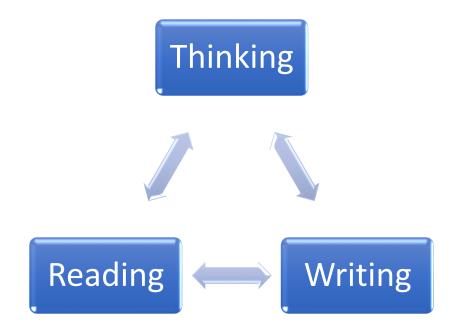
## Outline Writing Abstracts and Literature Reviews in English

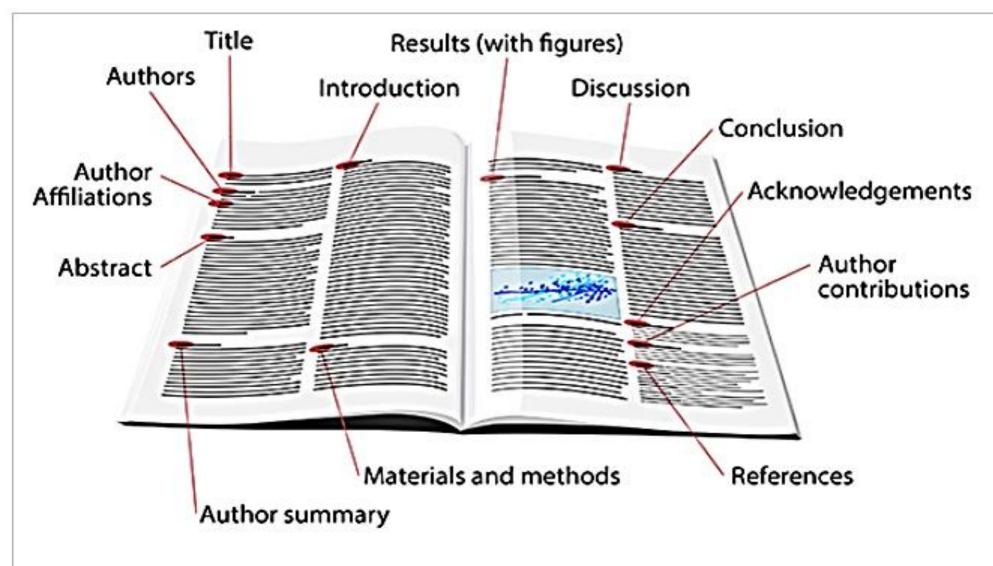
- Writing an Abstract
- Purpose of an abstract
- Elements of an abstract
- Writing a Literature Review
- Purpose of a literature review
- Finding research gaps
- Steps for writing a literature review
- Using ChatGPT for Writing Abstracts and Literature Reviews: Benefits and Limitations



# Academic Journal Articles

- Title
- Author
- Publication
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- Reference

## Anatomy of an academic journal article

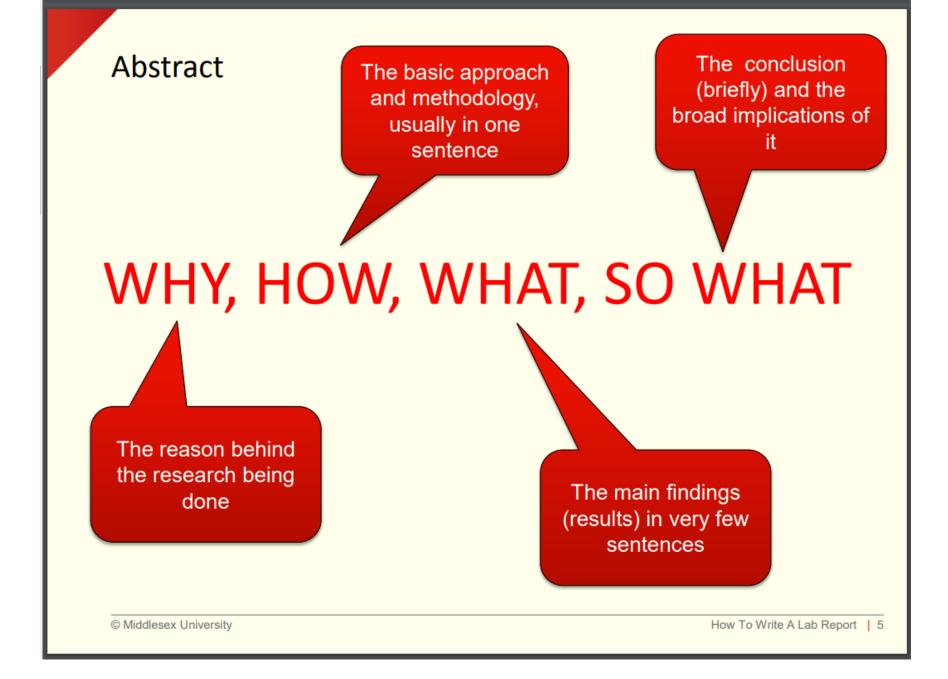


Moeller, K. (2014) Anatomy of an Article: ASU - Ask A Biologist.

Available at: <a href="https://askabiologist.asu.edu/explore/anatomy-of-an-article">https://askabiologist.asu.edu/explore/anatomy-of-an-article</a> (Accessed: 29 August 2019)

## Structure of Academic Journal Articles (Abstract + IMRD)

- Abstract (summary of the whole article)
- Introduction (why the author did the research)
- Methods (how the author did the research)
- Results (what happened)
- Discussion (what the results mean)
- Conclusion (what the author learned)
- References (whose research the author read)



https://unihub.mdx.ac.uk/\_\_data/assets/pdf\_file/0030/187518/How-To-Write-An-Abstract-New-Format.pdf

# What is an Academic Abstract?

- Short and overview of your paper, dissertation
- Explanation of the title of your paper, dissertation
- Brief but packed with information
- To keep your abstract short, focusing on just four or five of the essential points, concepts, or findings.
- Objective and accurate. The abstract should accurately reflect what your paper is about.
- The abstract's purpose is to report rather than provide commentary. Only include information that is included in the body of your paper.

# Basic Components of an Abstract

- Purpose (why): the overall purpose of the study and the research problems
- Methodology (how): the basic design of this study
- Results (What they found): major findings as a result of your analysis
- Conclusion (what it means): a brief summary of your interpretations

Purpose (why): the overall purpose of the study and the research problems

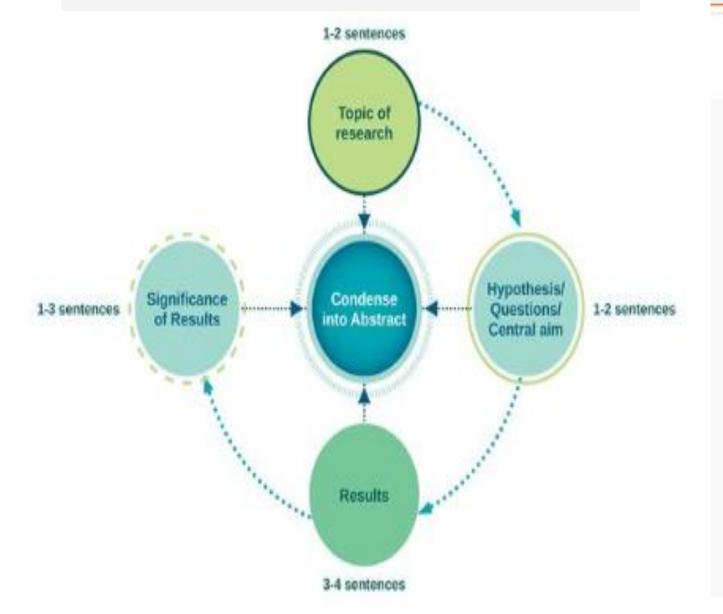
Methodology (how): the basic design of this study

Results (What): major findings as a result of your analysis

Conclusion (what it means): a brief summary of your interpretations

# The abstract abacus





# Write the abstract, together with the title, at the very end.

## Read the whole article carefully and identify:

- · Major objectives and keywords
- Most significant results/findings
- The basic methods used to generate them
- What makes the study either unique or relevant to the field

Compile this into a single paragraph.

# Abstract for IMRD paper

- 25% of their space on the purpose and importance of the research (Purpose)
- 25% of their space on what you did (Methods)
- 35% of their space on what you found (Results)
- 15% of their space on the implications of the research (Conclusion)

## The abstract should not contain:

- Lengthy background information
- References to other literature ("current research shows that..." or "studies have indicated...")
- Abbreviations, jargon, or terms that may be confusing to the reader
- image, illustration, figure, or table, or references to them.

資料來源: libguides.usc.edu/writingguide/abstract

# How do you know when you have enough information in your abstract?

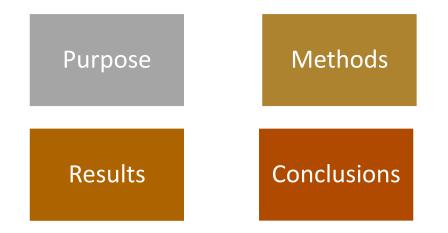
"if your abstract was the only part of the paper you could access, would you be happy with the amount of information presented there? Does it tell the whole story about your study?

If the answer is "no" then the abstract likely needs to be revised."

http://libguides.usc.edu/writingguide/abstract

# Sample abstract

How to Write an Academic Abstract



## Structure of an Abstract

Although outdoor thermal comfort has gained increasing research attention, meteorological conditions and thermal sensation in different urban settings in Background high-density cities have not been systematically studied from the perspective of urban planning and design. Considering the potential relationship between environmental quality and thermal sensation in outdoor spaces— an emerging topic in perceived comfort, this study offers a new approach for planning and design for climate resilience in cities. This paper presents the results of an outdoor thermal **Methods** comfort survey conducted on hot summer days in Hong Kong. Diverse patterns of PET-comfort ratings relationships were found in different urban settings. The study revealed that air temperature, subjective assessments of solar radiation and wind environment were strong determinants of thermal sensation and evaluation. In our Results analysis, wind condition showed a significant indirect effect on comfort through subjective perception. Statistical modelling showed that subjective perceptions on microclimate condition and comfort are moderated by various aspects of environmental quality. The findings of this study help inform future design for Conclusion climate resilience in outdoor urban spaces in hot-humid subtropical cities.

資料來源: David Taylor: How to Read a Journal Article in 10 Minutes or Less https://www.youtube.com/watch?v=466X7ti1kcs

## Abstract

The increasing use of English in research and higher education has been the subject of heated debate in Denmark and other European countries over the last years. This paper sets out the various positions in the national debate in Denmark, and then examines the attitudes towards these positions among the teaching staff at the country's largest university. Four topics are extracted from the debate - one which expresses a positive attitude towards English and three independent but interrelated topics which express more negative attitudes. The responses from the university lecturers show that a majority agree with all positions, negative as well as positive. This finding indicates that the attitude may not form a simple one-dimensional dichotomy. The responses are broken down according to lecturer age and the proportion of teaching the lecturer conducts in English. The results show that younger lecturers and lecturers with a higher teaching load in English are more positive towards the increase in English medium instruction.

