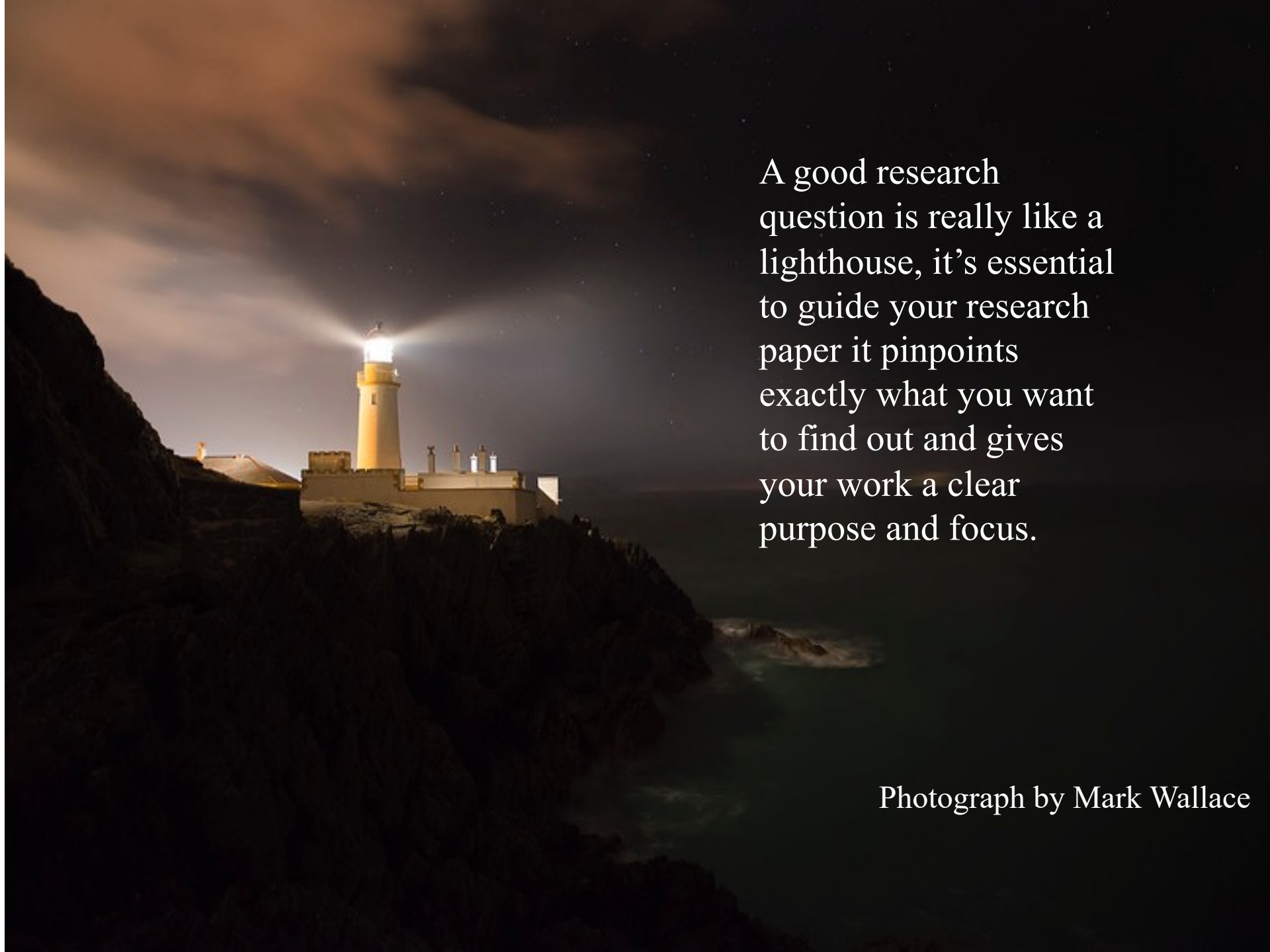


Locating and reviewing Literature

How to do a literature Review

Dr Christa McCartney

A photograph of a lighthouse perched on a dark, rocky cliffside at night. The lighthouse is illuminated from within, casting a warm glow and two powerful beams of light that cut through the dark, cloudy sky. The surrounding landscape is mostly in shadow, with the sea visible in the lower right corner. The overall mood is dramatic and focused.

A good research question is really like a lighthouse, it's essential to guide your research paper it pinpoints exactly what you want to find out and gives your work a clear purpose and focus.

Photograph by Mark Wallace

Have a clear research question &
Know your aims



- **Topic selection** is an important part of the overall process
- Developing a well-focussed and scoped **research question** and **research aims** is critical to a successful literature review

A photograph of a lighthouse on a cliff at night. The lighthouse is illuminated, and its light shines out over the ocean. The sky is dark with some clouds. The cliff is dark and rocky. The ocean is dark with some white foam from waves.

**A good research question is
like a lighthouse.**

**The Literature review
provides its foundations.**

Photograph
by Mark
Wallace

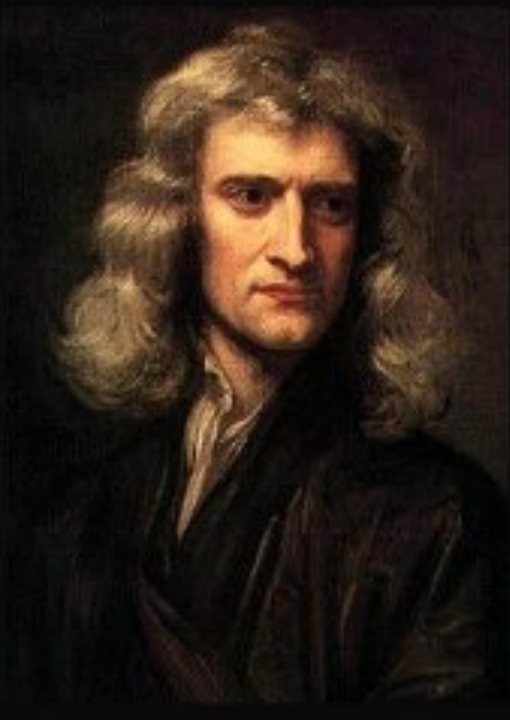
Why do I need to consider the literature?

