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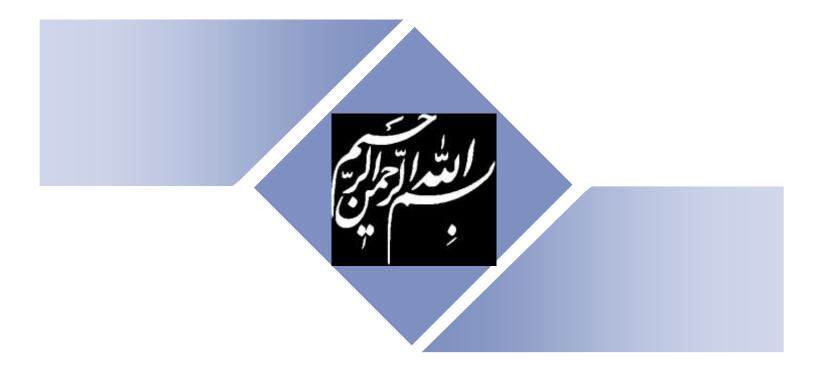
October 16, 2012

Approach to Conduct an Effe ctive Literature Review

Nader Ale Ebrahim



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Approach to Conduct an Effective Literature Review

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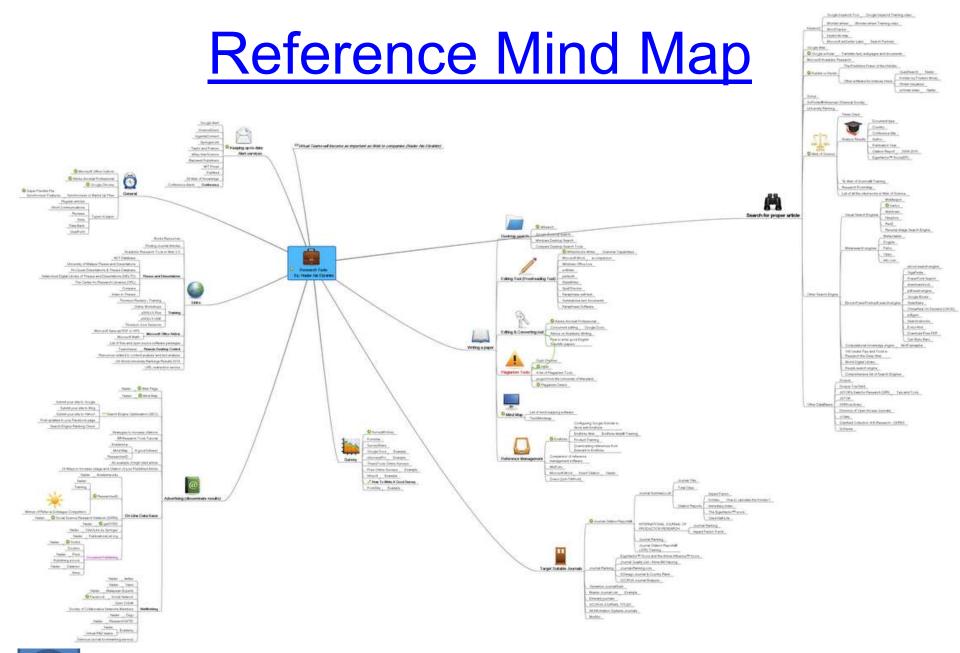
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Abstract

This presentation introduces a guideline for conducting an effective literature review. The target audience is research based postgraduate students, researchers who are constantly struggling with the development of an effective literature review. The proposed guideline follows:

- 1. Find literature associated with the topic.
- 2. Search and analyze the literature.
- 3. Evaluate the paper before reading.
- 4. Cite literature properly.
- 5. Make a summary table of reviewed papers.
- 6. Avoid plagiarism.
- 7. Write a journal article based on literature review.

Keywords: literature review, Research tools, Literature review, Effective literature review, literature search, Literature classification, doctoral education.



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The literature review

In your literature review, you should:

- clarify your understanding of the field
- explain the rationale for your research
- place your research within a broader context
- evaluate the results of previous research
- define key concepts and ideas
- identify research in related areas that are generalisable or transferable to your topic
- identify relevant methodological issues.





The literature review

A literature review ensures that you are at least familiar with the body of research in your field before starting your own investigations. Writing a literature review also provides practice in critical thinking. Once you have applied <u>critical thinking skills</u> to the findings of past researchers, you are in a better position to apply these same skills to your own work.

UNE. 2009. The literature review [Online]. University of New England. Available: http://www.une.edu.au/library/eskillsplus/literature/litreview.php [Accessed 25 January 2010].

Systematic Review 1/2

 A systematic literature review is a means of identifying, evaluating and interpreting all available research relevant to a particular research question, or topic area, or phenomenon of interest. Individual studies contributing to a systematic review are called *primary* studies; a systematic review is a form a secondary study.

Systematic Review 2/2

• A systematic review is a <u>literature review</u> focused on a research question that tries to identify, appraise, select and synthesize all high quality research evidence relevant to that question.

