



The study of research methods in LIS education: issues in Korean and U.S. universities

Soyeon Park

*Department of Library and Information Science, Duksung Women's University, 419 Ssangmun-dong Dobong-gu,
Seoul 132-714, South Korea*

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Abstract

This study investigates the current state of research methods education in Korean library and information science (LIS) programs and compares research methods education between Korea and the United States. The definition of research methods is consistent and homogeneous across Korean schools, whereas research methods are defined loosely and differently in the United States. Research methods in both the United States and in Korea appear to be in a state of methodological uncertainty where dominant methods may be taught but not necessarily applied by graduate students. Research methods, as shared knowledge, offer fields the tools needed to investigate problems and understand the process by which they are studied. Thus, if LIS wants to increase its research capacity and improve its research quality, then it will need to require research methods of all students. While the range of topics covered in Korean research methods courses may need to be expanded, those in the United States may need greater depth of coverage.

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1. Introduction

Research methods convey essential tools needed to conduct substantive research or critically analyze it. Thus, research methods, however defined, are an integral component of any field and shared knowledge of methods is important to the development of disciplines and fields. Yet, library and information science (LIS) as a discipline does not

E-mail address: sypark@duksung.ac.kr.

seem to recognize the role that research methods play in the development of a field since it lacks a common understanding of and consistent emphasis on education in this area.

O'Connor and Park (2001) investigated American Library Association-accredited LIS programs in the United States and Canada and disappointingly found that “research methods” are not a priority in the education of master’s students. They also found that research methods are defined loosely and differently across LIS schools. In a recent *Library & Information Science Research* editorial, Hemon and Schwartz (2003, p. 125) wondered if “the same picture they portray applies internationally.”

It is possible that LIS education in Korea and in the United States influence each other. LIS doctoral programs in the United States attract a small but significant core of Korean students who later become faculty in U.S. or Korean LIS programs. Korean graduate LIS education has developed in many ways similar to equivalent programs in the United States. Correspondingly, a number of LIS programs in the United States and Canada are now offering courses to undergraduates, something long done in Korea.¹

Korean LIS programs are oriented towards undergraduate education. There are thirty-two undergraduate LIS programs in Korea, and about 70 percent of them (twenty-two schools) offer graduate programs. Every LIS graduate school requires a master’s thesis. The number of faculty and students are much smaller than programs in the United States: On average, there are 4.5 faculty members per Korean school. Therefore, the infrastructure of Korean LIS programs is more homogeneous than programs in the United States where there is a mix of large-, small-, and middle-sized programs.²

2. Problem statement

Although Korean LIS education is undergraduate centered, research methods are seldom offered and taught in undergraduate programs. However, such courses are offered at the master’s level. This study explores research methods education in Korean LIS master’s programs and (1) examines course content; (2) makes comparisons across programs; and (3) compares courses between U.S. and Korean LIS programs. It is important that LIS education gain a better understanding of the extent to which master’s students world wide know about research methods and are able to appreciate and conduct small-scale research projects.

3. Procedures

Of the twenty-two Korean graduate LIS programs, two of these schools were newly opened and neither offered research methods courses. The graduate catalogs and curricula

¹ Although the research reported here does not address these interrelationships, it is not unaware of the possibility of such influences.

² It is important to note that the Korean Library Association (KLA) mainly functions as a professional association but that it is not responsible for the accreditation of LIS programs.

of twenty schools were first examined in December 2001 in order to investigate the current state of research methods education in Korea. Department offices of these twenty schools were also queried to confirm the data obtained from these sources. These results were examined again in August 2003 in order to see if they have changed since we first collected the data. The syllabi of these graduate programs were collected in order to content-analyze each school's research methods course. The course syllabi from twenty U.S. schools were also collected in order to compare courses between Korea and the United States. Of the forty-nine ALA accredited U.S. programs, course syllabi were available from twenty schools, and these were analyzed under the assumption that they would fairly represent the rest.

4. Related literature

O'Connor and Park (2001) examined the graduate catalogs and curricula of fifty-two of the fifty-six ALA-accredited LIS programs in both the United States and Canada using each institution's Web site to identify a research methods course. Park (2003) further analyzed research methods of fifty-four LIS programs and investigated research methods education in other academic programs. In their studies, only the curriculum of the ALA-accredited degree was analyzed when a school offered more than one master's degree. This was done to insure consistency when comparing schools. Their method also included comparing schools to the rankings reported in the *US News and World Report*,³ with the usual caveat that such rating systems are not based on in-depth examinations of each LIS program.

