CHAPTER SIX

CONCLUSION

Introduction

This study examines the research trend and the use of information sources amongst postgraduate humanities researchers. This chapter discusses the results of the study with comparisons made to previous findings.

The main objective of this study is to examine the trends of postgraduate research in the humanities and the use of information sources by humanities researchers based on the following hypotheses:

- The Faculty of Arts and Social Science is expected to contribute most to total submission of the dissertations.
- 2. Subject coverage of the dissertations are mainly Malaysian and regional oriented.
- 3. The preferred language of humanities scholars is the Malay language.
- 4. The materials used by humanities are more localised in nature.
- Local humanities researchers prefer monographs to other sources.
- The citations used by humanities scholars would be mainly singleauthored works.
- The core authors of literature cited by humanities scholars would comprise of a third of the total articles cited.

- The core journals used by humanities scholars would consist of a wider range of journal titles.
- The age span of literature used by local humanities researchers would be considerable longer and exhibit a longer half-life.
- 10. The literature used by local humanities researchers would indicate a wider interdisciplinary subject coverage than those used by experimental researchers.

The sample used for analysing the information sources used by the humanities researchers consisted 40% (104) of the 259 dissertations from the three disciplines (18 class B, 17 class D, and 69 class P). The detail citation of 40% of the total citations in each sample dissertation were randomly chosen and the bibliographic information were keyed into a database named REFERENCE DB. The relevant elements of each record were extracted and saved in a text file and then fed into a bibliometric toolbox to obtain cumulative frequency distributions to show the spread of the literature used.

Discussion of the Results

Research Trends of the Postgraduate Researches in the Humanities Quantity and Type of Dissertations

Research in the humanities is on the increase with more submission at the master's than doctoral level. Out of the total of 259 dissertations submitted to the University of Malaya between 1984 and 1994, 215 (83%) comprises of master's dissertations and 44 (17%) doctoral theses. The average number of dissertations submitted were 19 for master's and 4 for doctoral postgraduate dissertations. The results also show that the trend of local

research in the humanities is on the increase with a slight drop in 1994 (26 master's and 4 doctoral dissertations). The highest number of submission was in 1993 for both the master's and doctoral dissertations, with 36 master's and 7 doctoral dissertations. Categorisation of the dissertations by disciplines revealed that language and literature is the most productive discipline which continuously led in the total number of submission throughout the 11 years under study. Class P contributed to 66% (151 master's and 21 doctoral) of the total number of dissertations. This is followed by religion and philosophical studies (37 master's and 7 doctoral) and history (27 master's and 16 doctoral), both 17% respectively.

Faculty Distribution of Dissertations

The dissertations in the humanities came from 7 faculties. The Faculty of Arts and Social Sciences contributed the most, with 126 dissertations (49%). This is followed by the Faculty of Education with 63 (24%) dissertations; the Faculty of Languages and Linguistics 43 (17%); the Faculties of Syariah and Usuluddin with 18 (7%); the Faculty of Economics and Administration 6 (2%) and Institute of Advanced Studies 3 (1%). Although the Faculty of Arts and Social Sciences constitutes the highest contributor of research in the humanities, other faculties are also important contributors. This reflects the increasingly inter-disciplinary nature of studies in the humanities, meaning the cross-over into social sciences is becoming frequents.

This study also shows that pattern of research remains close to the main focus of the respective faculties. More than 97% of the dissertations submitted to the Faculty of

Language and Linguistics were concerned with the study and teaching of languages and literature. The same pattern is also exhibit in the Faculty of Education and the Faculties of Syariah and Usuluddin, where the former faculty produced more than 85% of the dissertations in language and literature studies, and the latter faculties produced more than 88% of the dissertations in religion and philosophy studies.

The departmental distribution of total submission of dissertations within the Faculty of Arts and Social Sciences showed that researchers from the Malay Studies Department were the highest contributors, with 25% (32) of the 126 dissertations submitted to the faculty. The other five top contributors were the Department of Islamic Studies 19% (24); English Studies 14% (17); Chinese Studies 13% (16); Indian Studies 10% (13) and History 9% (11). This pattern reveals that vernacular and ethic studies are popular amongst humanities postgraduate research.

Subject Dispersion of the Dissertations

The subject coverage of each dissertation was ascertained by checking the subject headings allotted to the titles against the University of Malaya Library Online Public Access Catalogue. The highest activity revolve around studies concerning local vernacular languages, literature, culture, religion and philosophical studies, which dominate humanities research over the years. Such results indicate that 73% of the dissertations in the humanities are local studies, orienting towards investigating Malaysian aspects of religion and philosophy; Malaysian history and race; and Malaysian languages and literature. The remaining studies focuses on Asean (6%) and other neighbouring areas

(21%). This findings support the hypotheses that humanities researches are more local oriented.