Keywords: attitudes, survey, English-medium instruction, internationalisation of higher education.

## Title: Undergraduates' Academic Reading Format Preferences and Behaviors (Abstract)

• This study of undergraduates' academic reading format preferences and behaviors asks the questions: What are undergraduates' format preferences when engaging with their academic readings, electronic or print? What factors impact their preferences and behaviors? How do these factors influence their actions? Almost 400 students at the University of California, Los Angeles completed the online Academic Reading Questionnaire in spring 2014 by agreeing or disagreeing with statements about their format preferences when engaging with their academic texts, and the contextual factors that impact them. Results show overwhelmingly that they prefer print over electronic formats for learning purposes, but multiple factors such as accessibility, cost, complexity and importance of the reading to the course affect their actual behaviors. The findings are then considered within the larger picture of previous studies of presentation format preferences, and research comparing reading comprehension in electronic and print formats. Zipf's Principle of Least Effort and the concept of information economics are used to suggest a theoretical basis for why factors outside of comprehension and learning efficiency impact the students' actual behaviors.

Several non-profit environmental organizations are trying to counter the adverse effects of climate change. To finance their activities, they require donations. However, in today's society the number of people who donate to environmental organizations is decreasing, which is creating a funding gap. If organizations are to be able to continue their work, the number of donations must increase.

The aim of this study is to determine how individuals' intentions to donate to an environmental organization can be increased. To this end, the research question is as follows: *To what extent does a potential donor's social distance to the victims of climate change portrayed in fund-raising campaigns affect his or her intention to make a donation?* In this context, social distance is the extent to which people feel they are in the same social group (i.e., in-group) or another social group (i.e., out-group) in relation to climate change victims.

The research question is answered through an experiment that entails distributing an online questionnaire to respondents. These respondents are randomly divided into two conditions (namely large and small social distance). Based on their classification, they are then asked to comment on a different image from a fund-raising campaign. The responses received show that feeling a large social distance leads to more donation intentions that feeling a small social distance does have an impact on donation intentions.

On this basis, it is recommended that environmental groups portray a significant social distance in fund-raising campaigns for their climate change activities. Further research could be undertaken to identify other factors it would be helpful for such organizations to bear in mind when selecting the best images for such campaigns.

### Example Abstract

| Features   | Example   |
|--|---|
| The problem/ focus/<br>topic you are<br>investigating.   | Previous research has shown that individuals with generalized<br>anxiety disorder (GAD) report elevated anger compared with<br>nonanxious individuals;  |
| The <b>rationale</b> for the research.   | However, the pathways linking GAD and anger are currently unknown.  |
| The research<br>methods e.g.,<br>participants included,<br>methods used for<br>analysing data. | We hypothesized that negative beliefs about uncertainty,<br>negative beliefs about worry and perfectionism dimensions<br>mediate the relationship between GAD symptoms and anger<br>variables. We employed multiple mediation with bootstrapping on<br>cross-sectional data from a student sample (N = 233) to test four<br>models assessing potential mediators of the association of GAD<br>symptoms to inward anger expression, outward anger<br>expression, trait anger and hostility, respectively.  |
| The main results of your thesis.   | The belief that uncertainty has negative personal and behavioural implications uniquely mediated the association of GAD symptoms to inward anger expression (confidence interval [CI] = .0034, .1845, PM = .5444), and the belief that uncertainty is unfair and spoils everything uniquely mediated the association of GAD symptoms to outward anger expression (CI = .0052, .1936, PM = .4861) and hostility (CI = .0269, .2427, PM = .3487). Neither negative beliefs about worry nor perfectionism dimensions uniquely mediated the relation of GAD symptoms to anger constructs. |
| The conclusion and implications of your research.  | We conclude that intolerance of uncertainty may help to explain<br>the positive connection between GAD symptoms and anger, and<br>these findings give impetus to future longitudinal investigations of<br>the role of anger in GAD.   |

*Note*. Fracalanza, Katie; Koerner, Naomi; Deschênes, Sonya S., & Dugas, Michel J. (2014). Intolerance of Uncertainty Mediates the Relation Between Generalized Anxiety Disorder Symptoms and Anger, *Cognitive Behaviour Therapy*, 43(2), 122-132.

## What are the different types of abstracts?

### Click the images to learn more

## WILEY

| Descriptive abstract | Informative abstract | Structured abstract | > |
|----------------------|----------------------|---------------------|---|
|                      |                      |                     |   |

### (1) Descriptive abstracts

Descriptive abstracts are generally used for humanities and social science papers or psychology essays. This type of abstract is usually very short (50-100 words). Most descriptive abstracts have certain key parts in common. They are:

- background
- purpose
- particular interest/focus of paper
- overview of contents (not always included)

### (2) Informative abstracts

Informative abstracts are generally used for science, engineering or psychology reports. You must get the essence of what your report is about, usually in about 200 words. Most informative abstracts also have key parts in common. Each of these parts might consist of 1-2 sentences. The parts include:

- background
- aim or purpose of research
- method used
- findings/results
- conclusion

| Descriptive abstract   | Informative abstract  |  |
|--|---|--|
| Describes the major points of the project to the reader.   | Informs the audience of all essential points of the paper.  |  |
| Includes the background, purpose and focus of the paper or article, but never the methods, results and conclusions, if it is a research paper. | Briefly summarises the background, purpose, focus,<br>methods, results, findings and conclusions of the<br>full-length paper. |  |
| Is most likely used for humanities and social science papers or psychology essays.   | Is concise, usually 10% of the original paper length, often just one paragraph.   |  |
|  | Is most likely used for sciences, engineering or psychology reports.  |  |

資料來源: The University of Adelaide https://www.adelaide.edu.au/writ ingcentre/ua/media/26/learningg uide-writinganabstract.pdf

## Abstract: Romantic Love and the Feudal Household: *Romeo and Juliet* as Social Criticism

• *Romeo and Juliet* is one of the first works to emphasize the important place that romantic love holds in the lives of two individuals. Less frequently acknowledged is the role of romantic love in the play's criticism of feudal society. Using the notion of an unlikely couple, I explore the play's critique of feudal society for allowing the antagonism between the two lovers' noble households to undermine the possibility of their finding true love. The play argues for the importance of a strong, centralized state in securing the welfare of its citizens.

## Irrational Love: Taking Romeo and Juliet Seriously

- This paper argues that there are important irrational elements to love. In the philosophical literature, we typically find that love is either thought of as *rational* or *arational* and that any irrational elements are thought to be defective, or extraneous to love itself. We argue, on the contrary, that irrationality is in part connected to what we find valuable about love. We focus on 3 basic elements of love: 1) Whom you love 2) How much you love them 3) How much of a role love plays in your life And in each case, we argue that love can be irrational and valuable.
- Natasha McKeever&Joe Saunders, International Journal of Philosophical Studies, Pages 254-275 | Published online: 15 Sep 2022

Techniques to reduce the abstract's word count

Click each technique to see examples.

Be sparing with adverbs/adjectives and avoid long phrases

Find shorter expressions without losing accuracy

Simplify compound or complicated sentences

Try to condense terms containing prepositions

Use words instead of phrases

Reduce long introduction and conclusion sections



# WILEY

## Techniques to reduce the abstract's word count

WILEY

Click each technique to see examples.

Be sparing with adverbs/adjectives and avoid long phrases

Find shorter expressions without losing accuracy

Simplify compound or complicated sentences

Try to condense terms containing prepositions

Use words instead of phrases

Reduce long introduction and conclusion sections

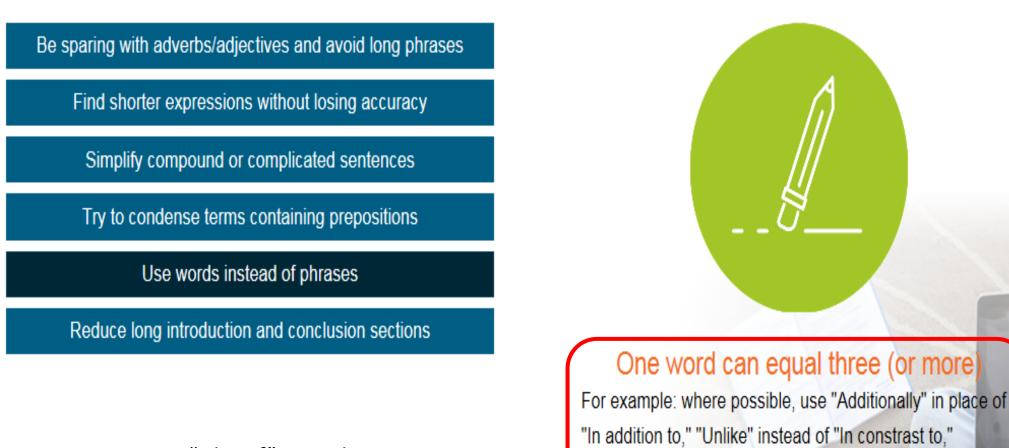
### Simplify without creating ambiguity

For example: "Serum obtained from newborn calves" can be changed to "Newborn calf serum," and "Cells derived from patient tumor samples" can be shortened to "Patient tumor-derived cells."

But be carefull Remember the following ambiguous phrase from Learning Path "Best practices in writing a scietific article", "an uncommon protein assay"?

## Techniques to reduce the abstract's word count

Click each technique to see examples.



"Consequently" rather than "As a consequence of."

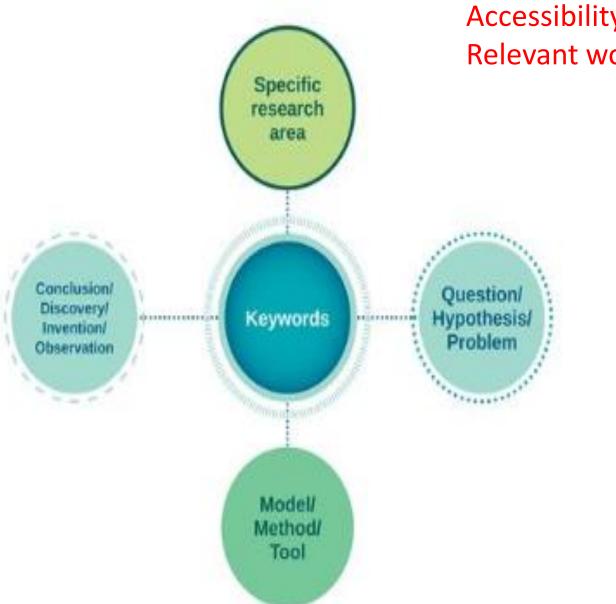
WILEY

"a lot of" = much

Keywords: How do you use keywords in your article?

- Title: 2-4 keywords
- Abstract : 3-5 keywords, repeat 2 or 3 times as natural
- Headings and Subheadings: 1-2 keywords each, subheadings are likely to be more flexible than headings
- Keyword fields: 5-7 keywords or popular synonyms
- Image, figure, or table captions : 2-4 keywords each
- Keep in mind keywords limit
- Avoid keywords 'stuffing'

# What is the Keyword Kit?



Key words Searchability Accessibility Relevant words

## Questions to answer in selecting keywords:

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- 1. What is my article about? Specific area of research
- 2. What are the most important/exciting findings of my study? Results, data and conclusion
- 3. What techniques or strategies were used to generate the key pieces of findings?
- 4. What is the significant contribution of my study to the specific area of research?