“Knowledge does not exist in a vacuum, and your work only has value in relation to other people's. Your work and your findings will be significant only to the extent that they are the same as, or different from, other people's work”

(Jankowicz, 1995, p.128-9)



The importance of reading, of “literature”



If I have seen further than others, it is by standing upon the shoulders of giants.

(Isaac Newton)

What is a literature review?

Sets the scene

- An overview
- Surveys the current state of knowledge on a topic
- Describe, compare and synthesise the existing research

Critical, not just descriptive

- Identify strengths and weaknesses
- Note areas of consensus and disagreement
- Highlight gaps in the existing research
- Suggest and justify future research



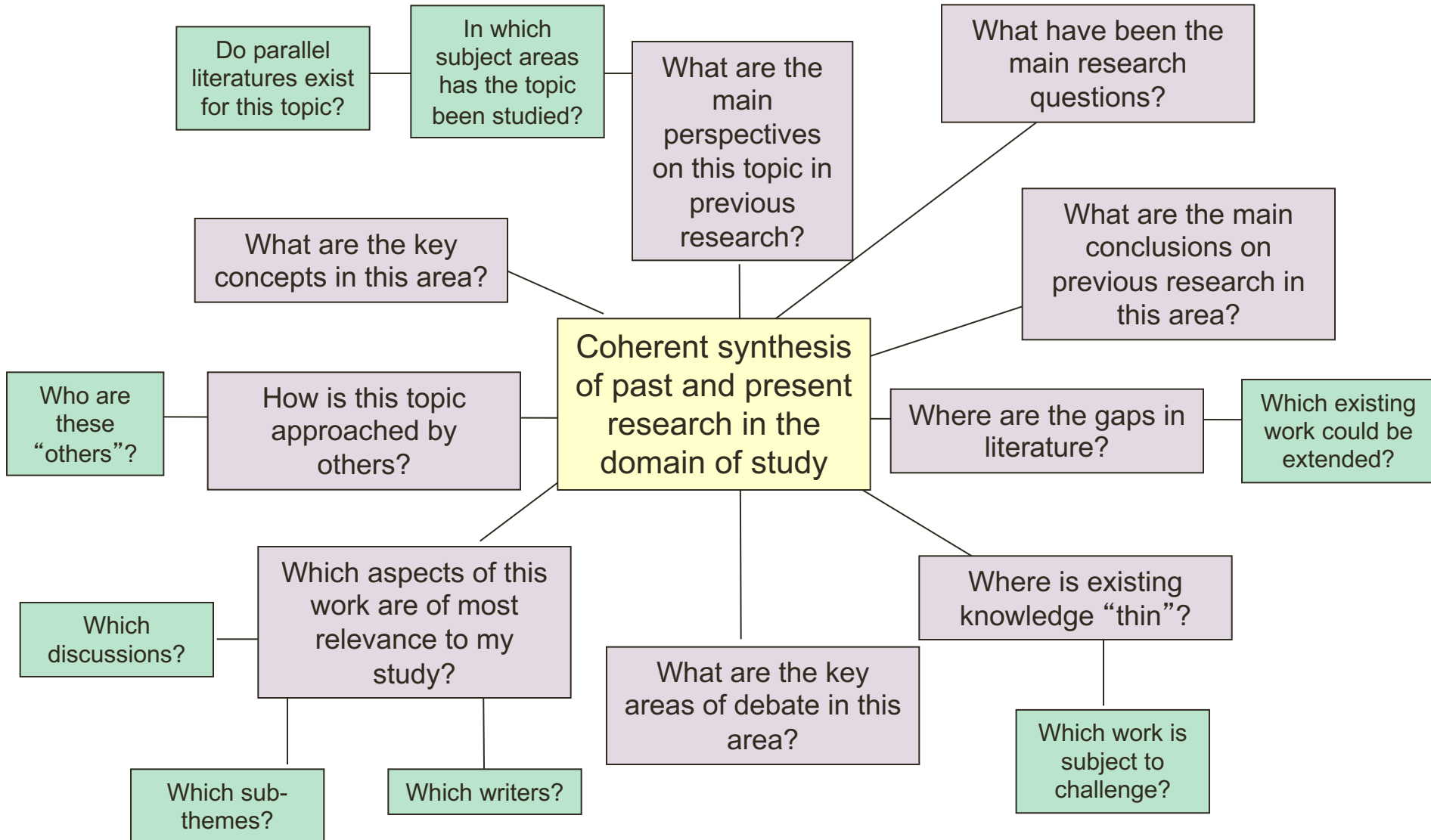
What is a literature review?



- ① It **surveys**: scholarly articles, books / book chapters and other sources (*e.g.* conference proceedings) **relevant** to a particular topic, issue, area of research, methodology or theory.

- ② It **critically evaluates** these works
 - to provide an overview of the significant literature, that
 - is, existing knowledge on this topic.
 - to identify an area where new knowledge is necessary

Mind map of Literature Review questions



Features (criteria for assessment of a Lit Rev)....

Provides the reader with:

- ① A logically and clearly structured summary of the main ideas, concepts and ***theories*** within the field (**analysis**)
- ② A logically structured summary of existing ***empirical evidence*** (**analysis**)
- ③ An overview of the key contrasts and **debates** (**comparative analysis**)
- ④ **Up-to-date** knowledge and understanding of the subject area coherently structured into one single account (**synthesis**)
- ⑤ Personal ***critical review*** of previous work; theories, research methodologies and research findings – *i.e.* the Strengths & Weaknesses of existing knowledge (**evaluation**)
- ⑥ An indication of the **theoretical limitations** (weaknesses in argument and **empirical limitations** (missing information) of existing knowledge (**gap/s**)
- ⑦ A ***rationale*** or ***justification*** for your research - offers questions that need further empirical research or theoretical resolution (**potential**)



The research process

The Literature review helps bring a research idea to fruition and helps form and frame the research question.

