University of Zurich UZH   MEDIA CHANGE and innovation a division of ikmz

Department of Communication and Media Research (IKMZ)
University of Zurich
Andreasstrasse 15
CH-8050 Zürich
Telefon +41 44 634 46 61
Telefax +41 44 634 49 34
www.ikmz.uzh.ch

IKMZ – Department of Communication and Media Research

Protocol of Literature Review and State of Existing Research – Guideline for Students at the Media Change & Innovation Division (Prof. Dr. Michael Latzer)

The following eight points are intended to guide you through the first steps of writing a research paper when conducting a literature review and elaborating the state of existing research. The first five steps concern the development of a research protocol in tabular form. Points six through eight show how to assess the state of existing research found and how to derive one's own research questions from it.

A   Review of relevant literature

Prepare a table in which you record all the details of your literature review. It should include at least the following columns:

Database	Search algorithm	Limitations	Further steps	Results

Then, proceed step-by-step as indicated below:

1. Recording of the databases to be used

First, consider which databases are relevant to your research. In communication and media research, for example, the databases *Web of Knowledge/Web of Science* and *Communication & Mass Media Complete* are central. Please note that some German-language publications are not covered there and that it is therefore necessary to also search in *Publizistik, Mediaperspektiven* or *M&K*, for example, in order to get an overview of the entire scope of existing research. A detailed list of relevant research databases can be found here:
https://www.mediachange.ch/media/medialibrary/2020/03/Leitfaden_Recherchetipps.pdf

2. Information about the search algorithm used

Once you know in which databases you want to conduct your literature review, it is important to work out relevant search algorithms. Think about which terms are particularly relevant to your topic area. Keep in mind that you cannot limit yourself to one search algorithm but must try to work out the entire current state of research using different combinations of search terms. The following is an example of a possible search algorithm:

TOPIC: (("public broadcast" OR "public service broadcast*") AND (fee OR tax OR financ*))*

Note: Truncating * expands the search results, because e.g. broadcaster, broadcasters as well as broadcasting are considered. If an expression consisting of several words is placed in " ", this means that the entire expression (e.g. "public service broadcast") is searched for and not the individual words ("public" and "service" and "broadcast").

3. Information about the hits achieved by this search

First, indicate in your research protocol how many hits a search algorithm produced in a particular database. Repeat this step for each search algorithm in each database, listing in a new row each time the number of hits found, e.g.: *Results in 107 hits.*

4. Information about initial restrictions and the hits achieved

Assess whether it makes sense to review the hits found individually (e.g., read abstracts) or whether you can further restrict the search to reduce the number of hits. You can reduce your search results by various restrictions: e.g., language, discipline, publication period, method used, etc. Restrictions are especially recommended if you have a lot of search results. Record in the next column of the table which restrictions you have made and to how many hits you could reduce your search results:
Example: *Restricted to English- and German-language publications. Results in 54 hits (reduction from 107 hits to 54).*

It is also possible to limit your search to the title of an article, for example. Since this only returns articles where the search terms used are in the title, this also reduces the search results:
***TITLE:** (("public service broadcast*" OR "public broadcast*") AND (fee OR tax OR financ*))*
Results in 17 hits (reduction from 107 hits to 17).

5. Information about further steps in the search, the hits achieved and the results

After you have been able to reduce your hit list by first restrictions, it is time to look through the hits that are still in your pool of relevant literature. Read the abstracts and assess whether the articles found are relevant to your research project. You can usually download and read the relevant articles directly from the database. When reading the relevant articles, note which sources are cited in them that you may not have found through your search yet, but which could still be relevant for the theoretical foundation of your research project. It is also helpful to look through the bibliography of relevant articles (snowball system).
After you have performed all the steps listed above, you should attain the table below as your research protocol.