Source: http://en.wikipedia.org/wiki/Systematic_review

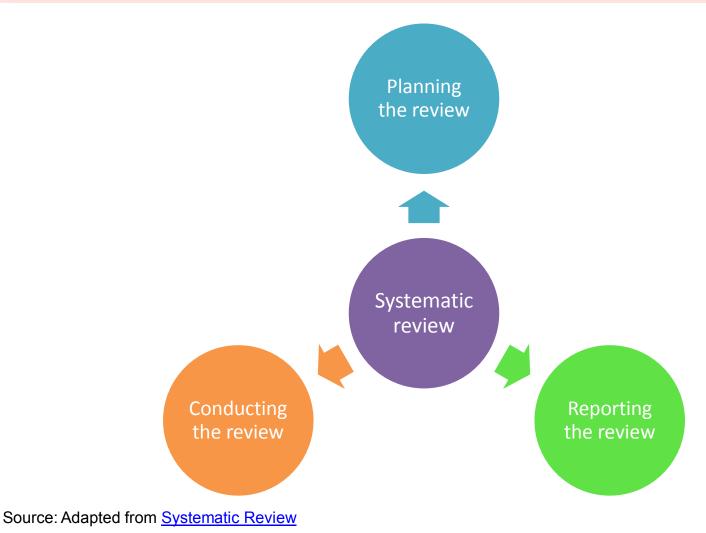
<u>A Guide to Writing the Dissertation</u>
<u>Literature Review</u> -

Reasons for Performing Systematic Reviews

- **To summarise** the existing evidence concerning a treatment or technology e.g. to summarise the empirical evidence of the benefits and limitations of a specific agile method.
- **To identify any gaps** in current research in order to suggest areas for further investigation.
- **To provide a framework/background** in order to appropriately position new research activities.

However, systematic reviews can also be undertaken to examine the extent to which empirical evidence supports/contradicts theoretical hypotheses, or even to assist the generation of new hypotheses

The Systematic Review Process



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Planning the review

- 1. Identification of the need for a review
- 2. Development of a review protocol. (The most important activity during protocol is to formulate the research question.)

Conducting the review

- 1. Identification of research
- 2. Selection of primary studies
- 3. Study quality assessment
- 4. Data extraction & monitoring
- 5. Data synthesis.



Reporting the review

Reporting the review is a single stage phase.

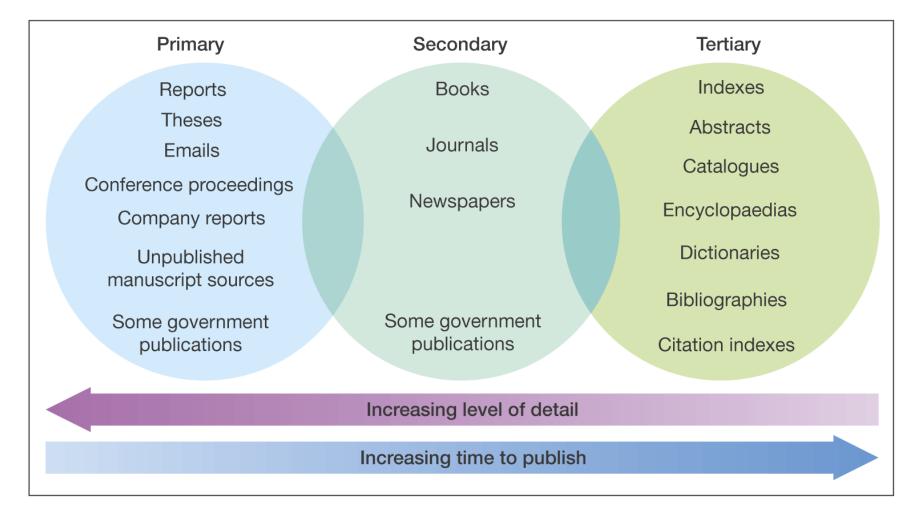
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Checklist for reading a review paper

- What are the review's objectives?
- What sources were searched to identify primary studies? Were there any restrictions?
- What were the inclusion/exclusion criteria and how were they applied?
- What criteria were used to assess the quality of primary studies and how were they applied?
- How were the data extracted from the primary studies?
- How were the data synthesised? How were differences between studies investigated? How were the data combined? Was it reasonable to combine the studies? Do the conclusions flow from the evidence?

Checklist for reading a review paper-From a more general viewpoint

- Can you find an important question, which the review addressed?
- Was a thorough search done of the appropriate databases and were other potentially important sources explored?
- Was methodological quality assessed and the trials weighted accordingly?
- How sensitive are the results to the way that the review has been done?
- Have numerical results been interpreted with common sense and due regard to the broader aspects of the problem?