# Choosing and placing keywords wisely

Title: Core keywords/key-phrases

Abstract: Repeat core keywords/key-phrases 2 – 3 times, and add other field-related ones

Headings and body text: Consistent use of keywords

Make sure the terms you use are consistent: e.g. which one: "dorsoventral", "dorso-ventral", "dorsal-ventral"?

## Wiley Researcher Academy

## WILEY

## Common Uses of Tenses

🚫 Scribbr

Personal pronouns

Common uses of tenses

#### **Tenses per section**

Abbreviations and acronyms

Numbers: words or numerals?

Capitalizing chapter and section headings

Language mistakes in quotes

Word order rules 
Adverbials

Adjectives

What's a phrasal verb? Getting phrasal verbs right 47 phrasal verbs

MEAL system 
MEAL examples

Transition words and phrases

Stylistic do's 🔻

Serial commas

Active sentences

Proofreading & Editing - Plagiarism Check APA Generator - Knowle

your topic matter.

https://www.scribbr.com/academicwriting/common-uses-tenses-academic-writing/

### Abstract or Summary

Present simple: for facts and general truisms; to say what the paper does

This thesis <u>examines</u> the ways that ecological poetry <u>relates</u> to political activism.

Our research suggests better economic policies.

Present perfect: for past events or research still relevant to the present

Thinkers have examined how ecological poetry relates to political activism.

Other economists have suggested different economic policies.

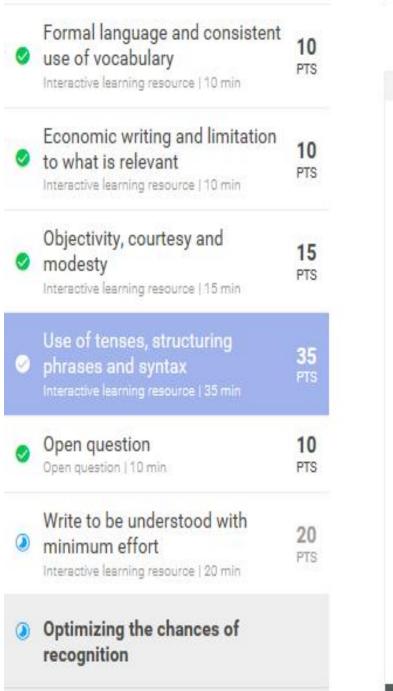
### Introduction

Present simple: to say what the paper does and why it is important

This research is relevant to how we understand the role of poetry.

Effective economic policies <u>help</u> societies to prosper.

Past simple: to provide historical background



# Click on each tense to see details of their use. Present tense (e.g., Imperfect past tense Perfect tense is) (simple past) (e.g., (present perfect) (e.g., has been) was) What happens in abstracts? >

**35 PTS** 

EARNED

BBBBBB

|                           | <i>I/We</i> -related use, i.e. the authors of <i>this</i> paper  | Others-related use,<br>i.e. other researchers  | <i>It</i> -related use, i.e. objects/substances/<br>non-human animals, or phrases<br>in passive mood  |
|---------------------------|--|--|---|
| Present<br>e.g. <i>is</i> | <ul> <li>To describe results of very high certainty/replicative redundancy and cases of "always-true"; but can be qualified with modal verbs (see later in section) to give grades of certainty.</li> <li>e.g. expression of an experimentally supported claim in abstract or introduction: "Here we show that"</li> <li>When used in the "We" form, it always refers to findings presented for the first time in the current manuscript.</li> </ul> | <ul> <li>To describe a finding or<br/>conclusion that is part of a<br/>progressing field and is relatively<br/>current/new, e.g. "McTavish and<br/>Carter show that";</li> <li>or a belief held by other<br/>researchers, e.g. "Takahashi et<br/>al. interpret this as evidence of<br/>nuclear re-programming upon<br/>mechanical stress.";</li> <li>or a methodology/approach that<br/>another team consistently uses,<br/>and which is being contrasted<br/>with a different one, or otherwise<br/>highlighted, e.g. "Price et al. use<br/>bovine serum albumin to reduce<br/>non-specific binding.";</li> </ul> | <ul> <li>To describe an accepted fact that is currently beyond doubt, and/or always true, regardless of conditions (within reason), e.g. "Plate tectonics continues to shape the Earth's surface." or "Fluoridation of tap water statistically reduces the incidence of tooth decay."</li> <li>Note also: the present continuous can be used in some cases, e.g. "The Earth's continents are still moving because of plate tectonics."</li> <li>In passive mood: to describe a <i>generic</i> action or process, e.g. "To achieve good electrical insulation, a layer of silicone rubber is injected between";</li> <li>or current situation or on-going condition, e.g. "The surface of Mars is bombarded by around 200 meteorites per year."</li> </ul> |





Because abstracts can, and often do, contain a mixture of all three tenses, here is a contextualizing example. Abstract Introduces an established fact Describes concluded instances of research from the past

Melatonin is a hormone with a complex role in the risk and pathogenesis of autoimmune disorders. Initial reports yielded conflicting results regarding the effect of melatonin in ameliorating or boosting natural and autoimmune reactions. However, over the years it has become clear that melatonin can exacerbate some autoimmune conditions... Here we present findings indicating that melatonin alleviates Multiple Sciences and other autoimmune disorders by afferting the balance between effector and regulatory cells...

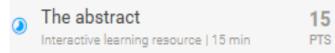
Frames insights from the past as part of longterm – possibly unconcluded – process

Minture of present and present continuous tenses to report present findings in the content establishing a new fact (aleviates)

Keep this in mind when writing your own abstract.

Abstract Introduces an established fact Describes concluded instances of research from the past

Melatonin is a hormone with a complex role in the risk and pathogenesis of autoimmune disorders. Initial reports yielded conflicting results regarding the effect of melatonin in ameliorating or boosting natural and autoimmune reactions. However, over the years it has become clear that melatonin can exacerbate some autoimmune conditions... Here we present findings indicating that melatonin alleviates Multiple Sclerosis and other autoimmune disorders by affecting the balance between effector and regulatory cells... Mixture of present and present continuous Frames insights from the past as part of longtenses to report present findings in the context of term – possibly unconcluded – process establishing a new fact (alleviates)



- Authors and keywords
- Introduction and methods
- Results, discussion and conclusions
- Other aspects of the manuscript

Final exam

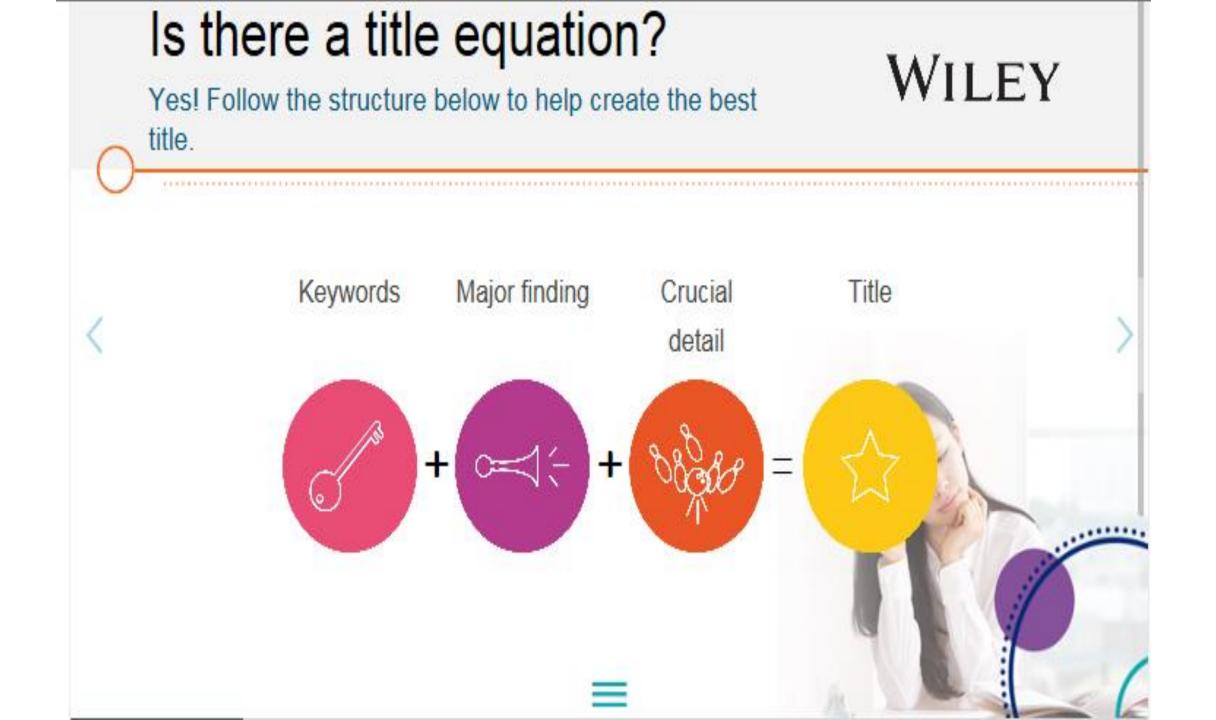
Good title: Exciting, novel, dramatic, specific, concise, no filler words, include key words as specific as possible, 12 words

# Have you written a good title with high impact?

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Review your article and revise the title for the following criteria. Does your title:

- Contain keywords relevant to your target readership
- Summarize the major conclusion or finding accurately
- Not contain generic or broad words, such as "A study of..." or "A report of..."
- Contain crucial specifics of the study
- Differentiate the study from other papers in the research area
- Not contain jargon or ill-defined abbreviations



## Academic Phrasebank

### http://www.phrasebank.manchester.ac.uk/

## MANCHESTER

## Academic Phrasebank

The University of Manchester

Introducing Work

Referring to Sources

**Describing Methods** 

thods Reporting Results

ults Discussing Findings

ings Writing Conclusions

| ENERAL LANGUAGE FUNCTIONS |
|---------------------------|
| Being Cautious            |
| Being Critical            |
| Classifying and Listing   |
| Compare and Contrast      |
| Defining Terms            |
| Describing Trends         |
| Describing Quantities     |
| Explaining Causality      |
| Giving Examples           |
| Signalling Transition     |
| Writing about the Past    |
|                           |

### Home Page

The Academic Phrasebank is a general resource for academic writers. It aims to provide you with examples of some of the phraseological 'nuts and bolts' of writing organised according to the main sections of a research paper or dissertation (see the top menu ). Other phrases are listed under the more general communicative functions of academic writing (see the menu on the left). The resource should be particularly useful for writers who need to report their research work. The phrases, and the headings under which they are listed, can be used simply to assist you in thinking about the content and organisation of your own writing, or the phrases can be incorporated into your writing where this is appropriate. In most cases, a certain amount of creativity and adaptation will be necessary when a phrase is used. The items in the Academic Phrasebank are mostly content neutral and generic in nature; in using them, therefore, you are not stealing other people's ideas and this does not constitute plagiarism. For some of the entries, specific content words have been included for illustrative purposes, and these should be substituted when the phrases are used. The resource was designed primarily for academic and scientific writers who are non-native speakers of English. However, native speaker writers may still find much of the material helpful. In fact, recent data suggest that the majority of users are native speakers of English. More about Academic Phrasebank.

