



BMMB7009
Critical Literature Review for
doctoral students

Week 3&4 – Types of
Literature Review (I) :
Narrative Review and
Systematic Review

Agenda



Overview of Literature
Review



Traditional literature review
/ Narrative literature review



Systematic literature review



Overview of Literature Review

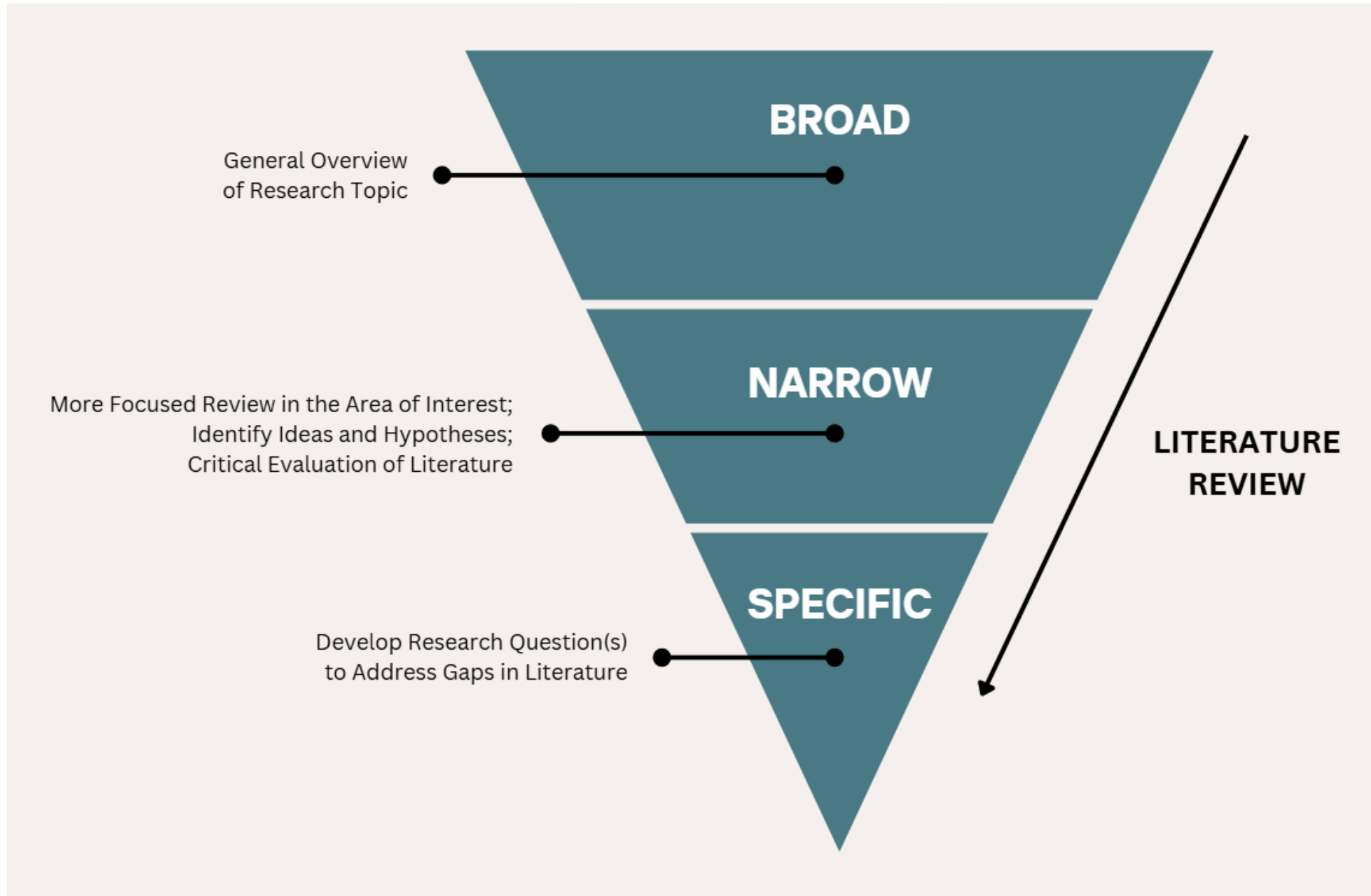


Literature Review

A presentation of a comprehensive background of the literature within the interested topic to highlight new research streams, identify gaps or recognise inconsistencies. (Arshed and Danson, 2015)

Literature Review

The purpose of a literature review is simple: it is to educate oneself in the topic area and to understand the literature before shaping an argument or justification... It provides the background to and justification for the research undertaken” (Bruce, 1994, p. 218).



The Purpose of the Literature Review

<https://youtu.be/1nqzcfw1wDE?si=qlZMSG1wSlyEwMxd>

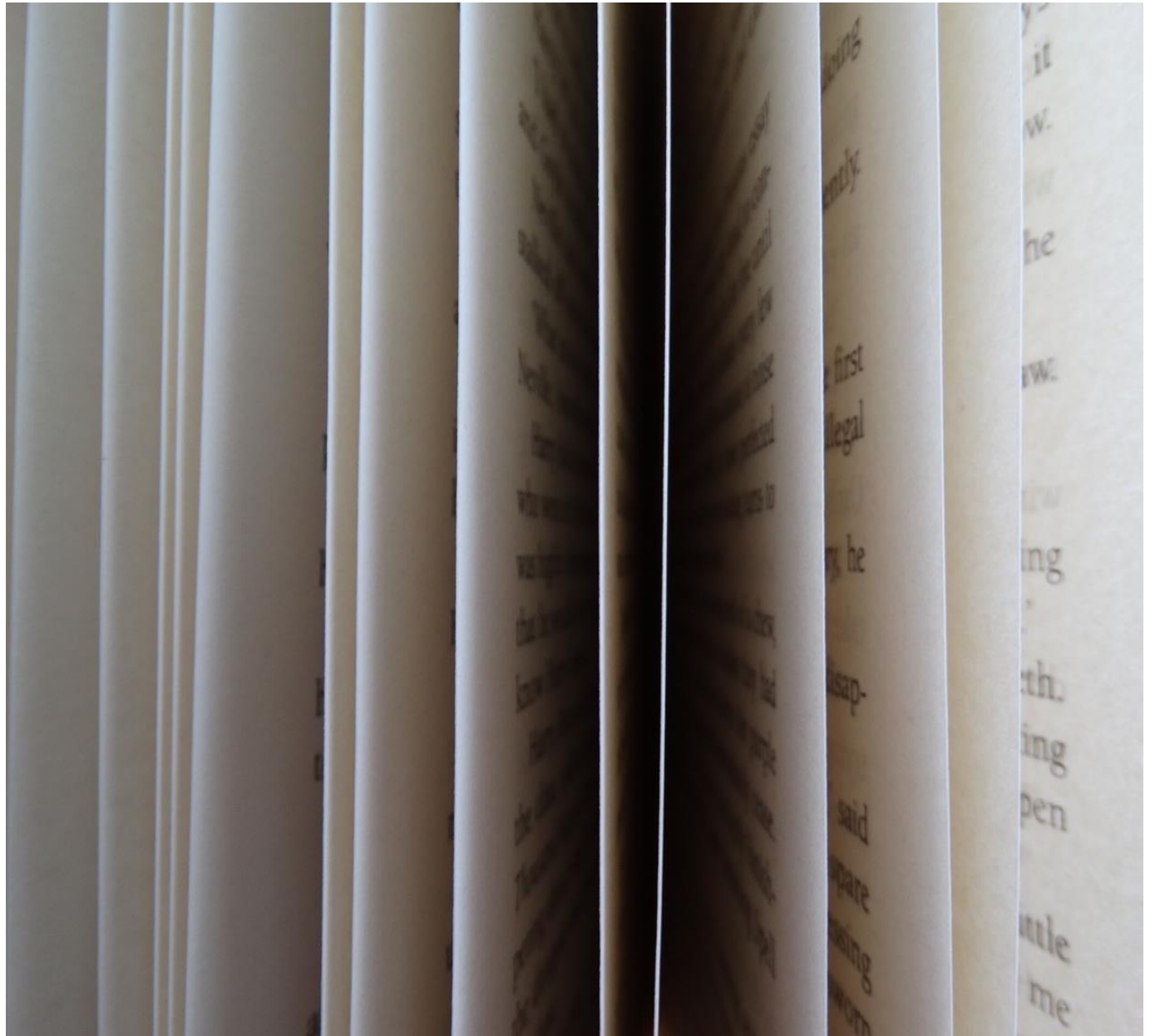
Criteria for literature review

- **Transparency** - provide sufficient documentation so that each step of the review process can be replicated including sources searched, the search strategies, the number of references found, and the date searches conducted.....
- **Theoretical saturation** – Assess the adequacy of research data, originated from grounded theory. (Low, 2019; Strauss and Glaser, 1973). Achieving data saturation means that further data collection and analysis will not contribute to deeper understanding of the theory Hence, further data collection and analysis is not necessary (Strauss and Corbin, 2008).

Criteria for literature review

- **Reproducibility** - The ability to get the same results when repeating an experiment or test. It indicates transparency and clarity of the review process allowing others to verify the findings. (Low, 2019).