In their studies, each institution's Web site was also examined to explore research methods requirements in other professional schools and academic programs. Graduate level business programs, social work programs, psychology programs, and education programs were examined. These programs were selected as a point of comparison since they are equivalent in serving various graduate student audiences similar to LIS programs: full-time students, part-time students, professional development programs, and programs directed at specialized interests.

5. Findings

Table 1 shows research methods requirements and the number of research methods courses offered by each school in Korea. Of the twenty Korean LIS schools examined, only six programs require a research methods course. For five schools, research methods is a

³ For *US News and World Report's* 1999 ranking of LIS programs, see US News Online. Available: http://library.uwsp.edu/aschmetz/Accessible/DEED2000/canned_pages/2001%20Graduate%20Rankings%20-%20Library%20Science%20USNews%20-%20edu.htm. Accessed April 1, 2002. It should be noted that Canadian schools are not evaluated for these rankings.

Table 1
Research methods requirement in Korea and the United States

		Korea, <i>n</i> (%)	United States, ^a <i>n</i> (%)
Number of LIS graduate programs		22	49
Number of programs analyzed in the study		20	47
Research methods requirement	required	6 (30)	25 (53)
	elective	14 (70)	22 (47)
Number of courses offered	one course	17 (85)	31 (66)
	two courses	3 (15)	11 (23.4)
	three courses	0 (0)	3 (6.3)

^a Data for the United States from Park (2003), quoted here for the purpose of comparison between Korea and the United States.

“common” course, or “recommended elective” course (which translates to a course that is highly recommended but not required). The remaining nine schools do not have any “required” or “common” course in their curricula; moreover, every course including research methods is run as an “elective” course. For those eleven schools that place research methods as a required course or a recommended elective course, research methods is offered every year or every other year; and when it is offered, it is highly recommended that students take the course. It is interesting to note that three schools offer two research methods courses. One of them offers two research methods courses even though research methods are not required in their curriculum.

Korean LIS programs are quite consistent in their use of course titles. Of the twenty schools examined, fifteen schools use “Research methods in library and information science” for course titles. The remaining five schools use “Research methods for library science and information science,” “Research methods for library science,” “Information science research and analysis methods,” “Research methods,” and “Library methods for the third world countries” for course titles.

In order to investigate the current trends in research methods education, the individual course syllabi were examined. Of the twenty Korean schools, course syllabi of seventeen schools were examined. Course syllabi could not be obtained from the other three schools, which have not offered research methods in the past three years. Of the forty-nine U.S. programs, course syllabi were available from twenty schools and these were also content-analyzed.

Table 2 shows the results of a content analysis of these course syllabi. This table presents seven broad categories and nineteen subcategories under “research methods,” based upon various classification schemes used in previous analyses of research methods, monographs about research methods, and coding of data drawn from syllabi.

Qualitative research methods receive much less attention in Korea than quantitative methods. Of the seventeen schools examined in Korea, four schools are totally focused on quantitative research methods whereas only one school (“Library methods for the third world countries”) is focused on qualitative research methods. For the remaining twelve schools, research methods is defined consistently and homogeneously: They offer an introductory

Table 2
Content analysis of research methods course syllabi^a

	Korea, <i>n</i> (%)	United States, <i>n</i> (%)
Scientific research/social science research	16 (94)	12 (60)
Selection of research topic	9 (53)	12 (60)
Research design	13 (76)	16 (80)
Validity/reliability	6 (35)	7 (35)
Develop and test hypotheses	11 (65)	12 (60)
Sampling	10 (59)	15 (75)
Operationalization/conceptualization/ variables/measurement	11 (65)	12 (60)
Research methods included		
Survey/questionnaire	11 (65)	17 (85)
Experiment	11 (65)	15 (75)
Historical method	10 (59)	10 (50)
Interview	5 (29)	8 (40)
Ethnography	1 (6)	2 (10)
Observation	5 (29)	9 (45)
Desk research/literature review	7 (41)	3 (15)
Comparative study	4 (23)	0
Content analysis	4 (23)	9 (45)
Evaluative research	3 (18)	6 (30)
Bibliometrics	4 (23)	6 (30)
Case study	5 (29)	9 (45)
Information system design	2 (12)	1 (5)
Action research	4 (23)	0
Delphi studies	0	2 (10)
Focus groups	0	6 (30)
Field study	0	7 (35)
Technical research	0	1 (5)
Deconstructionism	0	1 (5)
Data analysis		
Descriptive statistics	8 (47)	12 (60)
Inferential statistics	10 (59)	12 (60)
Statistical package (SPSS/SAS)	4 (23)	5 (25)
Writing research proposal/thesis	11 (65)	12 (60)
Ethics	2 (12)	15 (75)

^a Based on analysis of syllabi of seventeen Korean and twenty U.S. schools.

research methods course that deals with basic concepts such as research design, validity and reliability, common research methods employed in LIS, and data analysis techniques. The most popular research methods in Korean LIS programs are survey, experiment, and historical method. The next most popular methods are literature review, interview, observation, and case study. Comparative study, content analysis, action research, and bibliometrics are included in four schools' syllabi. Ethnography, information system design, and action research are taught in only one school, respectively.