This site was created by **John Morley**. If you could spare just two or three minutes of your time, I would be extremely grateful for any feedback on Academic Phrasebank: Please click **here** to access a very short questionnaire. Thank you.

ABOUT PHRASEBANK

### HOME »

## **Describing Methods**

GENERAL LANGUAGE FUNCTIONS

#### Being Cautious

### **Being Critical**

Classifying and Listing

#### **Compare and Contrast**

Defining Terms

#### Describing Trends

#### Describing Quantities

Explaining Causality

### Giving Examples

Signalling Transition

#### Writing about the Past

#### ABOUT PHRASEBANK

PDF

An enhanced and expanded version of PHRASEBANK can now be downloaded in PDF:

In the Methods section of a dissertation or research article, writers give an account of how they carried out their research. The Methods section should be clear and detailed enough for another experienced person to repeat the research and reproduce the results. Where the methods chosen are new, unfamiliar or perhaps even controversial, or where the intended audience is from many disciplines, the Methods section will tend to be much more extensive. Typical stretches of text found in this section of a research article or dissertation along with examples of the kind of language used for these are listed below. Note that for most of the functional categories in this section, the verbs are written in the simple past tense.

### Describing previously used research methods - close

Many researchers have utilised X to measure ... One of the most well-known tools for assessing ... Traditionally, X has been assessed by measuring ... A number of techniques have been developed to ... Different methods have been proposed to classify ... X is the main non-invasive method used to determine ... Different authors have measured X in a variety of ways. Several methods currently exist for the measurement of X. Previous studies have based their criteria for selection on ... X is one of the most common procedures for determining ... There are three main types of study design used to identify ... The use of life story data has a relatively long tradition within X. Recent advances in X methods have facilitated investigation of ...

### HOME »

## Discussing Findings

GENERAL LANGUAGE FUNCTIONS

#### Being Cautious

#### Being Critical

Classifying and Listing

#### Compare and Contrast

**Defining Terms** 

Describing Trends

#### Describing Quantities

**Explaining Causality** 

Giving Examples

#### Signalling Transition

#### Writing about the Past

#### ABOUT PHRASEBANK

An enhanced and expanded version of PHRASEBANK can now be downloaded in PDF:



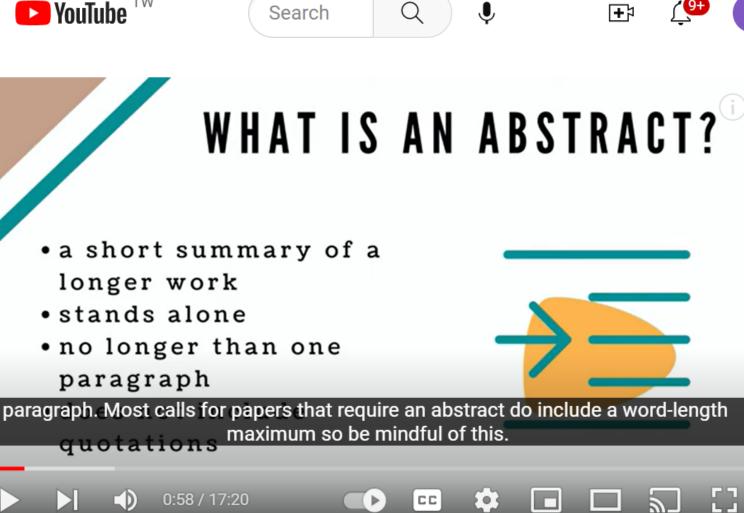
The term 'discussion' has a variety of meanings in English. In academic writing, however, it usually refers to two types of activity: a) considering both sides of an issue, or question before reaching a conclusion; b) considering the results of research and the implications of these. Discussion sections in dissertations and research articles are probably the most complex sections in terms of their elements. They normally centre around a 'statement of result' or an important 'finding'. As there is usually more than one result, discussion sections are often structured into a series of discussion cycles. The most common elements in these cycles, and some of the language that is typically associated with them, are listed below. Note that when offering explanations and suggesting implications the language used is very tentative or cautious (refer to the section entitled *Being Cautious*).

### Providing background information: reference to literature - close

Several reports have shown that ... As mentioned in the literature review, ... Prior studies that have noted the importance of ... Very little was found in the literature on the question of ... Previous studies evaluating X observed inconsistent results on whether ... A strong relationship between X and Y has been reported in the literature. In reviewing the literature, no data was found on the association between X and Y.

#### Droviding background information: reference to the question - close





### Writing Abstracts & Literature Reviews



https://www.youtube.com/watch?v=9HDarmREoh0

'Writing while you collect and collecting while you write.'

'Build an argument, not a library'.

Synthesise and interpret the reading material

Careful selection of relevant sources

Literature Review

Broad reading to critical analysis

Asking questions, discovering the value, limitations of previous studies

# Definition: Literature Review

- Literature = scholarly publications, mainly made up of research articles (peer-reviewed)
- Review = extended written discussion of publications, not summarising them
- A literature review isn't just about the topic, it's about someone becoming part of a community of scholars, and it's a particular way of thinking and communicating.
- When you write a review, you're not just writing a text you're joining in an academic activity.

- A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing you to identify relevant theories, methods, and gaps in the existing research.
- A literature review is a piece of discursive prose, not a list describing or summarizing one piece of literature after another. It's usually a bad sign to see every paragraph beginning with the name of a researcher. Instead, organize the literature review into sections that present themes or identify trends, including relevant theory. You are not trying to list all the material published, but to synthesize and evaluate it according to the guiding concept of your thesis or research question.

# A Literature review

- situates your research focus within the context of the wider academic community in your field
- reports your critical review of the relevant literature
- identifies a gap within that literature that your research will attempt to address
- demonstrates your familiarity with a body of knowledge and establishes the credibility of your work.

- the definition of the problem domain
- the critical discussion of the literature within this domain
- the identification of research needs and knowledge gaps within the literature
- a clear statement of research objectives, which should address one or more of the knowledge gaps and research needs identified

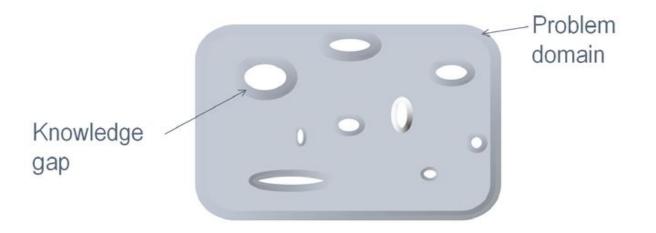


Figure 1: Simplified Conceptual "Swiss Cheese" Model of Purpose of Literature Review

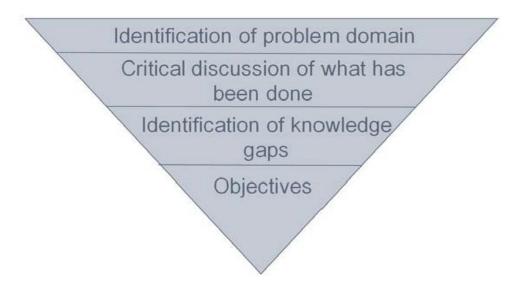


Figure 2: Conceptual "Inverted Pyramid" Model of Steps in the Writing of the Literature Review

Maier H.R. (2013) What constitutes a good literature review and why does its quality matter?, Environmental Modelling and Software, 43, 3-4, DOI: 10.1016/j.envsoft.2013.02.004.

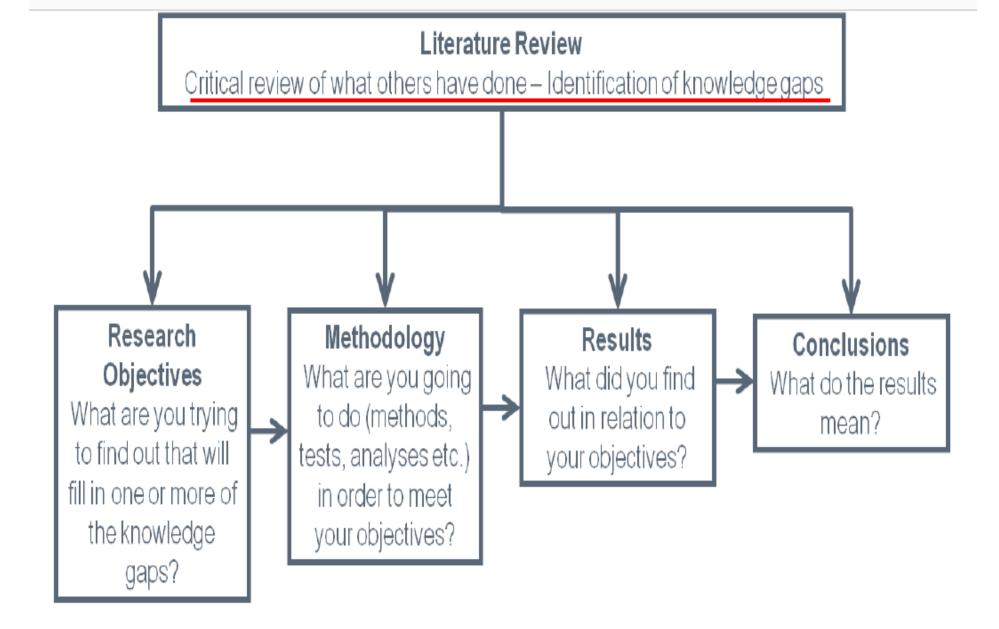
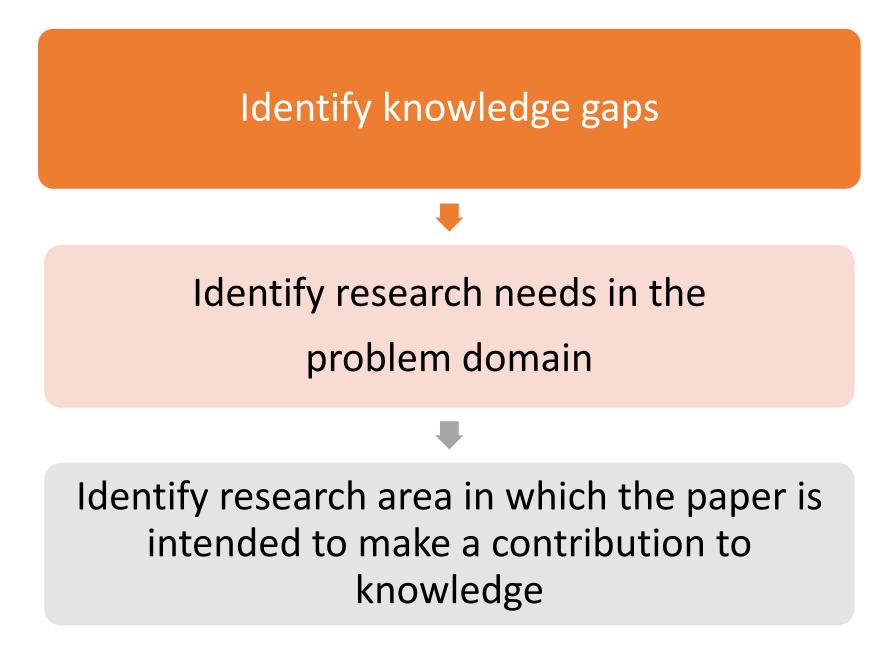


Figure 3: Conceptual Representation of the Impact of the Literature Review on Objectives, Methods, Results and Conclusions



# Structure of a literature review

- Chronologically do not just list items, write critically
- By theme if there are several strands within your topic that can logically be brought together
- By sector political background, practice background, methodological background, geographical background, literary background
- By development of ideas if there are identifiable stages of idea development

# Why write a literature review?

- An understanding and knowledge of a topic.
- The current research in this area.
- Gaps in the literature that helps justify your research.
- The **context** for your research and illustrates how it relates to the **wider research landscape** in this area.
- The key authors writing in this field.