Types of Literature Review



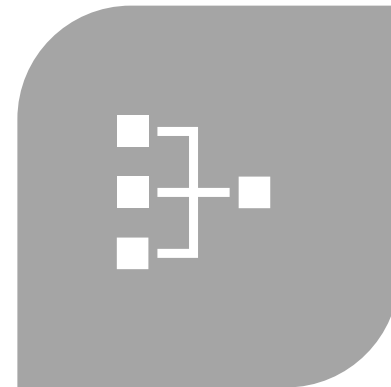
Types of Literature Review



Approaches/methods to Literature review

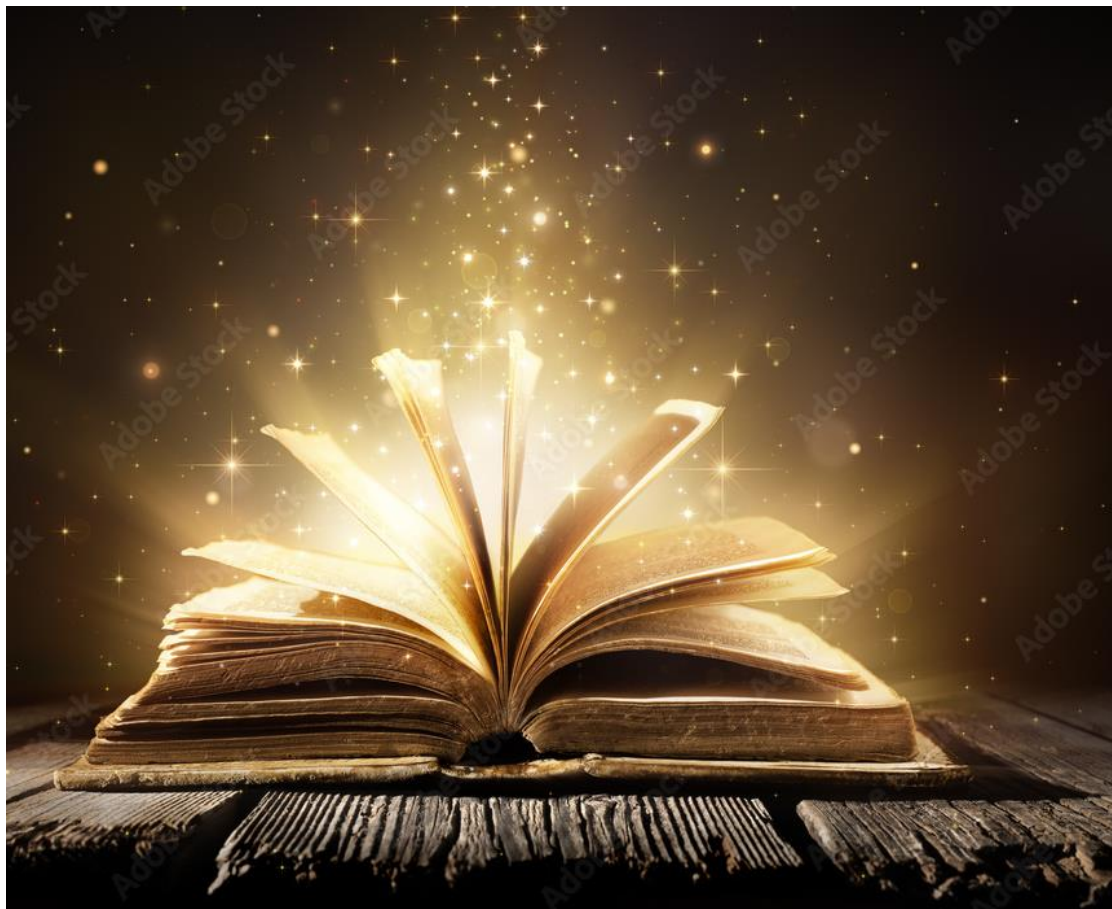


TRADITIONAL
LITERATURE REVIEW



SYSTEMATIC
LITERATURE REVIEW



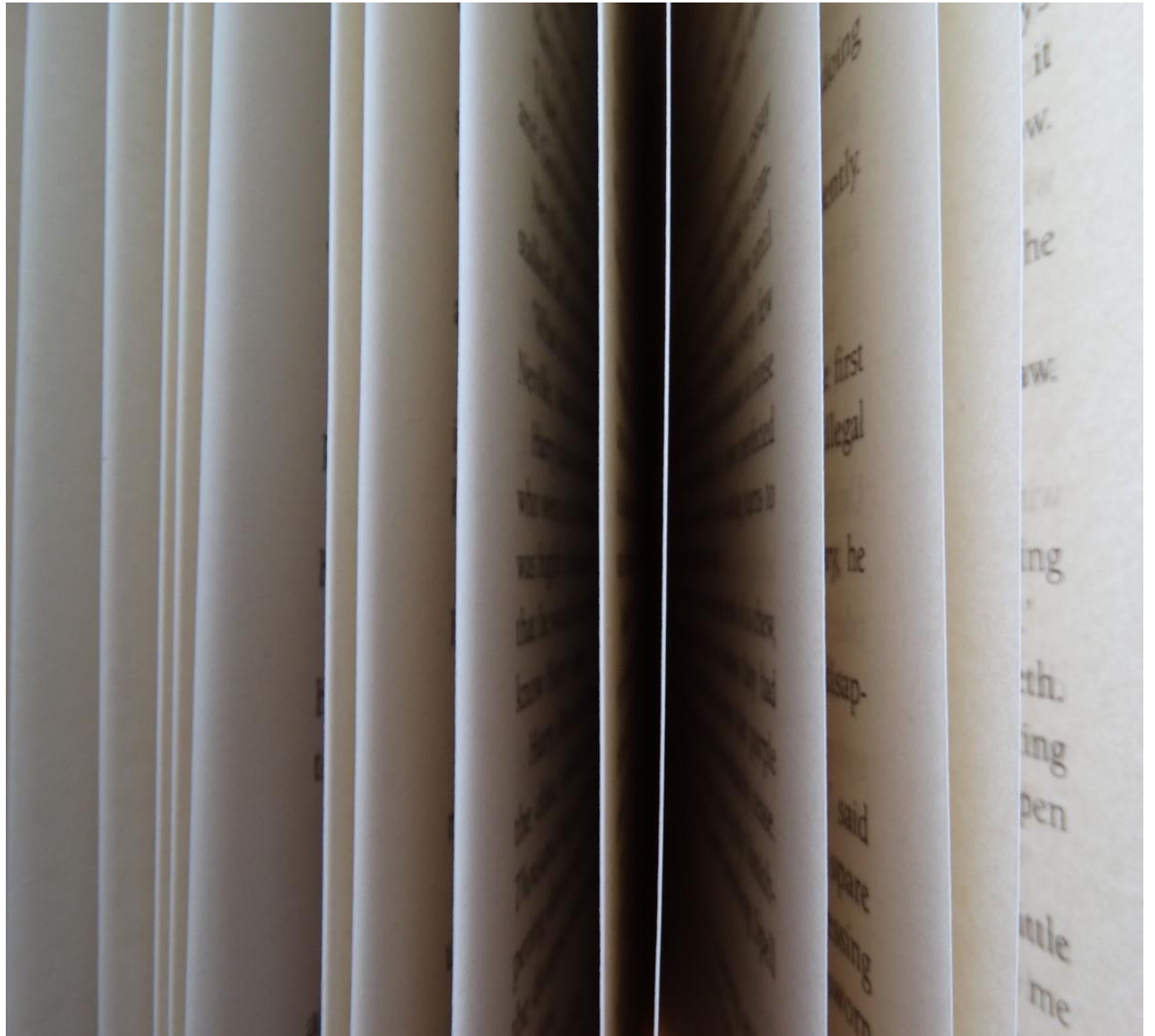


narrative

A **narrative** is a story that you write or tell to someone, usually in great detail. A *narrative* can be a work of poetry or prose, or even song, theater, or dance.

Often a narrative is meant to include the "whole story." A summary will give a few key details and then the narrative will delve into the details. "I hate to interrupt your narrative," is a polite way of stopping someone in the middle of a story. The origin of this noun is the Latin adjective *narrativus*, from *narrare* "to tell," from *gnarus* "knowing." It is related to our English verb *know*.

Traditional / Narrative Literature Review



Traditional Literature Review

- A narrative review focuses on providing a detailed, **qualitative synthesis of research findings on a specific topic**. It begins with a clearly defined research question and employs a structured and thorough search strategy to identify all relevant studies. The review follows explicit criteria for including and excluding studies which leads to a comprehensive and methodical approach.
- Narrative reviews can highlight new interpretations and identify gaps that may not be apparent in other review methods.

Narrow (Traditional) Literature Review

Onwuegbuzie and Frels (pp 24-25, 2016) define [four common types of narrative reviews](#):

1.General literature review that provides a review of the most important and critical aspects of the current knowledge of the topic. This general literature review forms the introduction to a thesis or dissertation and must be defined by the research objective, underlying hypothesis or problem or the reviewer's argumentative thesis.

2.Theoretical literature review which examines how theory shapes or frames research

3.Methodological literature review where the research methods and design are described. These methodological reviews outline the strengths and weaknesses of the methods used and provide future direction

4.Historical literature review which focus on examining research throughout a period of time, often starting with the first time an issue, concept, theory, phenomena emerged in the literature, then tracing its evolution within the scholarship of a discipline. The purpose is to place research in a historical context to show familiarity with state-of-the-art developments and to identify the likely directions for future research.



Narrative (Traditional) Literature Review

Narrative (Traditional) Literature Review

- Narrative Literature Review allows you to explore and summarize existing research on a topic without following a strict, step-by-step process like a systematic review.
- It provides you with a broad and thoughtful discussion, and highlight key themes, trends, and ideas in the literature.
- This approach helps you get a big-picture understanding of a subject, spot research gaps, and connect different perspectives.
- Use a narrative review to make sense of complex topics and shape future research directions.

Traditional Literature Review

Baumeister and Leary (1997) - Steps

- **Identify the research question**
- **Conduct the literature search**
- **Select relevant studies**
- **Organize the literature** - Organizing the literature involves grouping studies by themes, methodologies, or theoretical frameworks.
- **Synthesize the literature**
- **Evaluate** : Assessing the strengths and weaknesses of each study, and discussing methodological limitations are essential. Highlighting the implications of the findings for the research question adds depth and insight to the review.