Even though traditional methods are predominant in LIS research, relatively uncommon methods have been recently employed by LIS researchers, including transaction log analysis,

protocol analysis, sequential analysis, discrete choice analysis, phenomenological methods, hermeneutics, semiotics, and discourse analysis (Powell, 1999). However, the analysis of course syllabi indicates that these methods are seldom taught in Korea.

6. Discussion

This study shows that of the twenty Korean schools, a research methods course is required by only six schools. Research methods is a “common” or “recommended elective” course for five schools and “elective” for the remaining nine schools. These results imply that Korean LIS programs might be aware of the importance of research methods education, but most schools offer it as an “elective” or “recommended elective” either due to the lack of students or lack of faculty resources who can teach a research methods course. In Korea, professors are responsible for undergraduate and graduate education as well as other related activities such as a certificate of librarians program. Thus, teaching loads of Korean LIS faculty might be heavier than U.S. faculty who are mostly involved with graduate education. It is important to note that the concept of an “elective” course is different between Korean and U.S. programs. U.S. graduate schools usually offer more than ten courses each semester; and when research methods are offered as an “elective,” it is totally up to students to decide whether to take it or not. However, Korean LIS programs offer from three to six or seven courses at most each semester, and students usually have to take most of the courses that are offered.

Of the forty-seven U.S. LIS schools that Park (2003) examined, twenty-five programs require a research methods course, whereas a methodology course is not required by twenty-two LIS programs. There is an interesting pattern to these data in that the more highly ranked schools do not require research methods. Of the twenty-four schools within the top twenty rankings by *US News and World Report*, more than half (or fourteen schools) do not require research methods. Quantitative methodology and the study of social science statistics were not a prominent requirement for admission to or graduation from an MLS program. Additionally, qualitative methodology received little attention as a requirement at many LIS programs. These results indicate that research methods are not a priority in the education of MLS students across accredited LIS programs in the United States. On the other hand, psychology, sociology, business administration, and social work all have research methods requirements, usually requiring students to take prerequisite courses followed by the required quantitative and/or qualitative courses.

6.1. Definition of research methods

The definition of research methods is quite consistent and homogeneous across Korean schools, whereas research methods are defined loosely and differently in the United States. U.S. programs do not use consistent terminology across schools to identify what constitutes a “research methods” course (Park, 2003). It is hard to tell if courses such as “Problems in Library and Information Studies” (University of North Carolina at Greensboro), “Elements

of Research” (University of Oklahoma), and “User and Use Studies” (Rutgers University) are research methods courses. Research methods in the United States also vary from comprehensive coverage of both quantitative and qualitative methods to superficial inclusion of simple survey methods. Whereas a few schools provide more than one research methods course, others just touch upon methodological issues in their introductory MLS course.

6.2. Content analysis of research methods syllabi

The popularity of survey, experiment, literature review, and historical research in Korean research methods education is partly related to the heavy reliance of LIS research on these traditional methods. Several analyses of research methods employed in LIS research found that survey, experiment, and interview were the most popular methods (Dimitroff, 1995; Goodall, 1995; Julien, 1996; Peritz, 1993). For example, in a content analysis of the information needs and uses literature of 1990–1994, Julien (1996) found that written questionnaires and interviews (survey methods) accounted for 56 percent of research methodologies employed in research studies. In his content analysis of the special librarianship literature, Dimitroff (1995) found that “survey research was the predominant methodology.”

Similarly, Lee (2002) conducted a content analysis of articles published (1997–2001) in three major Korean LIS journals, *Journal of the Korean Society for Information Management*, *Journal of the Korean Society for Library and Information Science*, and *Journal of Korean Library and Information Science Society*. Table 3 ranks research methods used in these journal articles. Lee found that literature review was the most popular method in Korean LIS research, representing almost half (46.73 percent) of the research methods used. Literature review was followed by survey, interview, and observation that together accounted for 21.6 percent. There were very few articles that employed qualitative research methods. She found an increasing use of experimental and information system design methods. Cho (1999)