# Why write a literature review?

- Identifies the important works in your area and other people working in the same field.
- Demonstrates the depth of your knowledge about your research.
- Allows you to show that you are building on a foundation of existing knowledge and ideas.
- Provides an intellectual context for your own work and position your project in relation to others in the field.

# Why write a literature review?

- It is a relevant selection of everything you have read.
- It is structured by theme/topic.
- It is your expert understanding and evaluation of your subject.
- It is your engagement with the works of other scholars.
- It must tell the reader what knowledge and ideas have been established and agreed in your area and outline their strengths and weaknesses.



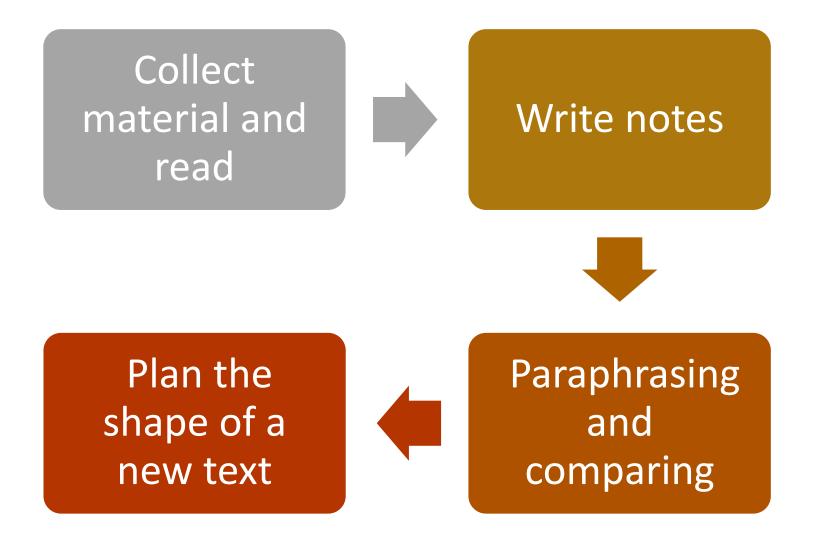
# What literature review is not

- It is not a descriptive list.
- It is not a book by book and article by article summary.
- It is not a survey of every single thing that's ever been written about your topic.

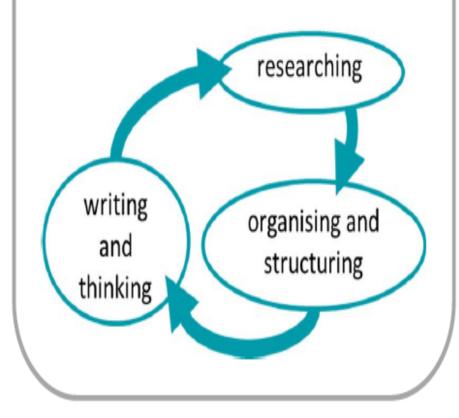
# Reviewing your review

- What is the balance between description and comment?
- Have I missed out any important dimension of the argument, or literature?
- Have I supported the development of each step in my argument effectively?
- Is the material presented in the most effective order?
- Are there places where the reader is left with unanswered questions?
- Is every element of my research question supported by the preceding material?
- Have I explained to the reader the relevance of each piece of evidence?
- Is there any material that is interesting but which does not contribute to the development of the argument?
- Have I explained adequately the justification for this research approach / topic / question?
- Are my references up to date?
- How effective is my linking of all the elements?
- Beware of becoming too attached to your writing.

Writing Literature Review – challenging and interesting



Is academic writing cyclical? Do some reading, write up a section, research further, think some more, edit your draft



# Do you write in bits?

Longer and more complex assignments are made up of shorter linked sections of writing on sub-questions or themes. These can be drafted as mini essays.

Do you write from the top down? You know what your big idea is and break it into smaller sections.

Do you write from the bottom up? You group ideas together and decide what order to put them in as your line of reasoning emerges.

# Literature Review Matrix.

4

- 1. Modify column headings as necessary.
- 2. Fill in rows for each reading completed
- 3. Sort by columns to find relationships

+ + Author(s), Title₽ Qualitative / Research Conclusions Limitations Specific ₽ ₽. Ð. Quantitative Setting₽ Year₽ Aims₽ (+ / -) Ð. ₽ ø. Ð. ø ₽ ø ₽. ₽. ₽. ₽ ₽. ₽. ₽ Ð. ₽. ₽ ø. ₽. ø. ₽. ₽ ₽ ø ø. ₽ Ð. ₽. ₽. ø ø ø. ₽ ø ø. ₽ Ð. ₽. ₽. ₽ ₽ ₽ ₽. ₽ ₽ ₽. ₽ φ ₽. ₽ ₽ ₽ ₽ ₽. ₽ ø Ð, ø ₽ ф. ₽ ø ₽ ø ₽ ₽ Ð. ф. ₽ ₽ ₽ ₽ ₽. ₽ ₽ ₽ ø

# Reading

Library / LibGuides / Literature reviews / Starting your literature review

## Literature reviews

Expert guidance from Study Advice at the University of Reading

| Home<br>Starting your literature review |                                    | Befo<br>in th |
|---|------------------------------------|---------------|
|   |                                    | mor           |
|   | Introduction                       | and           |
|   | Why write a literature review?     | w             |
|   | What is a literature review?       | Ne            |
|   | How do I get started?              | in            |
|   | Searching for sources              | ł             |
| ι                                       | Indertaking your literature review |               |
| C                                       | Developing your literature review  |               |
| V                                       | Vriting systematic reviews         | I             |
|   |                                    |               |
| J                                       | seful links for literature reviews |               |

efore getting started on sourcing and reviewing the background literature for a research project, it is important to understand the role that a literature review plays the research process, and how it can be helpful later on for placing your own findings in context. Knowing the job that a literature review does means you can be nore targeted and systematic in your literature searching. The guidance on this page will explain what you need to know about the purpose of a literature review not how to begin scoping your search.

#### /hy write a literature review?

New discoveries don't materialise out of nowhere; they build upon the findings of previous experiments and investigations. A literature review shows how the investigation you are conducting fits with what has gone before and puts it into context.

A literature review demonstrates to your reader that you are able to:

- Understand and critically analyse the background research
- Select and source the information that is necessary to develop a context for your research

#### It also:

- · Shows how your investigation relates to previous research
- Reveals the contribution that your investigation makes to this field (fills a gap, or builds on existing research, for instance)
- · Provides evidence that may help explain your findings later

https://libguides.reading.ac.uk/literaturereview/starting

Search this Guide

Search

### libguides.reading.ac.uk/literaturereview/starting

one-to-one advice sessions.

### Eibrary Homepage

 Doing your literature review (video)
 Watch this brief video tutorial for more on the topic.

# Doing your literature review (transcript)

Read along while watching the video tutorial.

- Literature searching guide
   A guide to finding articles, books and other materials on your subject
- Doing your literature search video -University of Reading

Brief video on literature searching from our Academic Liaison Librarians.

 Royal Literary Fund: Writing a Literature Review

A guide to writing literature reviews from the Royal Literary Fund

- What it means to be a critical student
   A brief and very useful video tutorial from the University of Leicester.
- Reading and notemaking LibGuide
   Expert guidance on managing your
   reading and making effective notes.

sections.

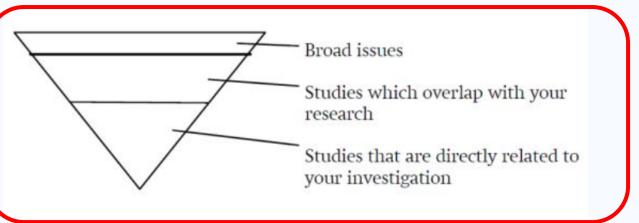
#### What is a literature review?

A literature review is a select analysis of existing research which is relevant to your topic, showing how it relates to your investigation. It explains and justifies how your investigation may help answer some of the questions or gaps in this area of research.

A literature review is not a straightforward summary of everything you have read on the topic and it is not a chronological description of what was discovered in your field.

A longer literature review may **have headings** to help group the relevant research into themes or topics. This gives a focus to your analysis, as you can group similar studies together and compare and contrast their approaches, any weaknesses or strengths in their methods, and their findings.

One common way to approach a literature review is to start out broad and then become more specific. Think of it as an inverted triangle:



- First briefly explain the broad issues related to your investigation; you don't need to write much about this, just demonstrate that you are aware of the breadth of your subject.
- Then narrow your focus to deal with the studies that overlap with your research.
- Finally, hone in on any research which is directly related to your specific investigation. Proportionally you spend most time discussing those studies which have most direct relevance to your research.

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#### How to approach the literature review

One way to approach a literature review is to start out **broad** and then become more **specific**. Think of it as an inverted triangle, or a funnel.

Using the funnel comparison, find:

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ac.uk/c.ph p?g=6905

46&p=494

6766

- 1. The background information to your topic. This will identify the **broader** issues and research related to your topic and help you orient it, in the wider subject context.
- 2. Narrow down your focus and identify the research that is closer to your area of research.
- 3. Focus on specific research that is directly related to your topic.

# Funnel approach to literature reviews



### Go broad

Start by looking at the broader issues around your project. Look at works that give a general overview of your topic and put it into the context of the bigger research landscape.

This will show an awareness of the breadth of your subject.

### Narrow down

Then try and focus your research on issues that are more related to your topic.

### Focus on the specific

Look at the most relevant research that relates to your topic and spend more time discussing these key studies that are directly related to your research.





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## **Thesis & dissertation**

Ultimate dissertation guide

Ultimate thesis guide

Getting started

+ Choosing a topic

Dissertation proposal

Title page

Abstract

+ Front matter

+ Introduction

#### Literature review

+ Theoretical framework

Methodology

Results

# What is a Literature Review? | Guide, Template, & Examples

Published on 22 February 2022 by Shona McCombes. Revised on 7 June 2022.