Traditional Literature Review

- They summarize key themes, trends, and gaps in the research. This approach provides insights into how knowledge in a field has developed into its current state.
- Researchers conduct a broad search of the literature, guided by their research question but without following predefined rules.
- Narrative literature reviews are organized **around themes, concepts, or trends** which makes it easier to describe and interpret the literature. It highlights key findings and provides context. The narrative format helps integrate different perspectives and identify patterns and relationships in the research.

Narrative (Traditional) Literature Review

- It is often used to summarize and synthesize existing research, identify gaps, and provide context for new research.

Traditional Literature Review

A1- Please select ONE journal on traditional narrative literature review from Google Scholar or Litmap. Download and read the format of the paper.

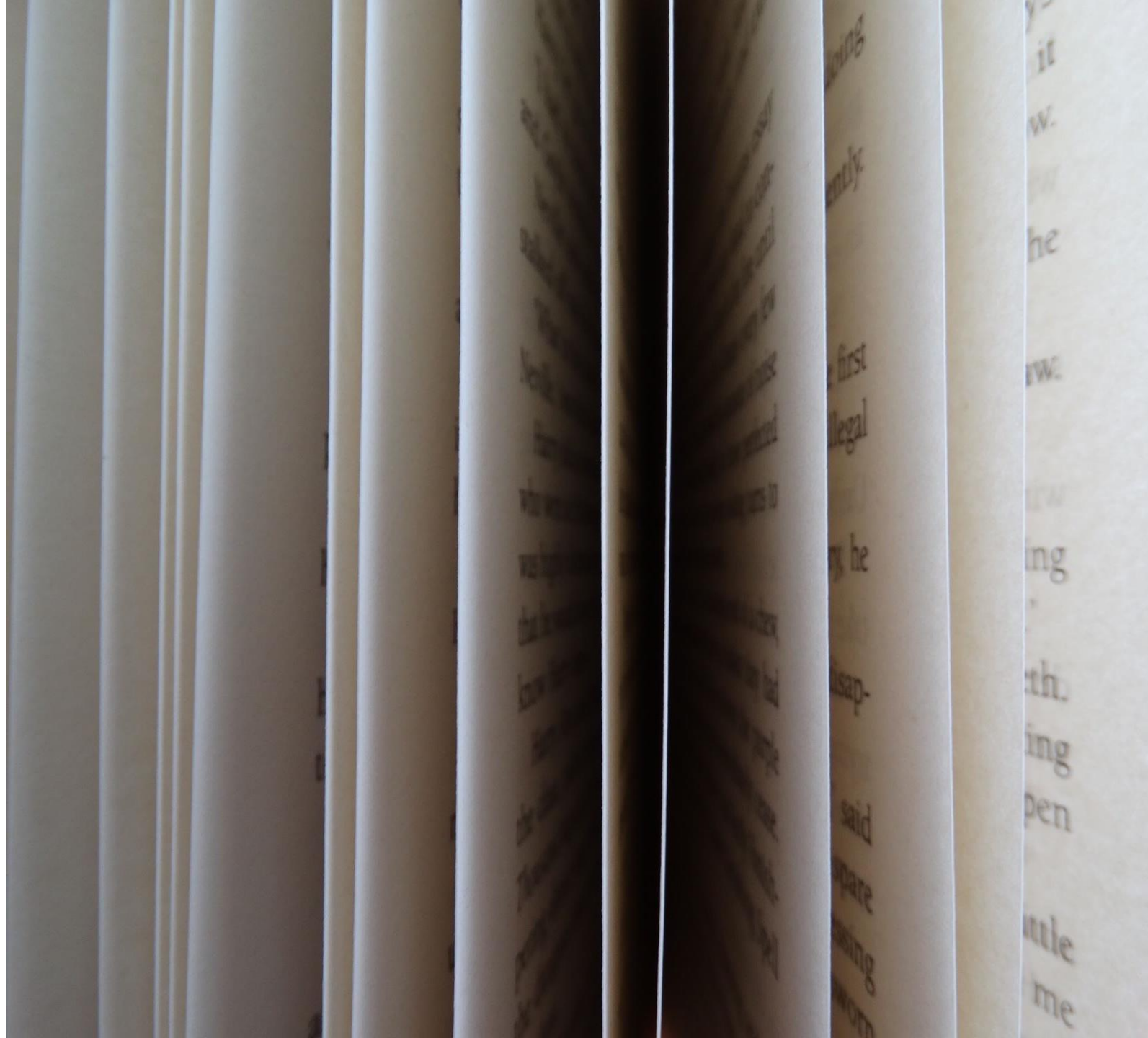
A2 – Please identify the difference between traditional narrative literature review and Systematic literature review.

Traditional Literature Review

A1- Please select ONE journal on traditional narrative literature review from Google Scholar or Litmap or select one on Moodle. Download and read the format of the paper.

A2 – Please select not less than ONE (Traditional) and ONE (Systematic) journal
Please identify the difference between traditional narrative literature review and Systematic literature review.

Activity



Activity 1

Please read 5 journals on Narrative Review per student on Moodle and check if the journals comprises the followings

I. APPROACH OF ANALYSIS

Thematic Framework

Chronological Framework

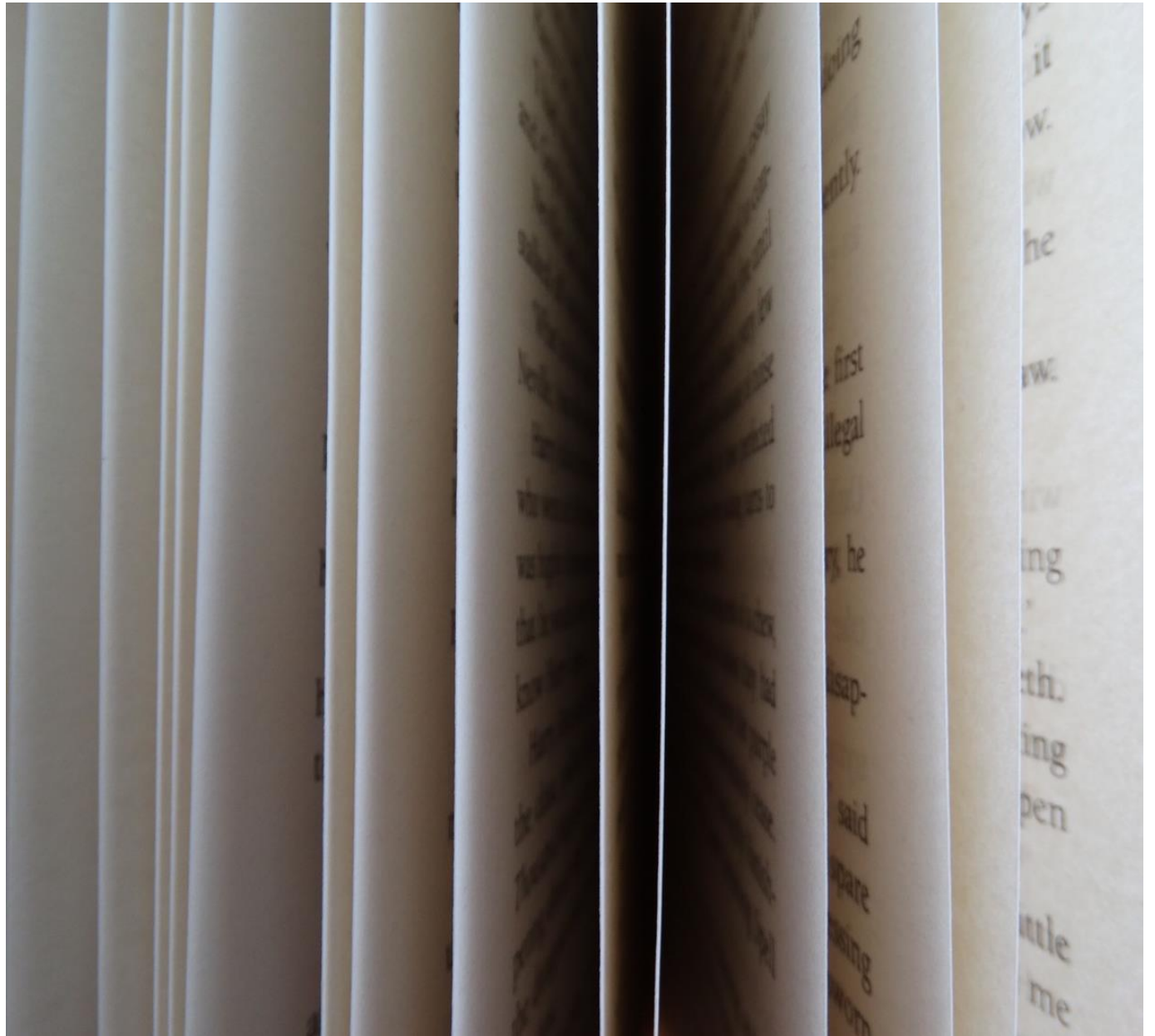
Methodological Framework

II. ANALYTICAL FRAMEWORK

SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type
e.g. qualitative, quantitative or mixed-methods research)

Output : An excel file or A Tubular format

Systematic Literature Review



Traditional Literature Review

[Types of Literature Review \(9:39 mins\)](#)

➤ https://youtu.be/t2d7y_r65HU

Difference between Narrative Review vs Systematic Review, Scoping by examples. (8:50)

<https://youtu.be/Nwp9tkhpLCo>

Systematic Literature Review

[What is Systematic Review ? \(4:38 mins\)](#)

➤ <https://youtu.be/l6aVyYHb25E>

Systematic Literature Review

Process

Essential Elements for Completing a Systematic Review



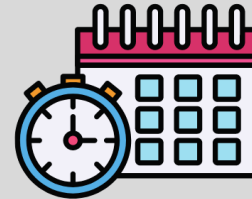
Question

You should have a clear, well defined question that is narrow in scope and has not been the subject of a recent high quality systematic review.



