From Topic to Literature Review

Inês Faria

05/03/2024, 18:00-19:30

FRANCESINHAS 2, Room 2.03

Research Methods and Masters Project

From topic to literature review

Objectives:

- Using ‘Causal Models’ to define research question – tree of problems exercise.
- Conducting a Systematic Bibliographic Search.
- Introducing students to the 'EBSCO Discovery Service’.
- Creating an ‘Article Matrix’ as a tool for systematizing information.

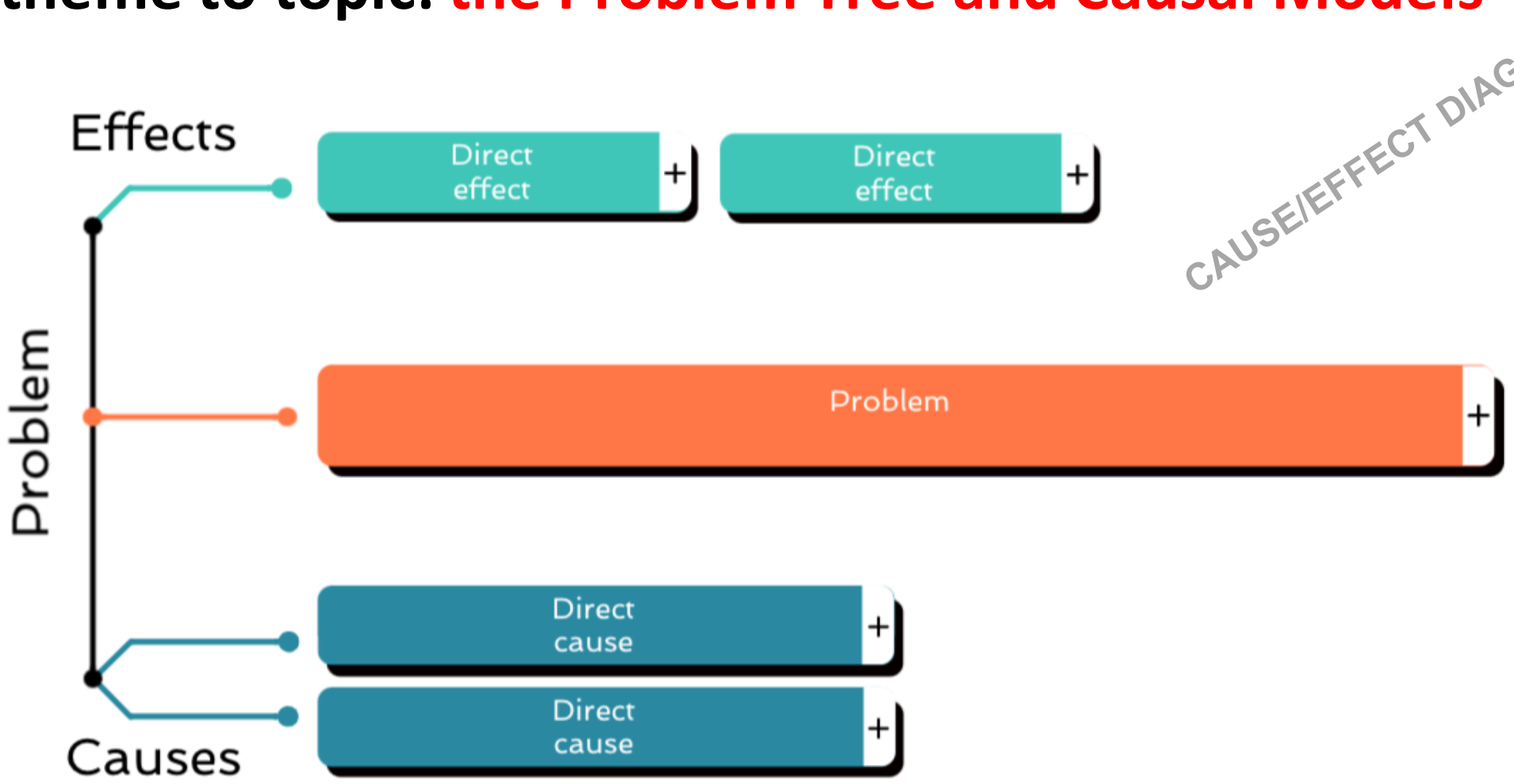
What are Causal Models?

- Representations of causal relationships between variables and factors.
- Represent how change in one variable causes change in another.
- Shed light on mechanisms of situations/configurations.
- More broadly, they can help us understand causes and interrelationships of problems in a community or system and,
- Give us a visual representation of causal pathways linking factors contributing to a problem.
- May facilitate individual and collective analysis and decision making.

Research Methods and Masters Project

From topic to literature review

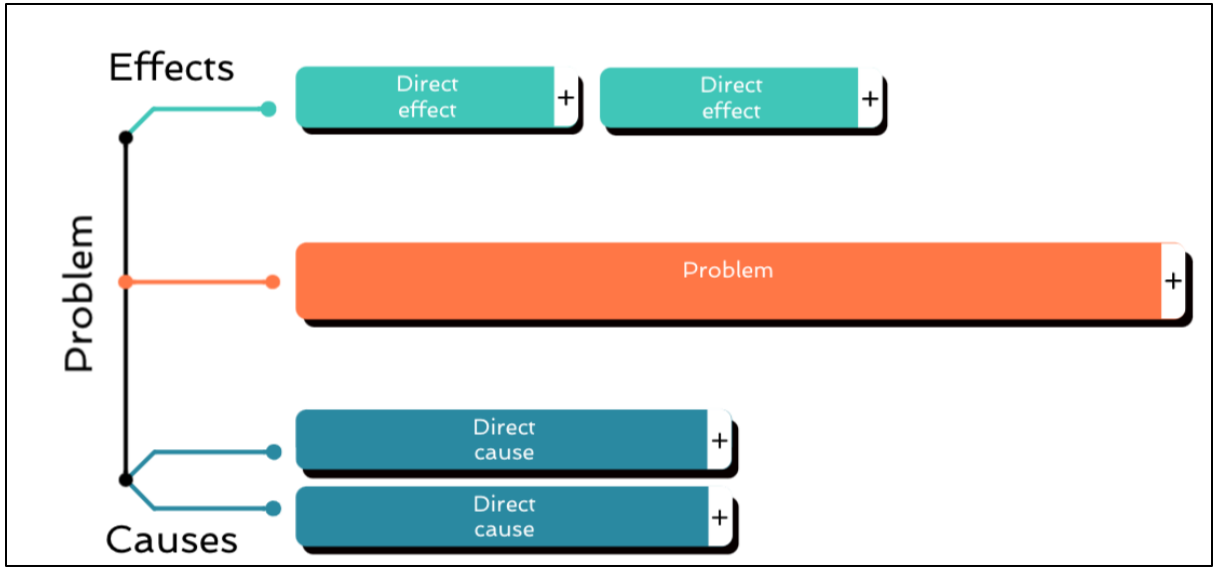
From theme to topic: the Problem Tree and Causal Models



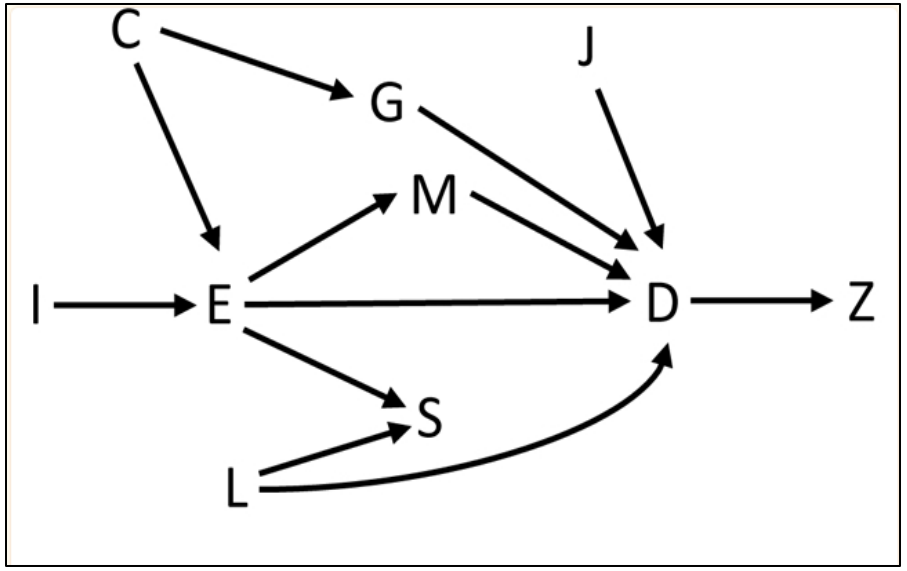
Research Methods and Masters Project

From topic to literature review

From theme to topic: Causal Diagrams and Models



Cause/Effect



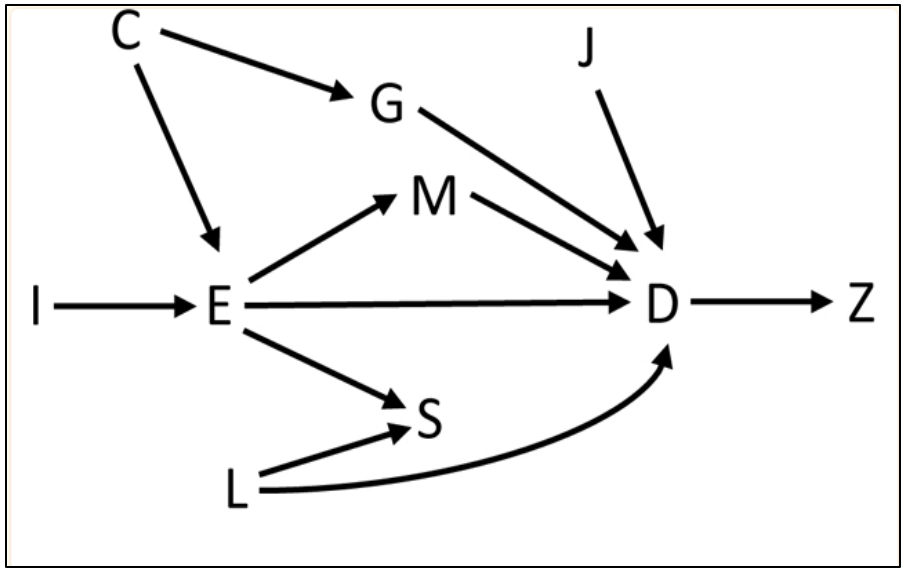
DAGs*

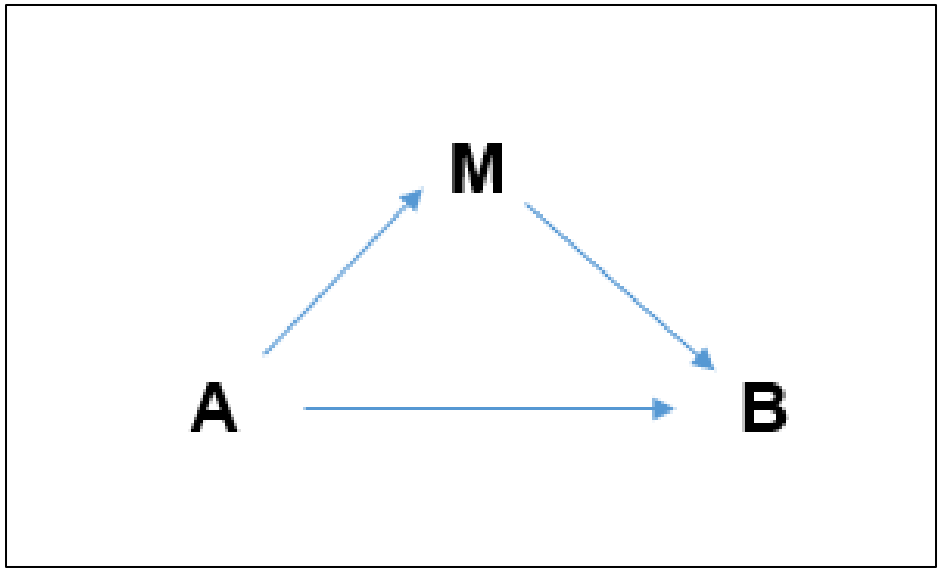
‘ Taylor 2014; *here and Digitale et al. 2023

