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WRITING RESEARCH PROPOSAL: Literature review and database search

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Available at: https://works.bepress.com/dicko/36/
WRITING RESEARCH PROPOSAL

Literature review and database search

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What is the original objective of the study?

The main objective of the LR is to allow the statement of the research need in order to clearly establish the objective of the new study.

What are the innovations?

The LR should demonstrate that the present study will add a significant knowledge on the subject.
The title of the research should be original, specific and should sound as a new message.

The LR enables the reader to learn more about the issues.

It should present the facts and evidence that support the need for the research project.
I. 1. Tips for literature review

- Insure that the LR is at the-state of the art.

- Do not try to justify a research project strictly on the basis of a need for a method.

- do not assume that the referee is familiar or understand the problem as well as you do.

- Assume that the referee wants to know how clearly you can state yourself on the research need based on the current knowledge (LR).
I.1. Tips for literature review (cont..)

- Provide enough background information to show the familiarity with the topic

- Show that you have reviewed the literature and you are aware of the relevant and pertinent information that is currently available

- Support all important statements with good references
I.1. Tips for literature review (cont..)

- Avoid terms such as « little is known about.... », « there is a general lack of information about.... », « no research has dealt with..... », etc. Instead, explain the consequences of this lack of information in terms of potential impacts.
1.2. Tips for Cited Literature

- The completeness of the review should consider the «political» aspects as well as the scientific ones.

- Include citations of possible reviewers or panel members if at all relevant to your research.

- Cite your own relevant publications.

- Cite your institution relevant publications.
I.3. Lack of literature review as cause of rejection

- Rejection because of incomplete literature review

- The literature review was incomplete and failed to establish that the proposed research was new and significant and not repetitive
I.3. Lack of Good literature review as cause of rejection (cont..)

- You take for granted that the reviewer will assume you are familiar with the literature because of your current position or publication record.

- Lack of a good knowledge on the subject
II. Database search

A. Internet Resources

B. Libraries: books, thesis, current contents, chemical abstracts, etc.

C. Endogenous written knowledge

D. Oral communications, and exchange with knowledgeable people (inquiry)
II. Internet ressources

II.1. GENERAL LITERATURE WEBSITES

II.2. SPECIALIZED LITERATURE WEBSITES

II.3. DATABASES (DATABANK) WEBSITES
II.1. GENERAL LITERATURE IN INTERNET

1. **Google scholar** ([http://Scholar.google.com](http://Scholar.google.com)): URL_freeJournals\Scholar_google_advanced_scholar_search.htm

2. **Scirus** ([http://www.scirus.com](http://www.scirus.com)): scirus.ppt

3. **Science direct** ([www.sciencedirect.com](http://www.sciencedirect.com)): URL_freeJournals\Science_Direct.ppt
4. National Center for Biotechnology Information

5. Pubmed central
   (http://www.pubmedcentral.nih.gov/index.html)
   URL_freeJournals\Free_Pubmed_Journals.htm

6. Wikipedia encyclopedia (Interactive database not curated!!!, be careful with the content)
II.2. SPECIALIZED LITERATURE

A. Open access arrangement for developing countries; [URL freeJournals\Open Access Arrangement DVW.htm](URL freeJournals\Open Access Arrangement DVW.htm)

1- HINARI ([www.who.int/hinari](www.who.int/hinari))

2- AGORA ([www.aginternetwork.org](www.aginternetwork.org))

Need of institutional keyword:
II.2. SPECIALIZED LITERATURE IN INTERNET
(cont....)

3 Open access journals:
(http://www.doaj.org/doaj?func=home) Directory of open access journals.htm

4. INAPS_Peri (http://www.inasp.info/peri/free.shtml)
URL_freeJournals\PERI_INAPS.htm

5. INIST (Institut de l’Information Scientifique et Technique).
   http://www.inist.fr/
   URL_freeJournals\INIST_French.htm
Online full-text journals and databases available through PERI

- **AJOL** (African Journals OnLine)
  - print copies available from INASP
  - URL: http://www.ajol.info

- **Academic Press**
  - 300+ full text journals
  - scientific, technical, medical

- **Blackwell Publishers**
  - 800+ journals
  - science, technology, medicine, social science, humanities
B. Free specific literature

1. Free Medical journals: www.freemedicaljournals.com


3. Natural Resource Institute: www.nri.org; URL freeJournals\Natural Resources Institute.htm

C. Patents Literature Online

http://www.freepatentsonline.com/
II.3 DATABASES IN INTERNET

A. Genk Bank and Protein Databases


2. EBI: European Bioinformatics Institute: (www.ebi.ac.uk):

3. Tigr: Genomes of Plants, Animals and Microorganisms: http://www.tigr.org/

5. There are also specific genome database for plants (Arabidopsis, sorghum, rice, etc.) animal (Human, mice) and other microorganisms (bacteria, plasmodium, etc.)
B. General Database of Biological Interest

1. Biology dictionary: www.biology-online.org

2. Chemical structures (1D and 3D) (www.chemfinder.com):
   URL: freeJournals\ChemFinder_Com.htm

3. FAOSTAT, Http://faostat.fao.org
   Glossaries, free books, etc: www.fao.org
B. General Database of Biological Interest (Contin...)


Other Internet resources

The Cochrane Library (www.thecochranelibrary.com)

EBSCO Host (http://www.ebscohost.com/)

Gale (Thomson Learning) Research database (1200 titles) Health and Wellness

Institute of Physics Publishing
36 physics journals

MCB/Emerald

www.ifs.se
• Oxford University Press
  – 170 titles
  – science, technology, medicine, humanities, social sciences
• Royal Society Journals Online
  – biological and physical sciences
• Springer
  – 1000 titles
Ressources for journal and research institutions ranking (discutable)

- Thomson ISI: Journal Impact Factor
  (http://scientific.Thomoson.com/mjl)
  a. List of Indexed Journals by ISI
  b. Journal Impact Factors
  c. General literature

2. Worldwide Universities and Research Institutions Ranking
   (http://www.webometrics.info/index.html)
These literature resources have:

- Core common functionality
  - searchable
  - browseable
  - information updates (TOC by email)

- Different user interfaces, details and functions

www.ifs.se
C. Tips for database search

- Use advance research methods: common name, scientific name, combination of keywords

- Use popular search engines for a general screening of performed research on the subject
C. Tips for database search (cont…)

- First focus on REVIEW PAPERS to understand the subject then to experimental papers

- More recent references are usually preferred than old ones

www.ifs.se