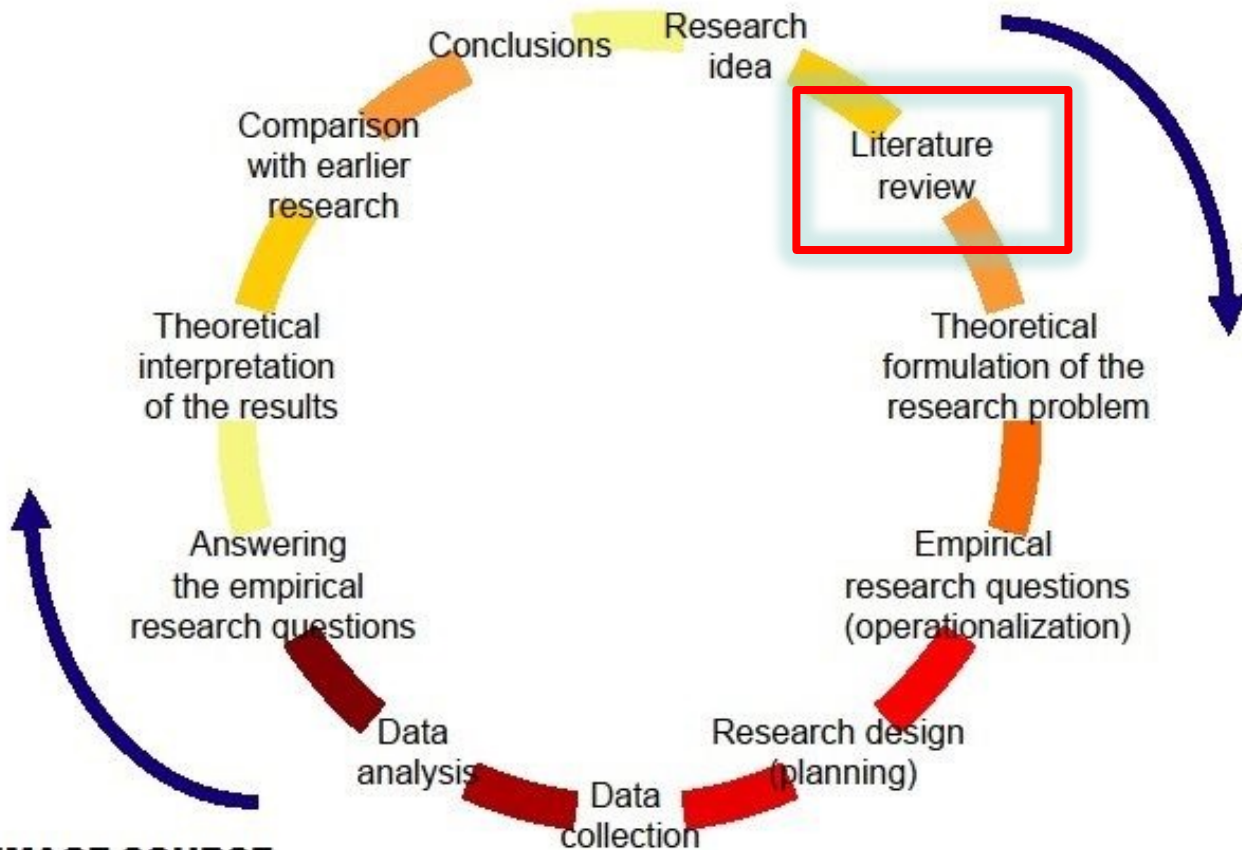


IMAGE SOURCE

http://www.bcps.org/offices/lis/researchcourse/images/research_process.gif

Literature review: good and bad



Good review

Is a synthesis of available research literature

Is a critical evaluation

Is up to date

Has clarity and conciseness

Uses a clear and consistent structure

Locates your own research

Poor review

Is an annotated bibliography

Is a descriptive summary list of papers/articles/books

Uses only dated literature

Is confusing and long-winded

Is constructed in an arbitrary way

Does not locate your own research (only argues its importance)

TYPES OF REVIEW

Narrative

- Broader research topic
- May or may not include comprehensive searching and quality assessment
- Usually summarises research findings in a narrative fashion e.g. chronological, thematic etc
- May be more subjective in how studies were chosen (selection bias)

Systematic

- Clearly defined research question
- Aims for comprehensive, exhaustive searching with transparent methods and pre-specified eligibility criteria
- May include a meta-analysis – statistical analysis of the combined results of quantitative studies
- Seeks to *systematically* search for, appraise and synthesise research evidence, often adhering to guidelines on how to conduct a review (e.g. PRISMA)

Grant & Booth (2009), 'A Typology of Reviews'

How do I undertake a literature review?

Three stages:

- 1) **Locating the literature** (thinking laterally and creatively) - finding, sorting, mapping and managing the relevant literature
- 2) **Literature review / evaluation** (reading and note-taking) – understanding, critical evaluation, making links, conceptualisation and presentation of the material
- 3) **Integration** (writing) – into your research report / Dissertation through the analysis and interpretation of your own empirical data





Searching for Sources

Books

Good for:

- Clear, broad overview

Not so good for:

- Up to date information

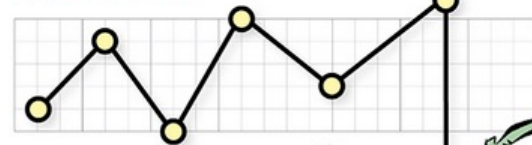


Academic Journal

- **Good for:**
- Latest research, critically reviewed by experts
- **Not so good for:**
- Broad overview of a subject

Harvard Business Review

44 How Dual-Career Couples Make It Work
70 Put Purpose at the Core of Your Strategy
140 Learning to Work with Intelligent Machines



Are METRICS Undermining Your Business?

Too many leaders confuse numbers with strategy.

62



Grey literature has been defined by the Luxembourg Convention on Grey Literature as:

Information produced by government, academics, business and industry in electronic and print formats where publishing is not the primary activity of the producing body.

Purpose is to share key highly relevant information with relevant parties.

Production and research quality may be extremely high as reputations are vested in the end-product.

There may be an obligation to share the information.

On release the information is extremely up-to-date and does not suffer from the delays and restrictions of publishing.

May support small niche areas of research.

Other sources

Newspapers / Magazines

- Archives/primary sources

Professional/Trade Journals

- Conference Proceedings

Company reports/Financial reports

- Theses

Social Media

- Government & legal

Websites

- Photographs/imagery/film

Internet: the advantages and disadvantages



As Abraham Lincoln said, *“the problem with the internet is, you never know if what you are reading is genuine.”*

- **Advantages** of general information web-sites (Wikipedia, blogs etc.)
 - Fast
 - Free
 - Multi-language (translate)
 - For sparking ideas – especially ‘discussion tabs’
- **But**
 - How comprehensive?
 - How accurate?
 - ‘Patchwork blanket’?