Research Methods and Masters Project

From topic to literature review

From theme to topic: Causal Diagrams and Models





DAGs*

*Textor 2023

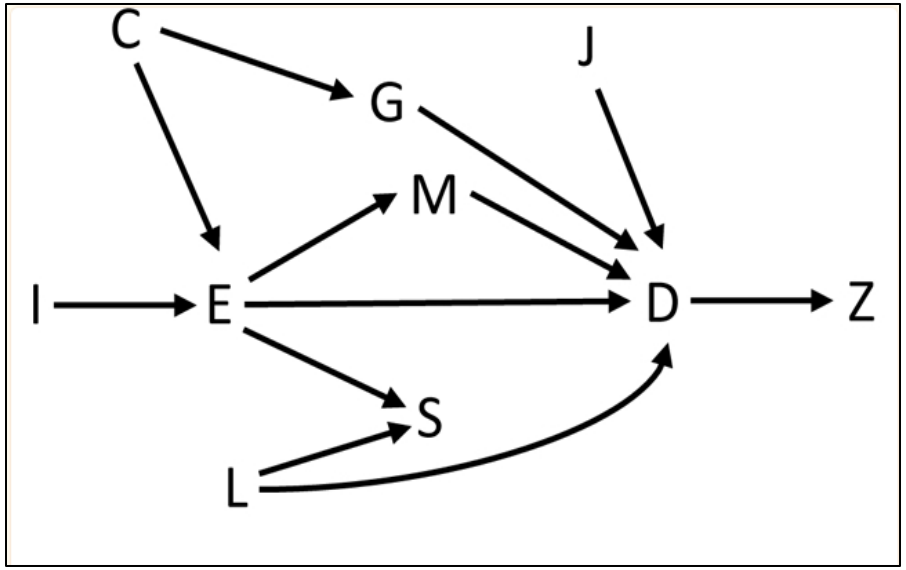
Research Methods and Masters Project

From topic to literature review

ACTIVITY

Causal Diagram and Models

- **Same groups**
- **Starting from your tree of problems/objectives exercise draw a (simple) causal DAG A (Cause)-B (problem) and one M (new), for one of the causes you identified.**
- **15 min + 10 min discussion**



Metodologia de Investigação (S73)

Revisão de Literatura: Uma abordagem sistemática.

LITERATURE REVIEW

Research Methods and Masters Project

From topic to literature review

What we want in a Literature Review (Bryman, 2012)

- Relevant concepts and theories on the topic.
- Research strategies and methods in commonly used to research similar topics.
- Assess facts with evidence (relative) in studies on the topic.
- Assess if there are methodological inconsistencies in produced evidence.
- Assess if there are research questions without an answer.

Research Methods and Masters Project

From topic to literature review

- **A series of steps**

1. Exploratory Bibliographic Search
2. Annotated Bibliography
3. Systematic Bibliographic Search: Keywords
5. Systematic Bibliographic Search: Sources
6. Literature Review: Atricle Matrix
7. Literature Review: Report Results

Research Methods and Masters Project

From topic to literature review

Systematic Bibliographic Search

Systematic Bibliographic Search

Where should I start?

Research Methods and Masters Project

From topic to literature review

Step 1: Keywords to guide your systematic Search

i. **Identifying key concepts for the Masters Project**

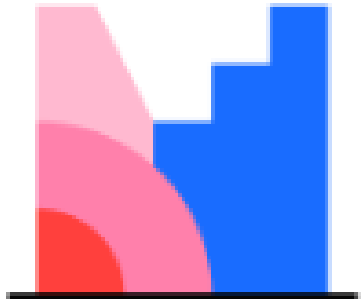
ii. **Look for synonyms, similar concepts and abbreviations in annotated bibliography**

	PART OF THE ANNOTATION	EXAMPLE
1	**Reference** Citation information in same format as required in Reference List	Griffiths, T. (1996). Hunters and collectors: The antiquarian imagination in Australia. Cambridge University Press.
2	**Statement** Short statement of author's viewpoint.	• *The authors describe...* • *The author's purpose is to challenge...*
3	**Describe** Short summary of theory, research findings or argument.	• *The main ideas expressed are...* • *The author's research focuses on...*
4	**Comment** Comment on usefulness/limitations of article/text for your research.	• *The writing style considers a range of audiences...* • *There is a lack of supporting evidence...* • *The main limitation of the website...*
5	**Evaluate** Evaluate the article/text, taking into account how it will fit into your research on a topic.	• *This article is useful for the research topic...* • *It is relevant to the thesis because...*

Research Methods and Masters Project

From topic to literature review

ACTIVITY



WHO: Individual

WHAT: Write down keywords that would fit your topic idea(s) for the MP (does not have to be a final idea)

Min: 6 / Max: 10

WHERE: Mentimeter

HOW LONG: 5 Minutes

5:00

Research Methods and Masters Project

From topic to literature review

Step 2: Sources

Research Methods and Masters Project

From topic to literature review

NON-SCIENTIFIC LITERATURE

i. Grey Literature;
ii. Newspapers and Magazines;
iii. Web;

SCIENTIFIC LITERATURE

- Primary Sources
  - Articles/Books with original empirical data/findings
- Secondary Sources
  - Articles/Books based on evidence from other sources:
    - Manuals;
    - Literature Reviews
    - Systematic Literature Reviews
    - Meta analysis

Research Methods and Masters Project

From topic to literature review

Step 2: Sources

- A systematic bibliographic search should be based exclusively on scientific literature and primary sources.
- However – there is non peer-reviewed scientific evidence that should not be used:
  - PhD theses;
  - Master dissertations;
  - Conference papers;
  - Unpublished papers even if posted in public repositories (SSRN, arXiv, etc.).

Research Methods and Masters Project

From topic to literature review

Step 3: Define further search parameters

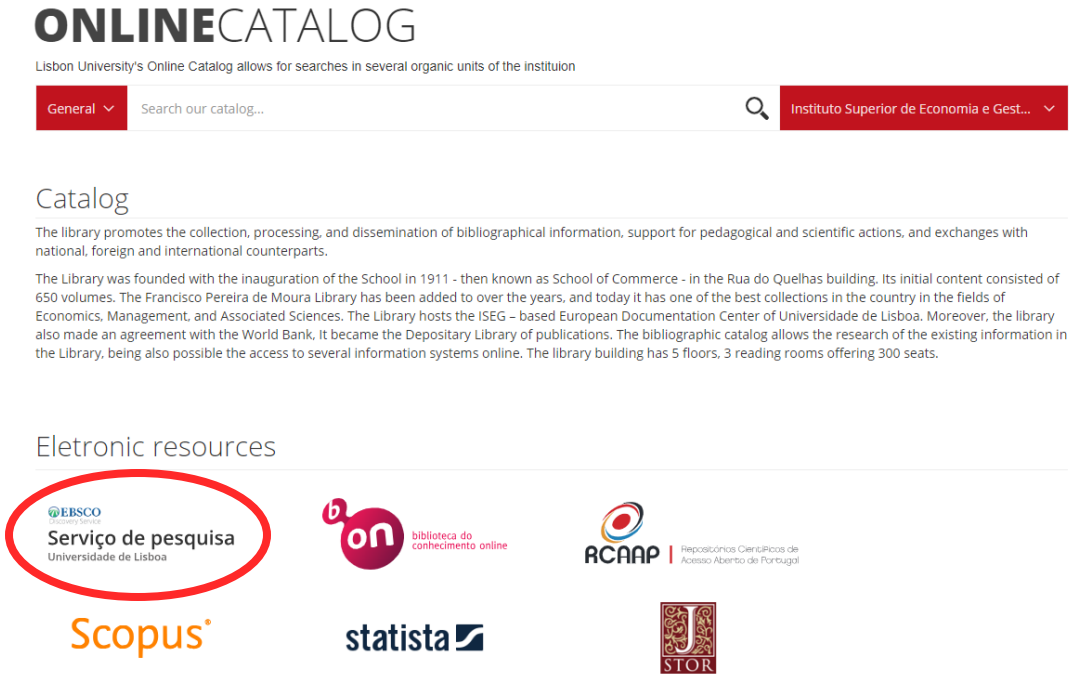
- Search fields: ex. ‘Title’, ‘Abstract’, ‘Title and Abstract’, etc.;
- Date: ex., ‘2000 – present’;
- Language: ex., ‘English’ (according to preference/need);
- Area: ex., ‘Management’; ‘Sustainability’

Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service at ISEG.

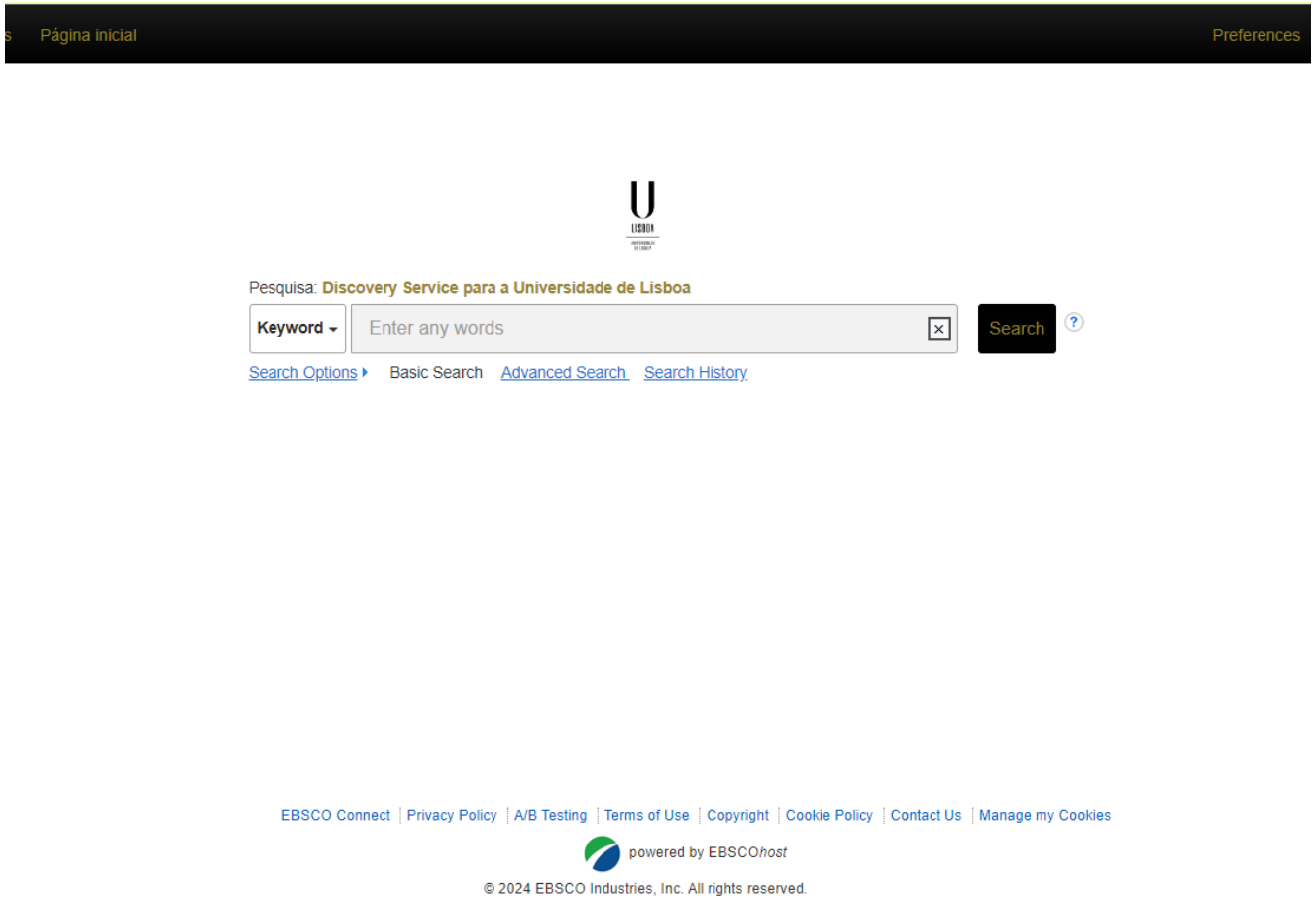
[ISEG ULisboa library catalogue]



Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service.

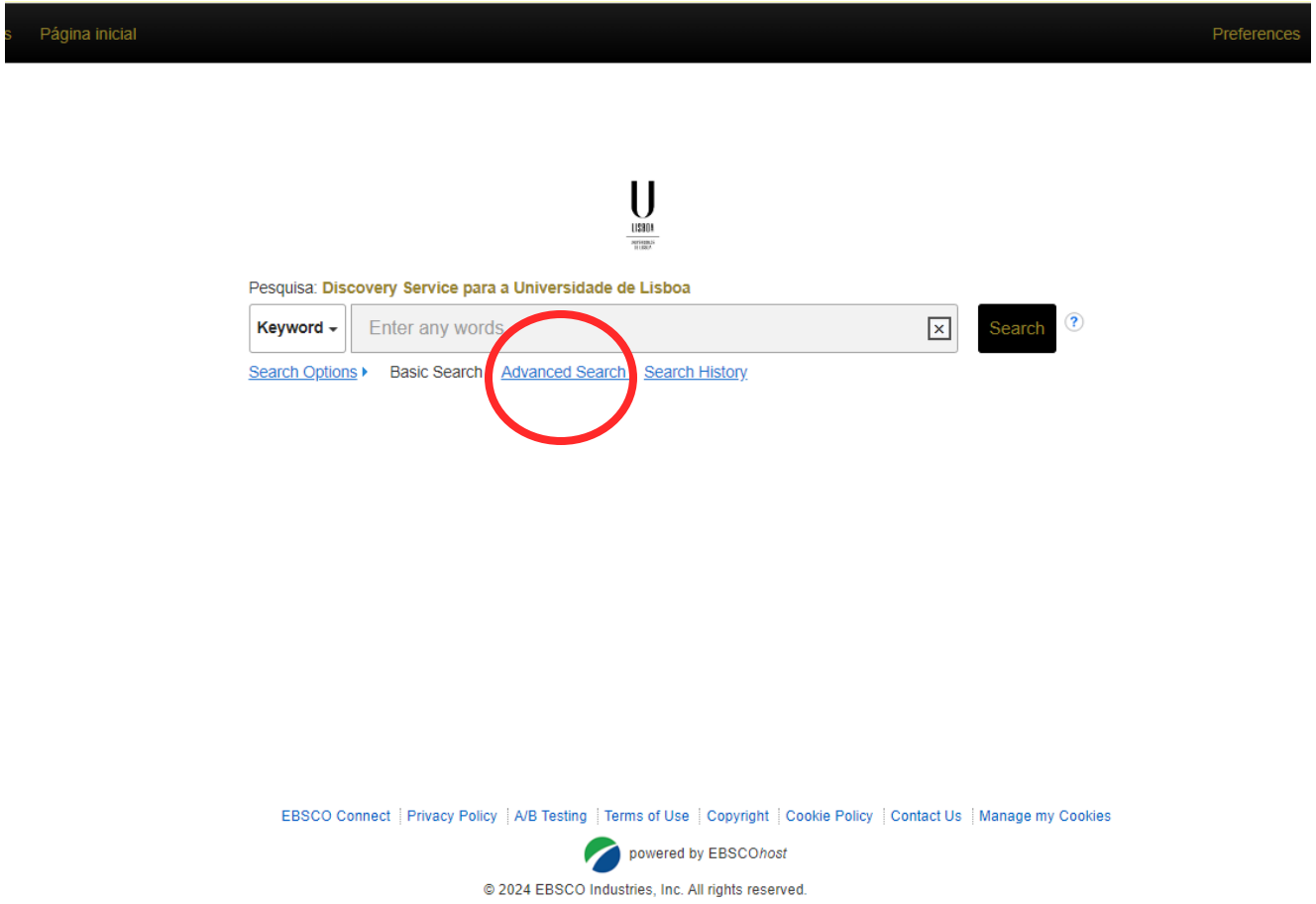


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- Choose advanced search.

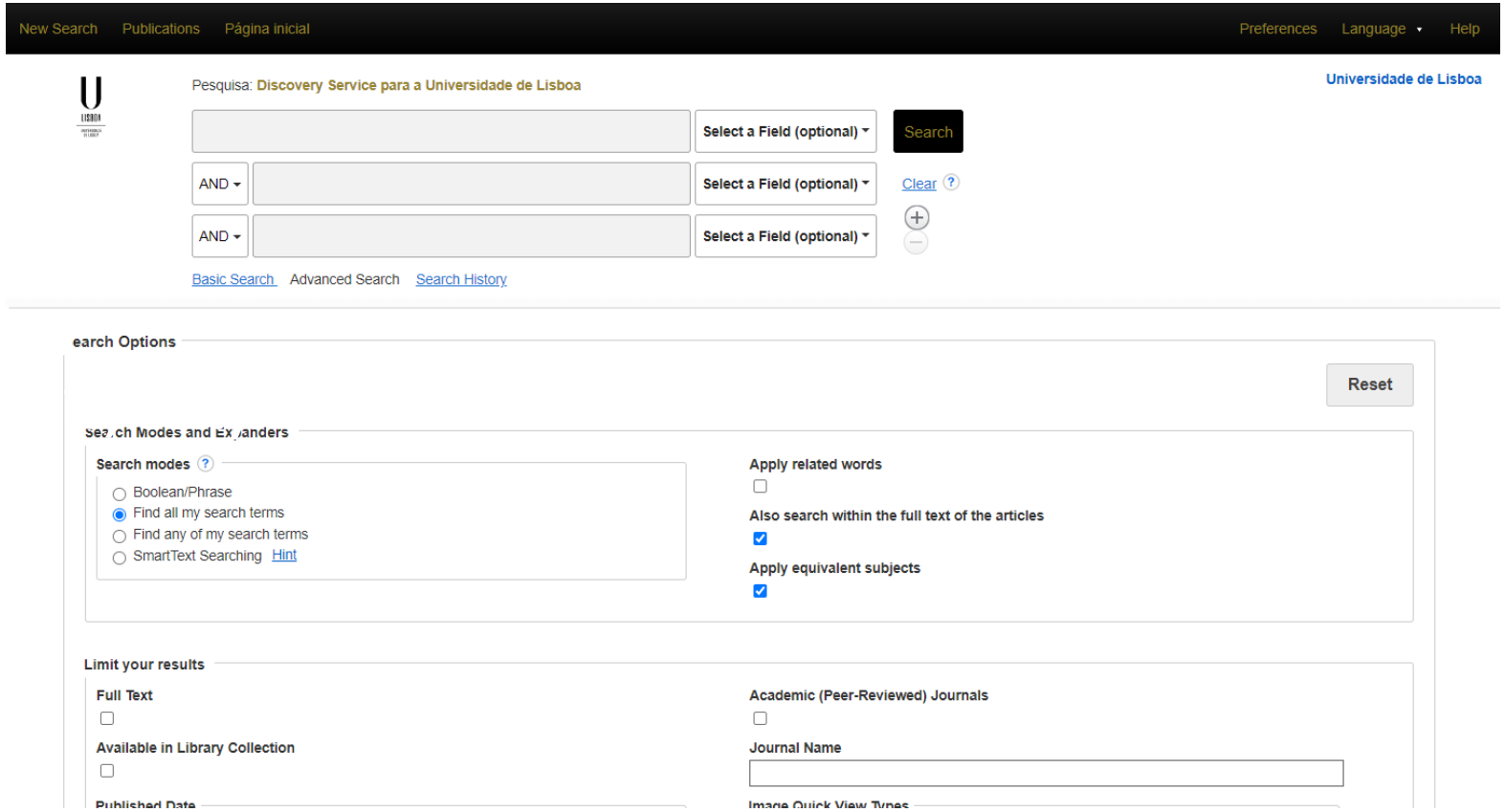


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- **Advanced search menu**

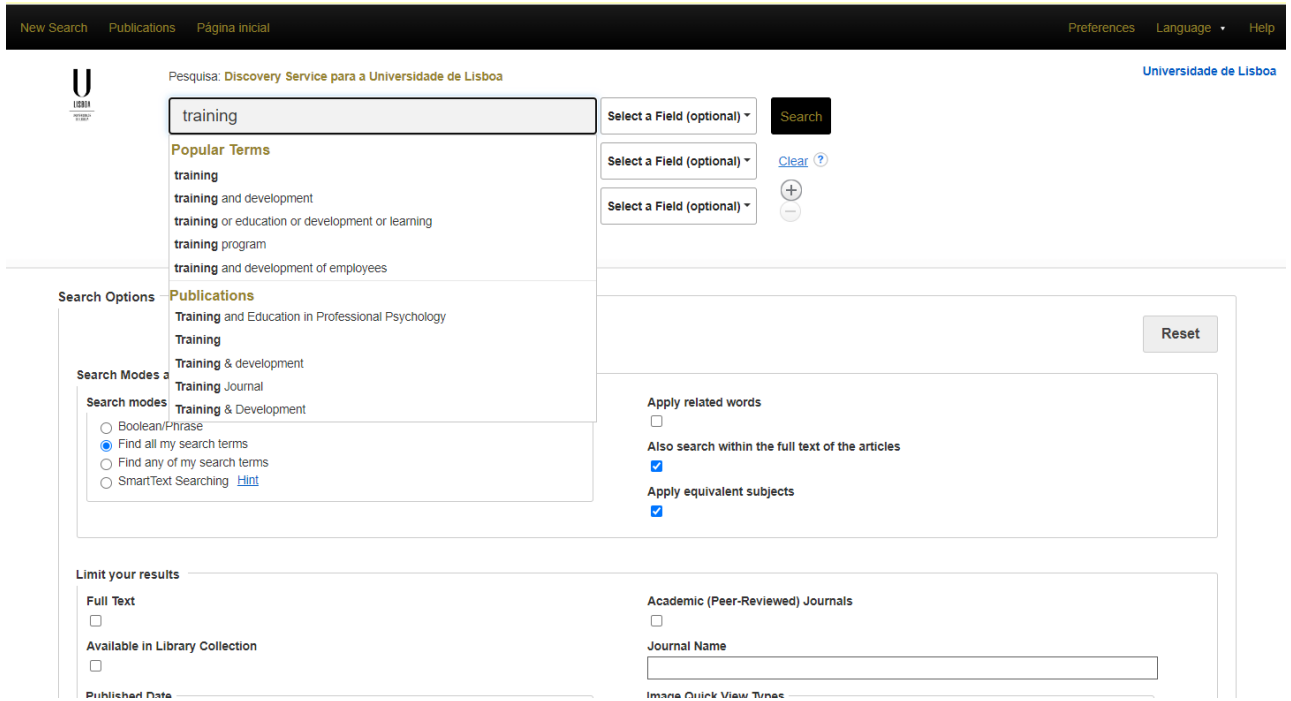


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- **First search term: TRAINING.**