Table 3
Research methods used in 597 Korean journal articles 1997–2001^a

Research methods	n (%)
Desk research/literature review	279 (46.73)
Survey research/interview/observation	129 (21.6)
Experiment	54 (9.04)
Historical method	8 (1.34)
Evaluative research	26 (4.35)
Case study	18 (3.01)
Bibliometrics	18 (3.01)
Information system design	47 (7.87)
Descriptive study	3 (0.50)
Content analysis	6 (1.00)
Others	8 (1.34)
Total	597 (100)

^a Data based on Lee (2002).

conducted a content analysis of articles published (1993–1997) in major Korean LIS journals. Of the total 426 articles, literature review accounted for 26.5 percent of the research methodologies used, case study for 17.7 percent, and survey methods for 10.9 percent. In a content analysis of master's and doctoral theses published in Korea between 1959 and 1992, [Kim \(1995\)](#) found that literature review and survey were the most common research methods used in Korean LIS theses. It is interesting to note that literature review is more popular in Korean LIS research than the United States.

A review of course titles, course descriptions, and course syllabi reveals that Korean and U.S. LIS research methods education turn out to be different in several other ways. First, various research methods including new and uncommon methods are taught in the United States, whereas Korean research methods education focuses on traditional and popular methods. Methods such as Delphi studies, focus group, field study, and deconstructionism are not a part of Korean research methods syllabi. Even though qualitative methods receive less attention in both countries, more coverage of qualitative methods can be found in U.S. education. Second, the ethics and politics of research is emphasized more in U.S. schools compared to those in Korea. Third, Korean research methods education is more focused on “thesis writing” whereas U.S. education focuses on “writing research proposals.” Lastly, Korean schools have a student body that is more culturally homogeneous than found in the United States. This might account for the Korean methods' courses not embracing new or different methodologies before they become popular or are in widespread use. Of course, it is also possible that U.S. schools are either more trendy or more likely to be early adopters of new innovative methodologies.

[Hernon and Schwartz \(2003\)](#) asked if this same picture they ([O'Connor & Park, 2001](#)) portray applies internationally. The answer is “yes” and “no” for Korea. It is “yes” in that research methods are not required as a core competency in more than half of the Korean LIS programs. It is “no” in that research methods are defined rather consistently and homogeneously across schools examined here.

The results of the current study and [O'Connor and Park's \(2001; Park, 2003\)](#) earlier studies have several implications for the LIS field. First, other related academic disciplines such as business administration, social work, psychology, and sociology recognize the need for a research methods foundation for their fields. These disciplines have strong research methods requirements, usually requiring students to take prerequisite courses followed by the required quantitative and/or qualitative courses. Also, those schools that do not require research methods in MLS programs all require research methods in their doctoral programs. This might reflect the trend of U.S. MLS curricula to run every course on an “elective” basis. This might also imply that schools do not recognize the importance of research methods in MLS programs as a separate course. It might be assumed that the top ranked U.S. LIS programs, with the larger faculties, do cover research methods with other courses, especially those in information science where the literature emphasizes methodology. This assumption has not been tested in this study nor was it found in other studies.

Research methods, as shared knowledge, offer fields the tools they need to investigate problems and understand the process by which they are studied. Without solid education in

research methods, as [Heron and Schwartz \(2003\)](#) pointed out, “future graduates of LIS may not understand what research is, nor be able to distinguish a research study from other types of articles, or a good research study from a bad one” (p. 126). Thus, in order to increase its research capacity, to improve its research quality, to be compatible with other academic disciplines, and to provide critical training for all LIS graduates, it is essential for LIS to require research methods as a core course whether it is called a “required course,” “core course,” “common course,” or “recommended course.” This is even more so the case in Korea since a master’s thesis is required in every program.

Second, the topics covered in research methods courses need to be expanded in order to keep current with the fast changing library and information environment/technology, which in turn has concomitant needs for competent research. Besides popular and common methods, diverse methods need to be introduced and taught in Korea. Third, more balance between quantitative and qualitative methods is required in Korean research methods education. In order to achieve this, it might be helpful to offer more than one research methods courses in graduate programs.

7. Conclusion

Overall, research methods in both the United States and in Korea appear to be in a state of methodological uncertainty where dominant methods may be taught but not necessarily applied by graduate level students. Korea’s inclusion of a master’s LIS thesis may be the anchor that forces Korean programs to adhere to consistency in the use of proven methods. U.S. schools, without any mandate that students need to go beyond being consumers of research, are free to cover a wider array of methods since students may encounter these when reading reports of someone else’s research investigation. In the final analysis—since research methods are not required across half of the LIS programs in both Korea and the United States—neither country shows a deep commitment to teaching their students the basic methodologies that would allow graduates to become entry level research practitioners.

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