Team

A systematic review is not a single person project. At a minimum you need 3 people to conduct screening of the articles. Your team should include members who are subject experts on the topic and methodological experts with systematic review experience.



Time

The average time to complete a systematic review from development to finished manuscript 12-18 months.

Protocol

A protocol is a road map of your review. It details your plan for searching, screening, and analyzing.



Systematic Literature Review

Step

1. Identify your research question and search relevant framework
2. Develop your protocol
3. Define include/exclude criteria
4. Conduct systematic searches (including the search strategy, text mining, choosing databases, documenting and reviewing
5. Screening & Critical appraisal
6. Data extraction and synthesis
7. Writing and publishing.

Systematic Literature Review

SLR demands a clear process with predefined criteria for selecting, evaluating, and synthesizing studies.

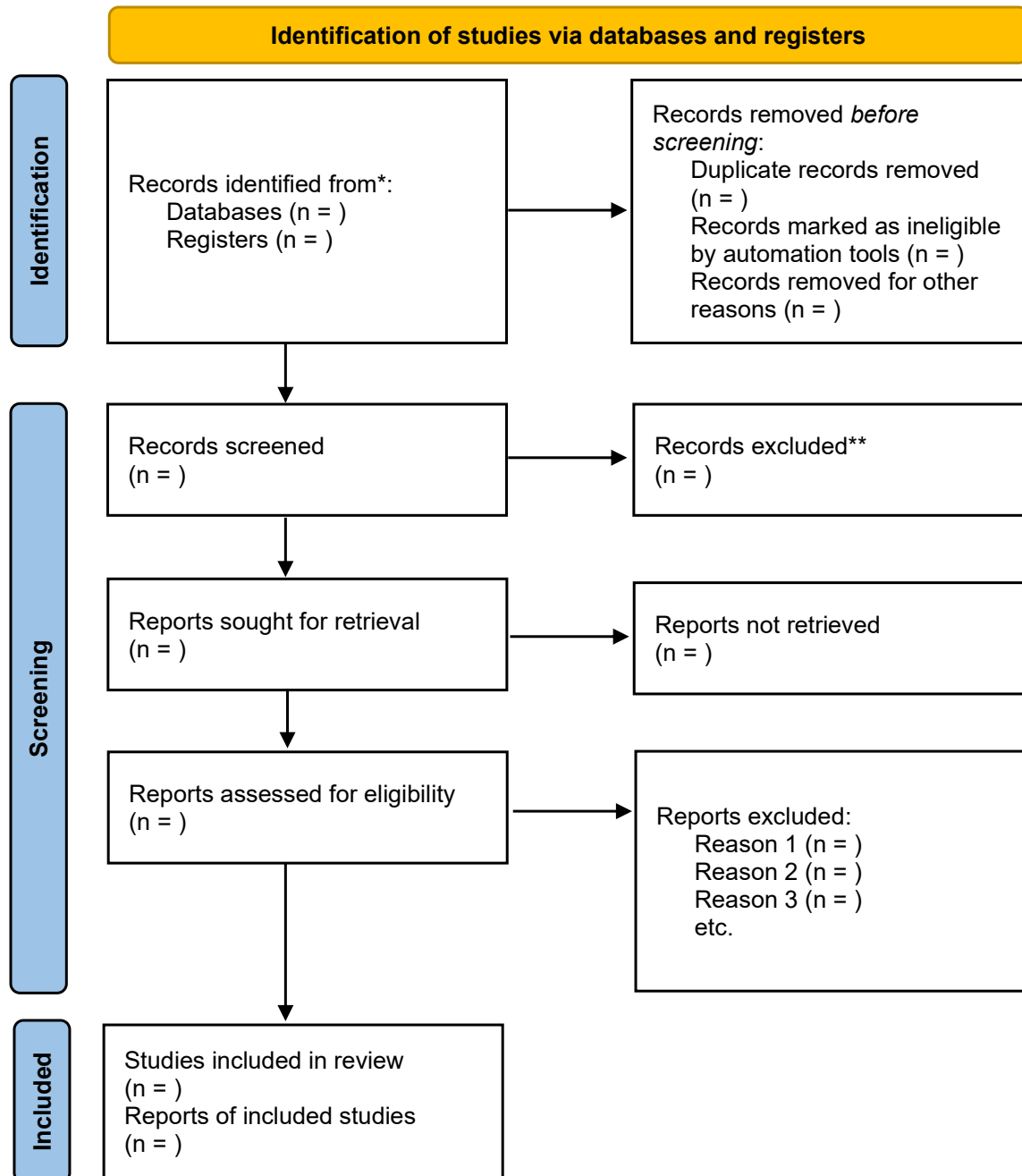
You need to use databases, set inclusion and exclusion criteria, and follow a transparent methodology to minimize bias and ensure reproducibility.

This approach allows you to identify trends, assess the quality of evidence, and draw reliable conclusions.

Systematic Literature Review

Step

1. Identify your research question and search relevant framework
2. Develop your protocol
3. Define include/exclude criteria
4. Conduct systematic searches (including the search strategy, text mining, choosing databases, documenting and reviewing
5. Screening & Critical appraisal
6. Data extraction and synthesis
7. Writing and publishing.



Systematic Literature Review

PRISMA 2020

Systematic Literature Review

Procedure

1. Identify your research question and research relevant framework

A well-defined research question helps identify the concepts to search to answer your question.

- Clearly state the objectives of the review (what question are you trying to answer?)
- Ask yourself if you've considered the **FINER** components:
 - **Feasibility**: Is the question answerable? Is it doable?
 - **Interesting**: Is your question interesting to others besides yourself? Does it fill a meaningful gap in the literature?
 - **Novel**: Is your question novel? New? Looking at a different population?
 - **Ethical**: Is it ethical?
 - **Relevant**: Is it relevant or practical for policy and/or /practice?

Systematic Literature Review

1. Identify your research question and search for relevant framework

Search frameworks are **mnemonics** which can help you focus your research question.

For questions about causes or risk, there is:

- **PEO**: **P**opulation, **E**xposure, **O**utcomes

For evaluations of interventions or policies, you can use

- **ECLIPSE**: **E**xpectation, **C**lient group, **L**ocation, **I**mpact, **P**rofessionals, **S**ervice

Framework - **PEIO**: Population, Exposure, Intervention Outcomes

Inclusion criteria

Type of study

Details of criteria

This should be the highest level of available evidence for the review aims and objectives

- RCTs for effectiveness of interventions
- Prospective cohort studies for risk factors for disease onset
- Diagnostic accuracy studies for diagnostic tests
- Qualitative studies for patient experience

Type of participants

Define the participants in terms of their:

- Diagnosis
- Age
- Gender
- If applicable, geographical location, ethnic group

Type of intervention

Define the specific interventions of interest and the comparison groups you will consider (if applicable)

- Drug trials: formulation & dose of the drug
- Surgery trials: specific surgical techniques
- Diagnostic tests
- Psychological therapies

Example - **PEIO**: Population, Exposure, Intervention Outcomes

Comparison

Define the comparison groups of interest (if applicable)

- Intervention versus no intervention (e.g. waiting list control group)
- Intervention versus placebo/sham surgery
- Intervention versus another intervention

Outcome measures

Define the outcome measures of interest, for example:

- Treatment effect, adverse events
- Define which measurements you are interested in and any specific validated measures you will include in your meta-analysis
- Risk factors, predictors of outcome
- Diagnostic test accuracy

Other

You might want also to define other characteristics of the studies you want to include, e.g.

- Recruitment: consecutive or random
- Prospective or retrospective study
- Any relevant exclusion criteria

RCT, randomized controlled trials.

2. Develop your protocol

The protocol is the detailed plan for your systematic review. It sets out your rationale and methodology, and should be developed right at the beginning. You can refine it as you go on.

Publishing your protocol in either a register or a journal will help avoid duplication of reviews. It also:

- reduces the likelihood of bias
- promotes transparency of methods and processes
- allows for peer review of the planned methods. See [Cochrane Handbook, Part 2, Chapter 1.5 - Protocol development](#).

Systematic Literature Review

3. Define Inclusion/Exclusion Criteria

One of the features that distinguishes a systematic review from a narrative review is the pre-specification of criteria for including and excluding studies in the review (eligibility criteria).

Explicit criteria, based on the review's scope and question(s), are used to include and exclude studies.

More importantly, it also helps to avoid hidden bias by having clear consistent rules about which studies are being used to answer the review's specific research questions.

<https://guides.lib.usf.edu/systematic>

Systematic Literature Review

3. Define Inclusion/Exclusion Criteria

Each study needs to be compared against same criteria. To be included in the review, a study needs to meet all inclusion criteria and not meet any exclusion criteria.

Inclusion/eligibility criteria include participants, interventions and comparisons and often study design.

Exclusion criteria may include non-peer-reviewed articles, articles not in English, articles before a specified date, and in this case, articles about theory rather than actual practice.

