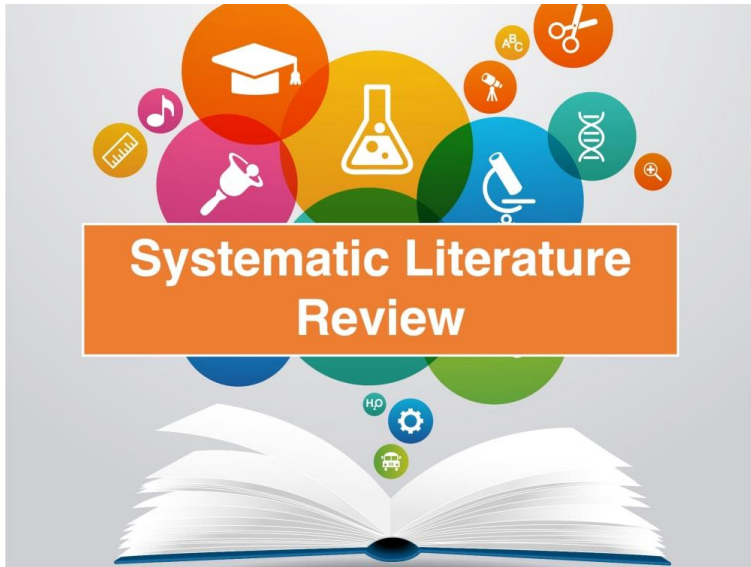


# Systematic Review

# *Systematic Review in the realm of Social Science*



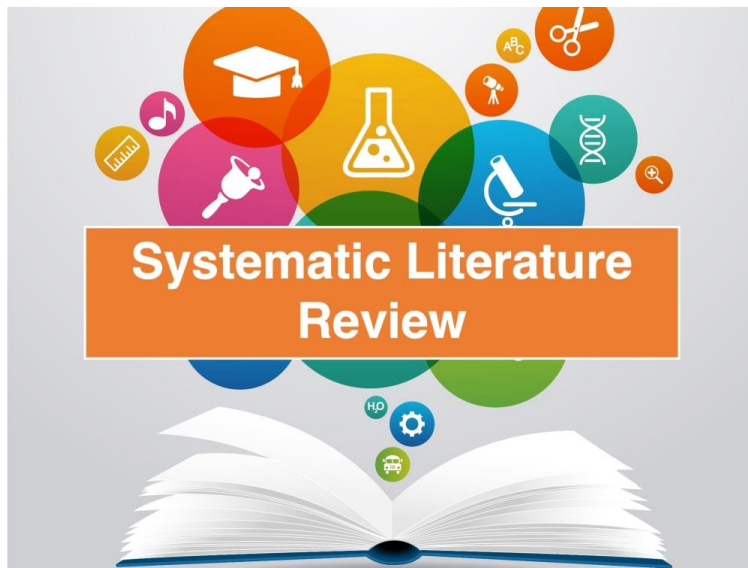
**Muhammad Yousuf Ali**  
PhD (Library & Information Science)  
Associate Librarian  
The Aga Khan University Karachi



***Systematic Review Success: An Introductory Workshop for  
Librarians & Information Professionals***

# Systematic Review in the Realm of Social Science

## Systematic Review



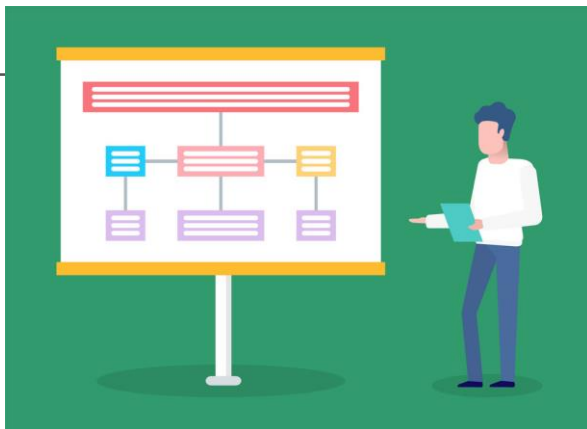
“In the nonstop tsunami of Global information, Librarians teach us to swim.”

**Linton Weeks**



## 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***



# Introduction

# Systematic Review

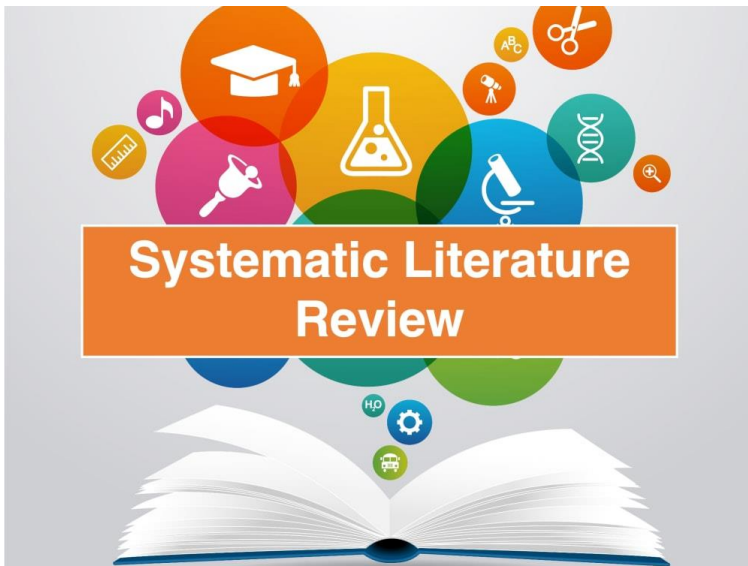
The “systematic review,” also known as the “research synthesis,” aims to provide a comprehensive, unbiased synthesis of many relevant studies in a single document.

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



# Introduction

# Systematic Review

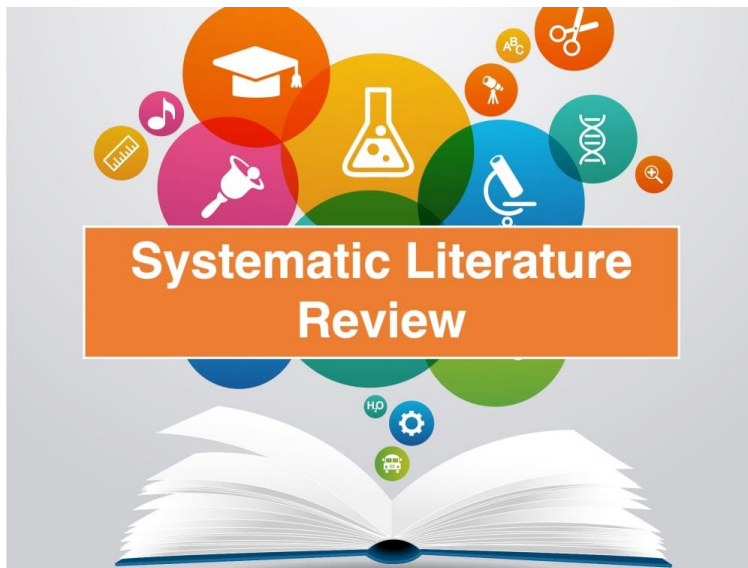


- **Systematic review is a specific methodology.**
- **It locates existing studies, selects and evaluates contributions, analyses and synthesizes data and reports the evidence.**
- **Allows reasonably clear conclusions to be reached about what is known and unknown.**