Evaluating websites

- Who produced the page?
 - Academic institution? Publisher?
 - Official company webpage?
 - Personal webpage?
- Are they qualified to produce the page?
- What was their purpose of developing the webpage?
- Who is the intended audience?
- Has it been refereed?
- When was it last updated?



Don't just Google *use your* University library search

The screenshot shows a web browser window displaying the University of Chester library portal. The browser's address bar shows the URL <https://portal.chester.ac.uk/LIS/Pages/finding-information.aspx>. The page features a dark red header with the 'portals the university intranet' logo, a 'welcome to portal!' message, and a search bar with 'All Sites' selected. Below the header is a navigation menu with links for Portal, Management, Programme Documents, Faculties, Support Departments, and Partner Staff. A secondary navigation bar includes 'Finding Information', a phone icon with the number 01244 51 1234, an email icon for lis.helpdesk@chester.ac.uk, and a 'Web Self Service' icon. The main content area is a grid of green and blue tiles. On the left, there are two vertical tiles: a blue one for 'LIS Homepage' and a red one for 'Library Facilities'. The main grid contains tiles for 'Library Search' (with sub-links for 'Classic Search & Catalogue' and 'A-Z eJournals'), 'Subject Resources', 'Guides & Training', 'Open Access & ChesterRep', 'Referencing', 'Reading Lists', and 'Copyright'. A dark red footer contains links for 'Policies', 'Privacy', and 'Cookies'. The Windows taskbar at the bottom shows the system tray with the time 11:28 and date 05/01/2018.

Home - Library Search, L. X Finding Information X

Secure | <https://portal.chester.ac.uk/LIS/Pages/finding-information.aspx>

Colin Potts

portals
the university intranet

welcome to portal!

All Sites

University of Chester

Portal Management Programme Documents Faculties Support Departments Partner Staff

Finding Information

01244 51 1234 lis.helpdesk@chester.ac.uk Web Self Service

LIS Homepage

Library Facilities

Library Search Search

Classic Search & Catalogue A-Z eJournals

Subject Resources

Guides & Training

Open Access & ChesterRep

Referencing

Reading Lists

Copyright

Policies Privacy Cookies

11:28 05/01/2018

University library search ... simply better than Google because:

The screenshot displays a web browser window with the University of Chester Library search results page. The search query is "online reviews do consumers use them". The results are sorted by relevance and show 3,657 results. The left sidebar contains filters for "REFINE YOUR SEARCH", "CONTENT TYPE", "PUBLICATION DATE", and "DISCIPLINE". The main content area lists four search results, each with a thumbnail, title, author, journal information, and a brief description. The first result is "Effectiveness of online consumer reviews" by Lin, CA, Xu, XW, published in INTERNET RESEARCH, 2017, Volume 27, Issue 2. The second result is "The impact of language style on consumers' reactions to online reviews" by Wu, LB, Shen, H, Fan, A, More..., published in TOURISM MANAGEMENT, 04/2017, Volume 59. The third result is "A study on parameters of online reviews content that influence consumers buying behaviour- an Indian perspective" by Prashant Devedi, R Suiatha, Ruchi Pathak, published in Journal of Business and Retail Management Research, 07/2017, Volume 11, Issue 4. The fourth result is "The impact of reference effects on online purchase intention of agricultural products The moderating role of consumers' food safety consciousness" by Zhao, XF, Deng, SL, Zhou, Y, published in INTERNET RESEARCH, 2017, Volume 27, Issue 2.

Home - Library Search, L... Results for "online review... x

chester.summon.serialssolutions.com/?q=online%20reviews#/search?ho=t&fvf=Discipline:business.f&rf=PublicationDate:2017-01-05:2018-01-05&l=en&q=online%20reviews%20do%20consumers%20use%20them

University of Chester Library Feedback Help

University of Chester

online reviews do consumers use them

3,657 results sorted by relevance

1 **online** Effectiveness of **online consumer reviews** The influence of valence, reviewer ethnicity, social distance and source trustworthiness by [Lin, CA](#), [Xu, XW](#)
INTERNET RESEARCH, 2017, Volume 27, Issue 2
Purpose - Extant research addressing how **consumers** respond to electronic word-of-mouth (eWOM) remains limited...
Journal Article: [Full Text Online](#)
[Preview](#)

2 **online** The impact of language style on **consumers'** reactions to **online reviews** by [Wu, LB](#), [Shen, H](#), [Fan, A](#), [More...](#)
TOURISM MANAGEMENT, 04/2017, Volume 59
The current research examines the novel impact of an **online review's** language style (figurative vs. literal...
Journal Article: [Full Text Online](#)
[Preview](#)

3 **online** A study on parameters of **online reviews** content that influence **consumers** buying behaviour- an Indian perspective by [Prashant Devedi](#), [R Suiatha](#), [Ruchi Pathak](#)
Journal of Business and Retail Management Research, 07/2017, Volume 11, Issue 4
... It has encouraged different **online** activities for **consumers** such as blogging, chatting, gaming, and messaging...
Journal Article: [Full Text Online](#)
[Preview](#)

4 **online** The impact of reference effects on **online** purchase intention of agricultural products The moderating role of **consumers'** food safety consciousness by [Zhao, XF](#), [Deng, SL](#), [Zhou, Y](#)
INTERNET RESEARCH, 2017, Volume 27, Issue 2
... Data were collected from a total of 297 **online** consumers in China. A structural equation modeling is utilized to assess the relationships proposed in the research model...

REFINE YOUR SEARCH

Full Text Online

Scholarly & Peer-Review

Open Access

Library Catalog

CONTENT TYPE

Journal Article (3,333)

Magazine Article (251)

Trade Publication Article (47)

Book Review (34)

Book / eBook (6)

More...

PUBLICATION DATE

1/5/17

1/5/18

Clear

Last 12 Months

Last 3 years

Last 5 years

DISCIPLINE

business (3,657)

economics (3,490)

engineering (2,887)

medicine (2,580)

public health (2,141)

More...