<https://guides.lib.usf.edu/systematic>

3. Define Inclusion/Exclusion Criteria

Inclusion criteria	Details of criteria
Type of study	This should be the highest level of available evidence for the review aims and objectives, e.g. ➤ RCTs for effectiveness of interventions ➤ Qualitative studies for patient experience
Type of participants	Define the participants in terms of their: e.g. Age, Gender, If applicable, geographical location, ethnic group...
Type of intervention	Define the specific interventions of interest and the comparison groups you will consider (if applicable) e.g. Psychological therapies
Comparison	Define the comparison groups of interest (if applicable)
Outcome measures	Define the outcome measures of interest, for example:
Other	You might want also to define other characteristics of the studies

Systematic Literature Review

4. Conduct systematic searches

Searching is a critical part of conducting the systematic review as it provides the evidence base for your research. If you are doing a full systematic review, your search strategy needs to be:

- **Comprehensive and unbiased.** You need to search across a number of databases and grey literature sources, and consider hand-searching bibliographies and key journals.
- **Clear and reproducible.** You need to document the search terms you are using, how you combine them, and where and when you have searched, so that others can evaluate and update your review.

Systematic Literature Review

4. Conduct systematic searches

A systematic search to identify studies must be comprehensive and it must strike a balance between recall and precision. In other words, don't expect to retrieve *only* relevant articles.

<https://guides.lib.usf.edu/systematic>

Systematic Literature Review

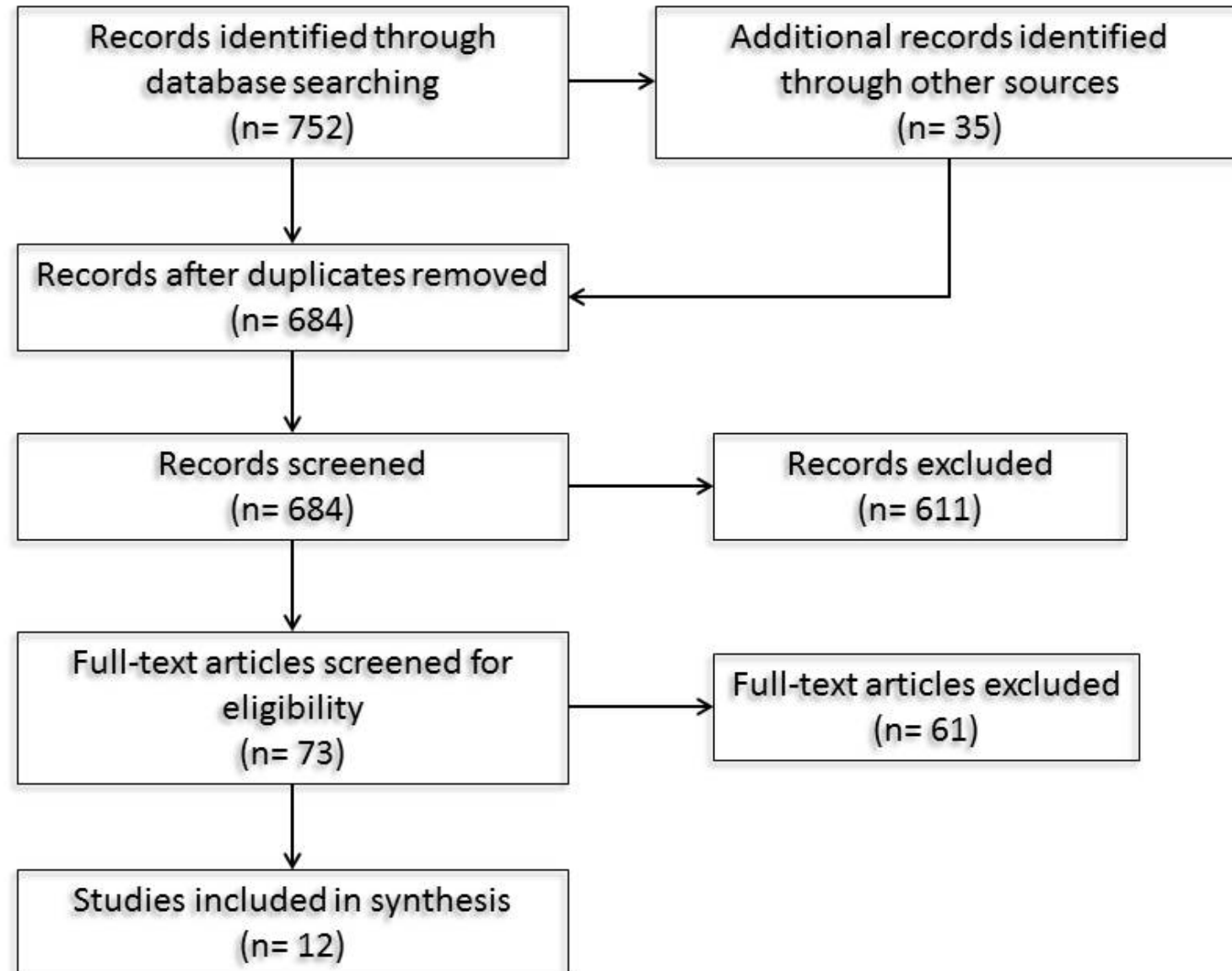
4. Conduct systematic searches

Some key steps in searching for studies include:

- Identifying databases to be searched.
- Identifying search terminology.
- Constructing and running database searches.
- Conducting hand searches of specialized journals.
- Searching reference lists of relevant studies.
- Contacting recognized experts working in the field.
- Searching relevant grey literature sources (e.g., conference proceedings, government reports, dissertations, etc.).

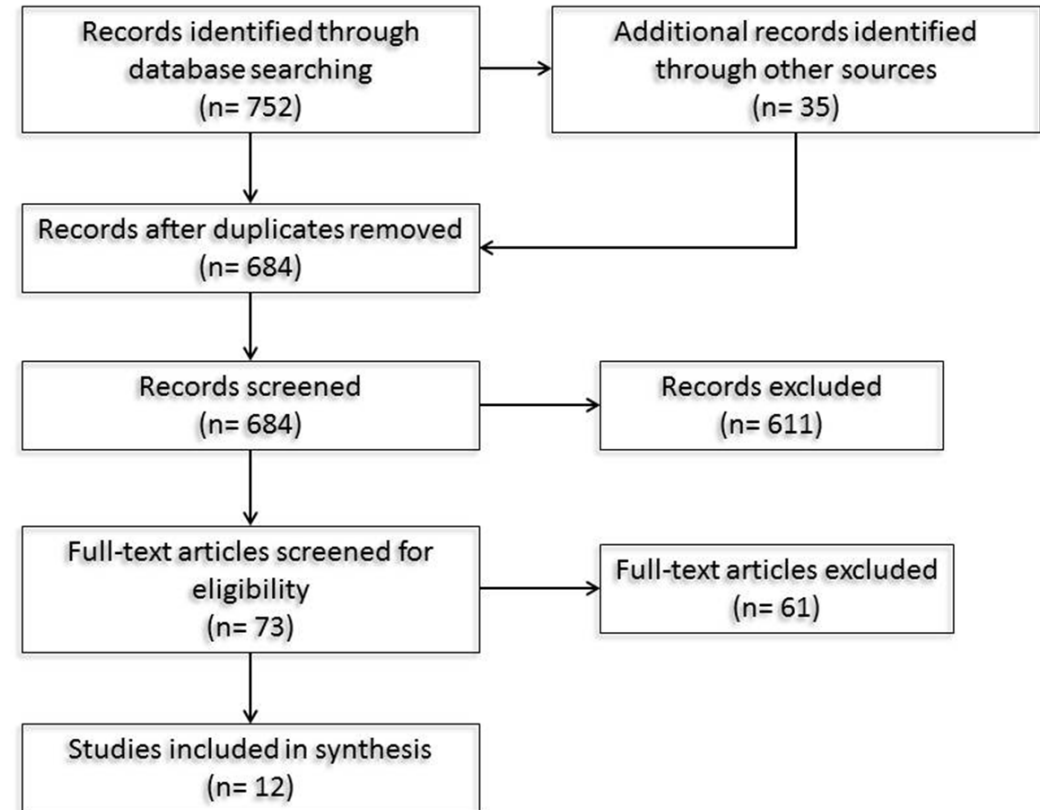
[Create Search Strategies - Systematic Reviews for Social Sciences - LibGuides at University of South Florida Libraries](#)

4. Conduct systematic searches



5. Screening & critical appraisal

Data screening and elimination to align with research objectives and questions.



Systematic Literature Review

6. Data Extraction

Data simply refers to information about or details from a study including its methods and design, participants, setting, interventions, results, etc.

Ideally, two or more researchers should independently extract/categorize data from each study in order to minimize errors and reduce the potential for bias. As a minimum, one researcher should extract data with a second person checking for accuracy.

Systematic Literature Review

7. Synthesize Data and Write the Report

Synthesis involves combining the results of the studies included in the review, summarizing their findings and drawing reliable conclusions based on the quality of the evidence. Synthesis may be done quantitatively using statistical techniques, such as a meta-analysis, or through a narrative approach.

Systematic Literature Review

7. Synthesize Data and Write the Report

When preparing your report or article, refer to the PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. [PRISMA Checklist](#). Some commissioning bodies and journals have adopted PRISMA as the required methods for reporting systematic reviews.