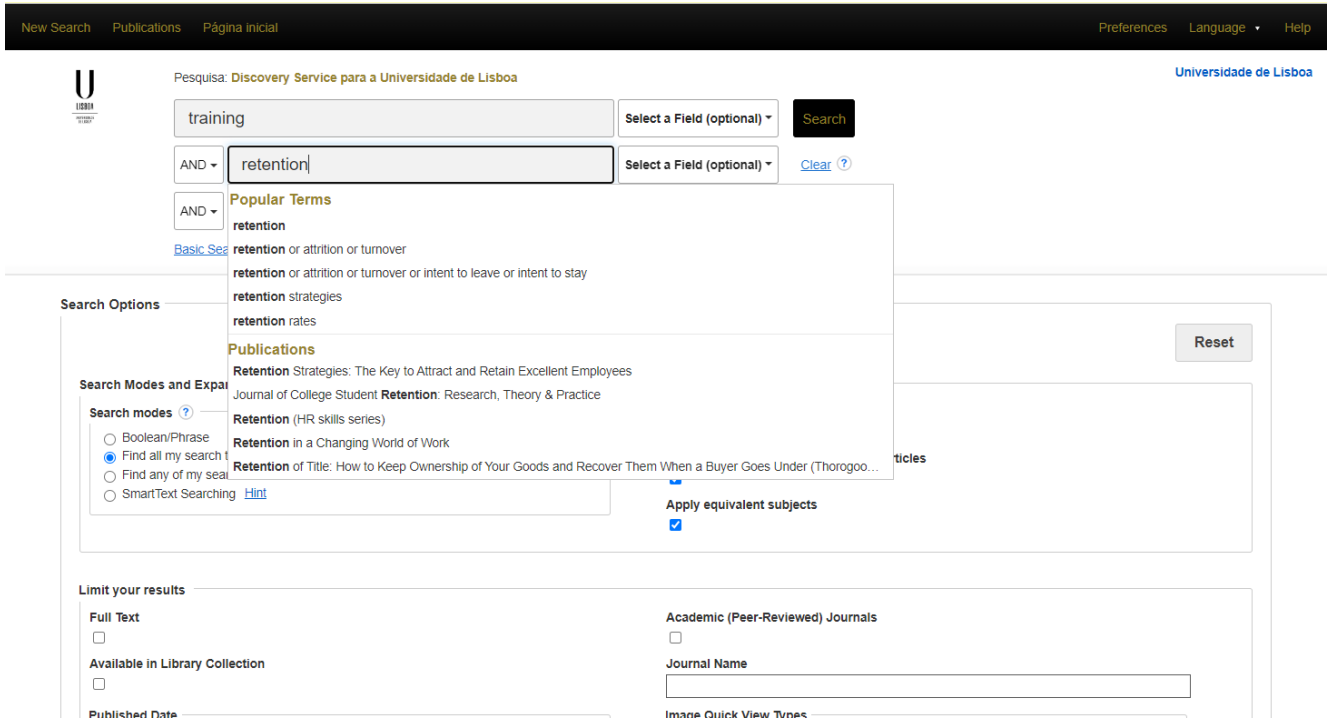


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- First search term: TRAINING.
- Second search term: RETENTION.

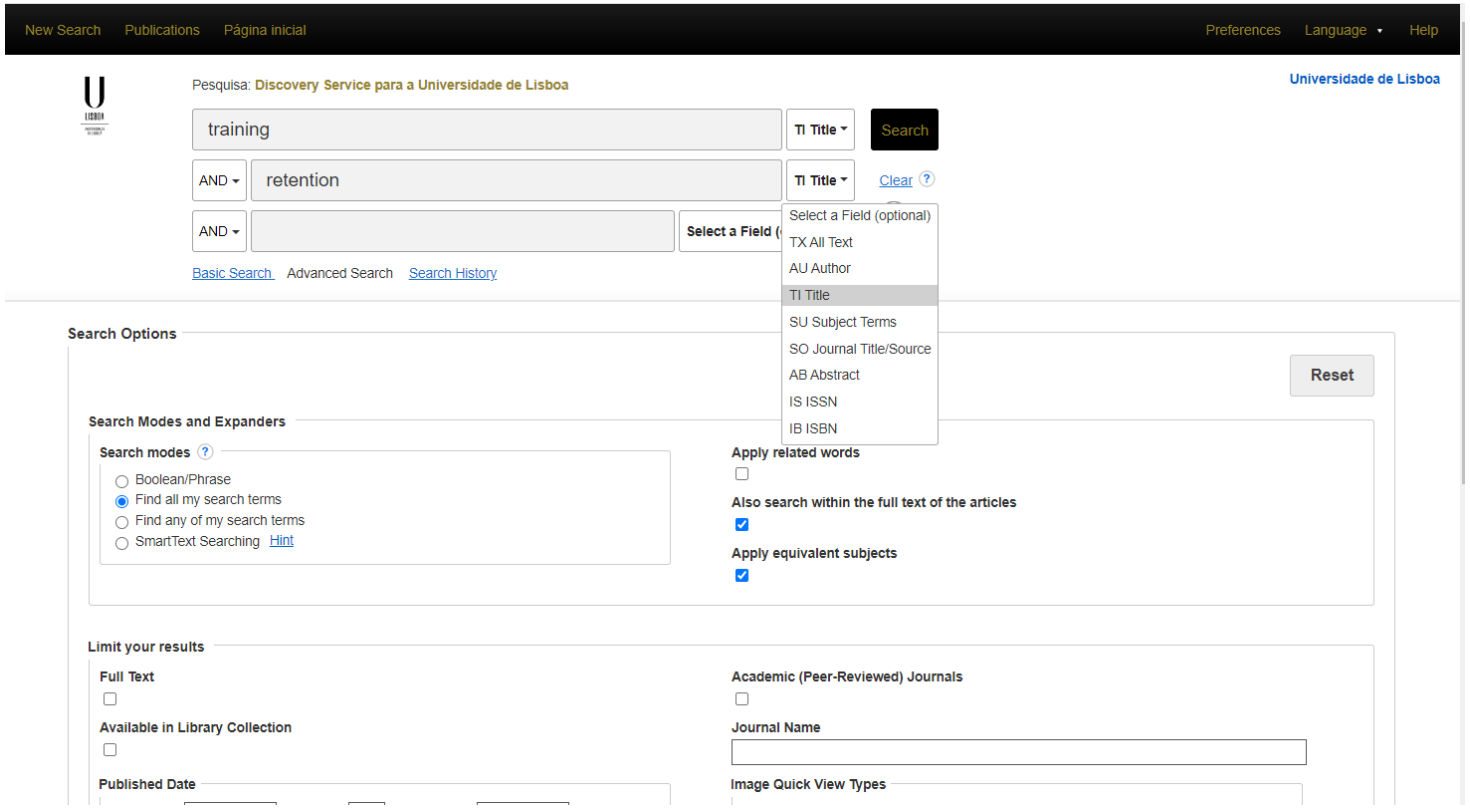


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- **Choose only scientific articles and books.**