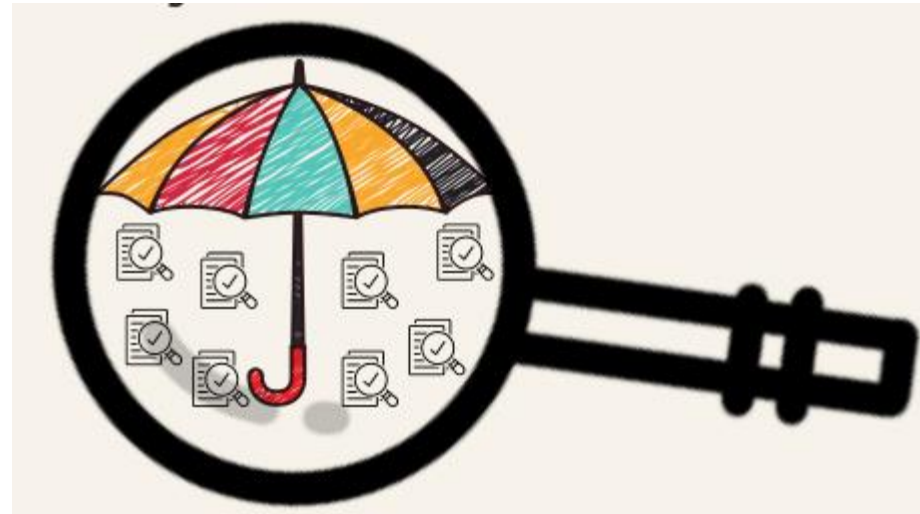


# Characteristics

# Systematic Review



Characteristics		
Concise	Unbiased summary	Evidence

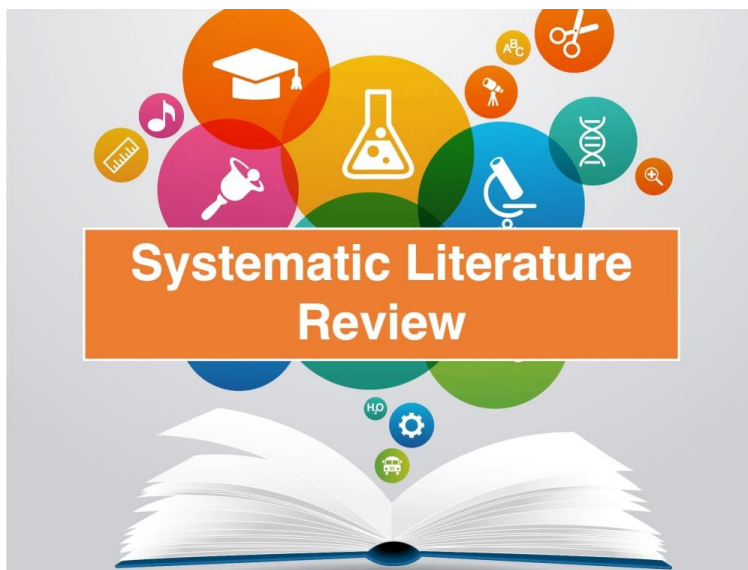


## Background

# Systematic Review

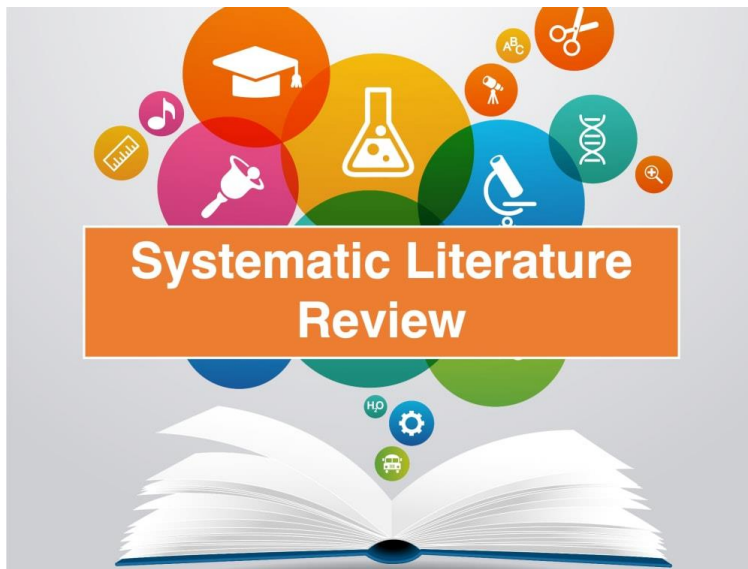
The first systematic review was published in 1753 by James Lind, who provided a summary of evidence having title “Treatise of the Scurvy.”

(Egger et al., 2001)



## Background

# Systematic Review



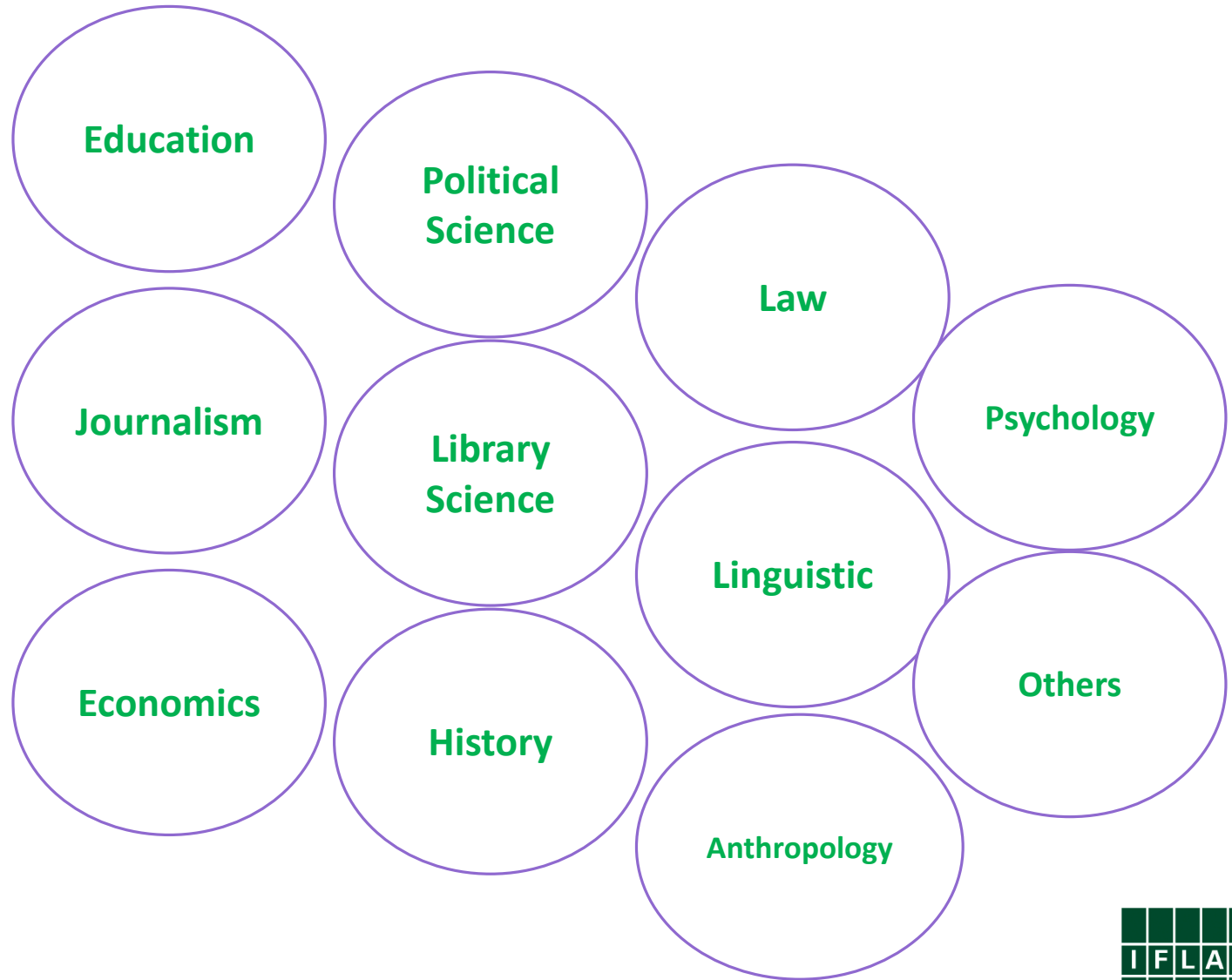
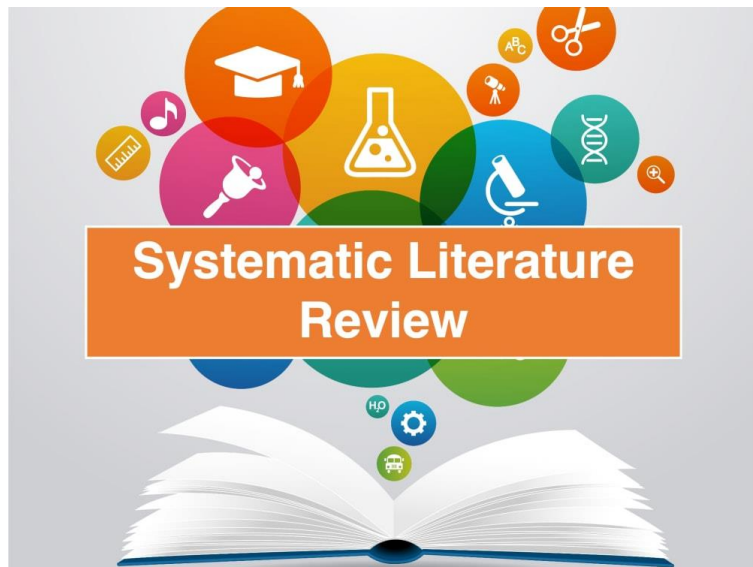
- **Systematic review is extensively used/applied in health sciences.**
- **It gains the Popularity after 1980's in the health sciences.**
- **It migrated to social science in 1930.**
- **In social Science it gains popularity in after 2001.**
- **systematic review conducted in the core subjects of social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