Database	Search algorithm	Limitations	Further steps	Result
Web of Science/ Web of Knowledge	***TOPIC***: *(("public broadcast*" OR "public service broadcast*") AND (fee OR tax OR financ*))* (107 hits)	*1. Restricted to English- and German-language publications.* (54 hits) *2. Restricted to search in title:* ***TITLE***: *(("public service broadcast*" OR "public broadcast*") AND (fee OR tax OR financ*))* (17 hits)	*Review of 17 hits, 12 abstracts read, 5 articles considered relevant to paper.* *Review of 54 hits, 20 abstracts read, 1 article considered relevant to paper.* *Review of 107 cases, 5 abstracts read, 2 other articles relevant.* *New search algorithm/new database tried: e.g. Communication & Mass Media Complete*	*7 articles relevant to paper, download, read, bibliographize.*
Communication & Mass Media Complete	***ALL TEXT***: *(("public broadcast*" OR "public service broadcast*" OR "public broadcast* service") AND (fee OR tax OR financ*))* (2880 hits)	*1. Restricted to:* ***ABSTRACT***: *(("public broadcast*" OR "public service broadcast*" OR "public broadcast* service") AND (fee OR tax OR financ*))* (128 hits)	*Review of 128 hits, 70 abstracts read, 20 considered relevant*	*20 articles relevant for paper, download, read, bibliographize.* *In bibliography in articles 7 more relevant articles identified, research: 3 of them relevant to paper....*

You should use the relevant articles for your paper, cite them and list them accordingly in the bibliography. If you have read articles that you ultimately do not use in the paper, but still consider relevant to the topic overall, you can list them under "Further Reading" in the bibliography.

B Record the state of existing research

After you have completed steps 1 through 5, you should have a pool of sources that you consider relevant to the theoretical foundation of your research project. This pool will serve as the basis for recording the state of research as follows:

6. Record hits in a bibliography and identify research areas

The first thing to do now is to bibliographically register and record them. To do this, it is best to create a separate table for each article found, in which you record the relevant information about it. The main purpose of the table is to give an overview of the relevant search results and to help you remember the different articles. Such a table could, for example, look like this:

Title	Title of the article
Authors	Authors of the article
Year of publication	Year of Publication of the article
Description	Briefly describe what the article is about. Is it an empirical study or a purely theoretical article? What is the central research question? This description is mainly to help you remember what paper it is in retrospect.
Data	How was the data collected? What is the composition of the sample? Is it a representative sample? How many cases were studied?
Results	List here the key findings of the study in question. Focus primarily on the results that are also relevant to your specific research project.

After you have prepared such a table for each relevant article, it is useful to systematically assign your search results to different research areas. To do this, try to deduce which sources examine the same phenomenon/use the same methodology/have similar research intentions, etc. Give a title to each research area you found and assign the tables you created for each source to the different research areas.

7. Assessment of the elaborated state of existing research

Now you should have obtained a systematic overview of the different research areas and articles. The next thing to do is to evaluate the quality of your overall search results and assess the overall state of research. The following points are important for the assessment:

- **Number of studies**: Are there many studies on a particular topic area? Has there already been intensive scientific research on the topic?
- **Geographical focus of the studies**: Where do the majority of the articles found come from? Is the scientific examination of the topic limited to a certain geographical area? For example, is there a lack of studies on the topic in German-speaking countries?
- **Timing of the studies**: When were most of the studies published? Do the empirical articles work with outdated data? Are the findings of the study still relevant at the time of your research or have relevant changes taken place (e.g. economic conditions, legal changes)? Are there new contextual factors to consider?
- **Methods**: Are the methods used helpful? Are they only descriptive evaluations of the empirical data or are there multivariate analyses? How were the data collected? Are the samples sufficiently large/representative?

Ideally, you can use this to create the following overview of each research area:

Research Area 1

Research area:

- E.g., the coverage of algorithms as gatekeepers

Current discussions/open research questions:

- Question 1? (author 1)

- Question 2? (author 2)

Main literature:

Author, xy (2015). *Title*. Citations.

Author, xz (1987). *Title*. Citations.

After having completed the first seven steps of this guideline, you should have the following:

1. **A clear research protocol** documenting your literature search and approach

2. **An overview of the current state of research in your field:** This includes a tabular overview of each relevant article, a clear classification of all sources found into research areas, and an assessment of the overall state of research.

8. Deriving your own research question

Once you have obtained an overview of the current state of research in your field, the next step is to identify existing research gaps and derive your own research question(s). To do this, use above all the assessment of the state of research that you made under step 7. Consider in what direction you can expand the existing state of research. For example, are there any missing studies that use a certain method? Are there still no studies on a topic with data from Switzerland? Are the existing models missing important indicators that could better explain the phenomenon in question? Use the articles you have found to justify your choice of research question. In addition, it is important to substantiate/justify all hypotheses you will make in the context of your research question with findings from the articles you have found that represent the state of research.