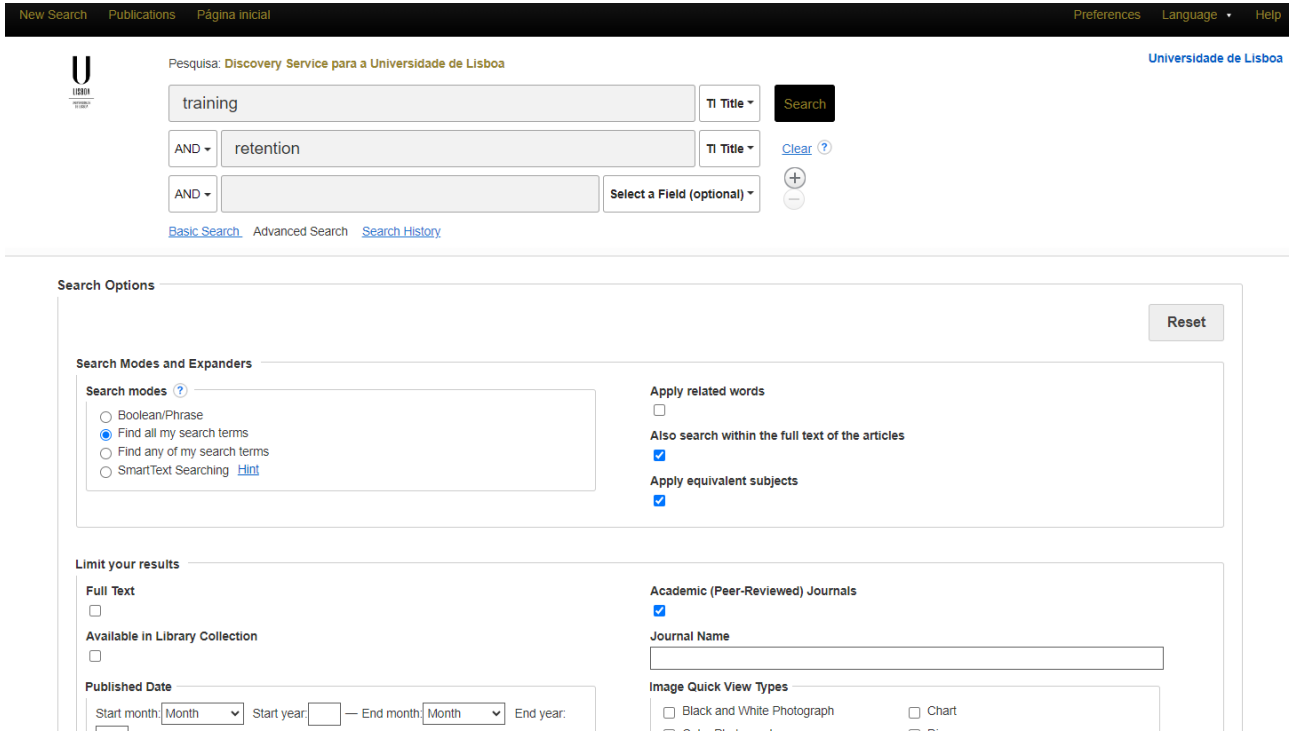


Research Methods and Masters Project

From topic to literature review

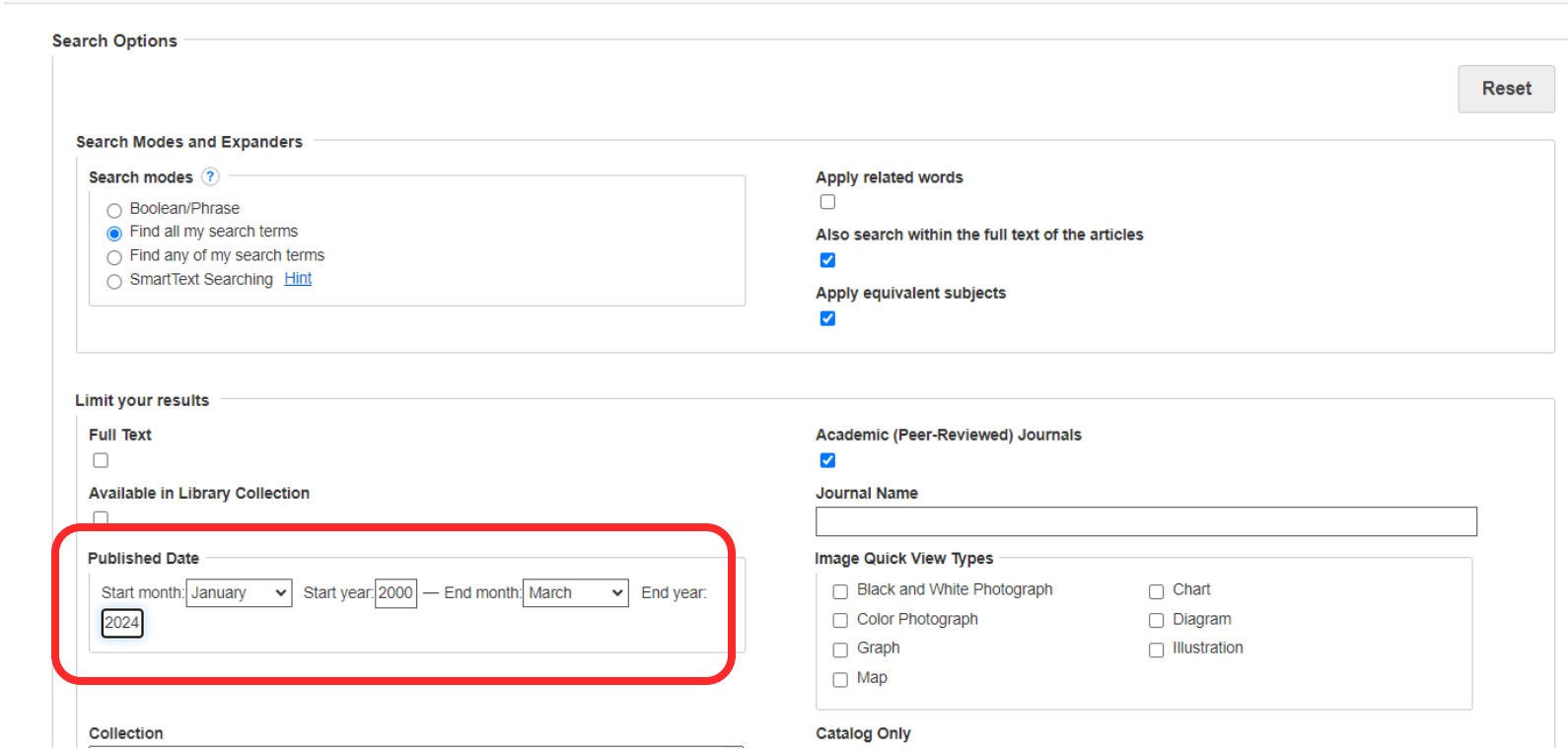
Step 4: EBSCO discovery service

- Choose only scientific articles and books;
- Accessible online;
- Peer reviewed.



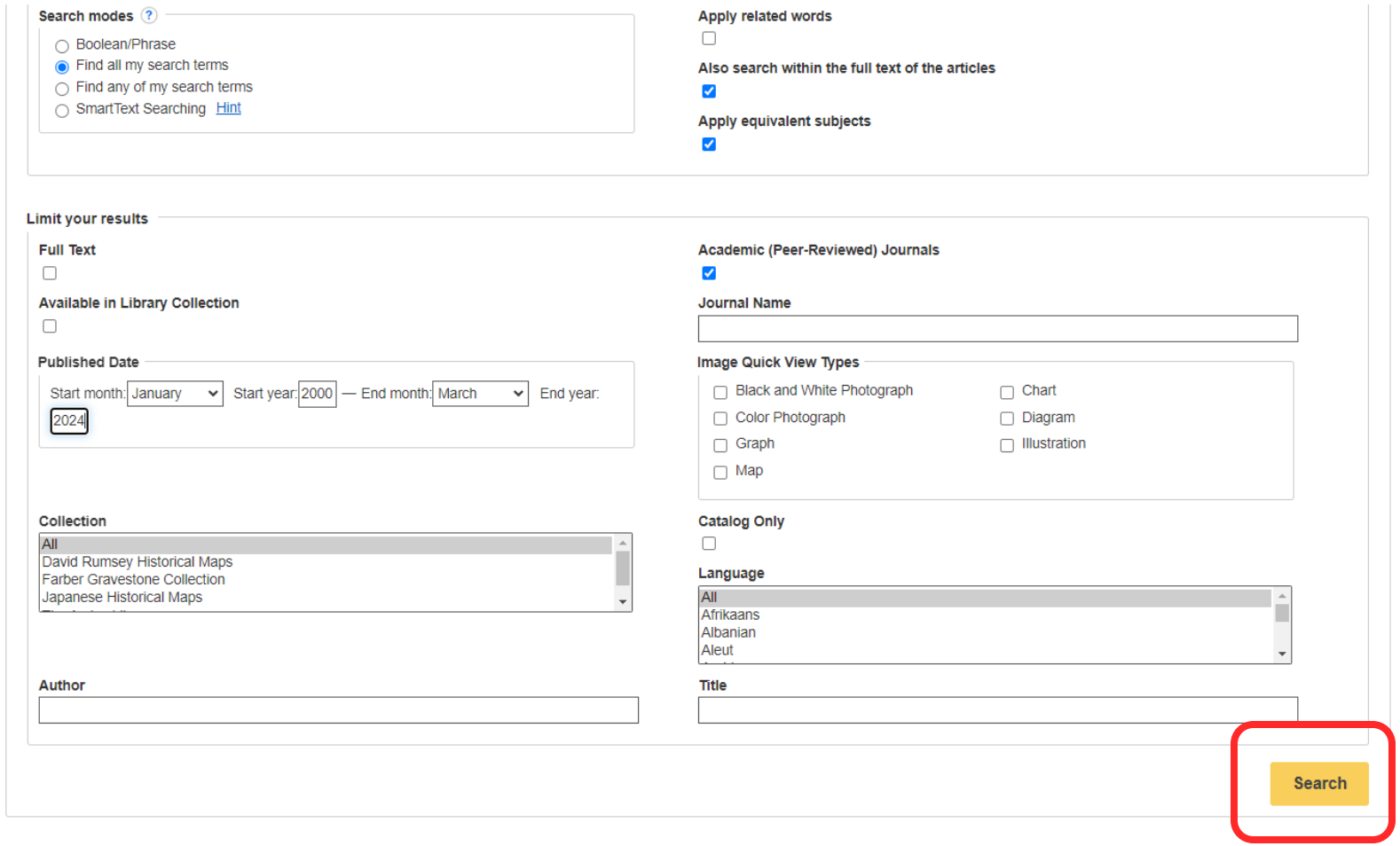
Step 4: EBSCO discovery service

- **Dates: 2000** to **2024.**



Step 4: EBSCO discovery service

- **Search concluded.**

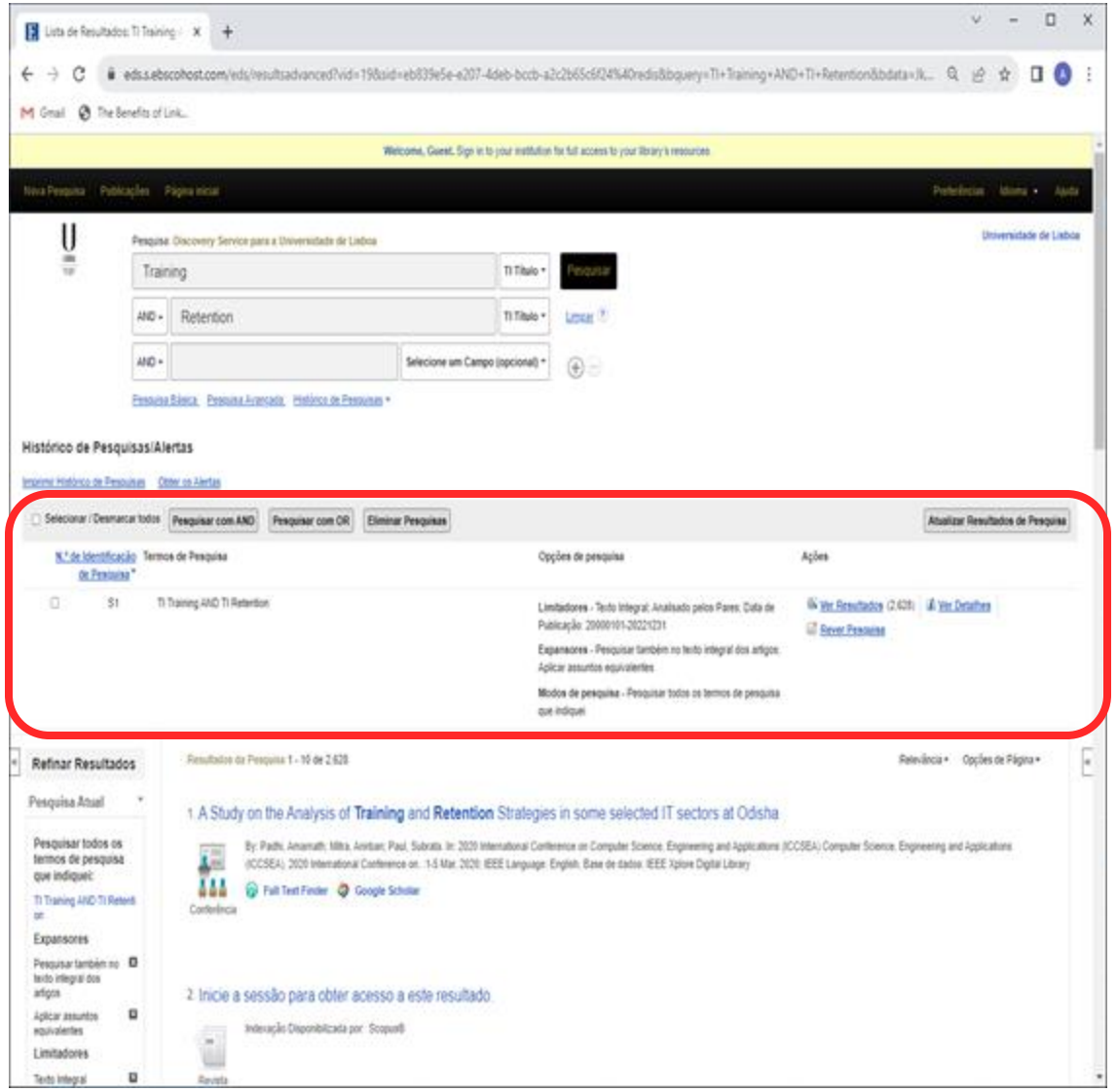


Research Methods and Masters Project

From topic to literature review

Step 4: EBSCO discovery service

- Saves search automatically.
- Easy to recover previous search with the better results.