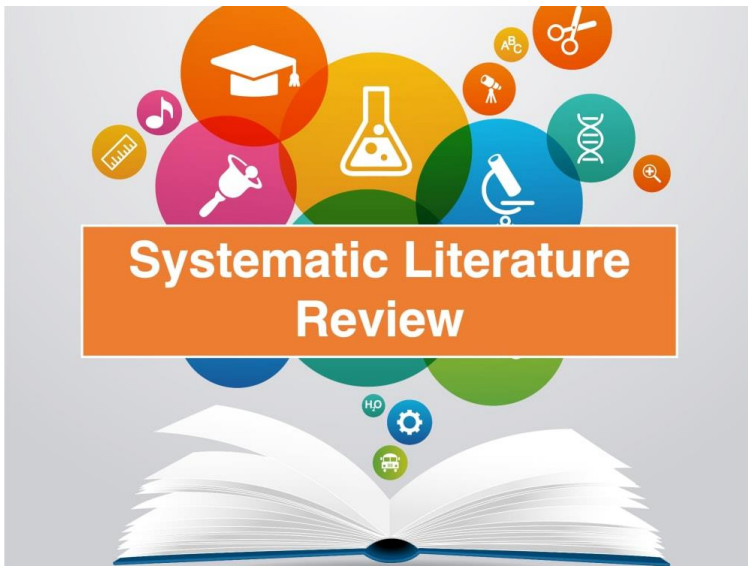
# SR in Social Science

# Systematic Review



# SR Social Science

# Systematic Review



## *Systematic Review & Social Science Quiz 1*

- Systematic review is a \_\_\_\_\_
- a. Methodology
- b. Analytical Technique
- c. Data Analysis
- The correct option is a **Methodology**

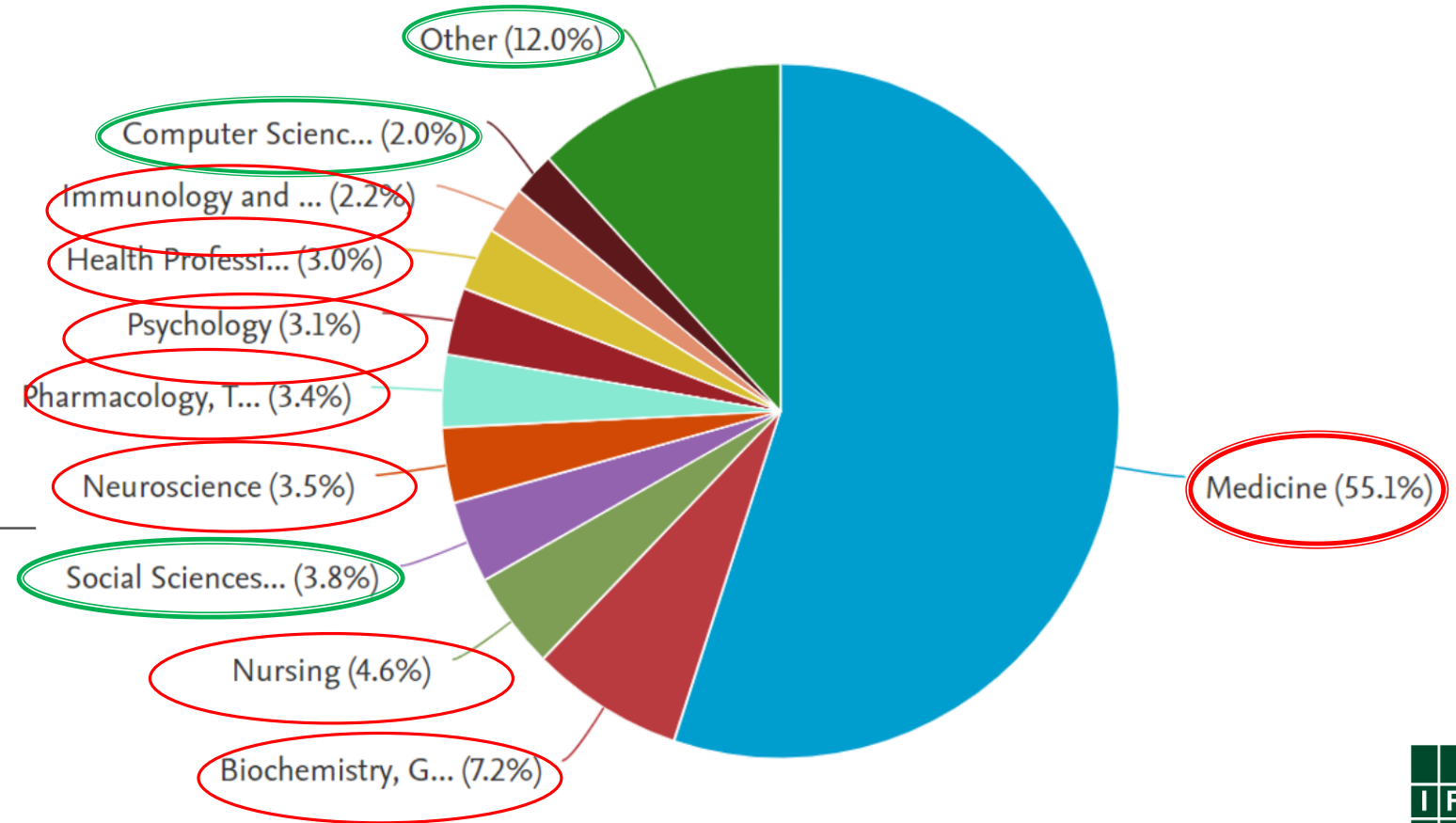
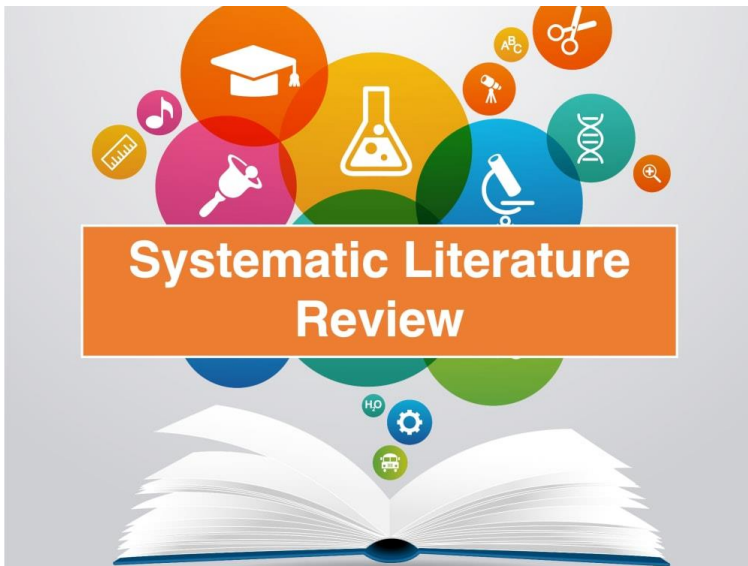