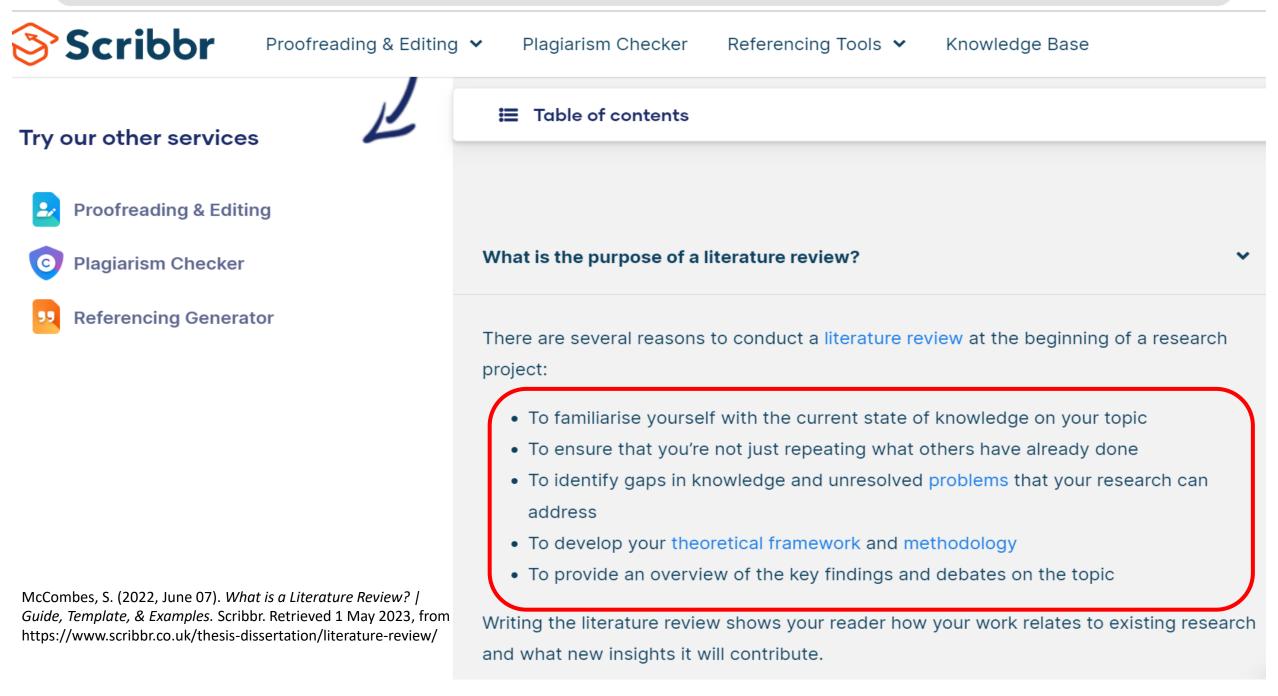
**What is a literature review?** A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing you to identify relevant theories, methods, and gaps in the existing research.

There are five key steps to writing a literature review:

- 1. **Search** for relevant literature
- 2. Evaluate sources
- 3. Identify themes, debates and gaps
- 4. **Outline** the structure
- 5. Write your literature review

A good literature review doesn't just summarise sources – it analyses, synthesises, and critically evaluates to give a clear picture of the state of knowledge on the subject.

https://www.scribbr.co.uk/thesis-dissertation/literature-review/



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# Research gaps

- Research gap refers to an area in the existing body of literature or knowledge where further investigation is needed to address unanswered questions, unresolved issues, or inconsistencies in previous research. It is the difference between what is known and what needs to be known in a particular research area.
- Identifying a research gap is an important aspect of any research project, as it helps to define the research problem, develop research questions or hypotheses, and provide a rationale for the significance of the study. By identifying a research gap, researchers can contribute to the advancement of knowledge in their field and help to address practical problems or issues that have yet to be fully understood or resolved.

# Finding research gaps

- A literature review involves searching for and reviewing existing studies and publications related to your research topic. This will help you identify what has already been researched and what questions remain unanswered.
- Look for inconsistencies or contradictions in the literature that may suggest areas where further research is needed.
- Analyze the research methodologies used in existing studies to identify any limitations or weaknesses that could be addressed by future research.
- Finding research gaps requires a critical analysis of the existing literature and a thorough understanding of the research area. It is an important step in developing a research project that can contribute to the advancement of knowledge in your field.

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In a class, you might not always be studying something brand "new." But, in most cases, you should still try to come up with something unique about your project, however small. Talk to your professor about what they expect for your gap statement if nothing seems to work.

### An example gap from <u>Hosaka, Itao, and Kuroda (1995)</u>:

"... The relationship between the four damping factors, i.e. internal friction, support loss, airflow force in free space, and squeeze force, has not yet been clarified, so it is not obvious which one is dominant in actual microsystems."

Here, the authors signal to us that this is a gap because they use the words "has not yet been clarified." Other phrases that might help you identify (or form!) a gap statement

| are: |   |
|------|---|
| •    | has/have not been (studied/reported/elucidated) |
| •    | is required/needed                              |
| •    | the key question is/remains                     |
| •    | it is important to address                      |
|      |   |

https://sites.middlebury.edu/middsciwriting/overview/organization/gap-statements/

# Fill the gap.

Once you identify the gap in the literature, you must tell your audience *how* you attempt to at least somewhat address in your project this lack of knowledge or understanding. In a journal article or poster, this is often done in a new paragraph and should be accomplished in one summary statement, such as:

Therefore, the purpose of this study was to determine the effects of lead on the hepatobiliary system, especially on the liver and on the gallbladder (adapted from Sipos et al. 2003).

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You'll often find that the first sentence of the last paragraph in a paper's introduction will start somewhat like this, indicating the gap fill.

Some phrases you can use to indicate your gap "fill:"

- "We therefore analyzed..."
- "In this study, we investigated..."
- "Therefore, the goals of this study are..."
- "In this paper, we report..."

Remember-always keep your voice professional! Colloquial phrases such as "we looked into" or "we checked if" should be avoided when introducing your gap fill.

So let's look at this idea in context by looking at some examples from a couple of types of papers. The gap statements are underlined; the fills are italicized.

### Adapted from <u>Monthioux et al. (2001)</u>:

Though ideally expected to be chemically very stable due to the poor reactivity of the basal aromatic plane from which SWNTs are built, <u>the question of whether all the chemicals</u> <u>which are now currently proposed in the literature as purifying, suspending, or grafting</u> <u>agents for SWNTs actually have a limited effect on the SWNT integrity has to be addressed.</u> <u>In this paper, we report the investigation of the effects of some commonly used chemical</u> *treatments on SWNT structure by means of high resolution transmission microscopy* (*HRTEM*). We also report the effect on purified SWNTs of an organic solvent, *dimethylformamide, used to tentatively prepare SWNT suspension.* 

### Adapted from <u>Zhang, Dawes, and Walker (2001)</u>:

Milly's work recognized the importance of storage capacity of the root zone in controlling evapotranspiration and has the postential for assessing the catchment-scale response of vegetation changes. <u>However, the practical application of this model is limited because of the complex numerical solutions required.</u> *The purpose of this paper is to quantify the long-term impact of vegetation changes on mean annual evapotranspiration at catchment scales based on data and parameters that are easily measurable at a regional scale.* 

In this very compressed and efficient literature review, the author introduces key theoretical concepts that scholars have identified to explain st political alliances. This literature review has been excerpted from a 4-page NSF grant proposal where it begins after the proposal's introduct paragraph. The full proposal can be found here: https://writing.wiscweb.wisc.edu/wp-content/uploads/sites/535/2018/07/SampleGrant2.pd

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In this very compressed and efficient literature review, the author introduces key theoretical concepts that scholars have identified to explain shifting political alliances. This literature review has been excerpted from a 4-page NSF grant proposal where it begins after the proposal's introductory paragraph. The full proposal can be found here: https://writing.wiscweb.wisc.edu/wpcontent/uploads/sites/535/2018/07/SampleGr ant2.pdf

### 

In the first three sentences, the writer introduces a concept of balancing, talks about how it applies to the locations under study in this research, and then clarifies the limitations of this idea within the context of this topic.

### ٦

This pattern is continued through the rest of the paragraph: introducing an important scholarly concept, acknowledging its contribution to the topic at hand, and then addressing its limitations.

From Clarence L. Moore's NSF grant proposal.

| In the first three  |   |
|---|---|
| sentences, the  | Stephen Walt's discussion of balancing posits that weak states join forces against  |
| writer  |   |
| introduces a  | powerful threats. <sup>1</sup> Applied to Anbar and central Afghanistan, balancing logic holds that domestic  |
| concept of  |   |
| balancing, talks  |   |
| about how it  | actors simply allied with whomever they believed could best provide security. However, this   |
| applies to the  |   |
| locations under   |   |
| study in this   | account does not explain why so many Anbar Sunnis switched allegiance to tribal leaders in  |
| research, and   |   |
| then clarifies  | 2006 before the 2007 surge granted those leaders extra support. David Laitin's <i>Identity in</i>   |
| the limitations   | a support David Later a substantia and support David Later a substantia   |
| of this idea<br>within the  |   |
| context of this   | <i>Formation</i> provides an important starting point for considering the role of collective identity in  |
| topic.  |   |
| topic.  |   |
|   | - domestic alliance shifts. His finning model suggests that conflict may provide an exogenous   |
| This pattern is   | domestic alliance shifts. His tipping model suggests that conflict may provide an exogenous   |
| This pattern is continued   |   |
| continued   |   |
|   |   |
| continued<br>through the rest   | shock that creates identity instability, leading some cultural entrepreneurs to create new identities   |
| continued<br>through the rest<br>of the   |   |
| continued<br>through the rest<br>of the<br>paragraph:   | shock that creates identity instability, leading some cultural entrepreneurs to create new identities to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,  |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an   | shock that creates identity instability, leading some cultural entrepreneurs to create new identities to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,  |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important  | shock that creates identity instability, leading some cultural entrepreneurs to create new identities   |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important<br>scholarly   | shock that creates identity instability, leading some cultural entrepreneurs to create new identities<br>to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,<br>the tipping model does not provide insight in the situations described because it does not   |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important<br>scholarly<br>concept,<br>acknowledging<br>its contribution  | shock that creates identity instability, leading some cultural entrepreneurs to create new identities to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,  |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important<br>scholarly<br>concept,<br>acknowledging<br>its contribution<br>to the topic at                                     | shock that creates identity instability, leading some cultural entrepreneurs to create new identities<br>to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,<br>the tipping model does not provide insight in the situations described because it does not   |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important<br>scholarly<br>concept,<br>acknowledging<br>its contribution<br>to the topic at<br>nand, and then                   | shock that creates identity instability, leading some cultural entrepreneurs to create new identities<br>to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,<br>the tipping model does not provide insight in the situations described because it does not<br>consider conflict's ability to change the meanings associated with preexistent identities. |
| continued<br>through the rest<br>of the<br>paragraph:<br>introducing an<br>important<br>scholarly<br>concept,<br>acknowledging<br>its contribution<br>to the topic at<br>nand, and then<br>addressing its | shock that creates identity instability, leading some cultural entrepreneurs to create new identities<br>to which population members can shift. <sup>2</sup> Despite the link it creates between conflict and identity,<br>the tipping model does not provide insight in the situations described because it does not   |
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### Doing a literature review

## What is a literature review?

The ability to review, and to report on relevant literature is a key academic skill. A literature review:

- situates your research focus within the context of the wider academic community in your field;
- reports your critical review of the relevant literature; and
- identifies a gap within that literature that your research will attempt to address.