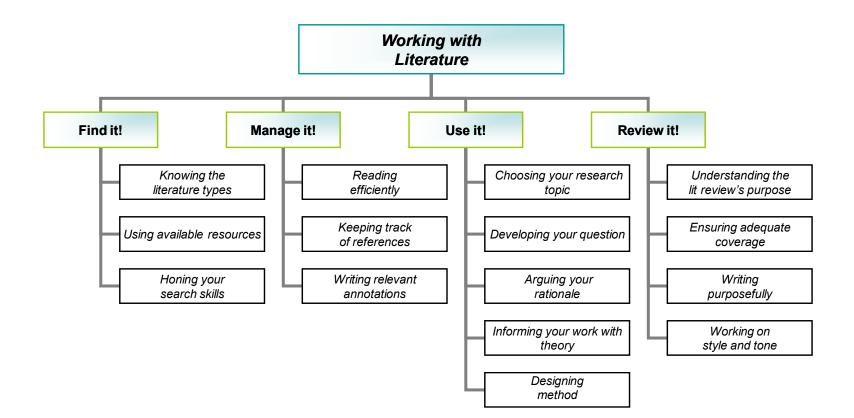


Literature sources available

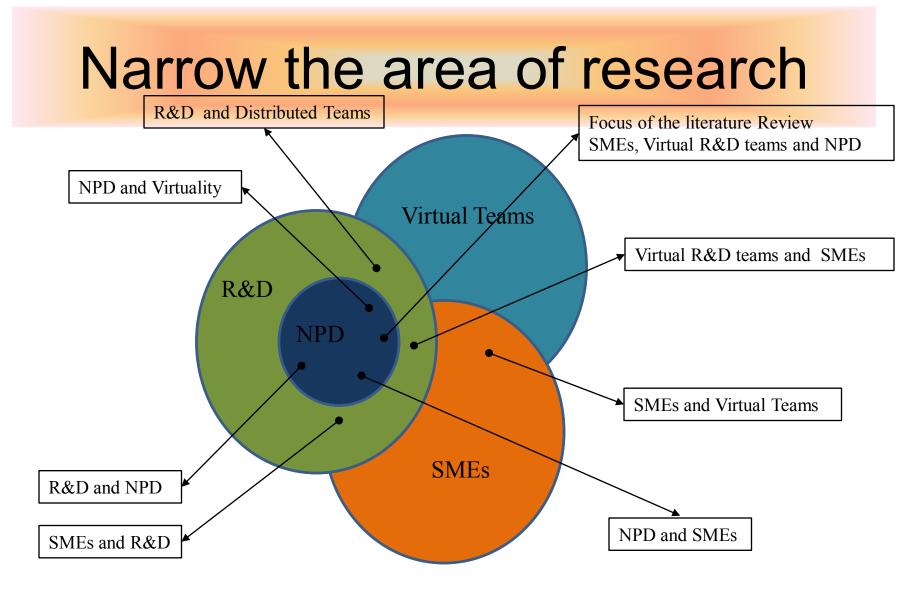
Source: Research methods for business students / Mark Saunders, Philip Lewis, Adrian Thornhill.—5th ed. ©2012 Academic Collaboration Centre for Publication

Promotion

Working with literature

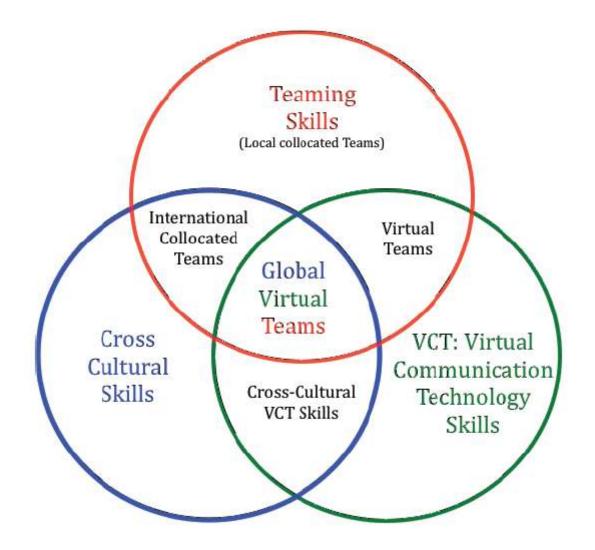


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The interactions between teaming, cross-cultural and virtual communication skills to create new engineering interactions.

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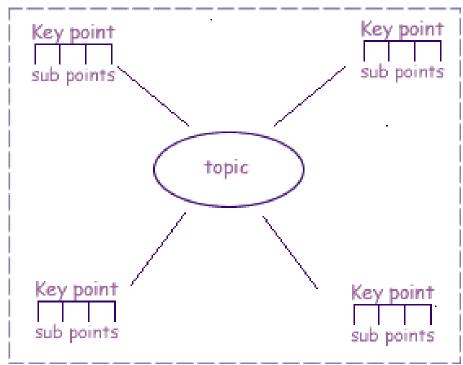
Figure from: http://memeburn.com/2012/06/do-links-from-social-media-sites-really-hold-any-seo-value/

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<u>Structure & planning your</u> writing - MindMaps

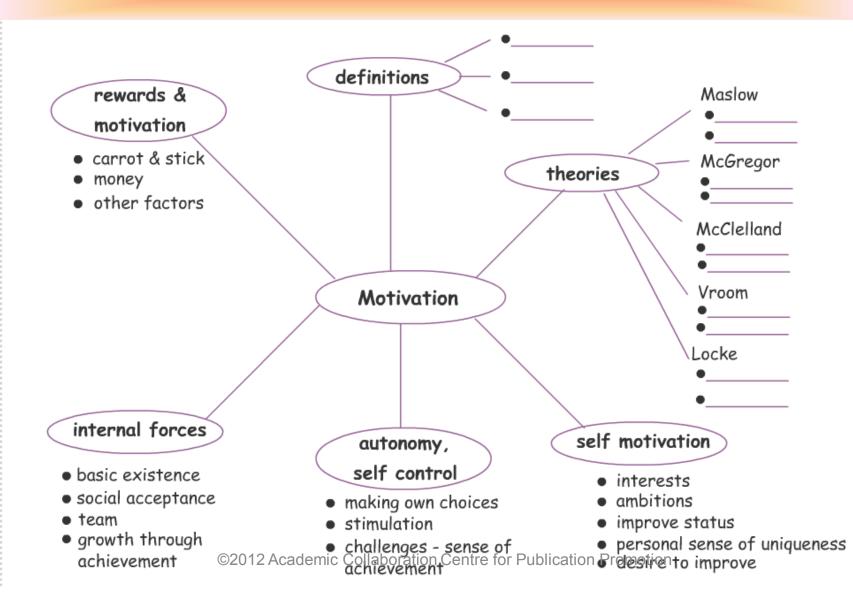
MindMaps are a visual map to link and organise key concepts of your research. They also show links and relationships between ideas. Sometimes it is a good idea to number key ideas in the order that you are going to place them in your literature review.

