 42 (1981): 549-60.

³³Richard Hopkins, "The Information seeking behaviour of literary scholars", *Canadian Library Journal* 46 (1989): 113-15.

³⁴Donald Owen Case, "The Collection and use of information by some American Historians: a study of motives and methods", *Library Quarterly* 61 (1991): 61-82.

³⁵Magaret F. Steig, "The Information of needs of Historians", *College and Research Libraries* 42 (1981): 549-60.

³⁶Melvin J. Voigt, *Scientist's approaches to information*, (Chicago: American Library Association, 1961), (ACRL Monograph 24), pp. 20-33.

³⁷Herbert Menzel, "The Information needs of current scientific research", *Library Quarterly* 43 (1964): 4-19.

³⁸Dawn McCaghy and Gary R. Purcell, "Faculty use of Government publications", *College and Research Libraries* 33 (1972): 7-12.

³⁹Barbara Orbach, "Historians: information needs, information seeking and the research process", *Specialisation paper, Graduate School of Library and Information Science, University of California, Los Angeles, 1984.*

⁴⁰Diana Amsden, "Information problems of Anthropologists", *College and Research Libraries* 29 (1968): 117-31.

⁴¹Popoola A. Awogbami, "Nigerian teaching faculty members' perceptions of Librarians: a survey", *Libri* 45 (1995): 199-202.

⁴²Sriyani Ileperuma, "Information needs and information gathering behaviour of Pure scientists in the universities of Sri Lanka", (MLS Thesis, University of Colombo, 1994), pp. 1-125.

⁴³Eugene Garfield, "Is information retrieval in the Arts and Humanities inherently different from that in Science? The effect that ISI®'s citation index for the Arts and Humanities is expected to have on future scholarship", *Library Quarterly* 50 (1980): 40-57.

⁴⁴Sriyani Ileperuma, "Information needs and information gathering behaviour of Pure scientists in the universities of Sri Lanka", (MLS Thesis, University of Colombo, 1994), pp. 1-125.

⁴⁵Karl J. Weintraub, "The Humanistic scholar and the library", *Library Quarterly* 50 (1980): 22-39.