To some extent, particularly with postgraduate research, the literature review can become a project in itself. It is an important showcase of your talents of: understanding, interpretation, analysis, clarity of thought, synthesis, and development of argument. The process of conducting and reporting your literature review can help you clarify your own thoughts about your study. It can also establish a framework within which to present and analyse the findings.

After reading your literature review, it should be clear to the reader that you have up-to-date awareness of the relevant work of others, and that the research question you are asking is relevant. However, don't promise too much! Be wary of saying that your research will *solve* a problem, or that it will *change practice*. It would be safer and probably more realistic to say that your research will 'address a gap', rather than that it will 'fill a gap'.

# Structure of literature review

Student Learning Development, University of Leicester 2009

## Structure

As with any piece of extended writing, structure is crucial. There may be specific guidance on structure within your department, or you may need to devise your own.

Examples of ways you might structure your literature review are:

- chronologically; although be careful not just to list items; you need to write critically, not just descriptively;
- by theme; this is useful if there are several strands within your topic that can logically be considered separately before being brought together;
- by sector e.g.: political background, practice background, methodological background, geographical background, literary background;
- by development of ideas; this could be useful if there are identifiable stages of idea development that can be looked at in turn;
- by some combination of the above, or by another structure you create.

There are many possible structures, and you need to establish one that will best fit the 'story' you are telling of the reason for your study. Once you have established your structure you need to outline it for your reader.

Writing H



## The Literature Review: A Few Tips On Conducting It

Written by Dena Taylor, Health Sciences Writing Centre

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## What is a review of the literature?

A literature review is an account of what has been published on a topic by accredited scholars and researchers. Occasionally you will be asked to write one as a separate assignment (sometimes in the form of an **annotated bibliography**—see the bottom of the next page), but more often it is part of the introduction to an essay, research report, or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept (e.g., your research objective, the problem or issue you are discussing, or your argumentative thesis). It is not just a descriptive list of the material available, or a set of summaries

Besides enlarging your knowledge about the topic, writing a literature review lets you gain and demonstrate skills in two areas

- 1. **information seeking**: the ability to scan the literature efficiently, using manual or computerized methods, to identify a set of useful articles and books
- 2. critical appraisal: the ability to apply principles of analysis to identify unbiased and valid studies.
- A literature review must do these things
  - 1. be organized around and related directly to the thesis or research question you are developing

## Ask yourself questions like these:

- 1. What is the specific thesis, problem, or research question that my literature review helps to define?
- 2. What **type** of literature review am I conducting? Am I looking at issues of theory? methodology? policy? quantitative research (e.g. on the effectiveness of a new procedure)? qualitative research (e.g., studies of loneliness among migrant workers)?
- 3. What is the **scope** of my literature review? What types of publications am I using (e.g., journals, books, government documents, popular media)? What discipline am I working in (e.g., nursing psychology, sociology, medicine)?
- 4. How good was my **information seeking**? Has my search been wide enough to ensure I've found all the relevant material? Has it been narrow enough to exclude irrelevant material? Is the number of sources I've used appropriate for the length of my paper?
- 5. Have I **critically analysed** the literature I use? Do I follow through a set of concepts and questions, comparing items to each other in the ways they deal with them? Instead of just listing and summarizing items, do I assess them, discussing strengths and weaknesses?
- 6. Have I cited and discussed studies contrary to my perspective?
- 7. Will the reader find my literature review relevant, appropriate, and useful?

## Ask yourself questions like these about each book or article you include:

- 1. Has the author formulated a problem/issue?
- 2. Is it clearly defined? Is its significance (scope, severity, relevance) clearly established?
- 3. Could the problem have been approached more effectively from another perspective?
- 4. What is the author's research orientation (e.g., interpretive, critical science, combination)?
- 5. What is the author's theoretical framework (e.g., psychological, developmental, feminist)?
- 6. What is the relationship between the theoretical and research perspectives?
- 7. Has the author evaluated the literature relevant to the problem/issue? Does the author include literature taking positions she or he does not agree with?
- 8. In a research study, how good are the basic components of the study design (e.g., population, intervention, outcome)? How accurate and valid are the measurements? Is the analysis of the data accurate and relevant to the research question? Are the conclusions validly based upon the data and analysis?
- 9. In material written for a popular readership, does the author use appeals to emotion, one-sided examples, or rhetorically-charged language and tone? Is there an objective basis to the reasoning, or is the author merely "proving" what he or she already believes?
- 10. How does the author structure the argument? Can you "deconstruct" the flow of the argument to see whether or where it breaks down logically (e.g., in establishing cause-effect relationships)?

The literature review: it is the purpose of the literature review section of a paper or dissertation to show the reader, in a systematic way, what is already known about the research topic as a whole, and to outline the key ideas and theories that help us to understand this. As well as being systematic, the review should be evaluative and critical of the studies or ideas which are relevant to the current work (refer to *Being Critical*). For example, you may think a particular study did not investigate some important aspect of the area you are researching, that the authors failed to notice a weakness in their methods, or that their conclusion is not well-supported.

A note on verb tenses: For general reference to the literature, the present perfect tense (have/has + verb + ed) tends to be used. For reference to specific studies carried out in the past, the simple past tense is most commonly used. This is always the case where a specific date or time in the past forms a part of the sentence. When referring to the words or ideas of writers, the present tense is often used if the ideas are still relevant, even if the author is no longer alive. The examples given below reflect these general patterns.

#### General descriptions of the relevant literature

A large and growing body of literature has investigated .... More recent attention has focused on the provision of .... Much of the current literature on X pays particular attention to .... Over the past decade most research in X has emphasized the use of .... There is a large volume of published studies describing the role of ....

資料來源; Academic Phrasebank: http://www.phrasebank.manchester.ac.uk/

# Academic Phrasebank

#### http://www.phrasebank.manchester.ac.uk/

#### MANCHESTER

### Academic Phrasebank

The University of Manchester

Introducing Work

Referring to Sources

**Describing Methods** 

thods Reporting Results

ults Discussing Findings

ings Writing Conclusions

| ENERAL LANGUAGE FUNCTIONS |
|---------------------------|
| Being Cautious            |
| Being Critical            |
| Classifying and Listing   |
| Compare and Contrast      |
| Defining Terms            |
| Describing Trends         |
| Describing Quantities     |
| Explaining Causality      |
| Giving Examples           |
| Signalling Transition     |
| Writing about the Past    |
|                           |

#### Home Page

The Academic Phrasebank is a general resource for academic writers. It aims to provide you with examples of some of the phraseological 'nuts and bolts' of writing organised according to the main sections of a research paper or dissertation (see the top menu ). Other phrases are listed under the more general communicative functions of academic writing (see the menu on the left). The resource should be particularly useful for writers who need to report their research work. The phrases, and the headings under which they are listed, can be used simply to assist you in thinking about the content and organisation of your own writing, or the phrases can be incorporated into your writing where this is appropriate. In most cases, a certain amount of creativity and adaptation will be necessary when a phrase is used. The items in the Academic Phrasebank are mostly content neutral and generic in nature; in using them, therefore, you are not stealing other people's ideas and this does not constitute plagiarism. For some of the entries, specific content words have been included for illustrative purposes, and these should be substituted when the phrases are used. The resource was designed primarily for academic and scientific writers who are non-native speakers of English. However, native speaker writers may still find much of the material helpful. In fact, recent data suggest that the majority of users are native speakers of English. More about Academic Phrasebank.

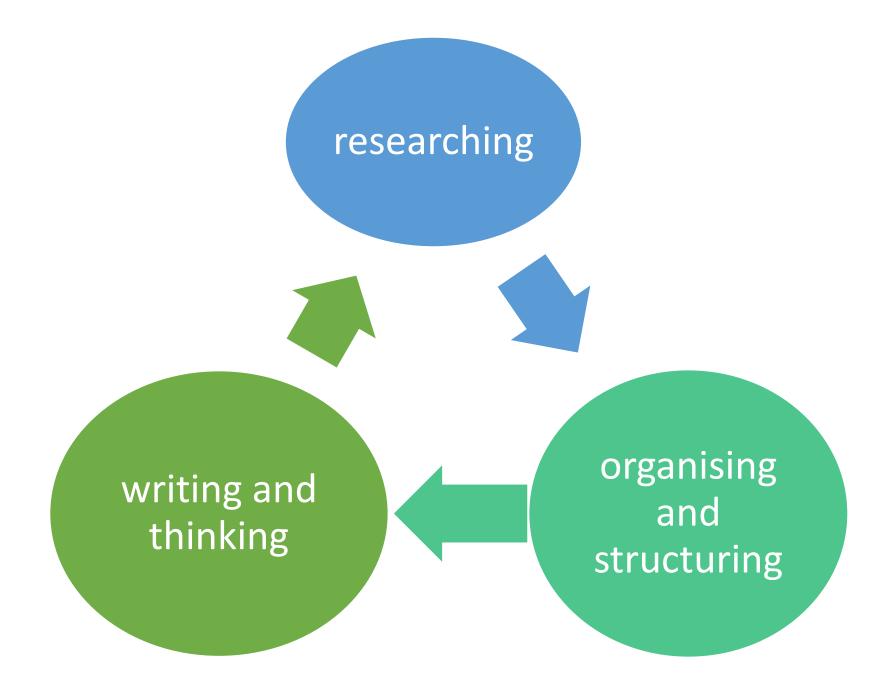
This site was created by **John Morley**. If you could spare just two or three minutes of your time, I would be extremely grateful for any feedback on Academic Phrasebank: Please click **here** to access a very short questionnaire. Thank you.

ABOUT PHRASEBANK

# Research tips

- It is essential to focus on the most recent studies within your area of interest.
- Article skimming: abstract/summary; introduction; discussion; conclusion
- Look for the following terms: Future research; Further research (is needed); Research opportunities; Research directions
- Once you've identified a research gap, return to Google Scholar to doublecheck that no one else has already filled the gap.
- Check what level of topic originality your program requires before you start looking for research gaps.
- Evaluate!

資料來源: How to find a research gap quickly https://www.youtube.com/watch?v=omYHjWZBWMU



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of rest and exalts it as such, influenced by Protestant teachings. This view of marriage as a means of obtaining sacred rest is a departure from the Petrarchan love conventions. and marks the introduction of this new concept in love poetry.

self study, discipline, listening to english lecturers

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Self-study, discipline, and listening to English lecturers can be helpful in improving your 69 English language skills. Self-study involves dedicating time to practice and learn on your own, using resources such as books, online lessons, or language learning apps. Discipline refers to making a consistent effort to use the language and practicing regularly. Listening to English lecturers can help improve your listening and speaking skills, as well as your understanding of grammar and vocabulary. All three strategies can help you build a solid foundation in the English language and achieve fluency over time.