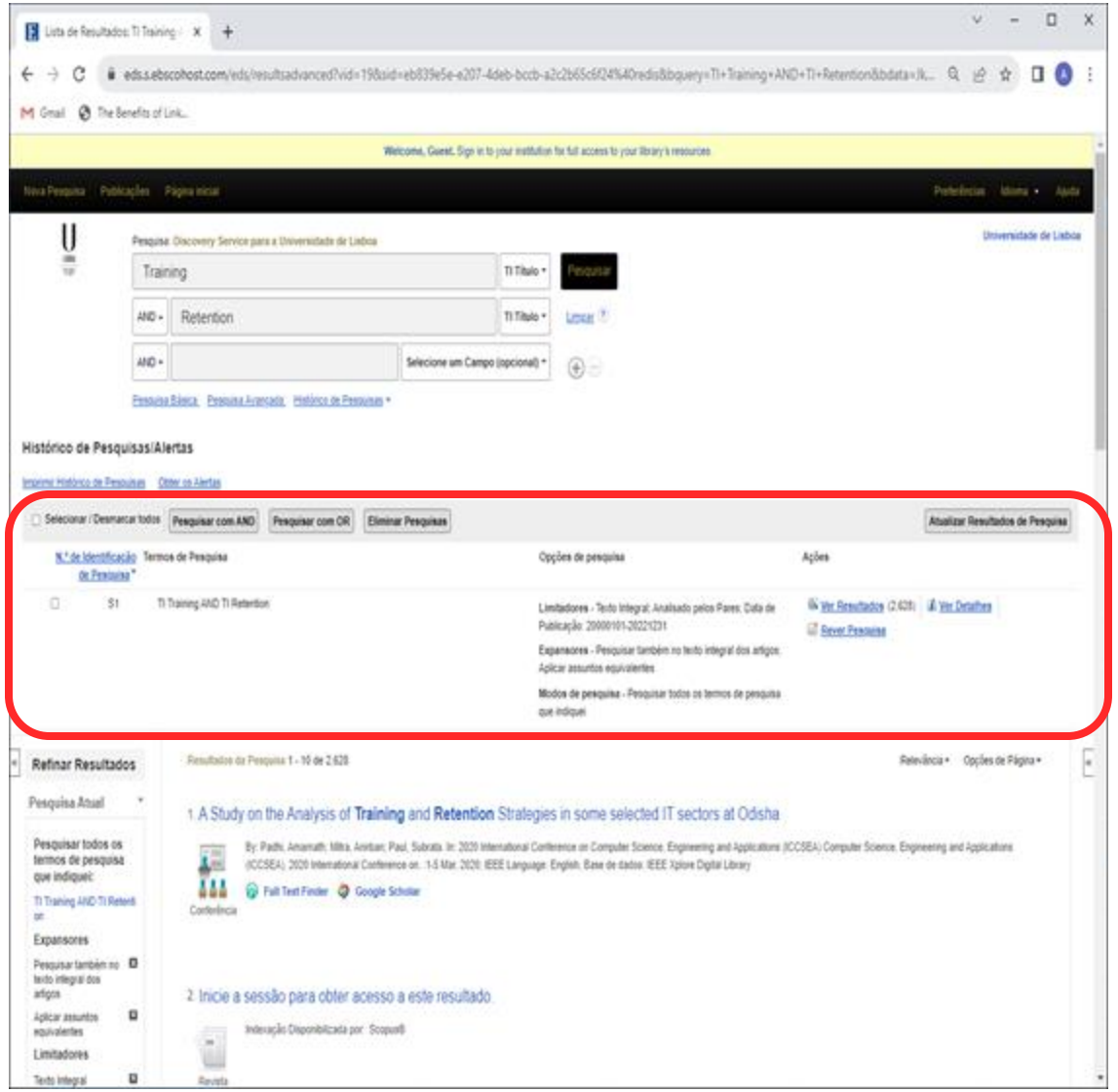
Research Methods and Masters Project

From topic to literature review

IMPORTANT

A satisfactory bibliographic sample:

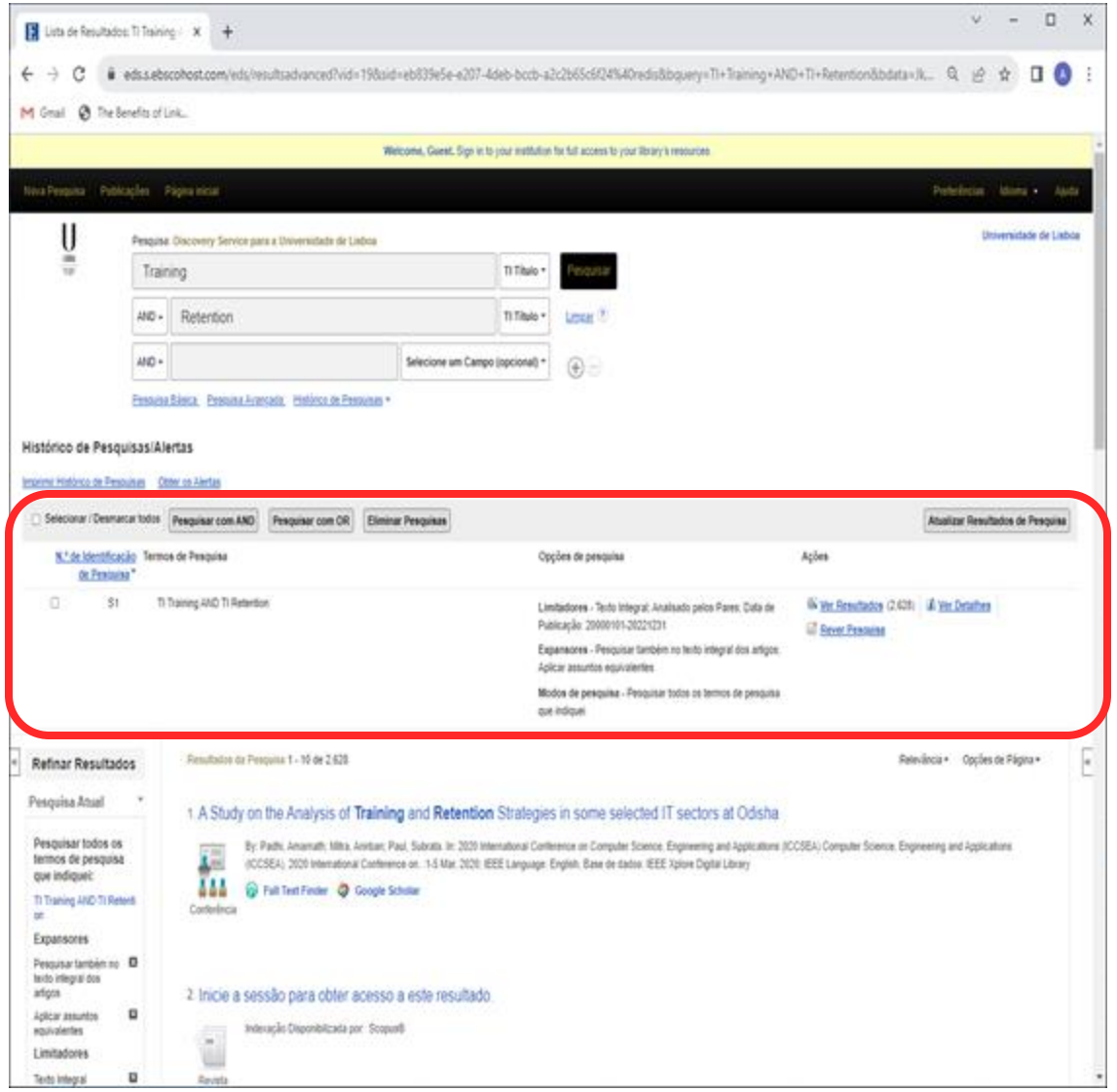
- **Identifies relevant evidence about our topic;**
- **Gives us several articles/books we can feasibly read/analyse.**



Research Methods and Masters Project

From topic to literature review

Before reaching a satisfactory bibliographic sample we need to go through an interactive process of widening and narrowing of the search terms.

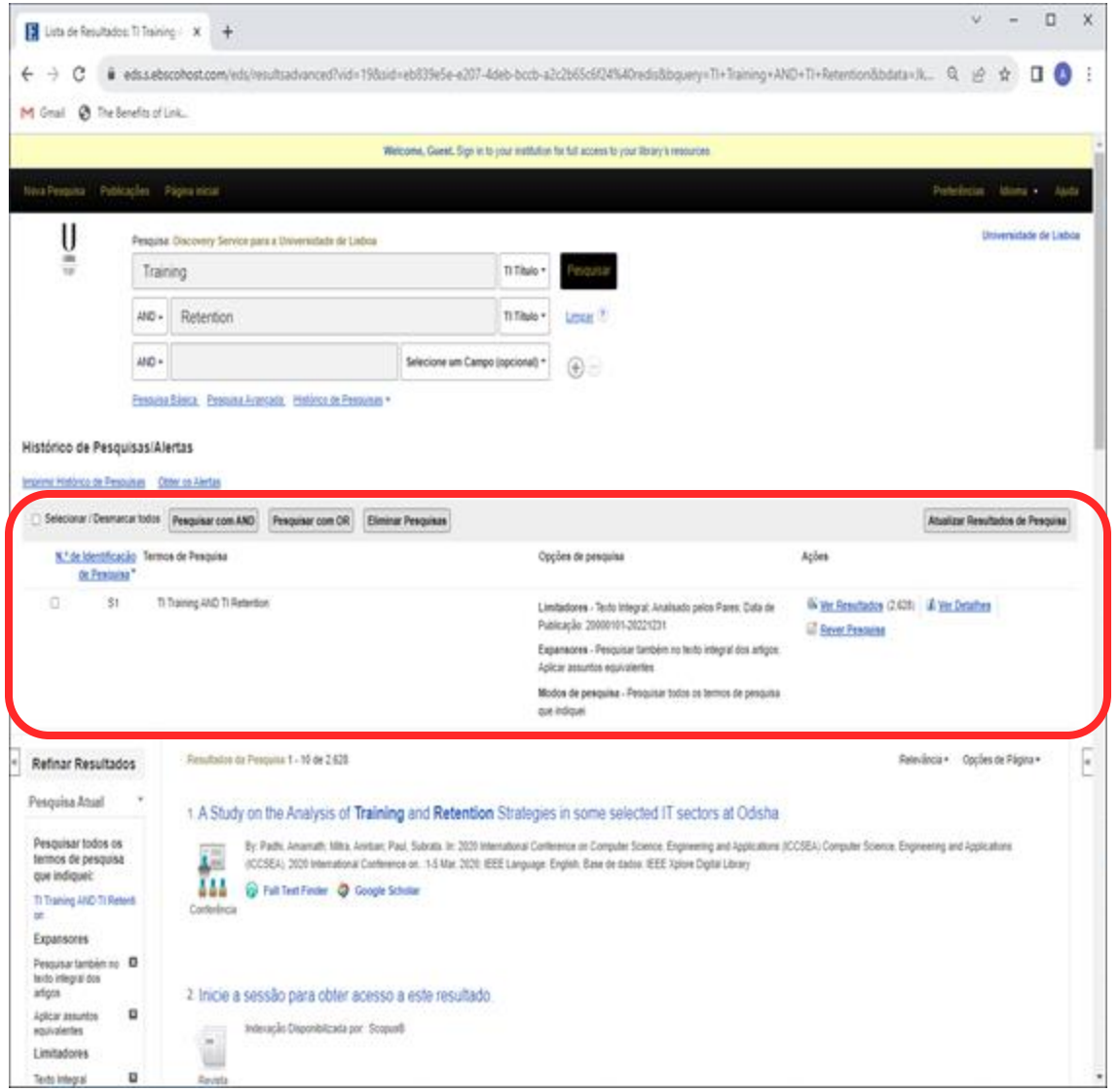


Research Methods and Masters Project

From topic to literature review

Widening bibliographic search terms:

- Include search terms that are either synonymous or close to our search terms;
- Widen search period;
- Remove search filters.