Language Distribution of Dissertations

The language distribution of the dissertations in the humanities support the hypothesis that the preferred language of the local humanities researches is the Malay language which accounts for 158 (61%) dissertations. English language accounts for 101 (38%) of total dissertations

Characteristics of the Citations Used by Humanities Researchers

Total Number of Citations

A total of 5,610 citations were used to analyse the characteristics of the information sources used by the humanities researchers. Class B consists of 1,057 citations, class D 1,428 citations and class P 3,125 citations. Researchers in class D cited more documents than the other two disciplines. The average cited documents was 102 documents in class D, 58.7 documents in class B and 45.3 documents in class P.

Types of Citations Cited

Humanities researchers under study use a variety of documents, such as books, journal articles, conference papers, theses, book chapters, government documents, newspapers and other formats. Citation to books strongly outnumber other types of sources with 52% of total citations. This result is similar to previously observed citation studies of the literature used by humanities researchers. Stern (1983), Heinzkill (1980), and Budd

(1986), in their studies of the journal literature used by American and English literary studies, found that between 64% and 82% of citations were to books. Cullars (1992) and Simonton (1960) also documented the predominance of monographs used in the fine arts (60.6%, 71.5% respectively). Although the present study found a lower percentage of monograph use than the previous studies, the importance of monographs to humanities scholarship is clearly indicated.

Citations to journal articles in the present study accounts for 23.55% of total citations. Earlier studies have also shown a more or less similar percentage in the use of journals, with 15.1%, 20%, and 26.7% in the studies by Stern (1983), Heinzkill (1980) and Budd (1986) respectively. This indicates that the postgraduate researchers in the humanities are consistent in their use of journal articles compared to other studies.

Theses account for 6.24% of total citations in the present study, a high percentage compared to earlier studies of literature in the fine arts (Cullars, 1992) Italian and Spanish literature (Cullars, 1990), French and German literature (Cullars, 1989) and American literature (Budd, 1986). They also found a smaller percentage of theses used (2% and 0.2%).

Authorship Pattern of Citations Used

Single-authored papers constitutes 89.54% of total citations used by researchers in the humanities. Two-authored papers comprise of 7.79%, three or more than three authored papers account for 2.27% of total citations used. Single-authored papers far outnumbered multi-authored papers for literature used by humanities scholars. The ratio between multi-

and single-authored papers is approximately 1:8. The high incidence of single-authored papers seems to characterise the working nature of the humanities scholarship, where humanities researchers prefer to work in isolation (Stone, 1982; Stevens, 1956)

Core Authors of Citations Used

The core authors of the citations use by humanities researchers consists of 700 (1.58%) authors contribute 2,160 (36.59%) of total citations. This result indicates that core authors in the humanities are larger in numbers. This pattern seems to conform the characteristic of historical research which requires a large number of infrequently used titles (Stevens, 1953a) to fulfill researcher's information needs.

The present study found that the top ten most cited cohort grouping of authors consist of 14 authors, of whom, 57.1% (8) are local. This is consistent with the research trend analysis which indicated that studies carried out by the humanities researchers are local-oriented.

Scattering of the Citations Used

The nucleus (most productive) of the core journals used by humanities researchers consists of 20 titles, which contribute to 35% of total citations. Journals in the second and third productive zones consists of 93 titles, and 343 journals which comprises of 34% and 31% of total citations respectively.

Core journals used by researchers in the humanities comprises a wider number of titles. Stevens (1953b) made a comparative analysis of the title dispersion in 8 disciplines; chemistry, biochemistry, physics, electrical engineering, radio engineering, chemical engineering and U. S. history (Table 6.1). He concluded that the zonal dispersion of journals used is smaller in the pure science, greater in technology, and greatest in the humanities. Table 6.2 displays the dispersion of the journals used by humanities researchers in this study. Such result seems to conform Stevens' (1953b) observation. Although the number of journals in the first 25% (11) in the humanities is less than the number of journals used in the same zone for US history (14), it is still larger than journals used in the pure science and technology.

The wider spread of journals used by researchers in the humanities may be due to dependence on historical research method. Stevens (1953a) found that experimental research needs to require a few journals frequently and a larger number of journals less frequently, while historical research requires a comparatively large number of journals of which few titles are used often. The same trend of literature use is also indicated in the use of monographs. More than 90% of the monographs used by the researchers were only cited once. The percentage for titles used more than once is negligible (6.05%).