# SR Social Science

## Systematic Review & Social Science

Documents by subject area

# Systematic Review

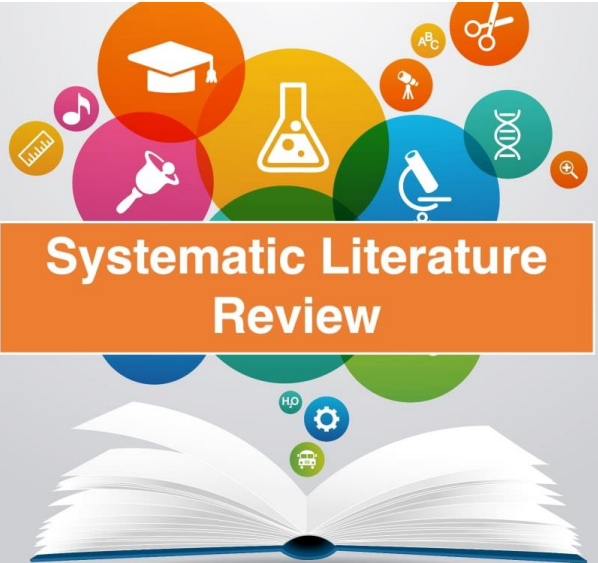
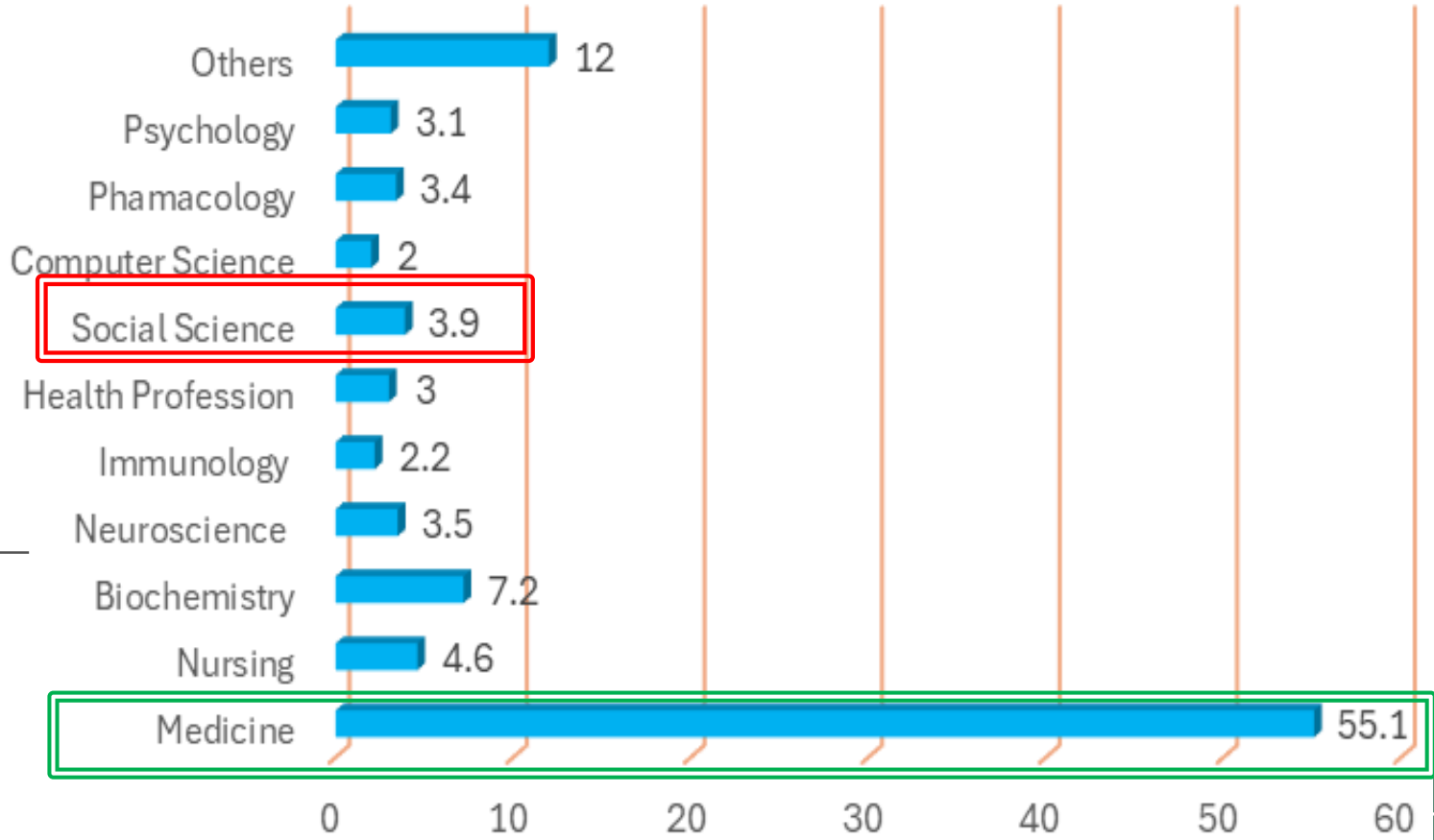


# SR Social Science

# Systematic Review

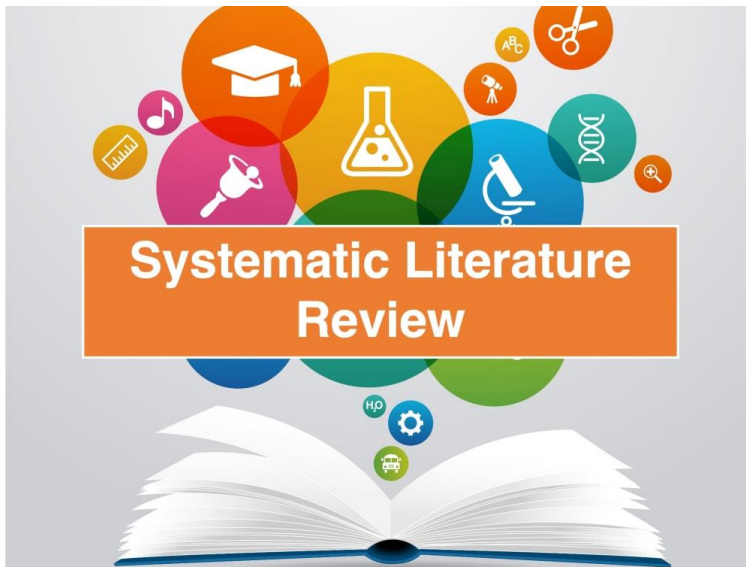
# Systematic Review & Social Science

Scopus Database



# SR in Social Science

# Systematic Review



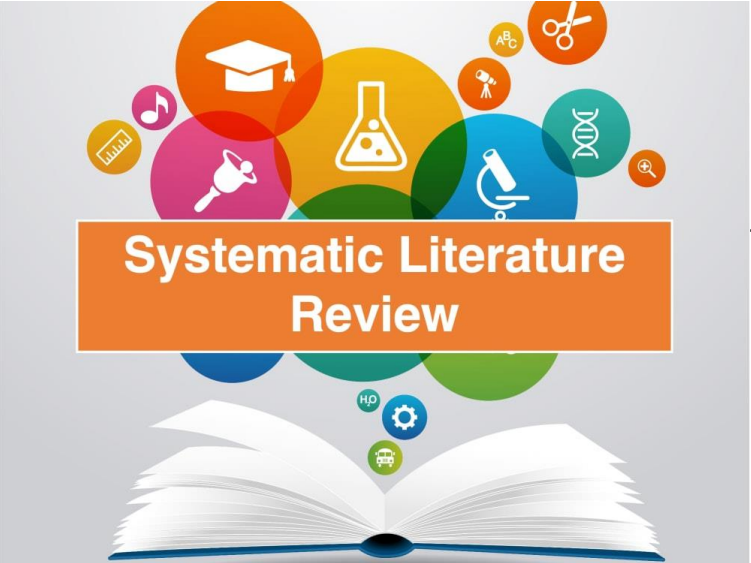
# Systematic Review & Social Science

Health Science Domain		Social science domain	
Medicine	55.1%	Social science	3.8%
Biochemistry	7.2%	Others	16.7%
Nursing	4.6%		
Neuroscience	3.5%		
Immunology	2.2%		
Health Profession	3.5%		
Pharmacology	3.4%		
	79.5%		20.5%