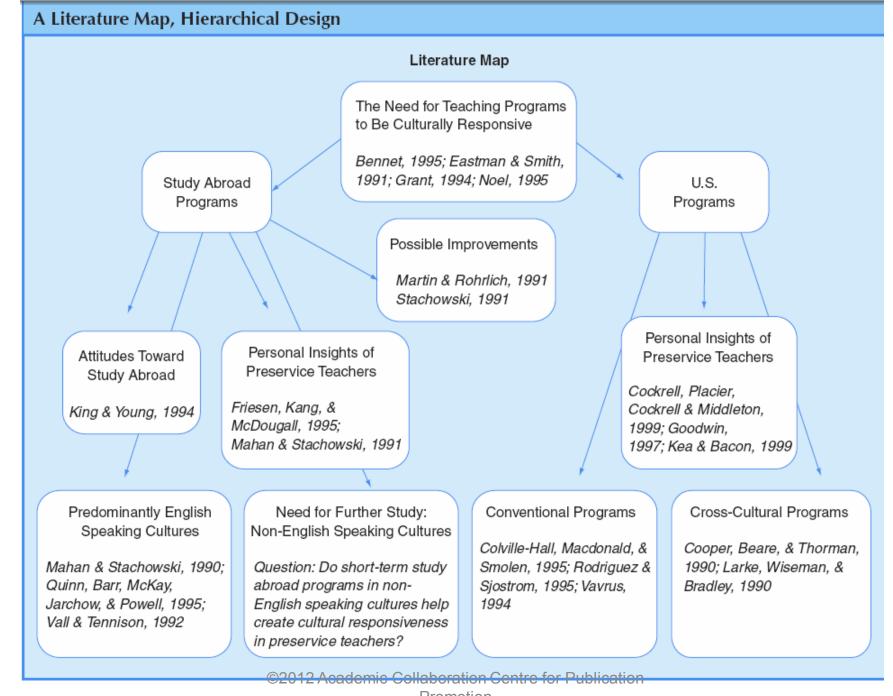
Example



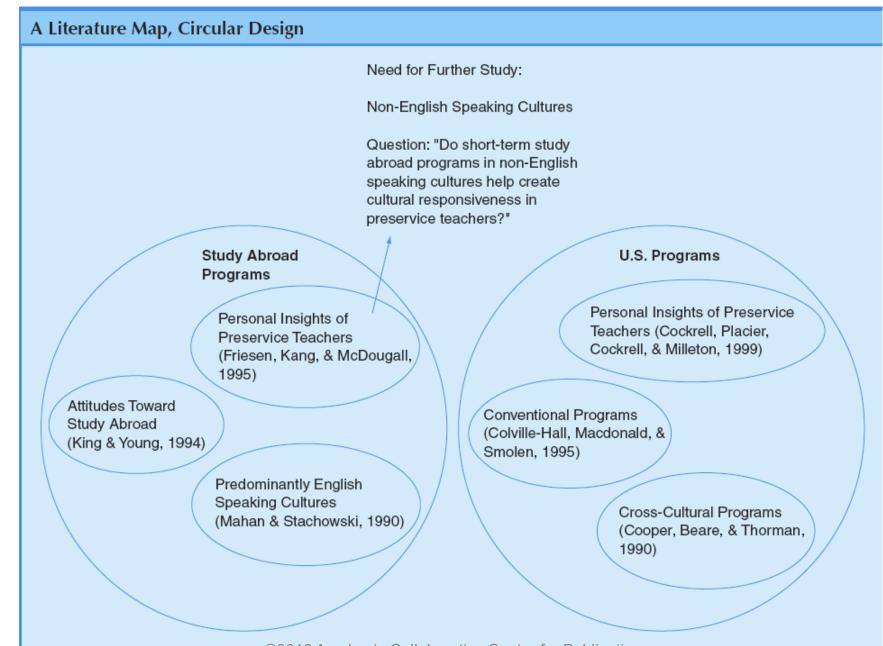
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Example of a MindMap



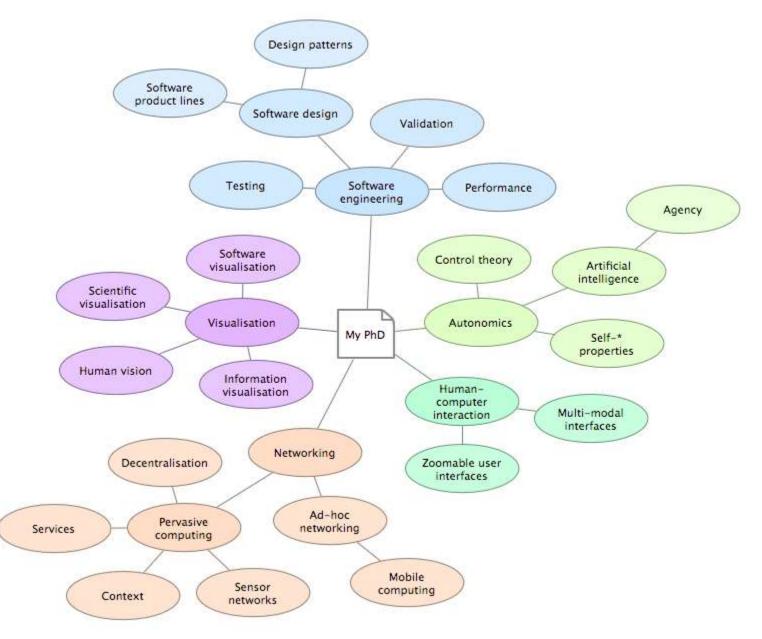


Source: Creswell, J. W. (2012). Educational research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th ed. ed.). Boston: Pearson Education, Inc.