Table 6.1: Title Dispersion in Eight Studies Summarised by Stevens (1953b)

Subject Field	No of Citations	No of Journals with % of citations			
		25%	50%	75%	100%
Chemistry	3633	2	7	24	247
Chemistry	1085	1	5	19	131
Biochemistry	17198	3	12	56	851
Physics	1279	1	3	17	134
Electrical engineering	17991	3	9	39	-
Radio engineering	1506	2	8	20	-
Chemical engineering	21728	3	23	-	-
US history	452	14	-54	149	259

Table 6.2: Journals Dispersion in the Humanities (Present Study)

Subject Field	No of Citations	No of Journals with % of citations			
		25%	50%	75%	100%
Humanities	1321	11	51	116	278

Age Distribution of Citations Used

The analysis of citations dispersion by age indicates that the use of documents by humanities researchers spread over 170 years, where the oldest document used was published in 1823. This shows that humanities researchers are not likely to ignore documents because of their age, and their works are less susceptible to obsolescence (Frost, 1979; Weintraub, 1980; Koenig, 1978).

A substantial number of citations (1,204, 21.5%) were made to documents more than 10 years old. This pattern coincides with previous studies in humanities, where 27.1% in foreign literature studies by native speakers of English (Cullars, 1988), 15.4% in American literature studies (Budd, 1986), 30.3% in studies on literary Criticism (Stern, 1983) are to documents 10 years old or less. Recency is not as important in the humanities as it is in the sciences. Fussler (1949) reported that 88.2% in physics, 71.4% in chemistry were citations to literature published within ten years or less. On the other hand, Gupta (1990) showed a 4.9 years half-life for citations to *Physical Review*. The half-life of citations in this study is about 18 years, which is much longer than Gupta's findings for literature used in physics. Differing from the sciences, monographic literature is often the raw material of scholarship in the humanities. New finding in the humanities scholarship does not totally replace what existed before in the sciences. With that an older paradigm or interpretation may be revivified and reinstituted, thereby will always be of interest for historical reasons, for it helps shape the thinking of contemporaries and also influences subsequent developments

(Koenig, 1978). This is the reason why the useful life of monographs in the humanities is longer than it is in the sciences.

This study also find that distribution of literature use by age vary between monographs and journals. The median age for monographic citations is 1980, whereas it is 1986 for journal citations. This shows that humanities researchers cite more recently published articles in journals than monographs. The useful life of monographic citations is greater

and the half-life for monographs (18 years) is longer than journal citations (17 years).

This study find that English-language documents comprise the overwhelming majority of

Language Distribution of Citations Used

citations used by humanities researchers, where English language documents comprises of 66% of total citations. Malay is the next preferred language cited with 18.5% of total citations used, followed by documents in Chinese and Arabic languages (6.2%, 5.2%). The percentage of citation to documents in the English language is higher than that indicated by some of the previous studies in the same field. Simonton (1960) working with the literature cited in the fine arts, found that 33% to 45% of the citations were to documents in English. Bebout, Davis, and Oehlerts (1975) summarised data from citation studies in philology and music, indicated that English language materials accounted for

Batts, (1972) in a study of English and German literary journal articles reported that up to 90% of all citations are in the native language of the citing scholar when the topic is also

45.5% and 57.3% of total documents cited respectively.

in that language, whereas when the language of the article differs from that of the researcher, 60% of the citations will be in the language of the topic and 30% in the language of the researcher. However, the language distribution of the citations used by the researchers in this study did not seem to be consistent with previous findings, as only 18.5% of the citations were in the Malay language, although 61% of the dissertations were written in the Malay language. The high percentage of use of documents in the English language seems to indicate that English is still the research language in local humanities studies.

The pattern of language usage other than English and Malay are discipline-oriented. The Arabic language is popular in the religion and philosophy studies, whereas documents in the Tamil language is only cited in the related language and literature studied.

Geographical Distribution of Citations Used

Geographical distribution of the citations used by humanities researchers show differences in the distribution trend for monographs and journals. More than 40% of monographs used by researchers are published in Asia. However, researchers use more journals published from North America, as 44.9% of the journals used are from the USA and Canada. Journals published in Asia account for 37% of total journals used. The result indicates that researchers use more monographs published in the United Kingdom (22%) than journals (12.6%). Monographs published in the Middle East received higher citations (9.9%) compared to journals (0.2%).

The use of a high percentage of publications published from the Asian region indicates that researchers need local or regional published publications more. Thus, a total of 21.4% of the monographs and 16.6% journals cited are published in Malaysia. This supports the hypothesis that humanities researchers use more local materials.

Subject Distribution of Citations Used

The result indicates that all three disciplines under study cite a high percentage to documents within the discipline itself. Religion and philosophy studies and history studies cited 55.9% and 58.1% to documents classed within the disciplines. Language and literature studies cite an even higher percentage to documents within the discipline (89.6% of the citations are classed within the discipline). Budd (1986) reported that American literature materials form the majority (72.1%) of the work cited in American literary studies. Broadus (1987) surveyed documents requested by the researchers in the National Humanities Center and found that a substantial proportion (56.5%) of documents requested were classified in the humanities. The results from this study therefore does not differ from the earlier studies.

