How Much of Library and Information Science Literature Qualifies as Research?

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ABSTRACT

There is an extensive amount of Library and Information Science (LIS) writing produced each year. While there is general awareness regarding the variety of journal literature, there is no certainty on the percentage of the collection that we can call research. This project is an important first step in answering the question. A content analysis of the LIS academic/scholarly journals at the Simmons College Library was conducted. The research level collection of LIS literature makes the library an ideal candidate for this study. The latest issue of each journal subscribed to for fiscal year 2012–2013 containing academic/scholarly content was analyzed. Each article was analyzed to determine: 1) if it was research or non-research, 2) the method used to collect data for the study in the article, and 3) the subject terms or keywords associated with the article. 105 journal titles were identified out of 177 periodicals. In the 1880 articles analyzed from these, 16% qualified as research. Surveys were found to be the most popular research method used. This study will benefit students, faculty, and staff with research requirements as well as librarians who guide patrons through a search for research literature.

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INTRODUCTION

Research is a core component of academia. Both faculty and students must produce and consume research to satisfy requirements of tenure or graduation, and the Library and Information Science (LIS) field is no different. As part of an evolving field, LIS programs benefit from analysis and experimentation leading to new insights — or research.

While there is an understanding of the gradations of the vast body of literature published in the field, there is no certainty on the percentage of the LIS literature that qualifies as research for a given year (Aharony, 2012; Buttlar, 1991; Jarvelin & Vakkari, 1990; Nour, 1985). Past studies have tended to look at a limited set of LIS journals when investigating such work. There is also much speculation about the range of topics covered in LIS literature. Furthermore, there is a gap in knowledge of the methodologies most commonly used to conduct the research.

This content analysis provides a snapshot of the LIS periodical collection at the Beatley Library at Simmons College. It is a small academic library serving the needs of all students in the college, including all those in the Graduate School of Library and Information Science (GSLIS). The purpose of this study is to determine what percentage of the LIS periodical collection available to GSLIS students, faculty, and staff qualifies as research. LIS databases and the LIS periodical collection available through the Simmons College Library were both used to conduct this study.

While the larger research question is "*How much of LIS literature qualifies as research?*" the specific questions investigated in this study are:

- RQ1: *What percentage of the LIS periodicals subscribed to for the financial year (FY) 2012–2013 are journals with academic/scholarly content?*
- RQ2: *Of the journals identified, what percentage of the articles found in those journals qualify as research?*
- RQ3: *In the articles that qualify as research, what methods of data gathering are used for research?*
- RQ4: *What are the keywords associated with both the a) research articles and b) non-research articles?*

These questions are summarized in Fig. 1 below:

The results of this study will provide a more accurate estimate of the percentage of research in the LIS journal collection. This study also provides a snapshot of the topics covered and methods used in current research.

It is critically important that LIS students learn about, and value, assessment and evaluation. It is also worthwhile to evaluate the contents of the LIS journals to determine the quantity of research published. This study's findings could impact how LIS librarians support LIS researchers. Librarians and established researchers mentoring new researchers will

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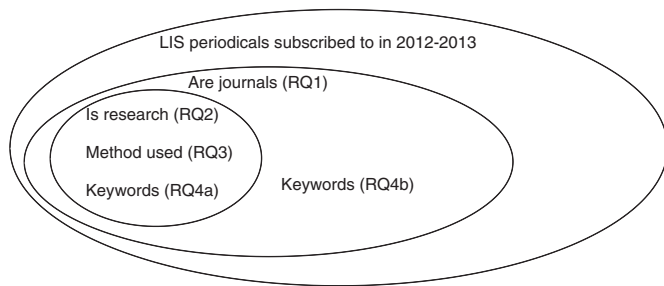
Fig. 1. Summary of research questions.

have a more concrete sense of the state of the literature, and how much of it is actually research. This improved understanding of the trends in research topics, keywords, subject terms, and methods could lead to an improved search experience, and better training for students getting acquainted with research and writing a literature review.

This study benefits both users and staff of the library. Specifically, library staff will have a clearer sense of how much the collection could fit the research needs of faculty, staff, and, students of the GSLIS program. Stakeholders for this study include LIS students with research requirements for the completion of their degree and faculty with research requirements for tenure. Other stakeholders include librarians who help researchers find appropriate information resources.

The rest of the paper is organized as follows: In the next section, we will review past work in this area. This is followed by a detailed discussion of the methodology used. We then have the findings and discussion addressing the four research questions. The paper concludes with directions for future work, and strengths and limitations of the study. We will now look at the literature review.