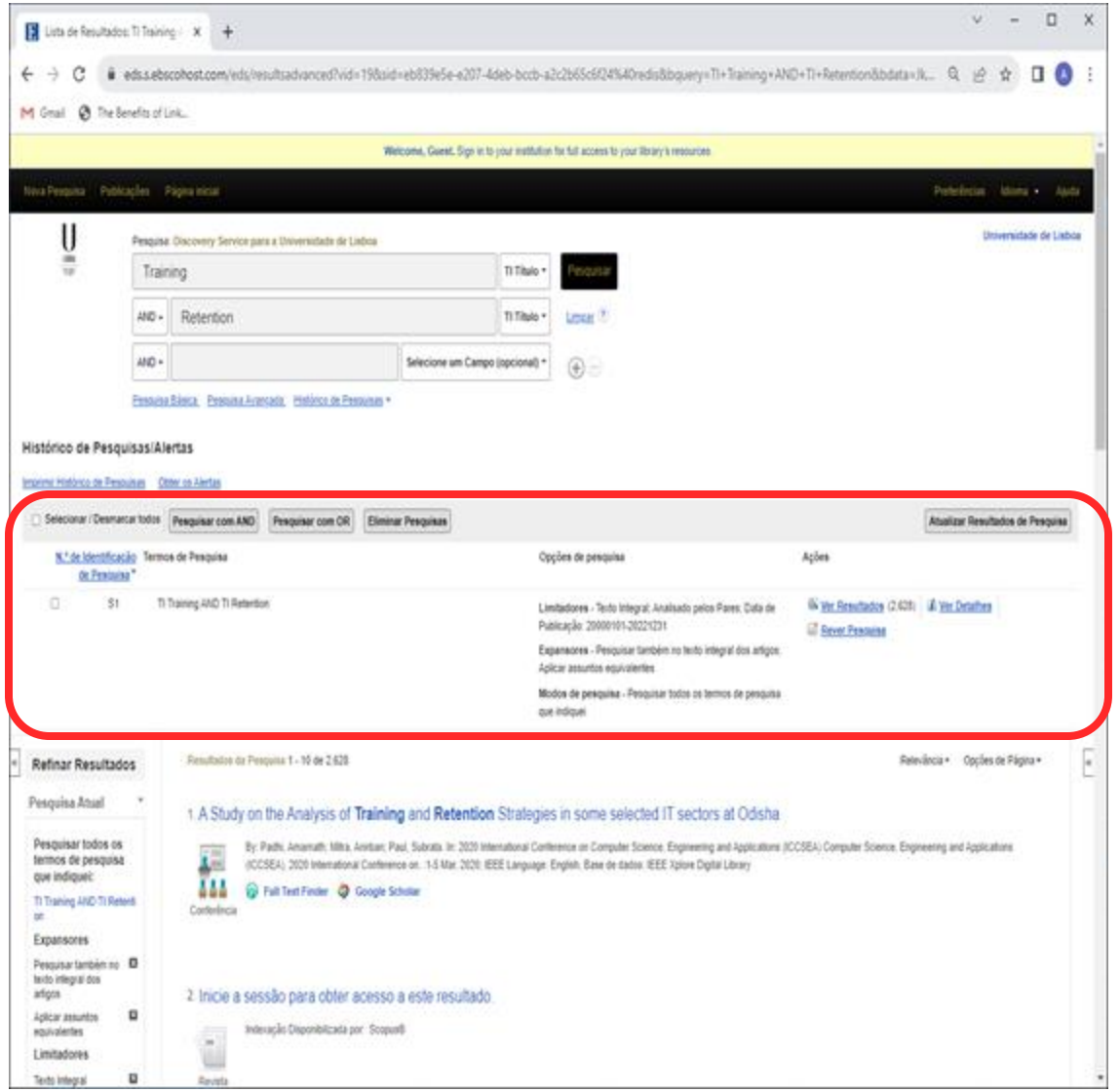


Research Methods and Masters Project

From topic to literature review

Refine bibliographic search terms:

- Add search terms that help us set the output of interesting bibliography better;
- Add filters to our search (ex: language) .



Research Methods and Masters Project

From topic to literature review

ACTIVITY

WHO: Individual

WHAT: Create an EBSCO search of 3 terms.
Search field: 'Title'.
Full text, peer-reviewed
2000 – 2023.

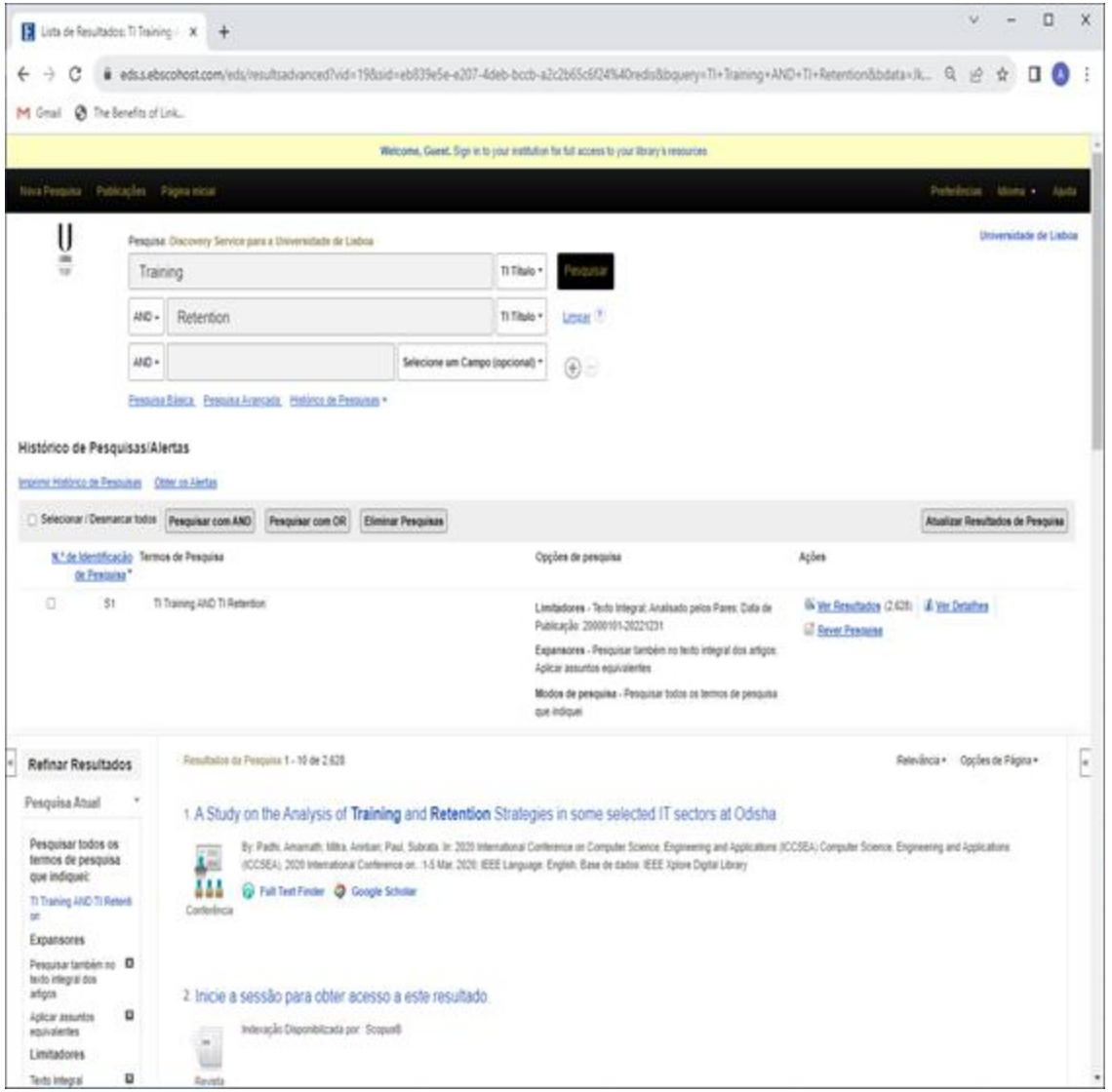
WHERE: ISEG library catalogue

HOW LONG: 5 Minutes

Research Methods and Masters Project

From topic to literature review

After setting up the best search, we need to filter down the articles we will actually include in the literature review.

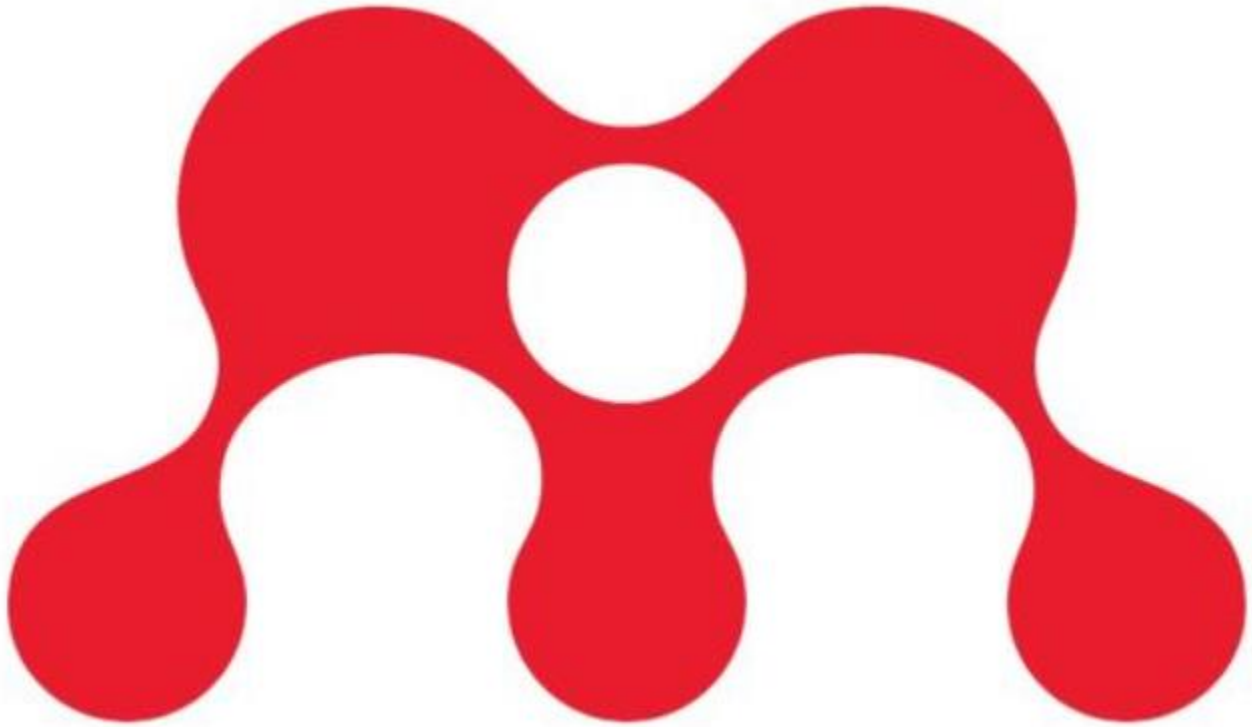


Research Methods and Masters Project

From topic to literature review

Step 5: Select articles and archive them

- Ordering or referencing software (ex. Mendeley).