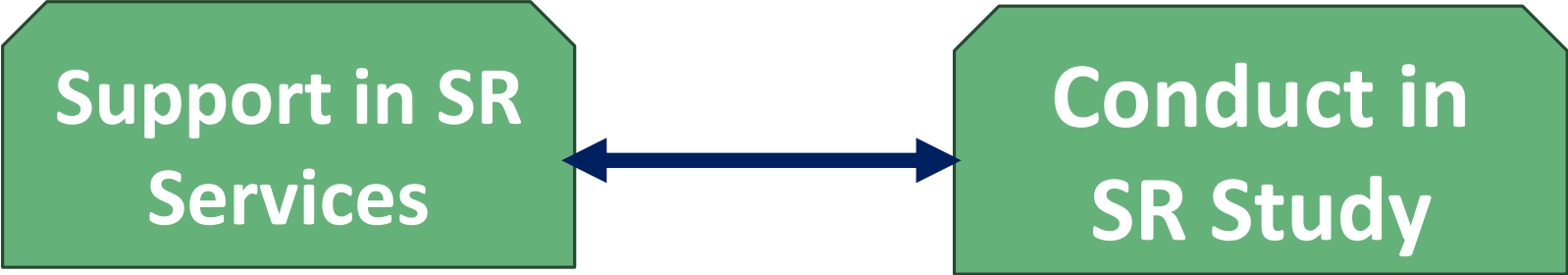


# Librarian Roles

## Systematic Review

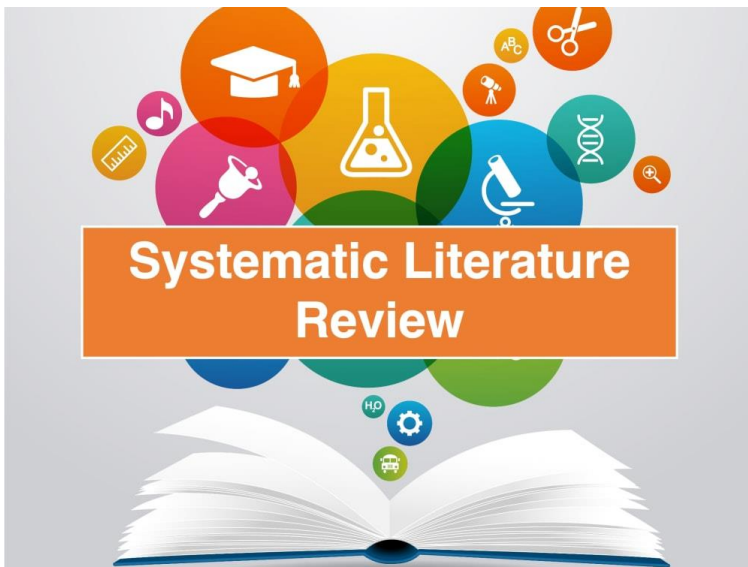


### *Librarian Roles*



# 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***



## Librarian Roles

# Systematic Review



**1. As a Subject Matter experts**  
*In systematic review process librarian roles as subject matter experts in respective topic and area s/he can assist the researcher(s)/ research team.*





# Librarian Roles

## Systematic Review



DEVELOPING  
A SEARCH  
STRATEGY

### *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*

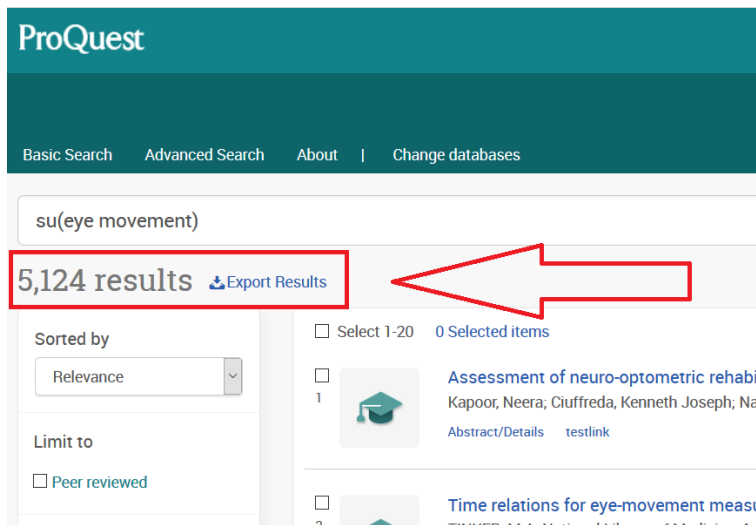


# Librarian Roles

## Systematic Review

### 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.***



## Systematic Review

### 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.*



## Systematic Review



### **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***

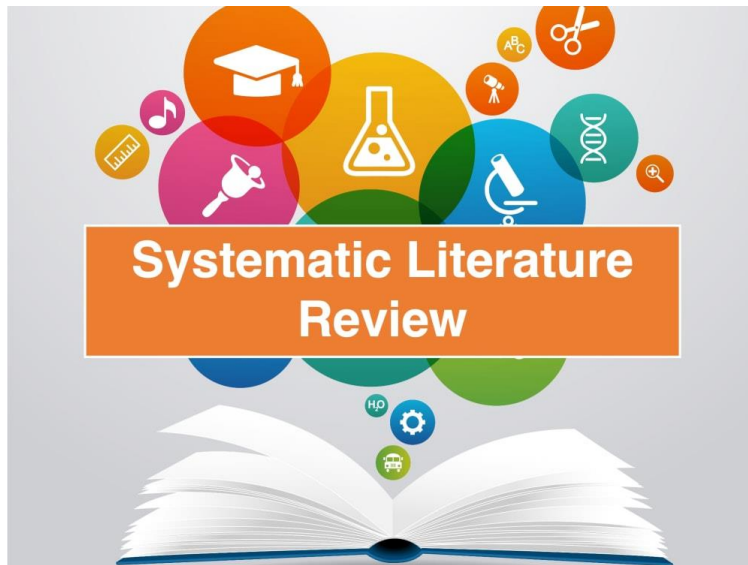
***Data Management pools are created in the universities and research-based institution all the systematic review save in data managment. Libraries are managed/archive such data to support the other researchers.***