11:41 05/01/2018



key authors in the field turn up often

Reviewing the literature: *evaluation*

- What is the source of the article/paper? – authors?
- How recent is it?
- Is this article/paper referenced subsequently by others?
- What is the purpose of the research? – scope? focus?
- What *concepts, perspectives* and *theories* are used?
- What are the main *approaches* and *methodologies* used? – problems?
- Are the claims robust?
- Reliability and validity addressed? – bias?
- Does it support or contradict your ideas?



It's not in the Library!

- <http://scholar.google.co.uk/>
- Google it.:
 - Open access research papers:
 - BASE <https://www.base-search.net/>
 - CORE <https://core.ac.uk/>
 - Researchers networks e.g. Research Gate, Academia.edu
 - Authors' and institutions' websites
 - Unpaywall/Open Access Button <https://kopernio.com/>

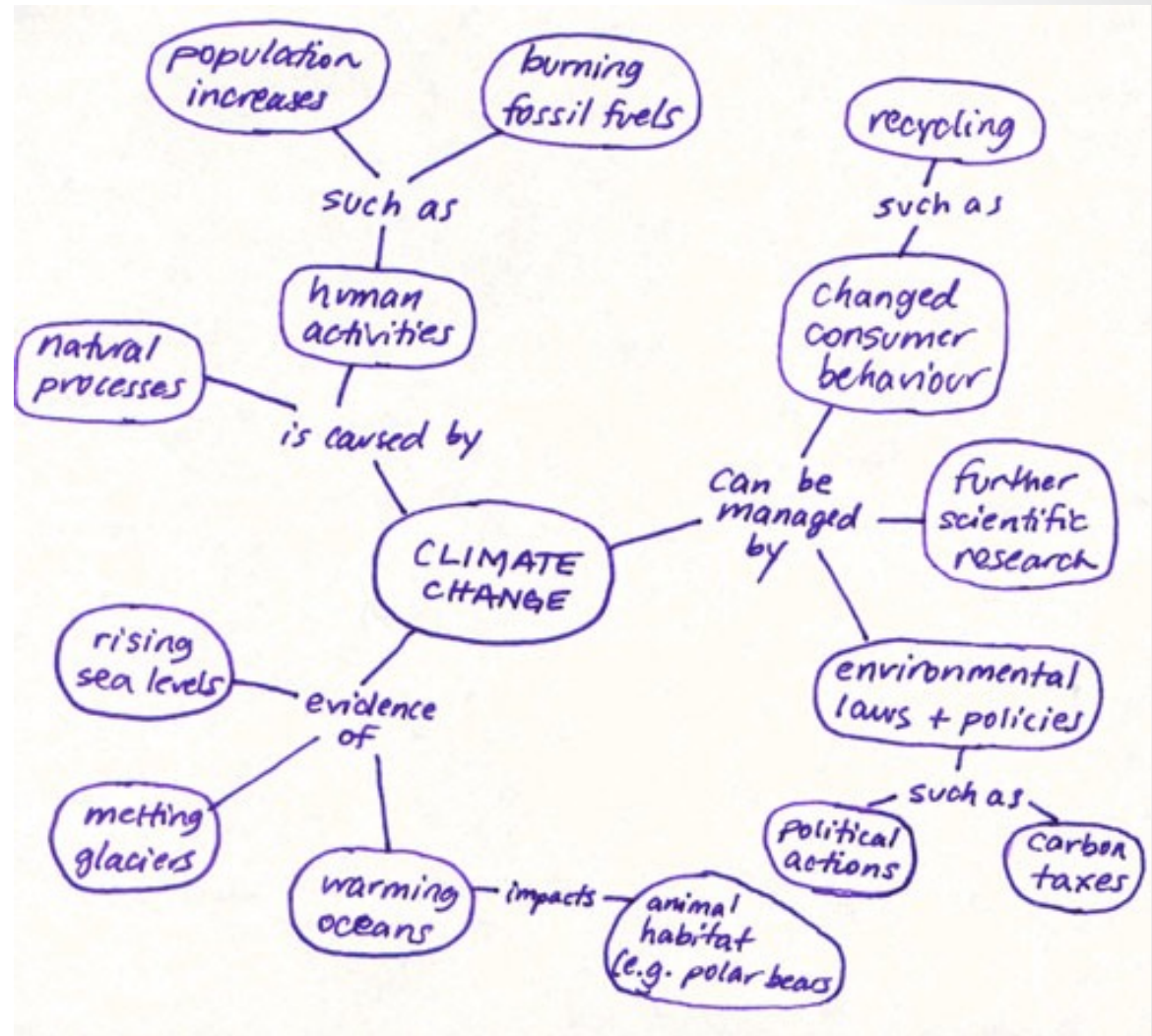
Keyword Searching



Search Thesaurus

A search thesaurus is created to locate the keywords we will use.

In a systematic review these keywords, how they are combined and where these combinations are used will be recorded and potentially justified.

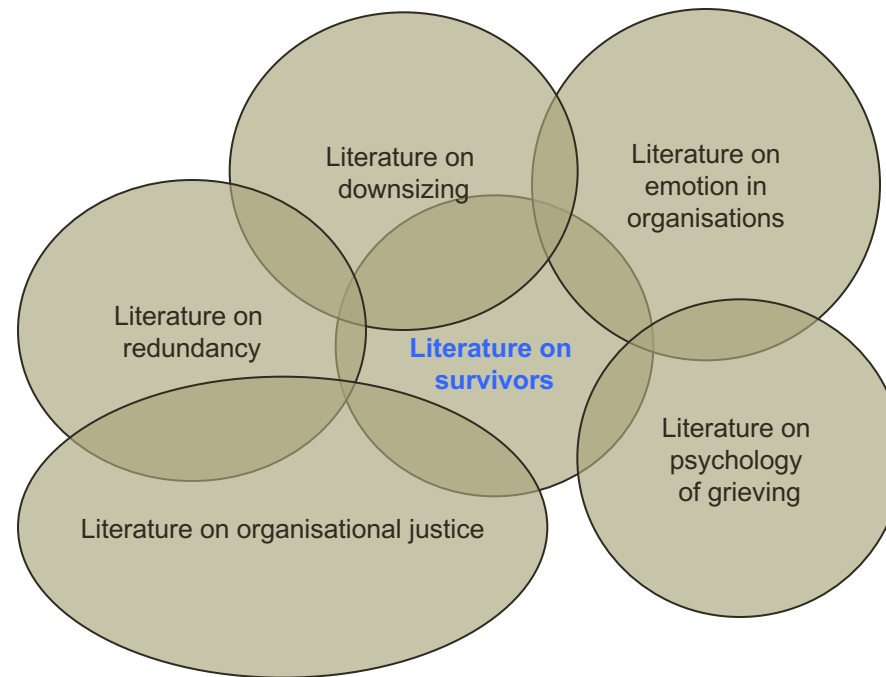


Locating your work - mapping the literature

Example Research topic:

Motivation of the survivors of downsizing

Source: Fisher (2007, p. 87)



Literature maps will typically contain more fields than can actually be managed in the literature review – so select the most relevant or important

Combining your keywords

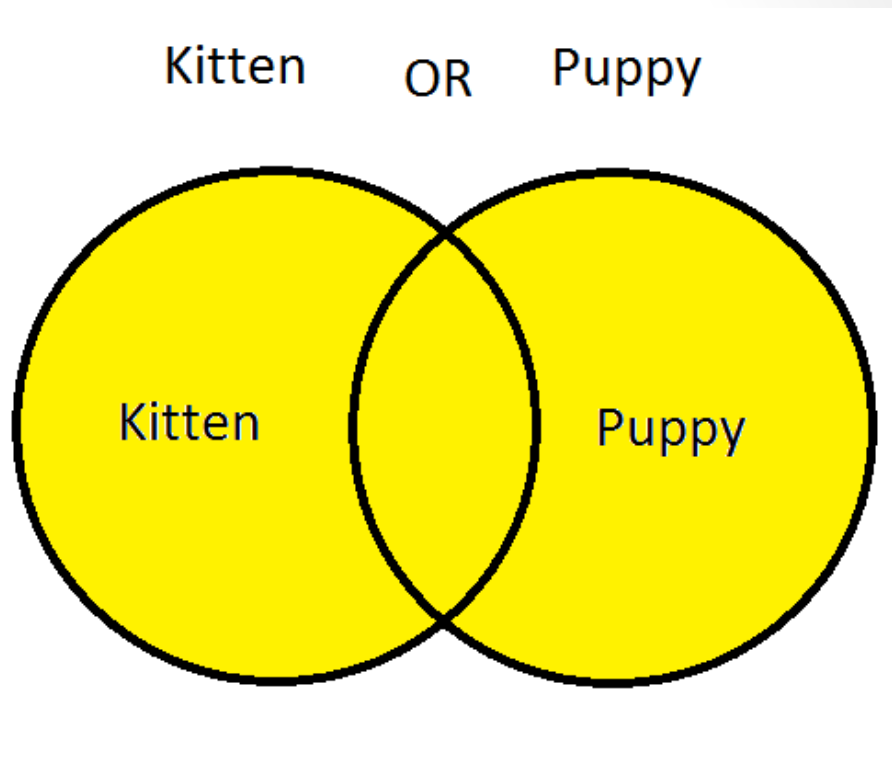
- Databases and search-engines allow you to combine several different keywords at once using **AND** or **OR**.
- The purpose of this is that you can be very specific as to whether the words **MUST** appear in your results or whether they are a range of alternatives.

