



LIBRARIES

Faking It 'Til We Make It: Libraries Supporting Researchers in Systematic and Scoping Reviews

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SECTION 1

Definitions

Types of evidence synthesis

Systematic reviews: “transparent and reproducible documentation of searches”
(Moher 2009 as cited by Premji, 2022)

Scoping reviews

Rapid reviews

Other types



Who is undertaking these reviews?

- Health & medical sciences
- Environmental, biological sciences
- Social sciences
 - Education
 - Political science
 - Business
 - Library science!



LIBRARIES

FEATURE

A Systematic Review of Research on Live Chat Service

Miriam L. Matteson, Jennifer Salamon, and Lindy Brewster

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The purpose of this study was to synthesize the research literature that has investigated library-based chat reference service. We define library-based chat reference as a synchronous, computer-based question answering service where users of the service ask question(s) which are answered by library employees or contracted agents. Following the methods for conducting a systematic review, we developed inclusion criteria for our data set and collected data from research on chat service dating from 1995 to January 2010. We limited our data to empirical research using established qualitative or quantitative methods. The final data set included 59 documents. We used White's (2001) digital reference service framework to guide our data analysis and unitized the data to the level of the

engaged in chat service in some capacity: academics, librarians, managers, and developers. Our research presents the collective knowledge in this area and provides groundwork for researchers as they explore new questions related to chat service. It unifies for practitioners a collection of findings about chat service to enhance and improve their practice. The results suggest areas of opportunity for managers who wish to further develop chat as a library service, and the results synthesize current understandings about chat service which may be useful for IT developers to extend and innovate chat technology in libraries.

Synchronous, computer-mediated communication between library staff and library users

Possible librarian roles

- Citation management
- De-duping sources
- Collaboration
- Evaluation of search strategies
- Formalized systematic review services
- Impact & Outcomes
- Indexing of database terms
- Peer review of search strategies
- Planning
- Question formulation
- Reporting & documentation
- Research agenda
- Search filters & hedges
- Searching
- Databases and other resources
- General
- Grey Literature
- Protocol development
- Search strategies
- Subject or topic specific searches
- Other
- Source Selection
- Systematic reviews in librarianship
- Teaching
- Technological and analytical tools



Benefits of librarians participating in evidence synthesis

- Improves the replicability of the research (Sayre & Riegelman, 2019)
- Changes librarians' focus when teaching information to students—move from basics to finding high-quality information (Silfen & Zgoda, 2008 as cited by Dalton, 2019)
- Cochrane handbook recommends it! (Lefebvre et al., 2022)



Other considerations

Open Science and evidence synthesis have similar goals (Haddaway, 2018):

- Balance knowledge access & increase efficiency by using best practices
- Increase reliability, trust, and reuse of information collected & synthesized within a review

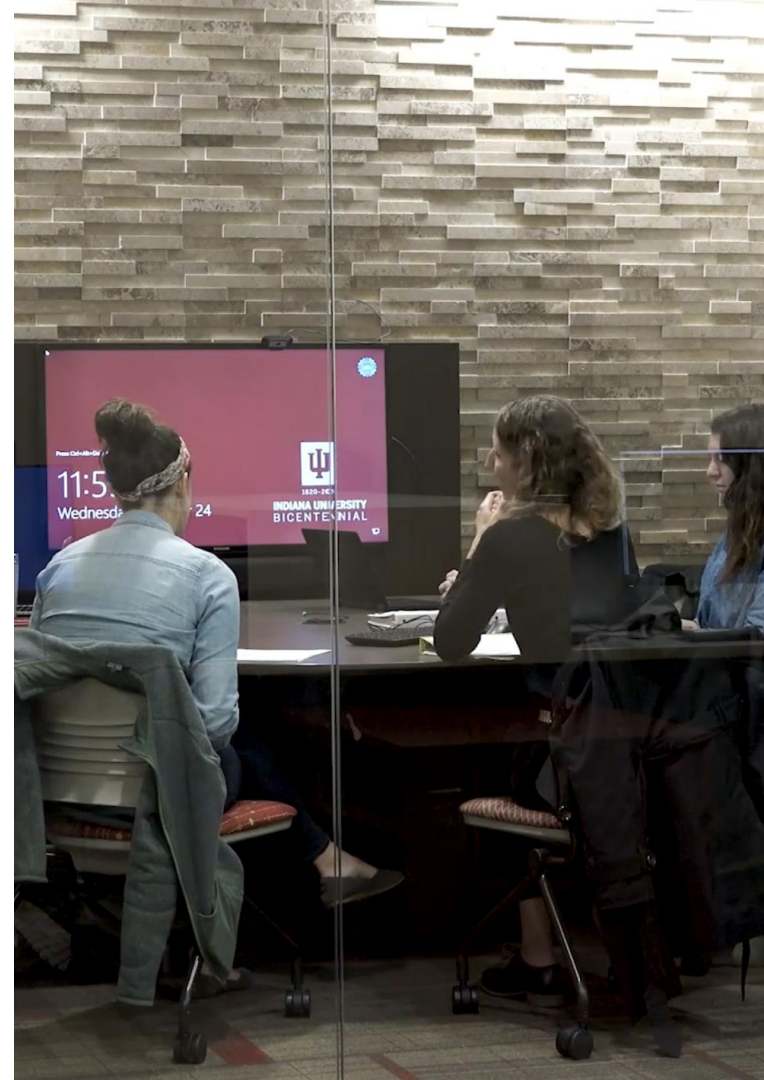
Systematic reviews by their nature incorporates some of these practices:

- Minimize publication bias by looking for and at articles that fit within scope of the research question
- In meta-analyses, statistical analysis is used to critically rank research
- Looking at grey literature to capture a fuller picture of research



Addressing challenges

- Drains on staff- high commitment and time (Bullers et al., 2018)
- Increasing numbers of Systematic Reviews being published worldwide (Chapman, 2021)
- Commitment to ongoing training for librarians



Setting up support

- Considerations
 - Time to devote
 - Whether to charge additional fees
 - 2 or 3 “tiers”
 - Subjects to cover
 - Training

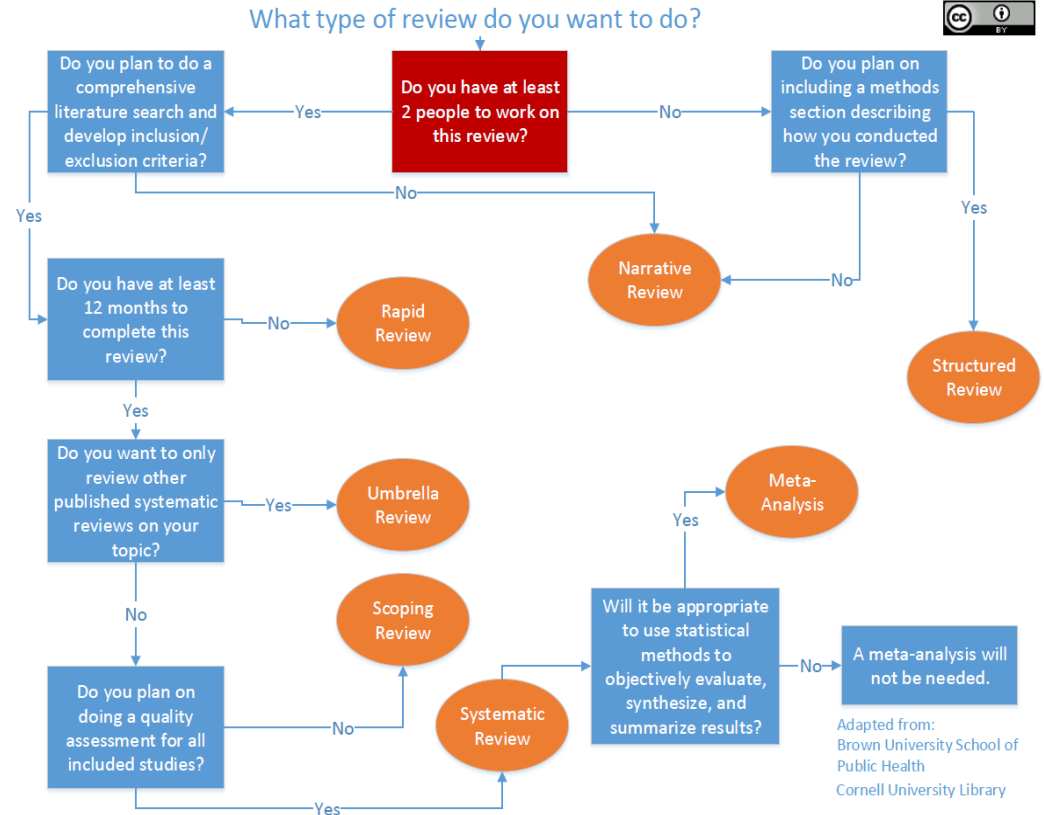


SECTION 2

Our Journey

Scope of services

- As of 2019, no formal systematic review services were available at Indiana University Bloomington
- Ruth Lilly Medical Library (RLML) on the Indiana University-Purdue University Indianapolis Campus provides systematic review support for medical science faculty
 - RLML consulted with IU Bloomington librarians to discuss the tiered service model & offered to let IUB use materials to market services from their Library Guide