### 我S給ChatGPT幾個字,他就立刻寫了一個短文(字數可 自訂)。若是 copy paste 交給作交老師,這就是 Chomsky 大師說的 'high tech plagiarism'高科技抄襲!

ChatGPT Jan 30 Version, Free Research Preview. Our goal is to make AI systems more natural and safe to interact with. Your feedback will help us improve.

### 我請 ChatGPT 說明 corrections,他說得很詳細,也很合理。



ChatGPT Ja

S

The following corrections were made to the original text to improve its grammar, vocabulary, and clarity:

- 1. Changed "This paper tries to demonstrate" to "This paper endeavors to showcase" Changed the verb to a more formal and advanced version.
- Changed "The first part of this paper offers" to "The first part provides" -Changed the verb to a simpler and more concise version.
- 3. Changed "The second part presents the various listening and speaking exercises designed for the Regenerate response is seen order to improve the various listening and speaking is the various listening and speaking exercises designed for the Regenerate response is a second part present.

Freshman English Course, specifically in the area of listening and speaking exercises. These exercises are designed to improve the students' listening and speaking abilities through the use of the asynchronous platform "ceiba," developed by National Taiwan University." - Reorganized the sentence for clarity and coherence.

- Changed "the definition of this term is not always consistent" to "the definition of blended learning is not always consistent" - Provided clarity by referring to the specific term being defined.
- A (T)

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### 我問: Effective ways to increase English vocabulary



There are several effective ways to increase your English vocabulary:

- Read, read, read: The more you read, the more exposure you have to new words and their usage. Try reading books, articles, newspapers, and magazines in English.
- Use a dictionary: When you come across a word you don't know, look it up in a dictionary and write it down. Make a habit of using it in your writing and speech.
- Study word lists: Make a list of new words you learn each day and review them regularly. You can also use flashcards to help you remember new words.
- 4. Watch English TV shows and movies: This is a great way to see words in context and improve your listening and comprehension skills.
- 5. Practice with native s speakers and ask the Regenerate response or phrases.

#### 練習與 ChatGPT 機器人對話,可立刻得到答案。 問的問題 specific, focused 得到的答案越切題。 ChatGPT Jan 30 Version. Free Research Preview. Our goal is to make AI systems more natural and safe to interact with.

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The park is an excellent location for individuals of all ages to unwind and spend their leisure time. The facilities at Park A are more suitable for children and parents, with various amenities for children to play and expend their energy. The playground is secure and free from any obstacles that may cause harm. Meanwhile, adults can take a break and feel at ease as their children play and receive exercise in the sun. Conversely, Park B is more suitable for adults, boasting a large number of trees and a grassy area that is ideal for picnicking and strolling with pets. The park provides ample shade and a serene Regenerate response ing with friends.

# 我給ChatGPT prompts 請他用 formal English 重寫。接著我請他說明改寫 成formal English的原因。

ChatGPT 提供的 feedback 功能非常 強大,可多多利用。

- The corrected text has been written in a more formal and polished style, suitable for professional or academic writing. The corrections include:
- Replacing informal words and phrases with more formal alternatives, such as "individuals" instead of "people" and "leisure time" instead of "free time".
- Writing in complete sentences and using proper grammar, punctuation, and capitalization.
- Using more precise and descriptive language, such as "comprise" instead of "have" and "spacious grassy area" instead of "endless grassland".
- Maintaining a consistent tone throughout the text, using words and phrases that are neutral and objective.

These corrections are intended to make the text more readable,

professional, and authorit 😘 Regenerate response

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🟳 ChatGPT for Literature 🖉 👜

ChatGPT Abstract Writing.

English's Development Throug

Contrasting Pride and Prejudic

Roy's Farm Triumphs.

Graded Reader Ideas.

#### English Literature Joy.

English Lit: Books vs Movies.



Can ChatGPT write summaries and analyses of existing research, and what are the pros and cons of using AI for these tasks?

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Using Chatgpt writing abstract and literature review Is this correct?

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Yes, you can use ChatGPT for writing abstracts and literature reviews. However, it is important to keep in mind that while ChatGPT is a powerful language model, it is not a substitute for human expertise and critical thinking. Therefore, it is essential to review and edit the output of ChatGPT to ensure accuracy, relevance, and coherence. Additionally, using Al technology for writing abstracts and literature reviews may have benefits such as saving time and reducing human error, but there are also potential limitations such as lack of domain-specific knowledge and potential bias in the data used to train the model.

Through these experiments, students will learn the basic lab skills, design the experiment, handle chemicals, and waste disposal. Through the hands-on activities, students will learn how to connect the fundamental chemistry principles with phenomena that happen in the lab, and become familiar with the scientific methods, and think like a scientist. Students are required to preview each experiment and write a pre-lab in order to know how to do the experiment. During the experiment, they have to record their experimental data with proper use of significant figures and units, and make the necessary observations. After the experiments, students should accomplish data analysis and draw a conclusion.

\$

#### Here's the passage in academic English:

These experiments are designed to facilitate the acquisition of basic laboratory skills by students. The curriculum covers the formulation of experiment designs, the handling of chemicals, and proper waste disposal procedures. Through hands-on activities, students can learn how to relate fundamental principles of chemistry to phenomena that occur in the laboratory. This approach enables students to become more familiar with scientific methods and develop a scientific mindset. Students must prepare by reviewing each experiment and completing a pre-laboratory exercise. During the experiment, students must record their data accurately using appropriate units and significant figures, and document their observations. Following the experiment, students are required to analyze the data and draw conclusions based on their observations.

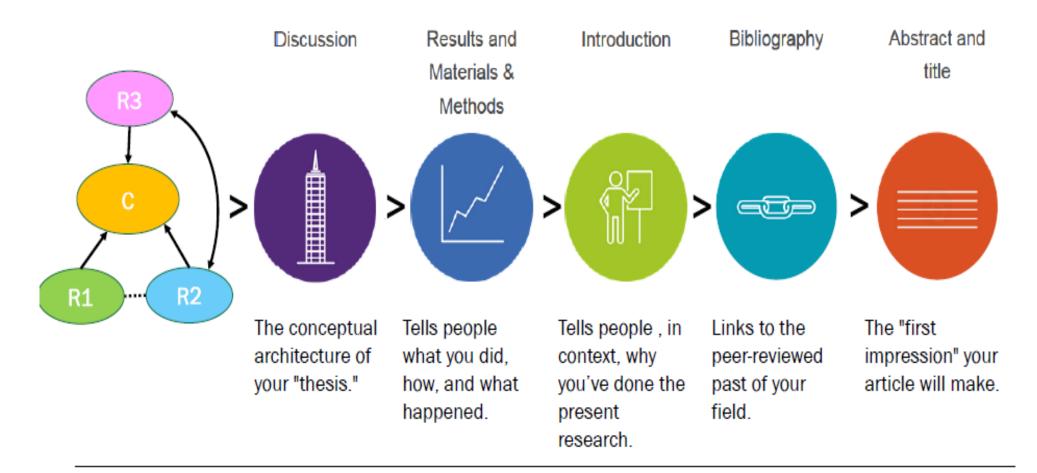
## Style and Terminology

You should have a look at abstracts used in your research area and being published in peer-reviewed academic journals. If you **copy their style and terminology** your abstract will ultimately increase its academic tone and voice:

- Previous research has shown that...
- Current conceptualizations indicate...
- Recent research has begun to focus on...
- The current study aims to examine...
- The present study explores...
- The paper employs...
- These results indicate that...
- This study highlights...
- The findings recommend that...
- The study provides evidence that...
- The research supports current developments in...
- The findings have implications for...
- The gained insights underscore...



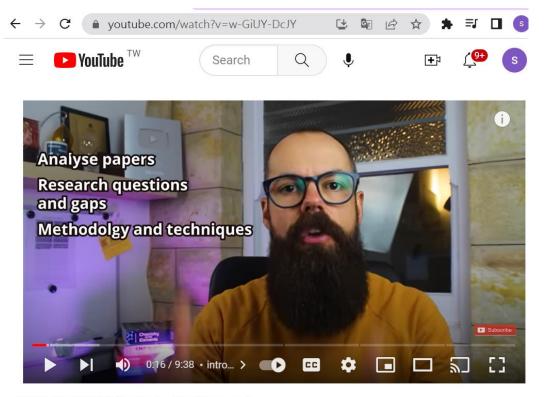
## Finding out whether you have a "good story": A structured approach to writing your first research article...



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# Epic ChatGPT Prompts for Research



#### https://www.youtube.com/watc h?v=w-GiUY-DcJY

#### EPIC ChatGPT Prompts for Research



# EPIC ChatGPT Prompts for Research: Summarizing and Analysis:

"Summarize the main arguments in this article/abstract:"

- "Analyze the strengths and weaknesses of this methodology:" "Compare and contrast [theory A] and [theory B] in the context of [field]:"
- "Identify the key findings and implications of this research paper:"
- "Describe the theoretical framework of this study and how it relates to the findings:"

# EPIC ChatGPT Prompts for Research: Methodology and Techniques

- "What are the limitations of using [statistical method] in [research context]?"
- "Create a recipie for the methods used in this [paper/thesis]"
- "Suggest interdisciplinary approaches to [research question/problem]:"
- "Explain how [qualitative/quantitative] research methods can be used to address [research question]:"
- "Describe the advantages of using a mixed-methods approach for studying [topic]:"
- "Recommend best practices for data collection and analysis in [field/research context]:"

EPIC ChatGPT Prompts for Research: Research Questions and Gaps

"List potential research questions related to [topic]:"

"Identify gaps in the literature on [topic]:"

"Generate a list of research hypotheses related to [topic]:"

"Identify potential areas for future research in the context of this article/abstract:"

"Suggest novel applications of [theory/concept] within [field]:"

# Writing abstracts and literature reviews Youtube 可利用資源

- ChatGPT Writes a PERFECT Abstract for a Research Paper https://www.youtube.com/watch?v=Zbr3f0rYtJ4
- How To Write A Literature Review From Start To Finish (Full Tutorial) <u>https://www.youtube.c is om/watch?v=bhXA0emLH-k</u>
- How to identify a research gap EASILY Andy Stapleton https://www.youtube.com/watch?v=Mvj1Q5WoGb8
- Researchers Beware: Avoid These Costly Mistakes When Using Al https://www.youtube.com/watch?v=FkITPN8SrxQ
- Find a research gap in one day <a href="https://www.youtube.com/watch?v=JYTG8MP3-YI">https://www.youtube.com/watch?v=JYTG8MP3-YI</a>
- EPIC ChatGPT Prompts for Research <a href="https://www.youtube.com/watch?v=w-GiUY">https://www.youtube.com/watch?v=w-GiUY</a>
- What is Research Gap and how to find it? https://www.youtube.com/watch?v=zP5npHvtZnl
- How to do a literature review QUICKLY (step-by-step process) https://www.youtube.com/watch?v=p7eeHSymGt8
- How to Write a Literature Review from Start to Finish (Advanced Tactics For PhD And Researchers) https://www.youtube.com/watch?v=b8Cn9srCzRM
- Writing Abstracts and Literature Reviews <a href="https://youtu.be/9HDarmREoh0">https://youtu.be/9HDarmREoh0</a>



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