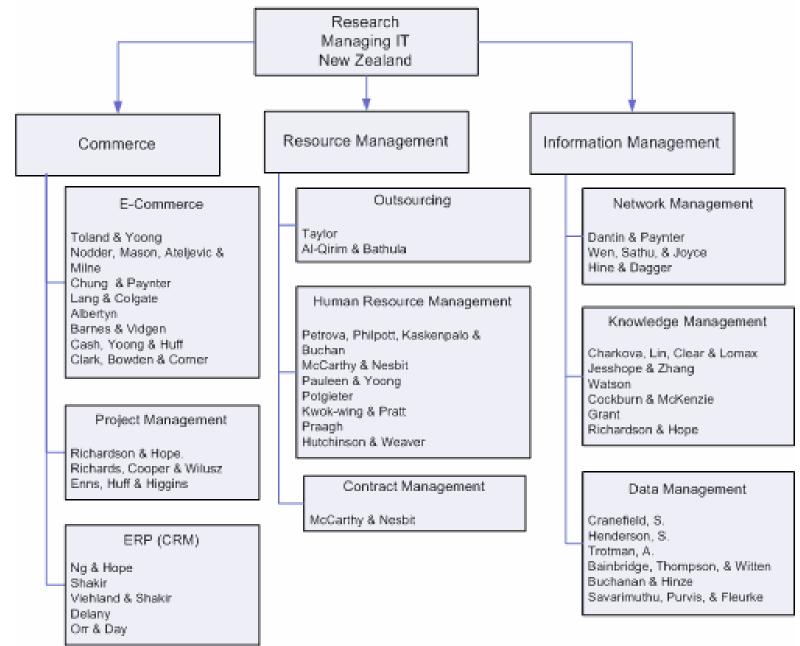
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Source: Creswell, J. W. (2012). Educational research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th ed. ed.). Boston: Pearson Education, Inc.



Source: Ross' PhD Literature Review Mind Map

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Source: http://www.wordsinspace.net/course_material/MatternLiteratureReviewTips.pdf

Review biases

- Read outdated version of a paper/book
- <u>Reading but not writing</u>
- Read unlinked papers (detect as much of the relevant literature as possible)
- Read before planning (defining a review protocol that specifies the research question being addressed)
- Start reading with few resources
- Language bias
- Publication bias
- <u>Read everything</u>
- Not keeping bibliographical information

Identifying a Research Problem

Researchers begin a study by identifying a research problem that they need to address. They write about this "problem" in the opening passages of their study and, in effect, give you as a reader the rationale for why the study is important and why you need to read their study.

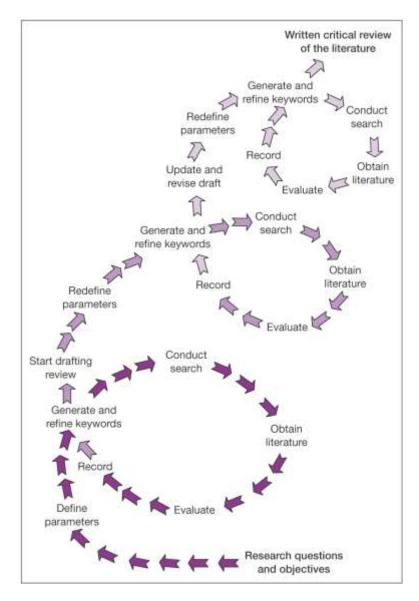
Reviewing the Literature

With so much information available, searching and locating good literature on your topic can be challenging. Five steps will provide a sense of how researchers proceed in reviewing the literature are:

- **1.** *Identify key terms to use in your search for literature.*
- 2. Locate literature about a topic by consulting several types of materials and databases, including those available at an academic library and on the Internet.
- 3. Critically evaluate and select the literature for your review.
- 4. Organize the literature you have selected by abstracting or taking notes on the literature and developing a visual diagram of it.
- 5. Write a literature review that reports summaries of the literature for inclusion in your research report.

Selecting keywords

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The literature review process

Source: © Mark Saunders, Philip Lewis, Adrian Thornhill and Martin Jenkins 2003 Research methods for business students / Mark Saun@@_PhilipAcevist Adrian Toorhuboestities Centre for Publication

Promotion

Improving Readership of Your Articles

Appearing at the top of the list of search results, and having a useful description of your work, greatly improve the likelihood that a reader will find and download your document.

- Abstracts should include keywords that potential readers are likely to use in searches. It is especially valuable to modify and reuse words that appear in the document's title and full text to improve the article's rank when readers search for those words.
- The first sentence of the abstract is all that is likely to be displayed in the search page results, so make your first sentence one that will encourage readers to click the link.

Using keywords is a vital part of abstract writing, because of the practice of retrieving information electronically: keywords act as the search term. Use keywords that are specific, and that reflect what is essential about the paper. Put yourself in the position of someone researching in your field: what would you look for? Consider also whether you can use any of the current "buzzwords".

Source: http://www.emeraldinsight.com/authors/guides/write/abstracts.htm?part=1#2



Selecting keywords lead to get more citation.



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KeyWords Plus

Hi there! This issue, we are going to explain how **KeyWords Plus** broadens your search. **KeyWords Plus** is the result of our Thomson Reuters editorial expertise in Science.

