Systematic Review in the realm of Social Science

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Systematic Review Success: An Introductory Workshop for Librarians & Information Professionals
Systematic Review in the Realm of Social Science

Systematic Review

“In the nonstop tsunami of Global information, Librarians teach us to swim.”

Linton Weeks

Muhammad Yousuf Ali, PhD Associate Librarian, The Aga Khan University, Karachi, Pakistan
Systematic Review in the Realm of Social Science
Muhammad Yousuf Ali, PhD Associate Librarian, The Aga Khan University, Karachi, Pakistan

Content

Systematic Review

• Scheme of Presentation
• Introduction
• Background
• SR in Social Sciences
• Librarian Role in Systematic Review
• Steps of SR
• FINER Criteria
• PICO
• Database Literature search
• PRISMA flow chart
• Software for Data extraction
• AI Based SR Software
• Report writing
• Recommendations
The “systematic review,” also known as the “research synthesis,” aims to provide a comprehensive, unbiased synthesis of many relevant studies in a single document.

(Egger et al., 2001; Khan et al., 2003; Tricco et al., 2011)
Systematic Review

- Systematic review is a specific methodology.
- It locates existing studies, selects and evaluates contributions, analyses and synthesizes data and reports the evidence.
- Allows reasonably clear conclusions to be reached about what is known and unknown.
Systematic Review

Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Concise</th>
<th>Unbiased summary</th>
<th>Evidence</th>
</tr>
</thead>
</table>

Systematic Literature Review
Systematic Review

The first systematic review was published in 1753 by James Lind, who provided a summary of evidence having title “Treatise of the Scurvy.”

(Egger et al., 2001)
Systematic Review

• Systematic review is extensively used/applied in health sciences.
• It gains the Popularity after 1980’s in the health sciences.
• It migrated to social science in 1930.
• In social Science it gains popularity in after 2001.
• systematic review conducted in the core subjects of social science, like....
Systematic Review in Social Science

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- Education
- Political Science
- Journalism
- Library Science
- Law
- Economics
- History
- Psychology
- Linguistic
- Anthropology
- Others
Systematic Review & Social Science Quiz 1

• Systematic review is a ____________
  a. Methodology
  b. Analytical Technique
  c. Data Analysis
• The correct option is a Methodology
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Systematic Review & Social Science

<table>
<thead>
<tr>
<th>Health Science Domain</th>
<th>Social science domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>55.1%</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>7.2%</td>
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<tr>
<td>Nursing</td>
<td>4.6%</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>3.5%</td>
</tr>
<tr>
<td>Immunology</td>
<td>2.2%</td>
</tr>
<tr>
<td>Health Profession</td>
<td>3.5%</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>3.4%</td>
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</table>

<table>
<thead>
<tr>
<th>Social science domain</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

79.5% 20.5%

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Systematic Review

Librarian Roles

Support in SR Services

Conduct in SR Study

Systematic Literature Review

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Librarian Roles

Systematic Review

1. As Subject Matter experts
2. Help in developing in Search strategy
3. Extract Data from different databases
4. Co-Authorship in SR
5. Acknowledgement
6. Data Management
1. As a *Subject Matter expert*

In systematic review process librarian roles as subject matter experts in respective topic and area s/he can assist the researcher(s)/research team.
2. Help in developing in Search strategy

Familiarity with the research terminology, Subject headings and keywords. This is basic task always librarian support to library patron in developing Search strategy.
3. Extract Data from different databases

Library team also serve the library users to extracted the data from various databases like WoS, Scopus, PubMed, ERIC, Google scholar, create the library and duplicate removal.
4. Co-Authorship in SLR

In most cases librarians' extensive role in literature searching, building in search strategy, extracting the data file, duplication removal. Librarians are offered as co-Author.
5. Acknowledgement

Researcher(s)/Author(s) have also acknowledged Librarian support and assistance and acknowledge them in their publication's articles, theses, dissertation and conference proceedings.
Systematic Review

6. Data Management

Data Management pools are created in the universities and research-based institution all the systematic review save in data management. Libraries are managed/archive such data to support the other researchers.
Steps of Systematic Review

1. Topic selection
2. Create Protocol/Conceptualization
3. Specific Bibliographical Search
4. Extracting the data
5. Screen the Abstracts & Title
6. Appraises the study
7. Analysis and Synthesis
8. Report Writing

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Systematic Review

Steps of Systematic Review

Systematic Literature Review

Steps in a systematic review

- Topic selection
- Conceptualise & create protocol
- Searching for studies
- Screening for studies
- Appraise studies
- Abstract data
- Synthesise and interpret results

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FINER Criteria to conducting a Systematic Review topic

☐ F Feasibility: Is the question answerable? Is it doable?

☐ I Interesting: Is your question interesting to others? Does it fill a meaningful gap in the literature?

☐ N Novel: Is your question novel? New? Looking at a different population?

☐ E Ethical: Is it ethical?

☐ R Relevant: Is it relevant or practical for policy and/or practice?
Systematic Review

PICO

Population

Intervention or Issue

Comparison intervention (optional)

Outcome of interest

Systematic Literature Review

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PICO

☐ P Population of the study.
☐ I Intervention:
☐ C Comparison:
☐ O Outcome:

☐ P Population AND ☐ I Intervention AND ☐ C Comparison AND ☐ O Outcome

Topic: Artificial Intelligence impact on digital literacy of the Public and private sector universities LIS professionals

LIS Professional AND Artificial Intelligence AND Public and Private AND Digital Literacy
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Systematic Review & Social Science Quiz 2

- FINER Criteria F is stand for ________
- a. Finding
- b. Facility
- c. Feasibility
- The correct option is c Feasibility
Databases

Systematic Review

<table>
<thead>
<tr>
<th>Health Sciences</th>
<th>Social Science</th>
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<tbody>
<tr>
<td>PubMed</td>
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<tr>
<td>CINAHL</td>
<td>ERIC</td>
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<tr>
<td>Cochrane</td>
<td>Scopus</td>
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<tr>
<td>OVID</td>
<td>SSCI</td>
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<tr>
<td>EMBAS</td>
<td>EMERLAD</td>
</tr>
<tr>
<td>WoS</td>
<td>WoS</td>
</tr>
<tr>
<td>PsyInfo</td>
<td>EBSCO Social Science</td>
</tr>
<tr>
<td>Medline</td>
<td>LISA</td>
</tr>
<tr>
<td></td>
<td>LISTA</td>
</tr>
</tbody>
</table>
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Software for use of SR

1. Endnote
2. Mendeley
3. Zotero
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**Systematic Review & Social Science Quiz 3**

- PRISMA is a ____________
- a. Picture
- b. Flow chart
- c. Protocol
- The correct option is b Flow Chart
1. Rayyan
2. Covidance
3. Research Rabbit
4. DistillerSR
5. MAXQDA
6. Abstrackr
The last stage is to report writing of the systematic review basis of the synthesis literature and submitted for the publication in reputable journals.
1. Build Data pool to register the Systematic review studies like current practice in health Science where Systematic review registered in Cochrane and PROSPERO.

2. Social Science database needs more advance filters like PubMed and Ovid. Google scholar and Scopus should add such advance filters for the effective search results.

3. Like Cochrane online course Medical librarian “systematic review librarian” social science platform also started online course of certified systematic review librarian in Social science domain.


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Website http://profileusuf.wordpress.com

YouTube 5minutes Information Channel
https://www.youtube.com/c/MuhammadYousufAli
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Thank you!