Journal Holdings in the University of Malaya Library

From the analysis of the scattering of journal titles, researchers in the humanities under study cited a total of 456 journal titles. To assess the availability of journals used by the researchers, the journal titles cited were checked against the University of Malaya Library's (UML) Online Public Access Catalogue. The availability ratings were then given

to the UML's holding of journal titles in accordance to a scale of measurement (Table 6.3).

When the journal titles were compared with UML's holdings, it was found that UML achieves a 'Good' measure of availability at 57.2% (261 titles) of total titles. The performance of UML's holding of the core journals is 'Excellent', where the library holds 100% (20) of the core journals used by the researchers. The high percentage of availability may be related to the assumption that researchers tended to cite materials found in the library (Heidenwolf, 1994).

Table 6.3: Scale of Measurement Used to Ascertain Journal Availability

Percentage of Availability	Grade	
80% and above	Excellent	
60 to 79%	Very good	
45 to 59%	Good	
30 to 44%	Poor	
Below 30%	Very poor	

Conclusion

Two factors emerged from this study. Firstly, researches in the humanities are extremely local oriented, aiming at identifying local problems and suggesting solutions. Secondly, humanities researchers require not only a wide variety of documents but also found usefulness for documents regardless of their age. This pattern of use provide useful clues to the library managers in that:

- a) acquisitions of materials for humanities researchers must be wide ranging from original texts to microforms.
- b) Recency should not be the prime factor considered for collection development. Instead, a thorough coverage of materials should be aimed at relevant to the particular needs of individual institution's research undertaking

As such, the collection of resources both primary and secondary, current and retrospective, which may be available locally or abroad, regardless of the cost must be given due priority in order to effectively service humanities researchers' information need.

Satisfying users' information need is the primary goal of every library. However, it is not possible to expect the library to possess all the materials the users need. The research process and the pattern of use of information sources in the humanities is peculiar from other disciplines. Humanities researchers are highly dependent on the library for their research information needs. The library is like the laboratory to the humanities researchers. Humanities researchers not only library-centered but also text-centered, hence library has to perform dual function by providing the researchers with both the raw material and the result of previous researches. Very little is known about the actual research process of the humanities. It is likened to 'detective work' (Fabian, 1986) which accounts for whatever is systematic in research, and equally the irritatingly unsystematic movements which are also part of the scholar's attempt to discover something new. Research in the humanities is not merely a simple process of consulting and digesting a smaller or larger number of books

and periodicals, but rather an act of continuous reading, to find and assimilate source materials and to collate the results of previous searches on the subject under study. This attempt must be repeated in a process of refinement and readjustment until the 'evidence' to be presented is entirely convincing (Fabian, 1986).

The book-bound nature of the humanities researches denote the characteristics of the scholarship which is based on texts and that the researchers must bring together texts from many sources. Besides having the core materials in the humanities, the library's research collection should provide as specific as possible the materials needed by the researchers. In other words, comprehensiveness of research collection is vital to the humanities researchers. In addition, the library should also improve its cataloguing and provision of secondary services which will help the researchers to access needed materials. Librarians need to ascertain the type of materials which ought to be fully catalogued. Bibliographic services are relatively more important to the humanities researchers as compared with personal recommendations, indexes and abstracts. As a result, the library serving their needs ought to maintain as large a collection of bibliographies and bibliographic reference sources as it can afford. The library policy should accommodate basic bibliographic tools in the subject areas in the humanities, especially highly specialised subject and author bibliographies, list of society publications, book-auction records. These are the potential sources of great value to the humanities researchers.

Humanities researchers will never be completely satisfied with a single library's collection. Consequently, catalogues of abbey libraries, catalogues of private libraries and national bibliographies of remote countries are helpful to humanities researchers, because humanities researchers would pursue the materials they need through alternate means such as inter-library loan or travel to other libraries instead of changing their research topics. Therefore, the library must accommodates by providing the freedom to make it easier for humanities researchers to gain access to materials available elsewhere.

Other services such as flexible circulation services and reprographic services also play an important role in supplying effective service to the humanities researchers. Researchers often face problems in accessing documents kept in special collection such as manuscripts, archives, theses, etc. Perhaps the library could help by adjusting the circulation policy to make it more flexible to use these materials. Reprographic services such as photocopying, making microfilms or microfiches of rare documents would serve the humanities scholars well.

One more aspect that needs further investigation is the role of librarian to the humanities scholarship. Librarian is usually not consulted by humanities researchers and are often not considered as a resource for their research. Subsequent study relating to the role of the librarian as a contributor assistant to the humanities researchers is needed in order to develop a closer relationship between researchers and the librarian. This would ensure that the research function of the library to the humanities researchers would be fully realised.