



Commentary

The State of Systematic Reviews in Library and Information Studies

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Introduction

Although the first article outlining what was then referred to as evidence based librarianship (EBL) was published in 1997 (Eldredge), it wasn't until 2000 that significant articles outlining how evidence based practice could work in library and information studies (LIS) were published (Eldredge, 2000a, 2000b, 2000c; Booth, 2000). Jonathan Eldredge published several keystone articles that year, and in one of those he focused on the challenges of finding the needed evidence to practice in an evidence based manner (2000c). Pondering the types of research evidence available in the LIS literature, specifically health sciences librarianship, Eldredge noted that: "Systematic reviews for EBL levels 1-2 ... are not known to currently exist in the health sciences librarianship literature" (p. 8). Since that time, the evidence based library and information practice (EBLIP) movement has encouraged the development of publications that synthesize or appraise existing research, such as the evidence summaries published in

this journal, so that practitioners do not have to do all the work themselves each and every time they encounter a problem or question. Systematic reviews have become an important source of information because they both synthesize the existing research on a topic, as well as critically appraise it and try to draw conclusions from the total body of quality research evidence.

Grant and Booth (2009) define a systematic review as a type of review that "seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review" (p. 95). Booth and Brice (2004) point out that a systematic review helps us "keep up-to-date, define the boundaries of what is known and what is not known and can help us avoid knowing less than has been proven" (p. 111). However, Urquhart (2010) points out the complexity of applying such methodology to research in LIS due to the diversity of the research methods in the LIS knowledge base, as well as the different standpoints taken by

the researchers. Systematic reviews in medicine have mainly used quantitative studies; however the field of library and information studies also contains a lot of qualitative research and different types of social sciences methodologies. Brettle (2009) notes that while most systematic reviews in health care use controlled studies, "it is appropriate for systematic reviews in the library domain to take a wide view of relevant evidence and include a variety of designs appropriate to the topic or review question at hand" (p. 45). It is not necessarily as "easy" to work with the various types of LIS research data within the context of a systematic review. However, more recently, there has been work done on qualitative synthesis within systematic reviews, and greater attempts to incorporate different types of research into such reviews (Dixon-Woods et al., 2006; Barnett-Page & Thomas, 2009).

The Creation of a Wiki to Track Systematic Reviews

Prompted by a desire to determine the growth of systematic reviews since the evidence based practice movement in our field began, I created a wiki (<http://lis-systematic-reviews.wikispaces.com>) in January 2012 to gather all known systematic reviews in library and information studies. Having found no similar source or good way to locate systematic reviews, the wiki was created and those with a known interest in the topic were invited to be collaborators. Databases such as Library and Information Science Abstracts (LISA), Library Literature, and Google Scholar were searched; any articles known to contain citations to systematic reviews in LIS (Ankem, 2008; Brettle, 2009; Urquhart, 2010; Eldredge, 2004; Koufogiannakis & Crumley, 2006) were reviewed, and input from colleagues was solicited once a preliminary version of the wiki was produced.

Upon the suggestion of Andrew Booth, a contributor to the wiki, it was decided that systematic reviews should meet one of the

following criteria to be included on the wiki site:

1. Published in a library journal
2. Authored by an LIS lead author
3. Affiliated with a library or information unit, or academic library or information department
4. Include studies conducted in a library setting
5. Include at least 25% of included studies from library journals

Description of the Systematic Reviews Included to Date

As of this writing, there are 37 LIS systematic reviews cited on the wiki. These systematic reviews were published between 1997 and 2012. Topics cover a wide range, but the vast majority of systematic reviews fall into the health sciences librarianship field (24). Others pertain to academic libraries (5), and a number do not focus on a specific type of library (8).

It is no surprise that so many systematic reviews are published on health librarianship topics: EBLIP grew out of the evidence based medicine (EBM) movement; health sciences librarianship was the first to embrace and apply evidence based principles; and librarians in health sciences librarianship would have been familiar with the systematic review methodology, as many participated in research teams working on systematic reviews in health care.

Journals that have published systematic reviews in LIS are noted in Table 1. *Health Information and Libraries Journal (HILJ)* impressively stands out as the one journal that has published a significant number of systematic reviews dating back to 2003, and at least one per year since 2007. *HILJ* has made a concerted effort for the past number of years to attract and publish review articles, and identify what type of a review article it is. Hence, systematic reviews published in *HILJ* are quite easy to identify as such.

Table 1

Journals that Have Published Systematic Reviews on LIS Topics

Journal title	Number
<i>Health Libraries and Information Journal</i>	13
<i>Journal of the Medical Library Association /Bulletin of the Medical Library Association</i>	4
<i>Information Research</i>	2
<i>Journal of Academic Librarianship</i>	2
<i>Reference Services Review</i>	2
Other journals that have published one systematic review each	14

Table 2

Number of Systematic Reviews in LIS by Domain

LIS Domain	Number
Reference	15
Education	8
Professional Issues	8
Information Access and Retrieval	6
Collections	1
Management	1

When categorized by LIS domain (Koufogiannakis, Slater, & Crumley, 2004), many systematic reviews were found to be in the areas of reference, education, and professional issues. The area of information needs research was included in the reference category, because it was seen as knowledge to support the reference needs of particular groups. Systematic reviews relating to information needs comprised about half of all the systematic reviews in the reference category. Also of note, in the professional issues category are three systematic reviews assessing the literature on clinical librarianship programs, and one assessing the literature on informationist programs, together comprising half of the systematic reviews in this category.

The number of systematic reviews published in LIS each year seems to slowly be growing; however the numbers are still small. Of the 37 systematic reviews that have been identified, only 3 were published prior to 2003. Of those three, one was published in 1996, and two in 1997. There was then a five year period between 1998 and 2002 when it seems that no systematic reviews were published. Since 2003, there have been at least two systematic reviews

published every year, with a high of six published in 2010. These numbers show that while there were a few systematic reviews prior to the year 2000 when evidence based practice in LIS began, growth has really occurred since systematic reviews have been promoted as a useful form of research to assist with evidence based practice.

Conclusion

The newly created LIS Systematic Reviews wiki is a starting point for LIS researchers and practitioners who are looking to see what research summaries on their topics of interest already exist. Where systematic reviews on a topic already exist, the review will save the practitioner or researcher much time in providing an overview of research on that topic up to the point in time in which it was published. Since systematic reviews are quite detailed, references to the original research studies will also prove valuable.

Yet, the number of systematic reviews in LIS is small, and so a review that is on topic may be elusive. The current small number of systematic reviews provides research and

publishing opportunities for librarians. For example, only one systematic review was found in each of the categories of collections and management. The research produced in these areas make them ripe for possible systematic reviews.

EBLIP is beginning a new Reviews section within the journal, hoping to provide more of this type of literature for practitioners, since the editorial team believes it is a valuable form of research in its own right, and has the potential to be very useful. Reviews do not have to be systematic reviews to be included in the reviews section, but given the current numbers of systematic reviews being published, there is certainly room for more. Whether it be in *EBLIP* or another journal, I encourage librarians to consider producing a systematic review. The wiki site will be continually updated as new reviews are brought to the author's attention, and will hopefully remain a useful gathering place for such content. All suggestions are welcome!

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