LITERATURE REVIEW

There have been a number of content analysis studies looking at LIS periodicals. These studies have primarily focused on the percentage of a collection that qualifies as research, the subjects covered, and methodologies used in LIS research (Feehan, Gragg, Havener, & Kester, 1987; Jarvelin & Vakkari, 1990; Kumpulainen, 1991; Nour, 1985). While these studies provide valuable information regarding the trends of research literature, they tend to focus on analyzing articles from a list of core LIS research journals. Additionally, the content analyses focus on a limited list of journals with a research focus. These studies intentionally exclude all non-peer reviewed and non-refereed journals (Feehan et al., 1987; Jarvelin & Vakkari, 1993; Koufogiannakis & Slater, 2004; Kumpulainen, 1991; Nour, 1985). In each case, the list of core journals is compiled after analyzing multiple indices to identify titles that are included in more than one database or index. Feehan et al. (1987) also solicited feedback from library professionals as to their opinion of the core journals in LIS. All studies explicitly excluded international journals. Only Jarvelin and Vakkari (1990, 1993) included non-English international journals.

The total list of core journals thus varied from as little as 10 (Aharony, 2012) to 91 (Feehan et al., 1987). This indicates that there is no consistency in what qualifies as a core journal. Another factor briefly addressed by Jarvelin and Vakkari (1993) is the nature of the publishing industry. Core journal lists vary between decades because the core journals identified for one decade may cease to exist before another, and new core journals may emerge since the initial year of cross-decade studies (Jarvelin & Vakkari, 1993, p. 131). It is therefore generally difficult to develop an unbiased, consistent list of core academic/scholarly journals, even with cross referencing lists of indexed titles as a means of developing the core list.

While part of the fluctuation in the final estimate of the percentage of research in a core collection can be attributed to trends in the field, it is also due in part to varying methods of conducting research

(Jarvelin & Vakkari, 1990). Related to this is the fact that even when only analyzing core journals, not 100% of these research journals are research (Buttlar, 1991; Feehan et al., 1987; Jarvelin & Vakkari, 1990; Kumpulainen, 1991; Nour, 1985).

The changing lists of journal titles selected for analysis also resulted in skewed results of the percentage of research literature found. Jarvelin & Vakkari found that as much as 54% of their sample qualified as research while Feehan et al. (1987) found that only 23.6% of the sample qualified as research. An inconsistency in journal titles further exacerbates the effects of a fluctuating publishing industry. This discrepancy makes it difficult to develop a sense of the field.

Both Buttlar (1991) and Aharony's (2012) studies produced valuable information about trends in authorship of research in LIS literature. Buttlar (1991) analyzed author information including geographic location, sex, occupation, and geographic location. Aharony's (2012) most recent content analysis went beyond Buttlar's (1991) and presented statistical descriptive analysis of research article keywords as well. While Aharony (2012) builds on the work of Buttlar, both authors limited the scope of their research by only including select journals. Buttlar (1991) limited the list to 20 LIS journals while Aharony included just 10.

A consistent theme throughout the studies is the need to define 'research' before undertaking a content analysis. Several content analyses (such as Feehan et al., 1987; Nour, 1985; Yontar & Yalvaç, 2000) use a consistent definition of research as established by Peritz (1980):

Research is any "inquiry which is carried out, at least to some degree, by a *systematic method* with the purpose of eliciting some *new* facts, concepts, or ideas" (Peritz, 1980, p. 251).

But, as Nour suggests, even a highly accepted definition is "criticized for its lack of rigor" (p. 262). This definition is often critiqued as too broad and not specific enough to the field (Koufogiannakis & Slater, 2004). Still, this definition endures for its inclusion of its key concepts, 'method' and 'purpose', which allow a researcher to more easily distinguish research articles from other articles (Feehan et al., 1987; Nour, 1985; Yontar & Yalvaç, 2000). Additionally, this consistent definition increases the external validity of the studies, even if their core journal lists vary drastically.

This definition has also been used in content analyses of international, non-English journals, further demonstrating its endurance and relevance (Kajberg, 1996; Yontar & Yalvaç, 2000). Moreover, the use of the same definition ensures that it will still be applicable to a collection that includes international, non-English journals. These international studies also varied in scope. Like the American studies, Yontar & Yalvaç (2000) limited the journals included in the study. In fact, they focused on only one journal. Still, the study demonstrated that a consistent definition produced reliable data with high internal validity.

Conversely, Kajberg (1996) expanded his research to include all the Danish LIS literature published from 1957 to 1986. Unlike the American studies, the Danish studies included non-research as well as research journals, demonstrating that it is possible to conduct a content analysis that includes different types of journals. These two international studies further support the validity of Peritz's definition of research in analyzing international articles.

Finally, these studies confirm the importance of analyzing the content of both research journals and trade periodicals to develop a better sense of the amount of research that exists within the body of literature. Furthermore, these studies prove that it is possible to analyze content across journal types spanning multiple years.

METHODOLOGY

This study aims to determine how much of the periodical collection for one fiscal year qualifies as research. In this study, there are no causal variables that will affect the final measure. The research questions and