Systematic Literature Review

PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

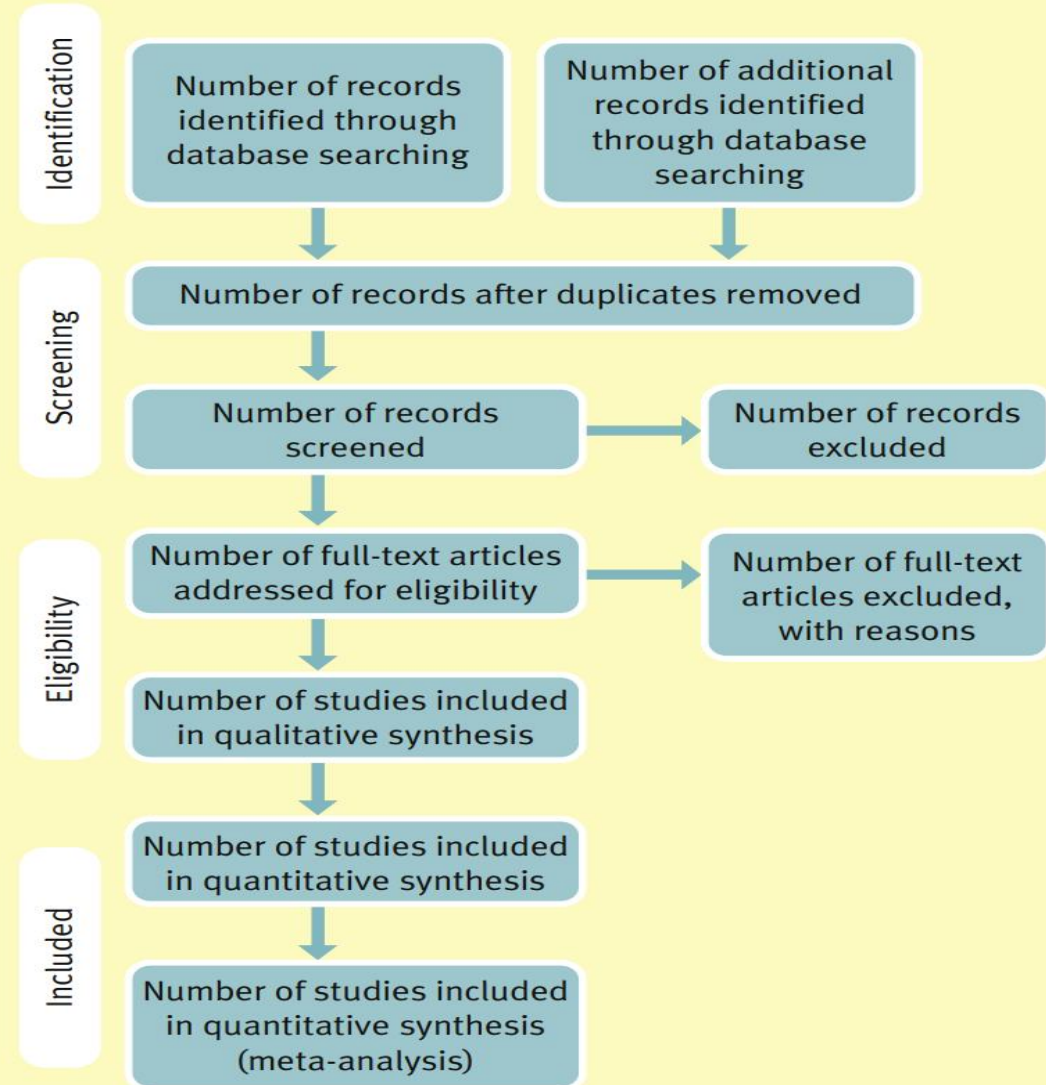
PRISMA Checklist [PRISMA 2020 flow diagram — PRISMA statement](#)

PRISMA Diagram [PRISMA 2020 flow diagram — PRISMA statement](#)

Systematic Review

PRISMA Diagram

The PRISMA statement



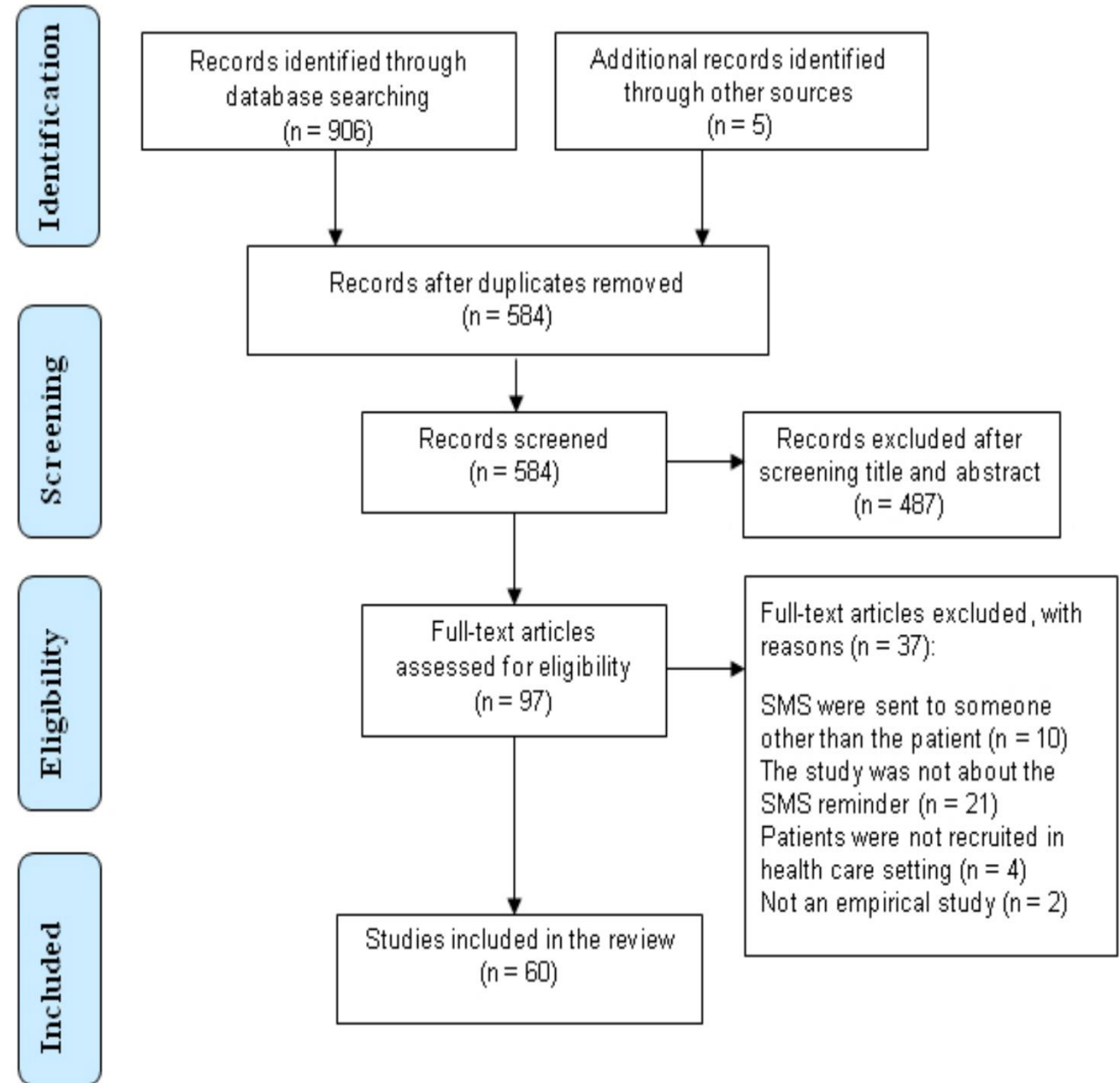
From: Moher D, Liberati A, Tetziaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses*. The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10. 1371/journal.pmed1000097

For more information, visit www.prisma-statement.org

Figure 1. PRISMA flow diagram outlining the review process.