What our editors do is to review the titles of all references and highlight additional relevant but overlooked keywords that were not listed by the author or publisher. With **KeyWords Plus**, you can now uncover more papers that may not have appeared in your search due to changes in scientific keywords over time.

Thanks and keep your feedback and questions coming!

Smiles,

Lim Khee Hiang Ph.D., Principal Consultant

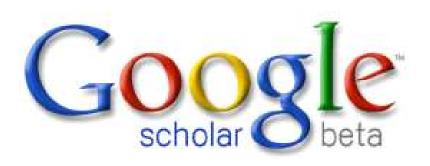
Where to Find Research Literature

- ISI Web of Knowledge
- Research tools Mind Map (Refer to "search

for proper article" section)

Finding review articles

- To demonstrate finding review articles in a Google Scholar search, enter the search:
- "health insurance""review article" and click on the **Search** button.





How do I select material?

Use three major criteria for selection, and ask yourself some questions:

relevance

- has the material contributed to the development of you main concepts?
- does it clarify your position (either by supporting or contrasting with it)?
- does it provide key interpretations or models you can apply to your design?
- is the material bound to a particular context or culture?

authority

- is the author qualified to report on the subject?
- has it been published by a reputable source or can you justify why it is an important source?
- has the material been critically evaluated or assessed by other authors or colleagues; for

example, peer reviewed or professionally edited.

currency

- is the material still influential in the field?
- are you keeping up to date with new research?

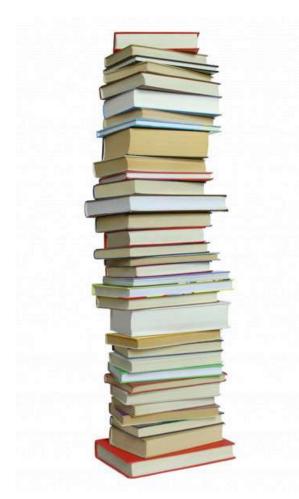
Critically Analyzing Information Sources

1-Initial Appraisal:

Author Date of Publication Edition or Revision Publisher Title of Journal (Distinguishing Scholarly Journals from other Periodicals)

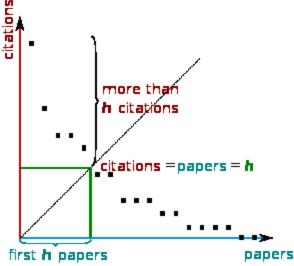
2- Content Analysis:

Intended Audience Objective Reasoning Coverage Writing Style Evaluative Reviews



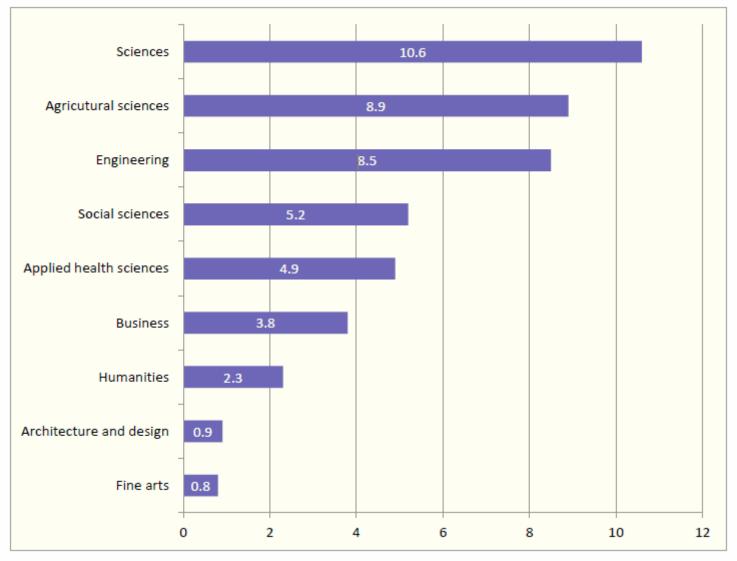
h-index (Jorge E. Hirsch)

 A scientist has index h if h of [his/her] N_p papers have at least h citations each, and the other (N_p – h) papers have at most h citations each.