## Steps of Systematic Review

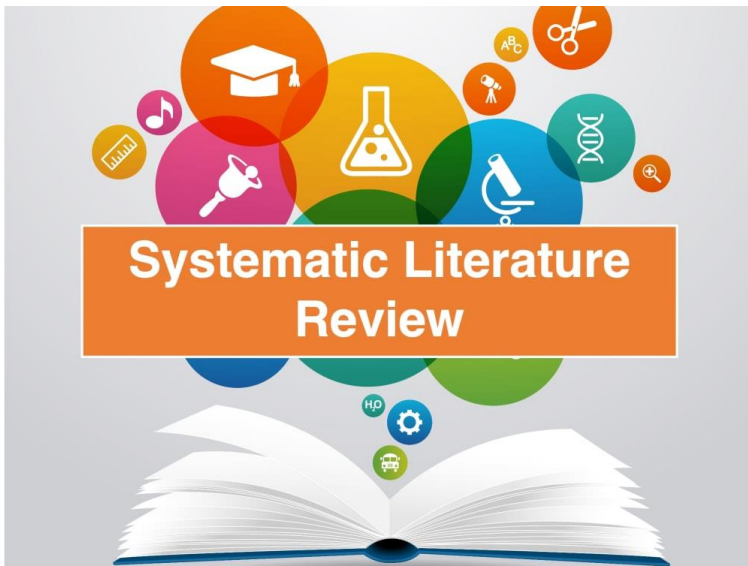
# Systematic Review

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

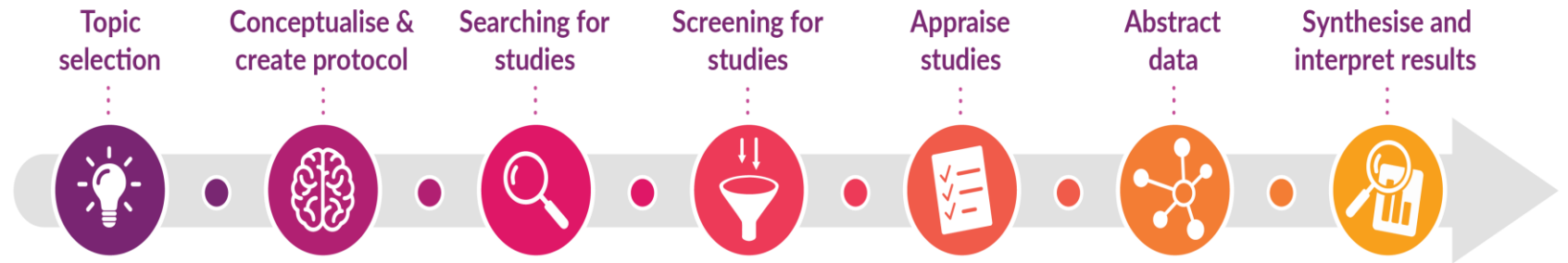


# Steps of Systematic Review

# Systematic Review



## Steps in a systematic review



# FINER Criteria

# Systematic Review

**FINER** criteria to conducting a Systematic Review topic

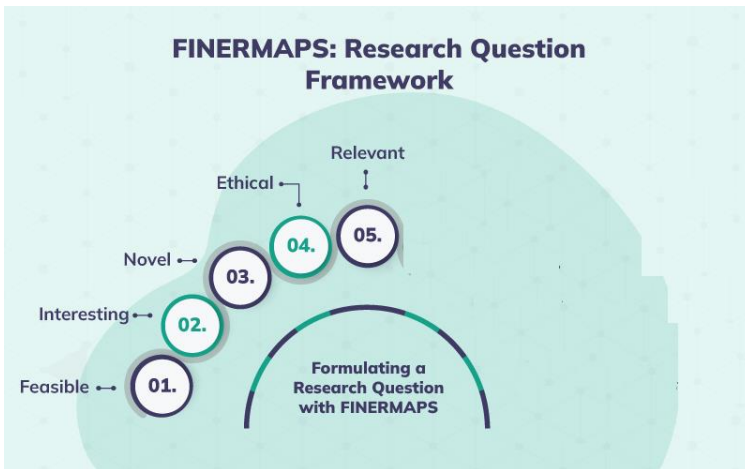
**F Feasibility**: Is the question answerable? Is it doable?

**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?

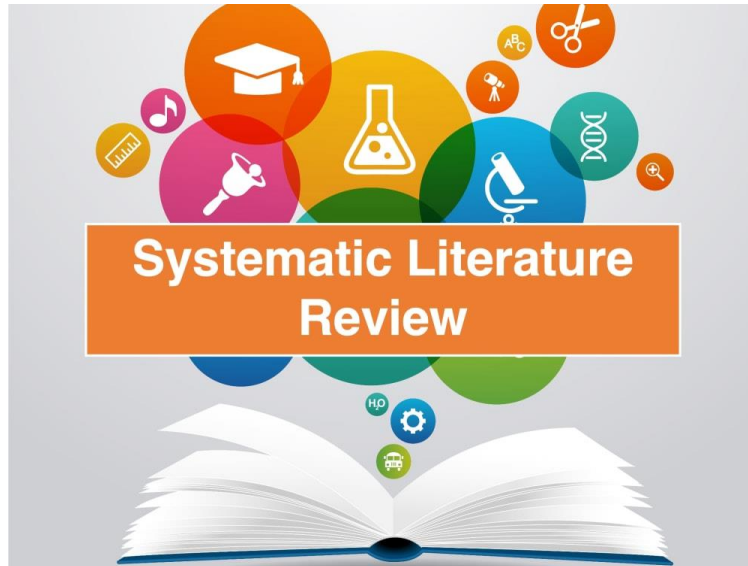
**R Relevant**: Is it relevant or practical for policy and/or /practice?



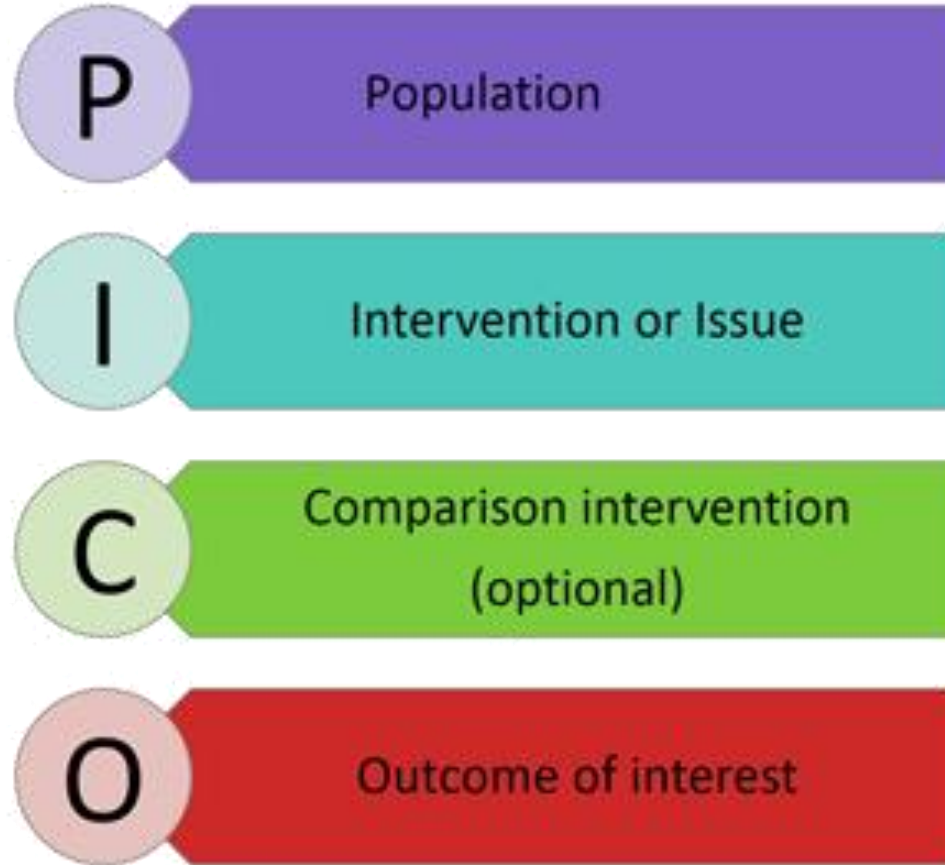


PICO

# Systematic Review



PICO



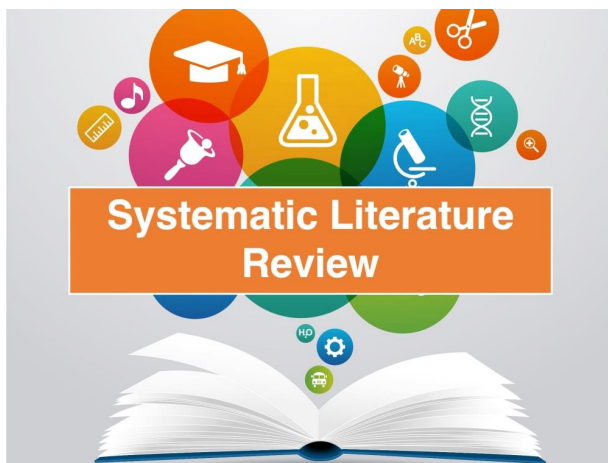
# Content

## PICO

- P **Population** of the study.
  - I **Intervention:**
  - C **Comparison:**
  - O **Outcome:**
- P **Population AND**  I **Intervention AND**  C **Comparison AND**  O **Outcome**