Systematic Review

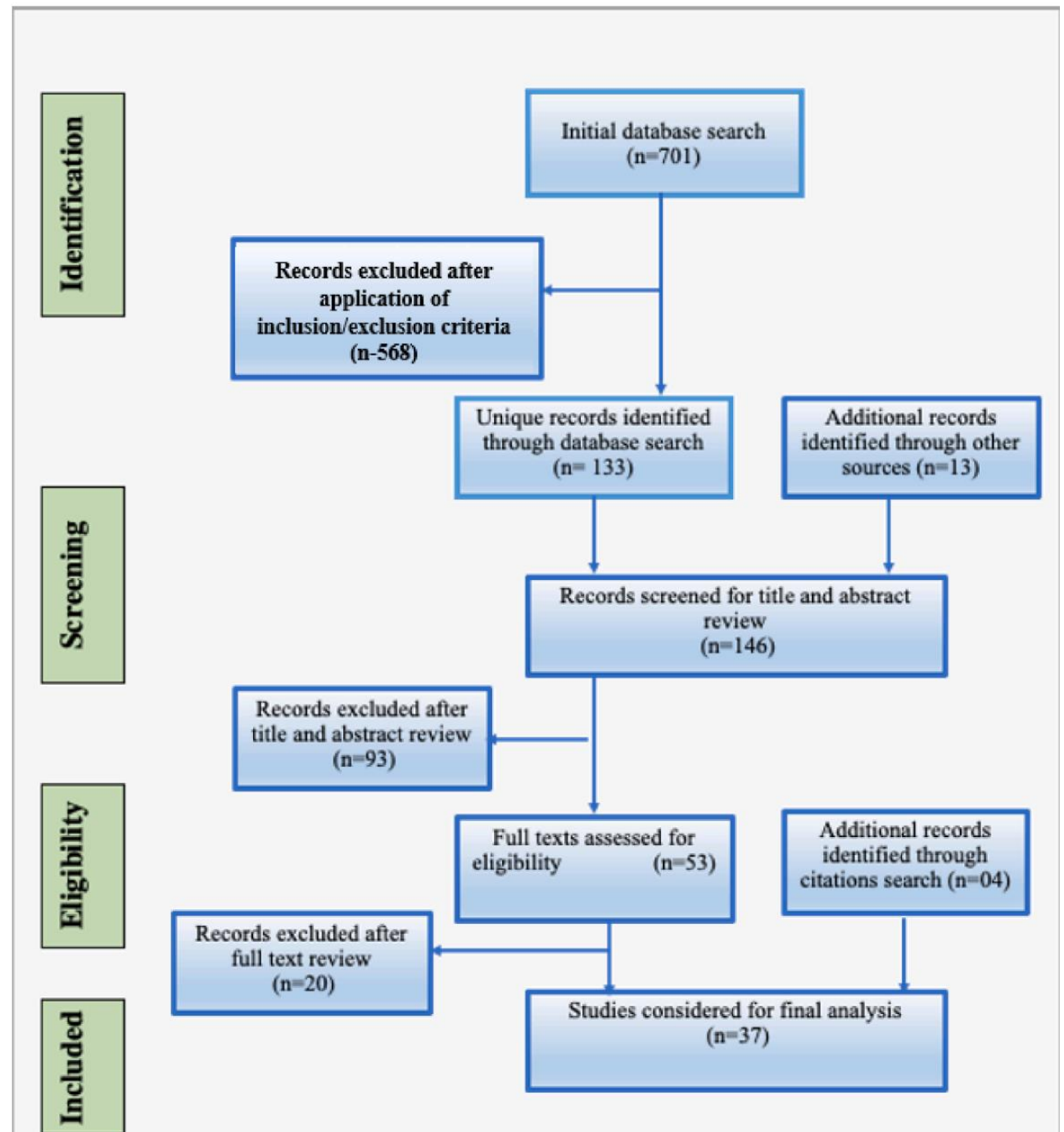
PRISMA Approach – Example



Systematic Review

Example : Systematic Literature view

[Digital platforms for business-to-business markets: A systematic review and future research agenda](#)

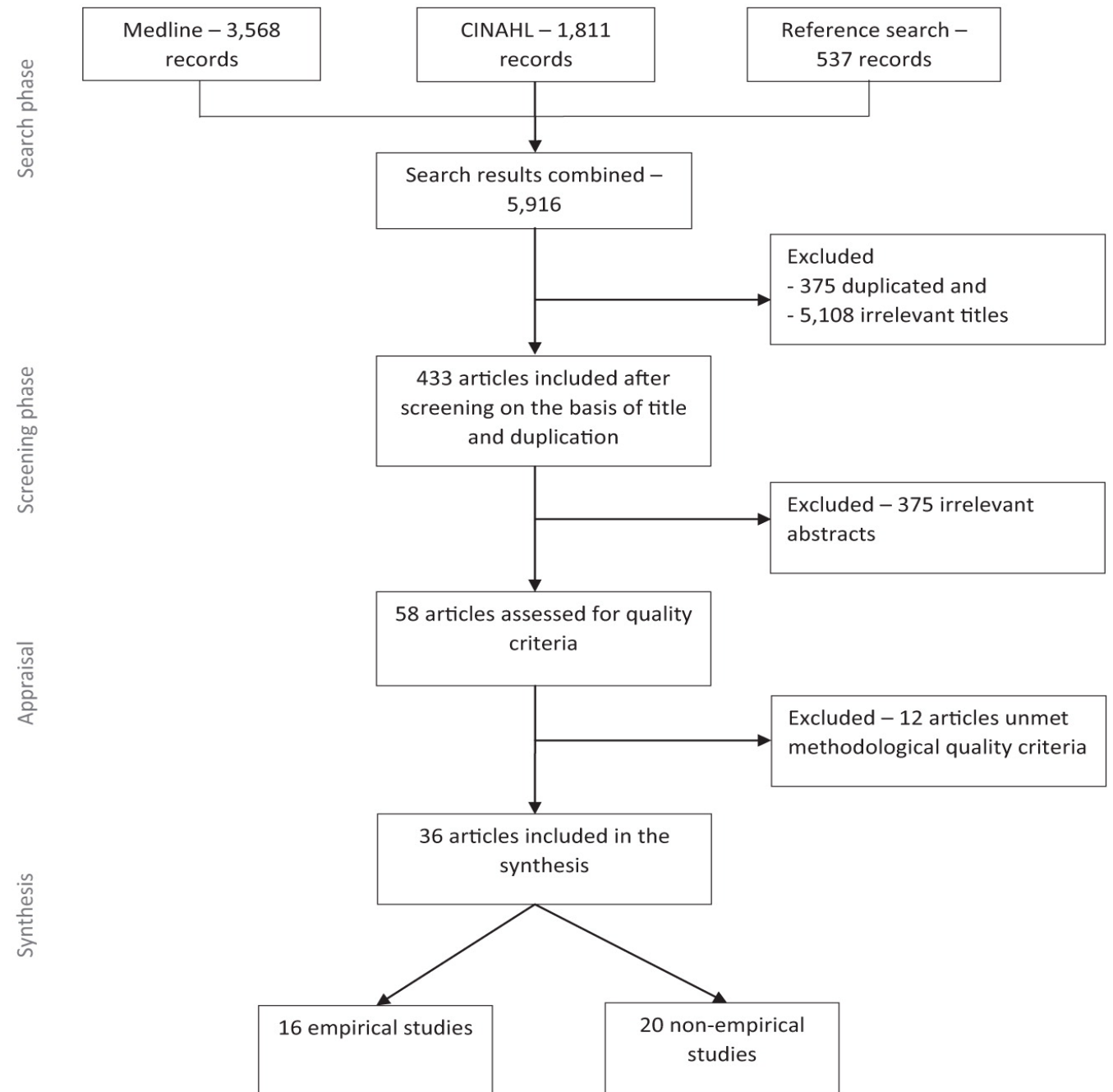


Systematic Literature Review

Search – Screening –
Appraisal – Synthesis
(Example)

Batbaatar, et. al. (2015)

<https://journals.sagepub.com/doi/epub/10.1177/1757913915594196>



Pros and cons of systematic reviews

Pros

- Involving collections from a broad range of sources that might cross over into other disciplinary areas related to management and business
- Highlighting cross-disciplinary themes
- Increasing transparency of the review
- Increasing replicability of the review
- Being 'systematic' and so offering a sense of rigour
- Aiding the process of synthesis through the increased scope possible

Cons

- Limiting creativity and intuition
- Overlooking important 'grey' literature, e.g. reports
- Being restricted by the accessibility of sources
- Requiring keyword search strings to be identifiable
- Failing to include some older seminal texts
- Relying on databases that support 'keyword' search
- Relying on the quality of the abstract (often limited to 100 words)

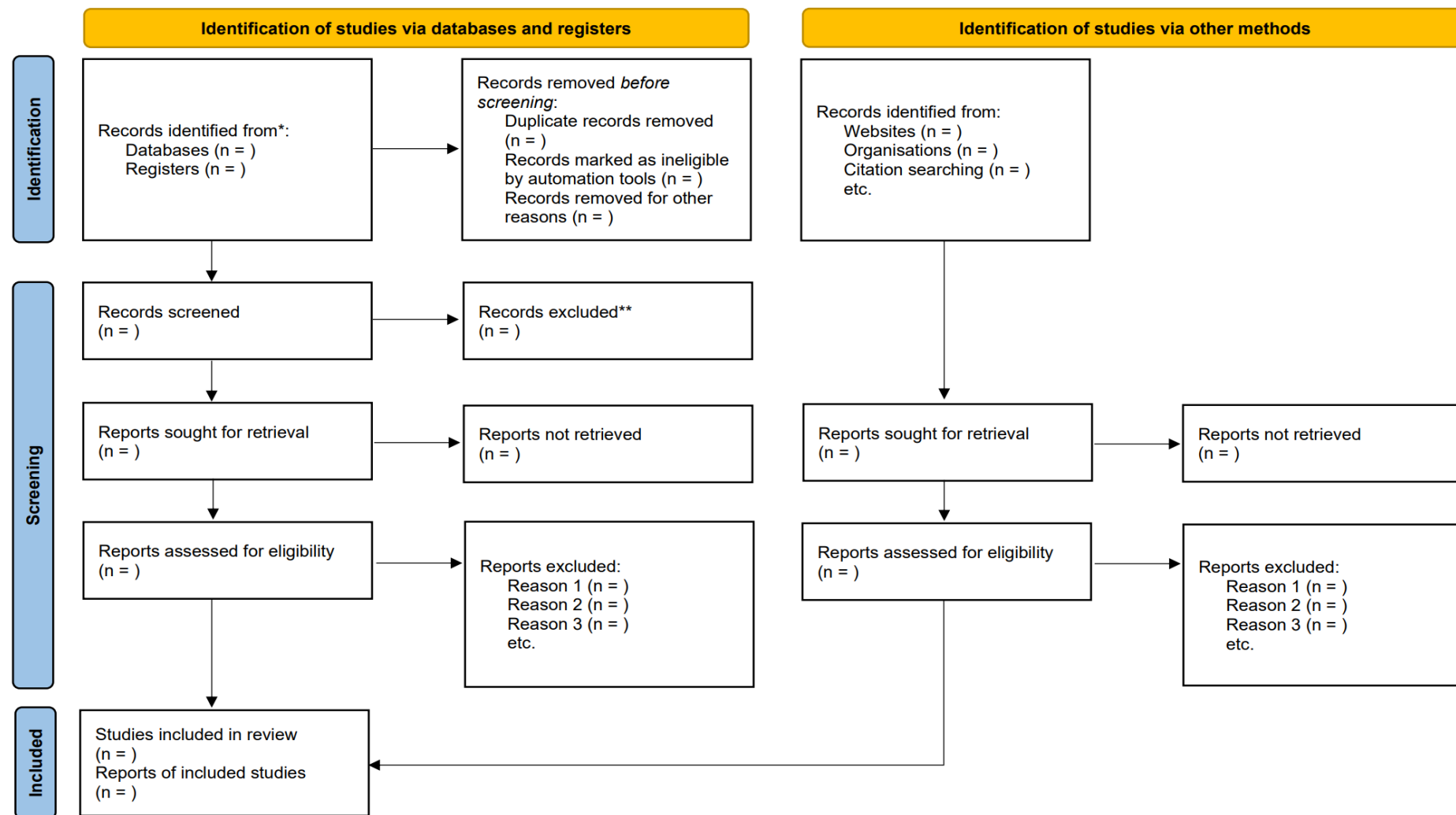
Systematic Literature Review

PRISMA standard - PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

It is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. The aim of the PRISMA Statement is to help authors improve the reporting of systematic reviews and meta-analyses.