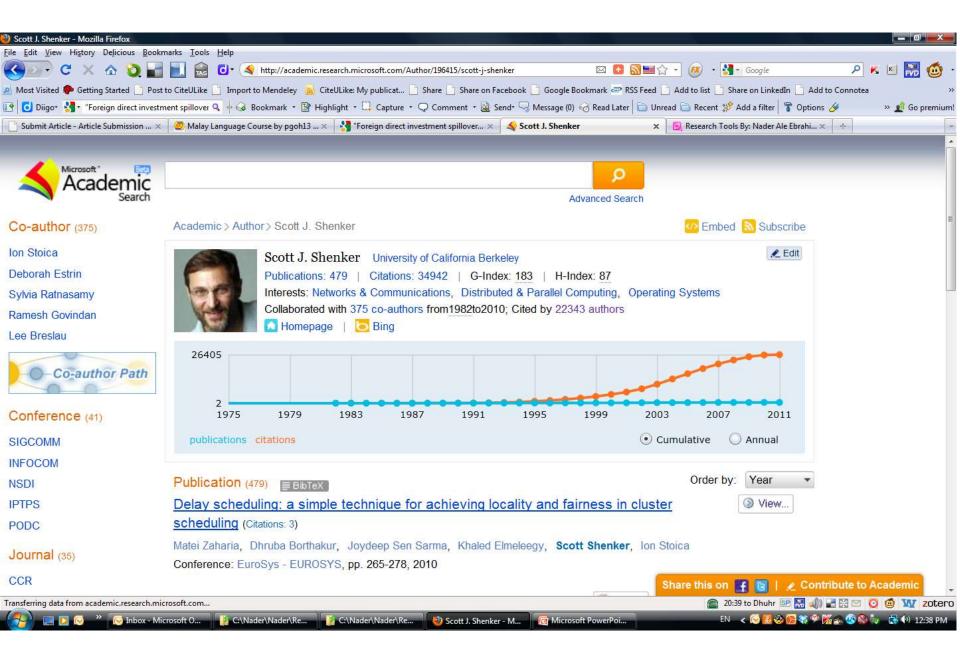


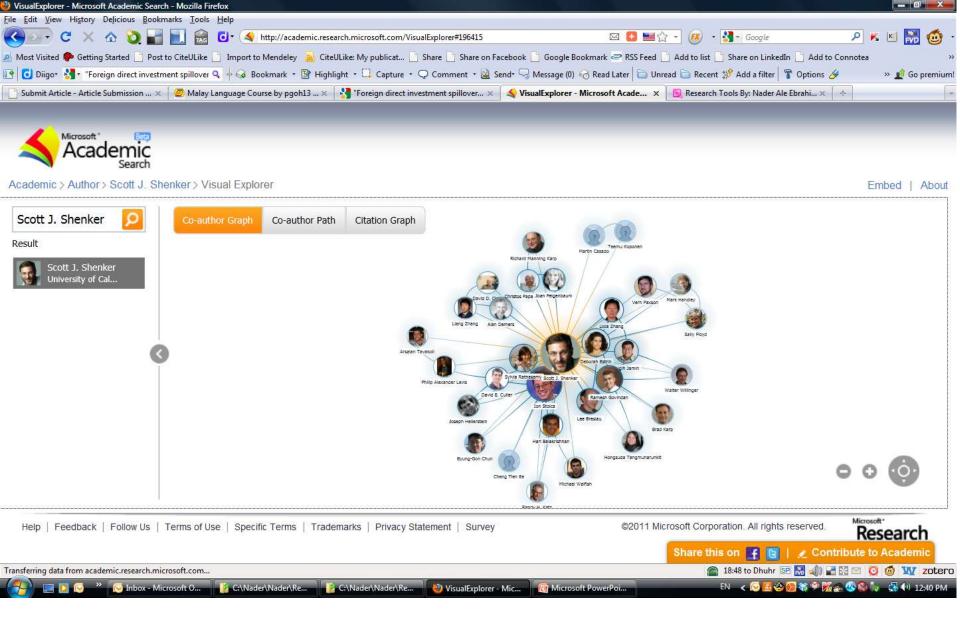
H-index from a plot of decreasing citations for numbered papers





Source: Making Research Count: Analyzing Canadian Academic Publishing Cultures





Paper/journal quality

- Journal Index, Impact Factor
- Another guide to paper/journal quality is the general reputation of the association, society, or organization publishing the journal.
- Leading professional associations such as American Psychological Association (APA) or the Institute of Electrical and Electronics Engineers (IEEE) publish a range of journals that are highly regarded.

The Institute for Scientific Information (ISI)

The Institute for Scientific Information (ISI)

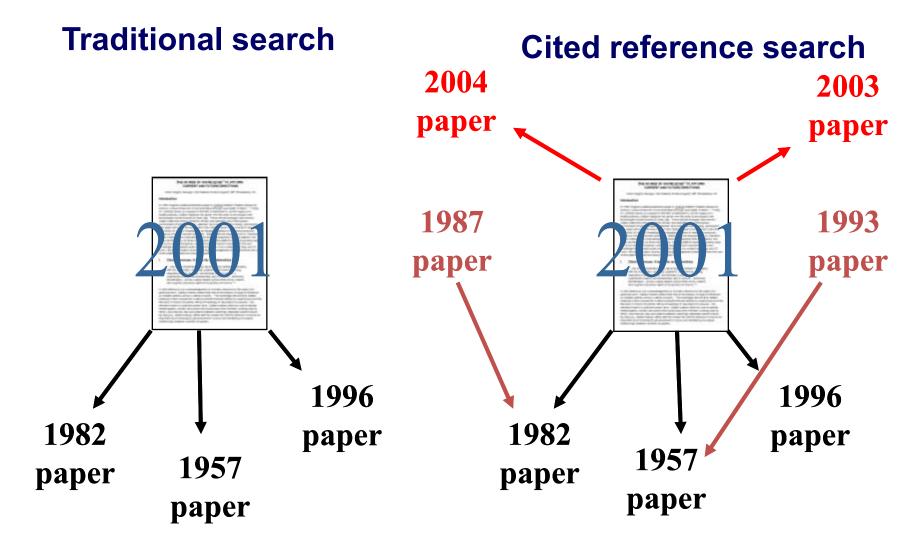
- The Institute for Scientific Information (ISI) was founded by <u>Eugene</u> <u>Garfield</u> in 1960. It was acquired by <u>Thomson Scientific & Healthcare</u> in 1992, became known as **Thomson ISI** and now is part of the Healthcare & Science business of the multi-billion dollar <u>Thomson Reuters Corporation</u>.
- ISI offered <u>bibliographic database</u> services. Its speciality: <u>citation indexing</u> and analysis, a field pioneered by Garfield. It maintains citation databases covering thousands of <u>academic journals</u>, including a continuation of its long time print-based indexing service the <u>Science Citation Index</u> (SCI), as well as the <u>Social Sciences Citation Index</u> (SSCI), and the <u>Arts and Humanities</u> <u>Citation Index</u> (AHCI). All of these are available via ISI's <u>Web of Knowledge</u> database service.