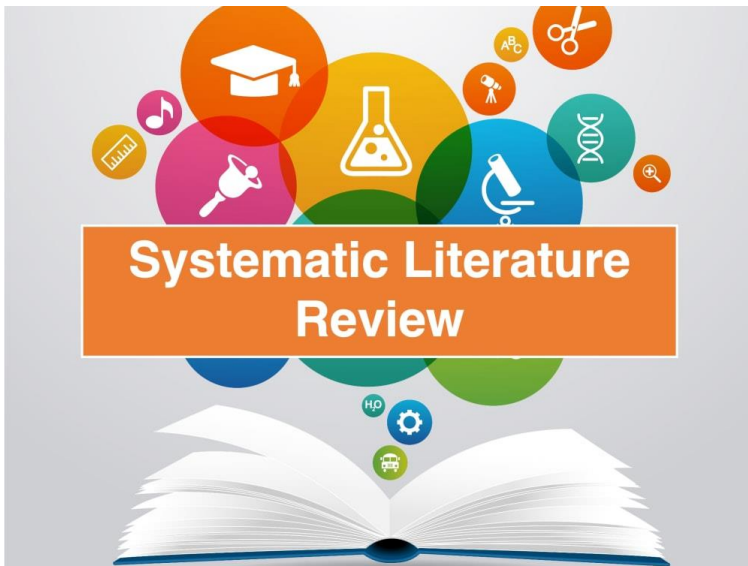
**Topic:** Artificial Intelligence impact on digital literacy of the Public and private sector universities  
LIS professionals

LIS Professional **AND** Artificial Intelligence **AND** Public and Private **AND** Digital Literacy



# SR Social Science

# Systematic Review



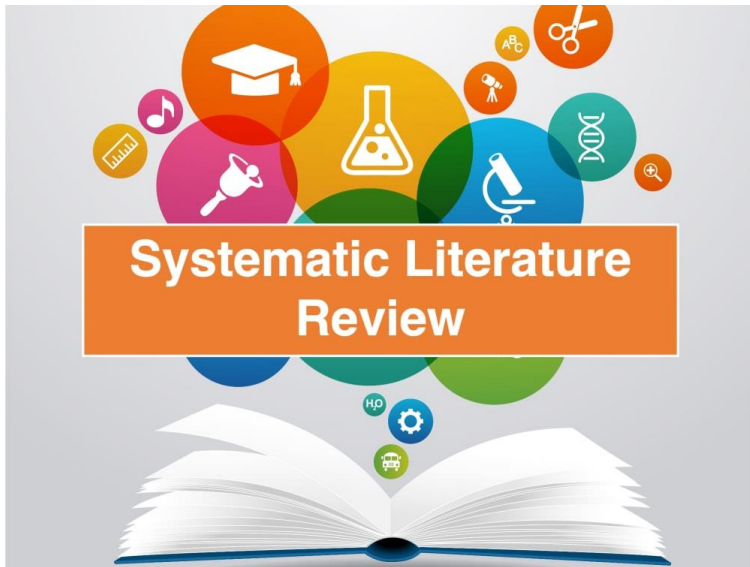
## *Systematic Review & Social Science Quiz 2*

- FINER Criteria F is stand for \_\_\_\_\_
- a. Finding
- b. Facility
- c. Feasibility
- The correct option is c **Feasibility**



# Databases

# Systematic Review



## Health Sciences

PubMed

CINAHL

Cochrane

OVID

EMBAS

WoS

PsyInfo

Medline

## Social Science

Google Scholar

ERIC

Scopus

SSCI

EMERLAD

WoS

EBSCO Social Science

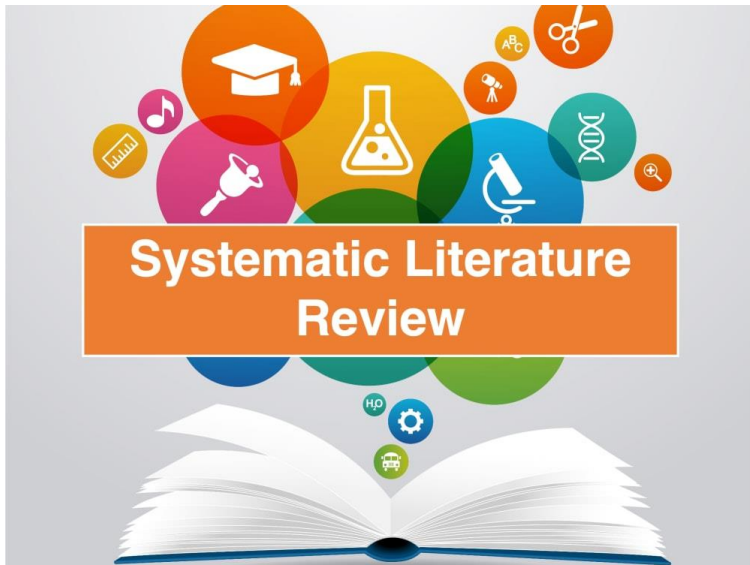
LISA

LISTA



**PRISMA**

# Systematic Review



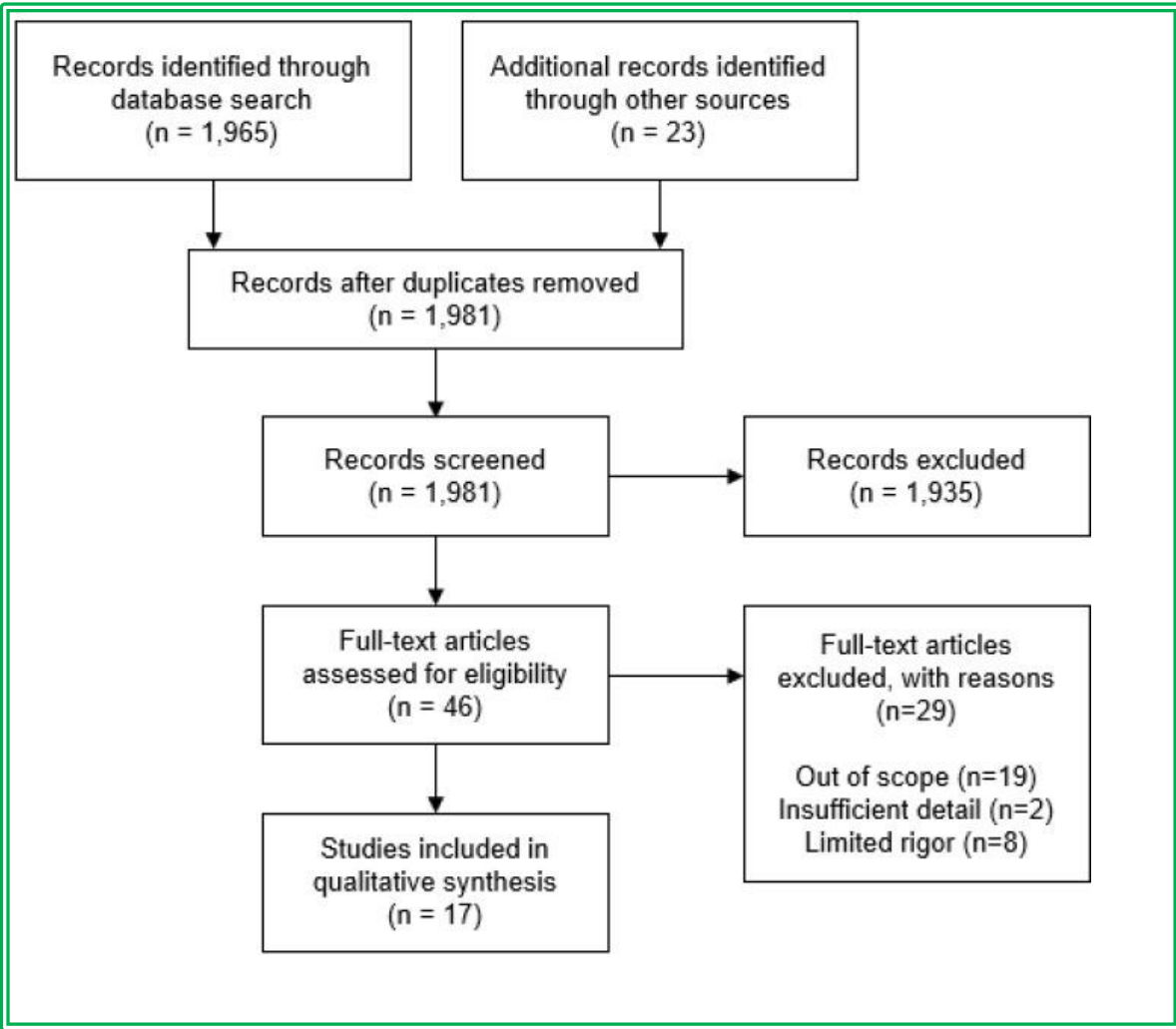
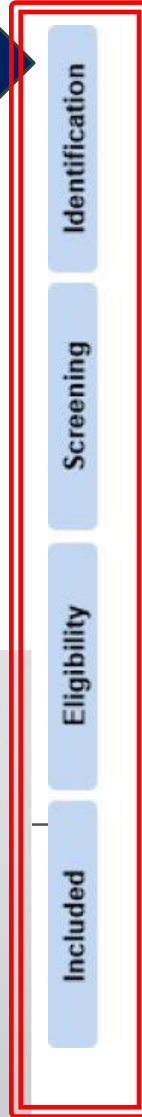
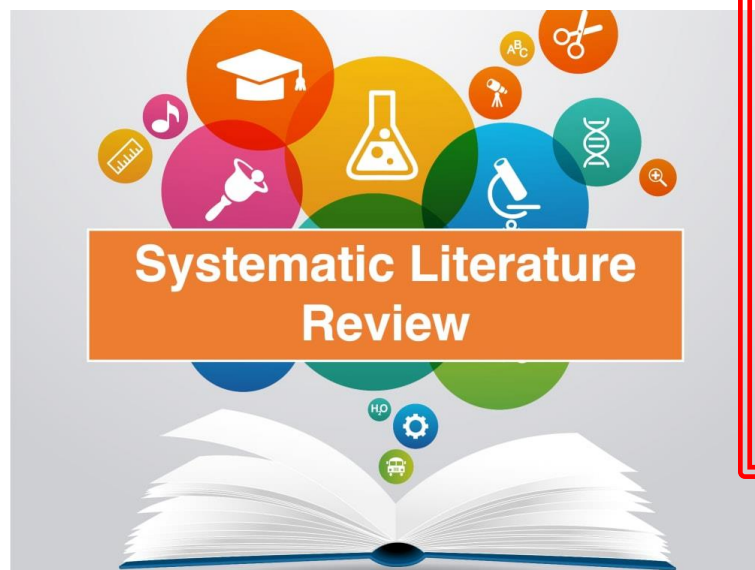
## PRISMA flow chart/Diagram