Research Methods and Masters Project

From topic to literature review

Step 6: Systematize evidence

- **Using an Article Matrix**

Table 3.1: Summary table

Author/ Year	Research Design	Participants or Population Studied	Comparison	Outcome
Smith/2010	Mixed methods	Undergraduates	Graduates	Improved access
King/2016	Survey	Females	Males	Increased representation
Miller/ 2011	Content analysis	Nurses	Doctors	New procedure

Mauldin e DeCarlo, SD

Research Methods and Masters Project

From topic to literature review

You will have a lot of very diverse articles to use so it is useful to systematize the information:

Article Matrix

Table 3.1: Summary table

Author/ Year	Research Design	Participants or Population Studied	Comparison	Outcome
Smith/2010	Mixed methods	Undergraduates	Graduates	Improved access
King/2016	Survey	Females	Males	Increased representation
Miller/ 2011	Content analysis	Nurses	Doctors	New procedure

Mauldin e DeCarlo, SD

Research Methods and Masters Project

From topic to literature review

Article Matrix Items (minimum):

- Author(s);
- Publication Year;
- Main objective of article;
- Methods/research design;
- Topic and research object (case study, sample, etc.);
- Findings.

Table 3.1: Summary table

Author/ Year	Research Design	Participants or Population Studied	Comparison	Outcome
Smith/2010	Mixed methods	Undergraduates	Graduates	Improved access
King/2016	Survey	Females	Males	Increased representation
Miller/ 2011	Content analysis	Nurses	Doctors	New procedure

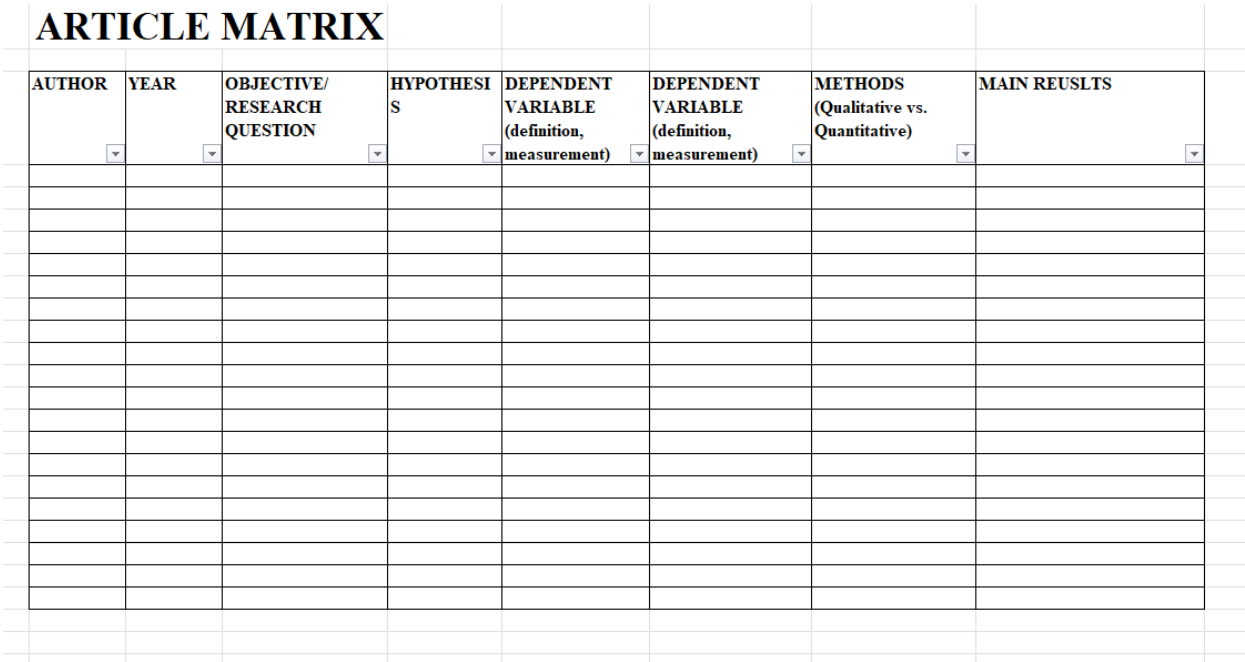
Mauldin e DeCarlo, SD

Research Methods and Masters Project

From topic to literature review

Once you systematize the information in the same way you can create the article matrix by:

- Publication year;
- Research Object;
- Methods (Qualitative, quantitative, mixed, participatory, etc.);
- Results;
- Other relevant organization priorities.



ARTICLE MATRIX

AUTHOR	YEAR	OBJECTIVE/ RESEARCH QUESTION	HYPOTHESIS	DEPENDENT VARIABLE (definition, measurement)	DEPENDENT VARIABLE (definition, measurement)	METHODS (Qualitative vs. Quantitative)	MAIN REUSLTS

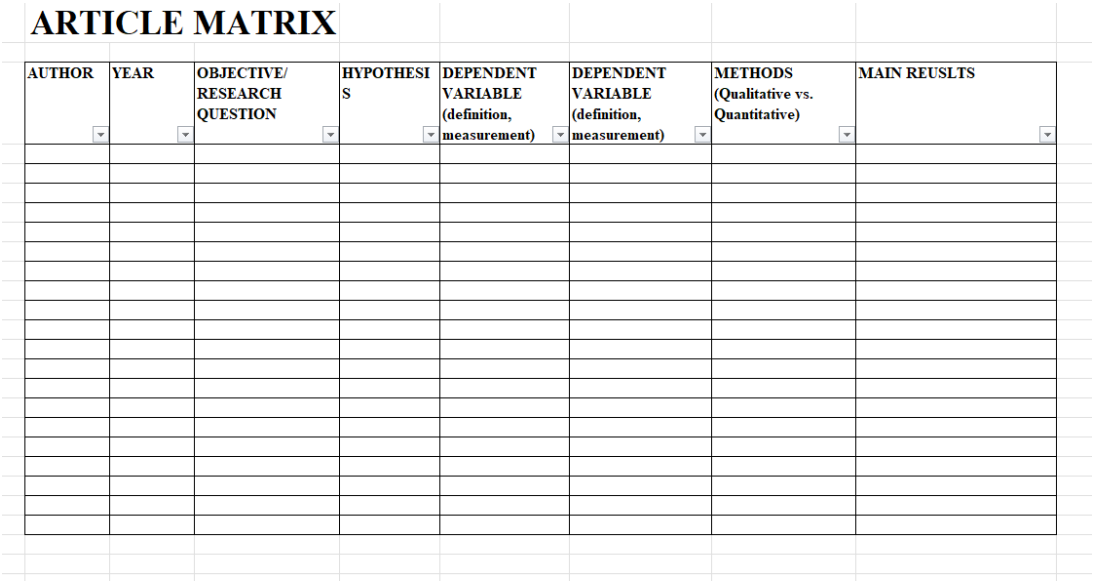
Research Methods and Masters Project

From topic to literature review

You can adapt the Article Matrix to the Methods:

- In quantitative research matrix should be more detailed - information about hypothesis, sample, variables, method and analysis.

- In qualitative research categorization is more flexible - same basic matrix structure, without the details about the variable but with details about the qualitative data collection (ethnography, interviews, focus groups, etc.) and analysis (content analysis, discourse analysis, mapping, etc.)



ARTICLE MATRIX

AUTHOR	YEAR	OBJECTIVE/ RESEARCH QUESTION	HYPOTHESIS	DEPENDENT VARIABLE (definition, measurement)	DEPENDENT VARIABLE (definition, measurement)	METHODS (Qualitative vs. Quantitative)	MAIN REUSLTS

Research Methods and Masters Project

From topic to literature review

The literature review:

- With all the information systematized you can write the literature review
- It is a narrative, where you tell the story of what has been said about the topic and how it relates to your research question/hypothesis or argument (gap in the literature, further inquiry on a topic, specific line of study, etc.)
- The literature review set the background for the development of your work on the topic you choose in any of the modalities of Masters' Project you Choose.

Research Methods and Masters Project

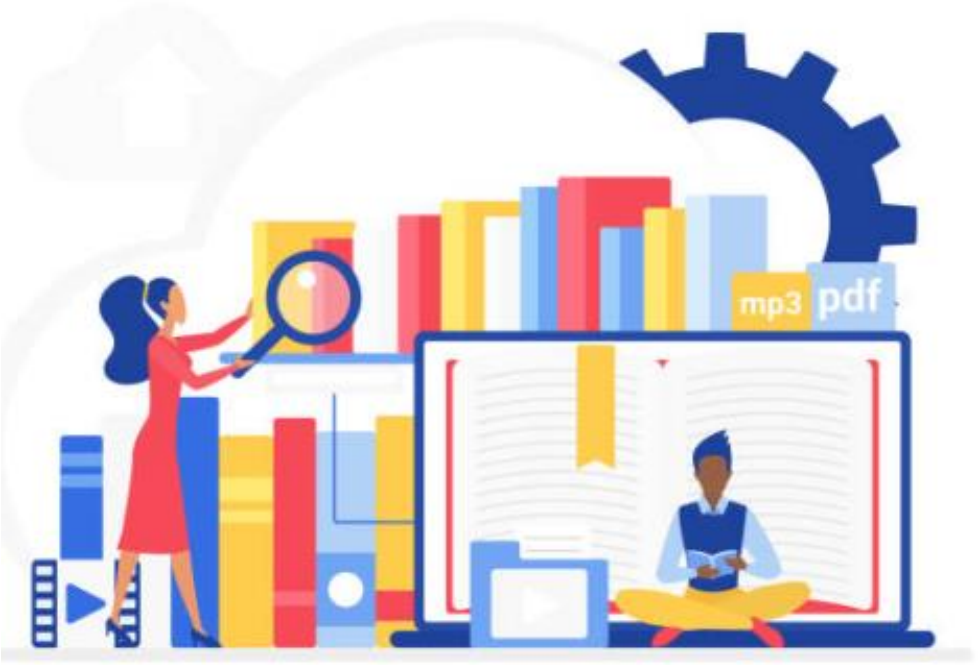
From topic to literature review

The literature review:

- Overview and your topic
- Research question/objective of review
- Organize literature (dates, subject, concepts, etc. - remember article matrix)
- Identify gaps, inconsistencies and contradictions (remember the annotated bibliography and the critical reading)
- Identify weaknesses or limits of studies used
- Summarize and conclude – implications, gaps, further research…
- Your MP's place within this literature configuration – what literature/conceptual challenge are you responding to?

More details here:

- Galvan et al. 2017: Reporting
- Zemach and Rumisek 2005: Academic Writing



Research Methods and Masters Project

Gaining Information on your Topic of Interest

ACTIVITY

WHO: Individual

WHAT: Article Matrix.

Min. 5 Articles of your choice.

WHERE: MsTeams

HOW LONG: 9-04-2024