This is known as Boolean searching

OR

OR = MORE

You can use OR to expand a search in order to get MORE results

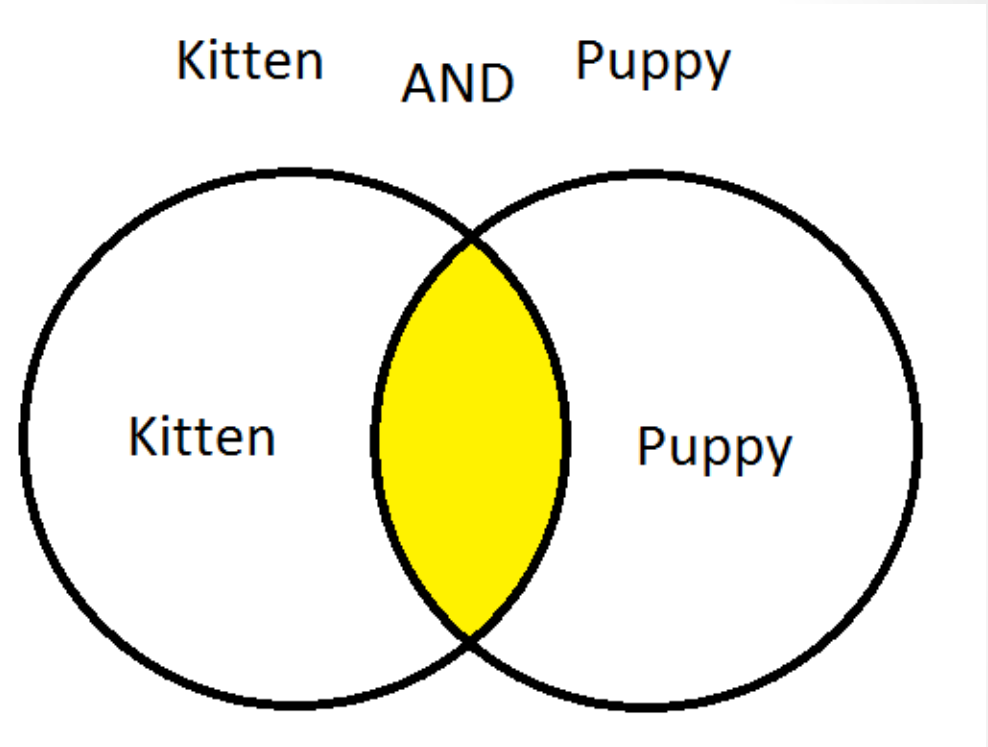


AND

AND = Less

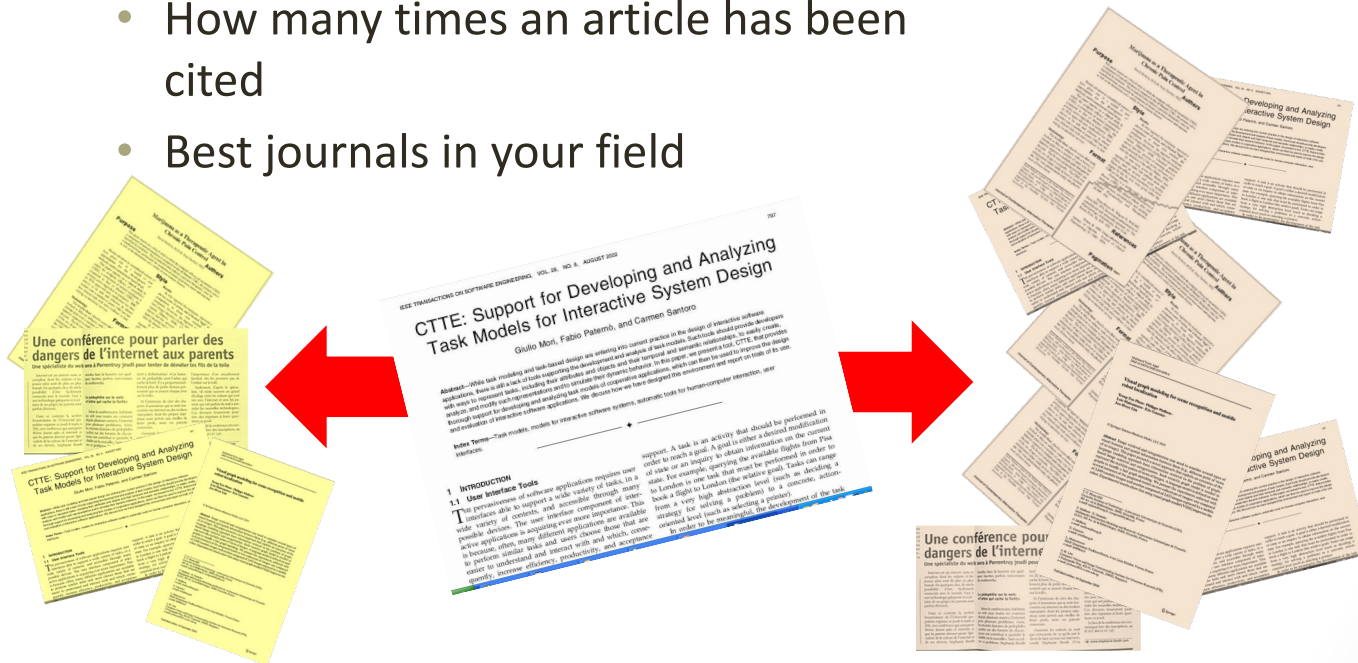
AND requires **all** of the terms to be present

AND makes your search results **smaller**



Citation searching

- Which articles have cited an earlier article
- Find articles on similar/related subject
- How many times an article has been cited
- Best journals in your field



Main steps in a systematic review

1. Framing the question
2. Establish selection criteria
3. Assessing the quality of studies
4. Summarising the evidence
5. Interpreting the findings

(Khan et al. 2003)



PRISMA checklist:

Preferred Reporting Items for Systematic Reviews

<http://www.prisma-statement.org/>

Section/Topic	#	Checklist Item	Reported on Page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome-level assessment (see Item 12).	
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group and (b) effect estimates and confidence intervals, ideally with a forest plot.	
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., health care providers, users, and policy makers).	
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review level (e.g., incomplete retrieval of identified research, reporting bias).	
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	

PRISMA steps 6-9

6. Eligibility Criteria

7. Information sources

8. Search

9. Study selection

Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).

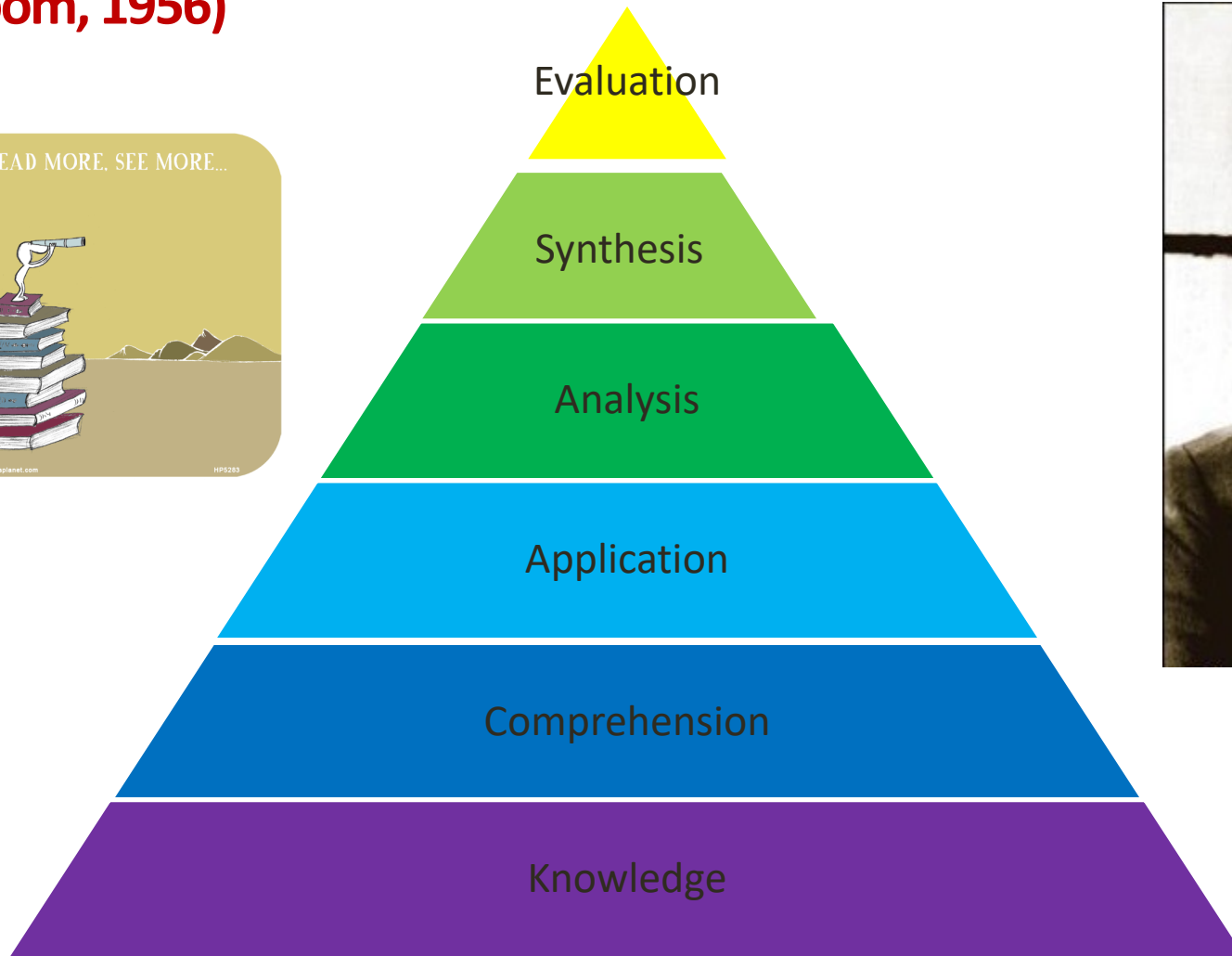
<http://www.prisma-statement.org/PRISMAStatement/Checklist>