- P Preferred
- R Reporting
- I Items
- S Systematic Review
- M Meta
- A Analysis



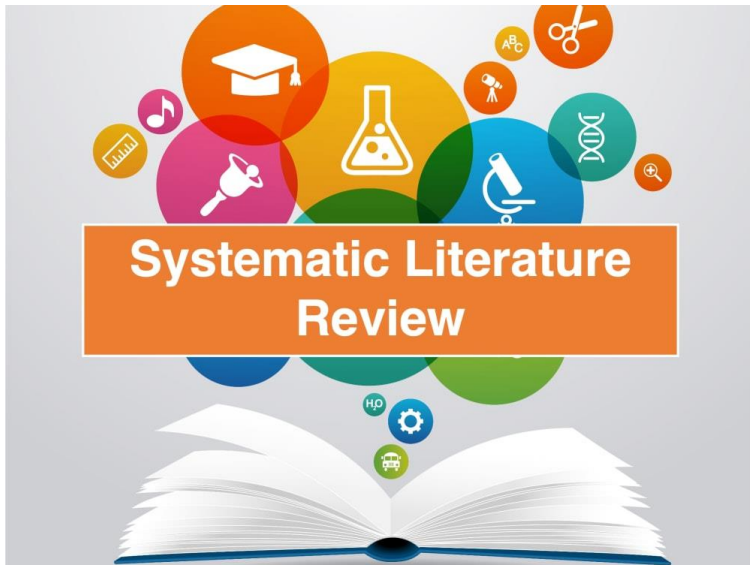
# PRISMA

# PRISMA flow chart/Diagram



Software

# Systematic Review



## Software for use of SR

1. Endnote



2. Mendeley

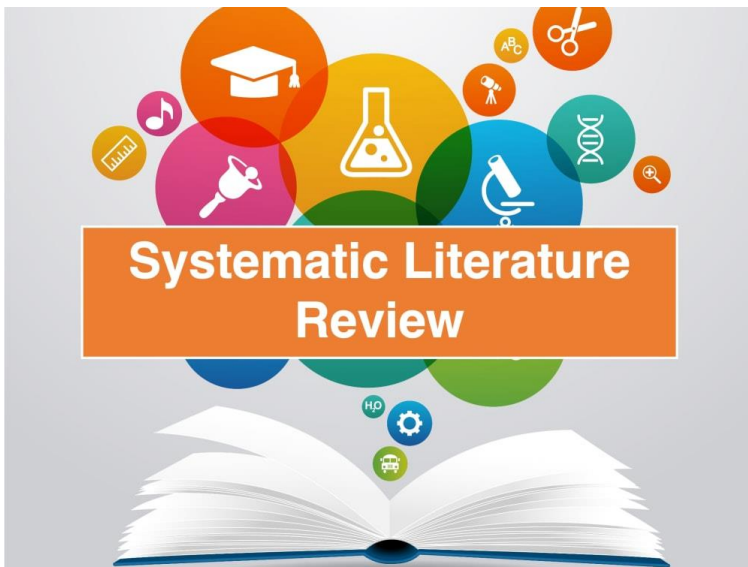


3. Zotero



# SR Social Science

# Systematic Review



## *Systematic Review & Social Science Quiz 3*

- PRISMA is a \_\_\_\_\_
- a. Picture
- b. Flow chart
- c. Protocol
- The correct option is b **Flow Chart**





# AI based software SR

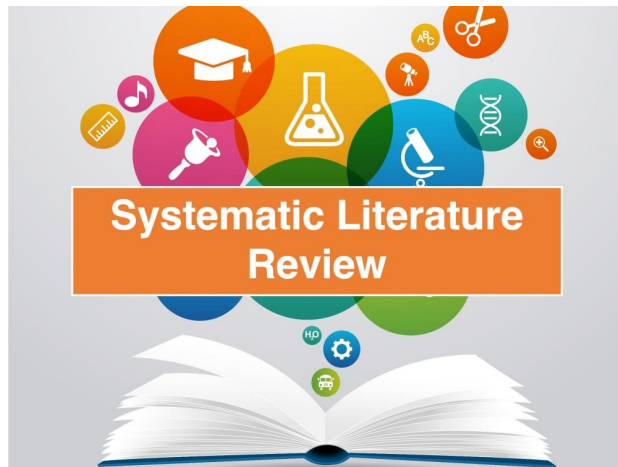
1. Rayyan



2. Covidence



3. Research Rabbit



4. DistillerSR



5. MAXQDA



6. Abstrackr



# Report Writing

**Report  
writing**



**The last stage is to report writing of the systematic review basis of the synthesis literature and submitted for the publication in reputable journals.**



# Recommendations



- 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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Tricco, A. C., Tetzlaff, J., & Moher, D. (2011). The art and science of knowledge synthesis. *Journal of clinical epidemiology*, 64(1), 11-20.



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# Systematic Review



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**Google Scholar :**

[https://scholar.google.com/citations?user=aUSK\\_kIAAAAJ&hl=en](https://scholar.google.com/citations?user=aUSK_kIAAAAJ&hl=en)



**ResearchGate:**

[https://researchgate.net/profile/Muhammad\\_Ali118](https://researchgate.net/profile/Muhammad_Ali118)



**Website** <http://profileusuf.wordpress.com>



**YouTube**

**YouTube**

**5minutes Information Channel**



<https://www.youtube.com/c/MuhammadYousufAli>

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Systematic  
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*Thank  
you!*