Health sciences expansion

- In December 2020, the Health Sciences Building opened. It's attached to a brand new hospital that opened December 2021
- Previously disparate units on campus are now located in one spot: Nursing, Social Work, Medical Science, & Speech, Language, and Hearing Sciences
- A library research center is located within the building, providing higher visibility for library services

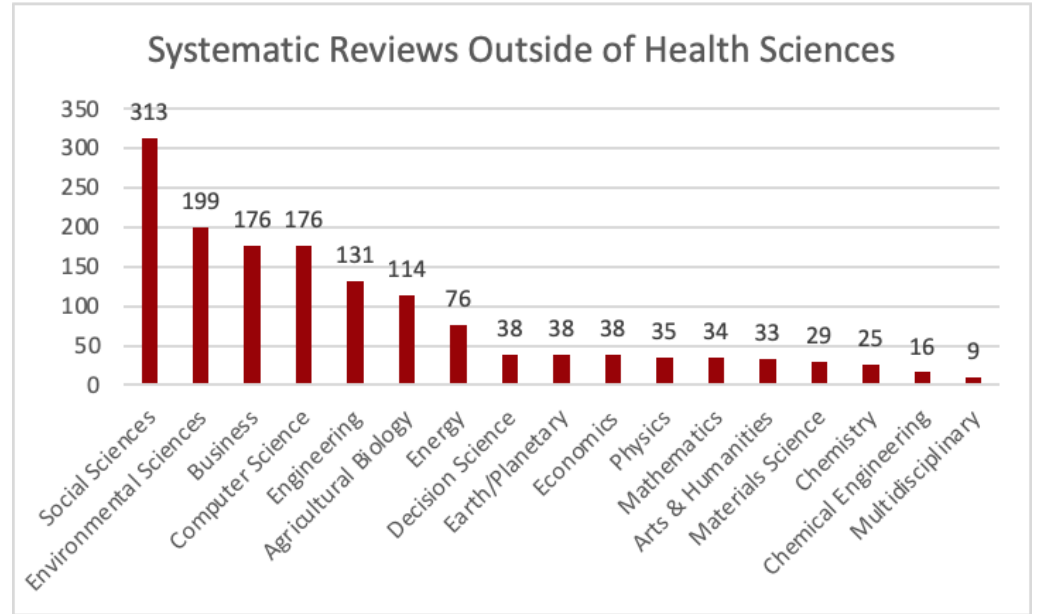


Requests by discipline

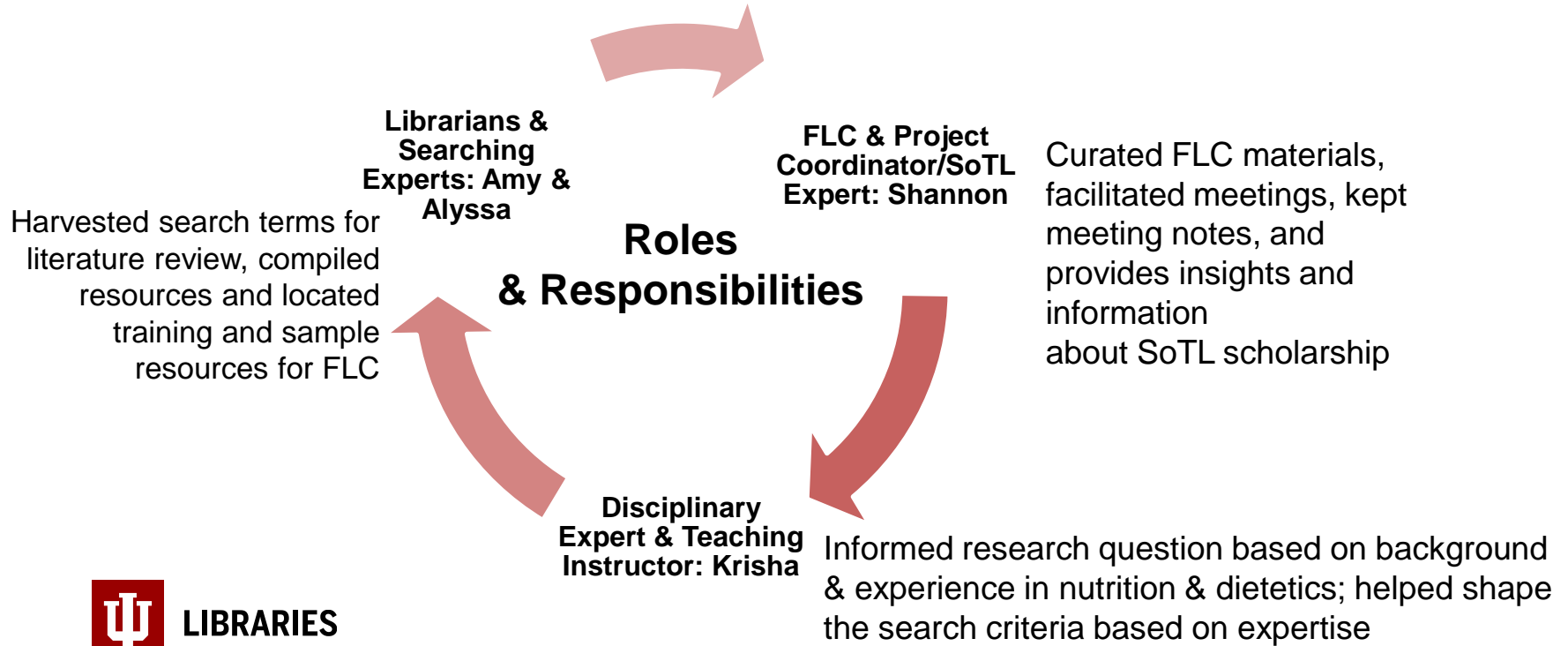
Current areas seeking evidence synthesis support at IUB:



Trends in systematic reviews outside of health science disciplines:



Faculty Learning Community (FLC): Systematic Literature Review as a Research Method in SoTL



Next steps

- Evidence Synthesis Institute Proposal Submitted
 - Training for at least 10 librarians
- Establishing systematic review scale
- LibGuide
- Community of librarians

IU Libraries / LIBRARY RESEARCH GUIDES

Systematic & Evidence Based Reviews

Home

Getting Started

Core Databases

Citation Management

Grey Literature

Need Assistance

Basics of Systematic Reviews

What is a Systematic Review?

A systematic review attempts to identify, appraise and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a given research question. Researchers conducting systematic reviews use explicit methods aimed at minimizing bias, in order to produce more reliable findings that can be used to inform decision making.

What is a Meta-Analysis?

If the results of the individual studies are combined to produce an overall statistic, this is usually called a meta-analysis. Many Cochrane Reviews measure benefits and harms by collecting data from more than one trial, and combining them to generate an average result. This aims to provide a more precise estimate of the effects of an intervention and to reduce uncertainty.