[PRISMA 2020 flow diagram — PRISMA statement](#)

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/register).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

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PRISMA 2020 flow diagram — PRISMA statement

Approaches/methods to Literature review

Systematic Review	Literature (Narrative) Review
➤ Systematically and transparently collect and categorize existing evidence on a broad question of scientific, policy or management importance. ➤ Compares, evaluates, and synthesizes evidence in a search for the effect of an intervention. ➤ Time-intensive and often take months to a year or more to complete. ➤ The most commonly referred to type of evidence synthesis. Sometimes confused as a blanket term for other types of reviews.	➤ A broad term referring to reviews with a wide scope and non-standardized methodology. ➤ Search strategies, comprehensiveness, and time range covered will vary and do not follow an established protocol.

Approaches/methods to Literature review

Scoping Review or Evidence Map

- Systematically and transparently collect and categorize existing evidence on a broad question of scientific, policy or management importance.
- Seeks to identify research gaps and opportunities for evidence synthesis rather than searching for the effect of an intervention.
- May critically evaluate existing evidence, but does not attempt to synthesize the results in the way a systematic review would

Meta-Analysis

- Statistical technique for combining the findings from disparate quantitative studies.
- Uses statistical methods to objectively evaluate, synthesize, and summarize results.
- May be conducted independently or as part of a systematic review.

Approaches/methods to Literature review

Rapid Review

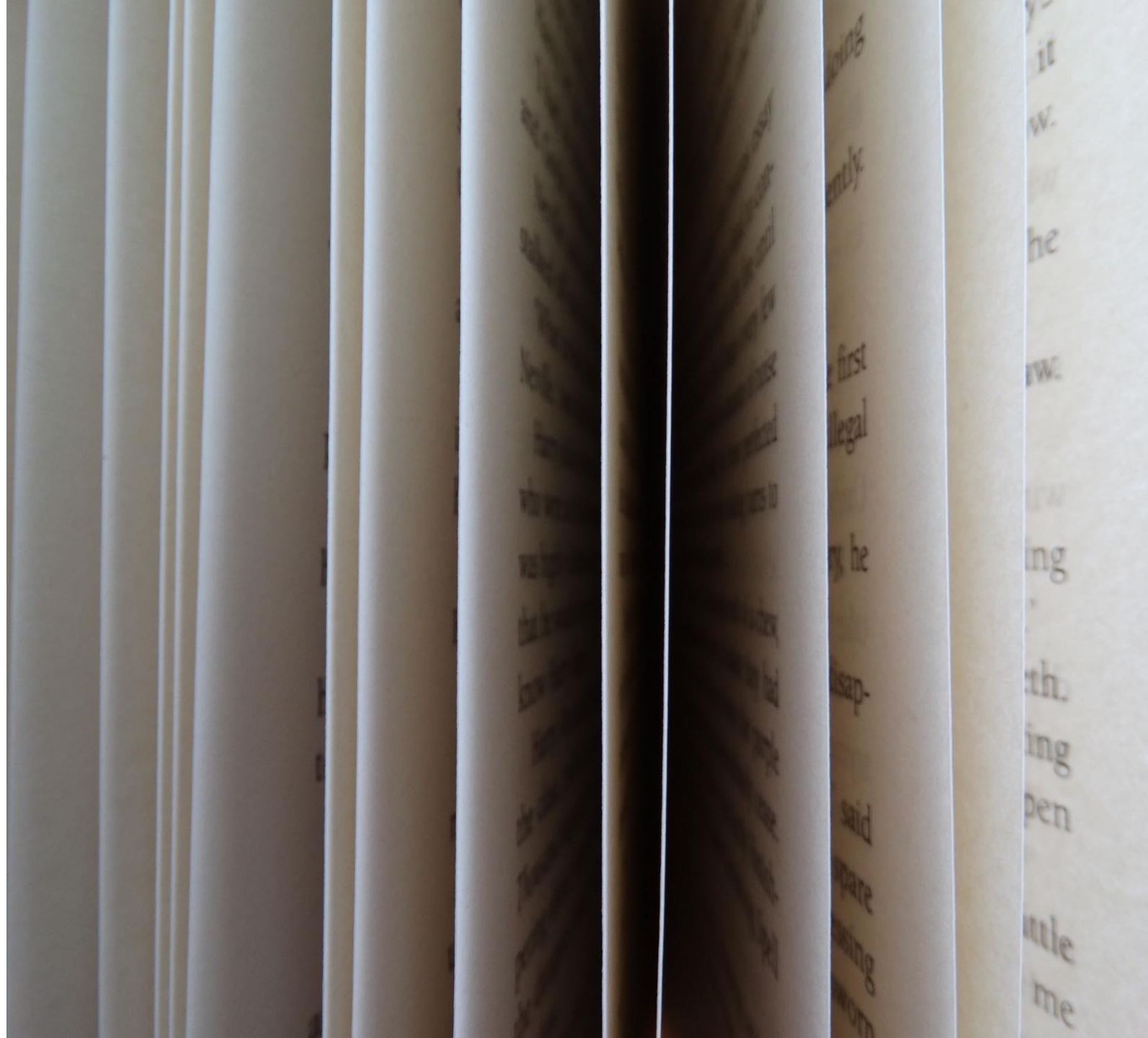
- Applies Systematic Review
- methodology within a time-constrained setting.
- Employs methodological "shortcuts" (limiting search terms for example) at the risk of introducing bias.
- Useful for addressing issues needing quick decisions, such as developing policy recommendations.

Table 1. Comparison between narrative vs systematic review

	Systematic reviews	Narrative reviews
Hypothesis	Clearly-defined or well-formulated clinical or basic research topic or question.	Broad overview of a topic-related research area.
Search method	Predefined protocol-based	Not predefined protocol-based: involving subjective selection bias
Inclusion of studies for review	Predefined selection criteria as per the authors' hypothesis	Authors' intuition and research experience
Search media	Diverse search engines	Mainly PubMed or Medline data base
Data extraction	Protocol-based: Continuous or categorical statistical values	Not protocol-based: Simple description of study findings
Data synthesis	Based on data extraction and synthesis guidelines such as PRISMA	Overall description of each study, mainly focusing in studies that authors selected
Data quality	Grading by guidelines available in multiple resources	Partially objective grading by anecdotal resources
Interpretation	Based on data included	Easily biased by authors' subjective intention

Pae, C. U. (2015). Why systematic review rather than narrative review?. *Psychiatry investigation*, 12(3), 417.

Activity

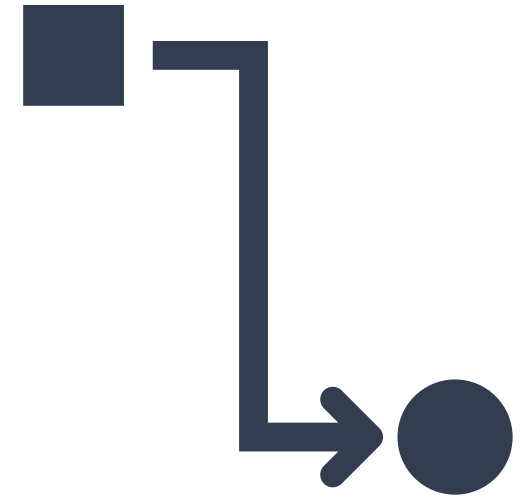


Activity 3

1. Please select a theme
2. Read 5 journals for each student
3. Follow the PRISMA guideline (2020) to devise a PRISMA Diagram
4. Summarise your findings on the excel list according to your chosen approach:
 - i. Theme 1 - Food and culture
 - ii. Theme 2 - Hybrid work and management
 - iii. Theme 3 - Consumer behaviour and service
 - iv. Theme 4 - Technology and digital well-being
 - v. Others (Organisation Management; Leadership)

Activity 2 : Systematic reviews

- Download the article*.
- Examine how the review has been conducted and write down a detailed list of all the stages of the review process. Pay attention to the various checks they used to ensure that they had done a thorough job.
- Then download the flow diagram and the checklist provided by [PRISMA](#). Use these resources to evaluate the review process.
- [PRISMA 2020 flow diagram — PRISMA statement](#)



* Kolk, A., Rivera-Santos, M. and Rufín, C. (2013) 'Reviewing a decade of research on the "Base/Bottom of the Pyramid" (BOP) concept', *Business & Society*, 53 (3): 338–77.

Activity 2 : Systematic literature review

- Please team up (2-3 per group).
- Please think about a theme/topic (food, smart transportation, health....)
- Objectives
- Then discuss about the steps of systematic review e.g. the keywords used, the database selected, data inclusion/exclusion rules and so on.
- Follow the PRISMA rule
- Draw the diagram.
- Output : The PRISMA Diagram

Remarks : Please read not less than 3 journals per student.

Activity 3

According to your selected theme, try to read 10 articles (n=10) and conduct systematic literature review following PRISMA guideline.

Output : A PRISMA diagram

Activity 4

[Activity 1 - 3]

- What is the difference between Narrative Review and Systematic Literature Review ?



Questions?



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

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