Reading a journal article

- Read with a clear purpose or goal in mind
- Skim the article – what can you learn from the title, abstract, headings and conclusions?
- How does the article ‘fit’ with what you already know about the topic and the methods used?
 - Is it contrary to other work? (you need to identify the arguments)
- Read in detail – evaluate as you read: any errors? Do the findings follow from the data? Do the conclusions follow from the findings?
- Summarise – topic, keywords/points, theoretical perspectives, methods used, findings, questions you have arising from the article



Thoughtful reading: *hierarchy of thinking* (Bloom, 1956)



Critical evaluation

- What is *new* in this work?
 - How does it contribute to the body of knowledge?
- What is *good* and *bad* about this work?
 - Adopt an air of scepticism or reasoned doubt
 - Is it 'fact' or 'opinion'?
 - Does it make assumptions? – scrutinise the claims
- Does it *link* with other work I have read?
 - Include all sides of an academic debate
- Does it *cite* significant works that I have identified?
- Does it cite other works which are often cited?
- What *themes* are emerging from it?



Be selective

Think of individual literature sources as pieces in a jig-saw puzzle. Some pieces may be bigger than others, some background, some foreground; but they should all piece together to provide some overall picture.



Missing pieces indicate the research that still needs to be carried out

Working with themes, concepts and theories

Ideas

Underling idea or message

Concepts / themes

- Abstract principles used to classify, interpret, describe, explain and evaluate aspects of the social world – group them to simplify (or use selected)

Perspectives

- Groups of concepts – facts, values and assumptions providing a lens

Theories and models

- Bundles of concepts defined in a particular way

Writing your literature review - 1

It will include:

- Introduction;
- Main body;
- Conclusion



Introduction - might include

- the topic of focus and rationale for its choice
- a context for the review
- the aims and structure of the review
- the sources of literature considered within the review – might include key search terms

Writing your literature review - 2



Main body – this is the main review (critical *not* descriptive)

- might start by providing a *brief* and broad overview of the relevant themes, concepts, definitions
- typically structured by parent field then sub-fields
- identifies multiple *viewpoints* or positions regarding the topic (*consensus* or counter-evidence/views) – and identifies *your* considered view
- should summarise each theme with the key arguments and how it relates to the next (logical flow)

Conclusions – integrates the theme summaries

- Clearly identifies the '*gaps*' in this existing literature (theory or practice) and key *issues* for your research

Practical advice



- Review the literature – don't reproduce it!
- Synthesise the material – don't simply provide a list
- Link the review to your own research – it is *not* a general review of the subject matter
- Look for circular patterns in the material you are reviewing
- Don't uncritically accept the findings of existing literature – critically evaluate
- Don't rely on secondary sources (textbooks)
- **Give yourself sufficient time!**

How do I know if I have completed my review?

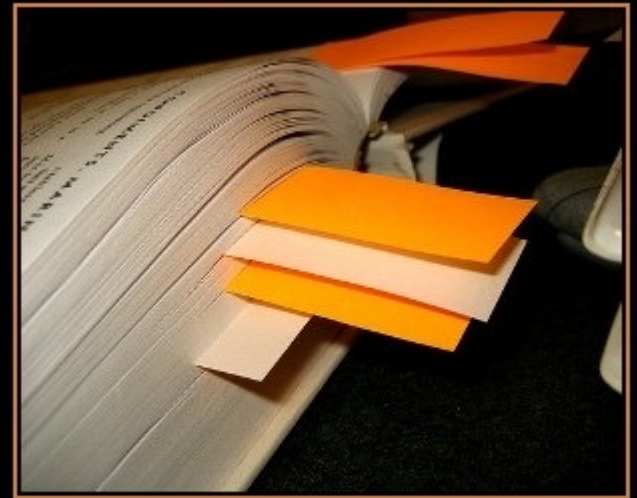
(based on Saunders *et al.*, 2012, p.59)

- Have I covered the key literature? – and key authors in my subject area?
- Does it cover ***the*** significant theories?
- Is the literature ***up to date***?
- Do I ***relate*** my literature to my research question / aim?
- Have I included literature that ***contradicts as well as supports*** my own view?
- Have I produced a ***critical assessment*** rather than a descriptive one?
- Have I organised the literature into a logical and coherent structure rather than simply producing a list of the literature? – ***analysis***
- Is it easy to read and understand – ***synthesis***?
- Have I identified gaps /weaknesses in the existing literature?
- Does my own research emerge clearly from the literature – ***potential***?



Importance of citations

- Make sure that you reference everything – including page numbers
- Accurately record the key reference information for every paper that you read – it will save you considerable time later!
- Write the reference list as you go along



APA REFERENCING

Lecture review

- Your literature review sets up your dissertation/thesis
- It therefore involves reading and critical analysis
- The reading must be of relevant books, journals and reports
- The literature review identifies the research gap that your work will help fill
- You will use the literature review in selecting your methodology and in analysing your findings
- **It is quite normal to amend your research title once you have examined the literature in detail**