Definitions provided by [About Cochrane Reviews](#).

- [About Cochrane Reviews](#)

Types of Reviews

What type of review do you want to do?

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graph TD; Q1[Do you have at least 12 months to complete this review?]; Q2[Do you have at least 2 people to work on this review?]; Q3[Do you plan on including a methods section describing how you conducted the review?]; Q4[Do you plan to do a comprehensive literature search and develop inclusion/exclusion criteria?]; RR([Rapid Review]); NR([Narrative Review]); SR([Structured]); Q1 -- No --> RR; Q2 -- No --> NR; Q2 -- Yes --> Q4; Q3 -- No --> NR; Q3 -- Yes --> SR; Q4 -- No --> NR; Q4 -- Yes --> Q1;
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The flowchart starts with the question "Do you have at least 12 months to complete this review?". If "No", it leads to "Rapid Review". If "Yes", it leads to "Do you have at least 2 people to work on this review?". If "No" to this second question, it leads to "Narrative Review". If "Yes", it leads to "Do you plan to do a comprehensive literature search and develop inclusion/exclusion criteria?". If "No" to this third question, it leads to "Narrative Review". If "Yes", it leads to "Do you plan on including a methods section describing how you conducted the review?". If "No" to this fourth question, it leads to "Narrative Review". If "Yes", it leads to "Structured". There is also a feedback loop from "Do you plan on including a methods section..." back to "Do you plan to do a comprehensive literature search..." if the answer is "Yes".



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