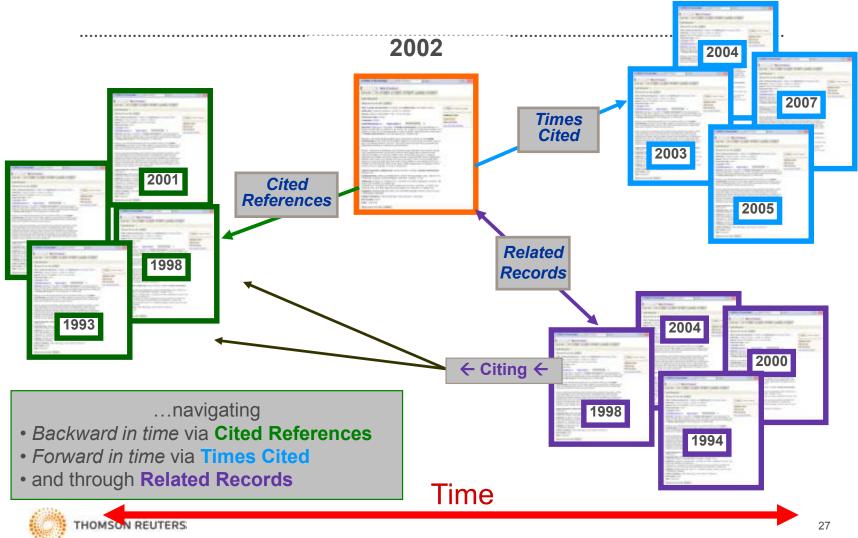
Citation tracking

 Citation indexes allows you to search the academic literature in ways that illuminate the progress of academic debate in your field. With a citation index, you can easily identify the most influential articles, and the leading academic authorities. You can track backwards (using lists of cited articles) and forwards (using lists of articles which cite a particular article). As a result, you can determine the position of academic debate at any time in the past





Literature Citation Information – Driving Discovery of "CLOSE Art"



Paper/journal quality

- Another guide to paper/journal quality is the general reputation of the association, society, or organization publishing the journal.
- Leading professional associations such as American Psychological Association (APA) or the Institute of Electrical and Electronics Engineers (IEEE) publish a range of journals that are highly regarded.

For More Info.

How to do an Effective Literature Search?

Application Training Module Series I by Customer Education Team

ts.training.asia@thomson.com

STOP SEARCHING, START DISCOVERING



Writing Literature Review

Writing your literature review

Writing your literature review takes time. You may need to complete several drafts before your final copy. It is important to have a good introduction that clearly tells the reader what the literature will be about.

An introduction must tell the reader the following:

- what you are going to cover in the review
- the scope of your research
- how the review ties in with your own research topic.

Source: https://www.dlsweb.rmit.edu.au/lsu/content/2_AssessmentTasks/assess_tuts/lit_review_LL/writing.html

Introduction

This is a good example of an introduction because it has a topic sentence which indicates what will be covered and also tells the reader the specific focus of the literature review in the concluding sentence.

Topic sentence - identifies five major themes as the scope of this review

Many theories have been proposed to explain what motivates human behaviour. Although the literature covers a wide variety of such theories, this review will focus on five major themes which emerge repeatedly throughout the literature reviewed. These themes are: incorporation of the self-concept into traditional theories of motivation, the influence of rewards on motivation, the increasing importance of internal forces of motivation, autonomy and self-control as sources of motivation, and narcissism as an essential component of motivation. Although the literature presents these themes in a variety of contexts, this paper will primarily focus on their application to self-motivation.

5 major themes to be covered

Concluding sentence - specific focus

Paragraphs

A paragraph is a group of connected sentences that develop a single point, argument or idea. Paragraphs need to link to other paragraphs so that the themes, arguments or ideas developed are part of a coherent whole rather than separate bits.

A paragraph should include:

- a main statement / idea that you are putting forward, ie topic sentence
- evidence from research to support / argue your idea, showing where the writers agree and / or disagree
- student analysis of the research literature where appropriate
- summing up and linking to the next idea (paragraph).
- In the literature review, you will need to show evidence of integrating your readings into each paragraph and analysis of the readings where necessary.

Source: https://www.dlsweb.rmit.edu.au/lsu/content/2_AssessmentTasks/assess_tuts/lit_review_LL/writing.html

Integrating arguments in paragraphs

Integration of multiple sources

To develop an integrated argument from multiple sources, you need to link your arguments together. The model below is a guide.

Topic sentence - outlining your main claim or key point for that paragraph

Supporting evidence from the readings

Most early theories of motivation were concerned with need satisfaction. Robbins, Millett, Cacioppe and Waters-Marsh (1998) argued that motivation relies on what a person needs and wants. Similarly the early theories of Maslow and McGregor (Robbins et al. 1998) focused on personal needs satisfaction as the basis for motivational behaviour. However, recent studies outlined by Leonard, Beauvais, and Scholl (1999) suggest that personality and disposition play an equally important role in motivation. Current thinking does not discount these theories, but simply builds on them to include a self-concept.

Contrasting theories from research

Concluding sentence - linking to the next paragraph

Integrating arguments in paragraphs

Integration of student analysis

It is important to integrate your analysis and interpretation of the literature in your literature review. Read the following paragraph and see how the arguments have been integrated into the paragraph along with student analysis. Analysis is not just student opinion, it needs to be supported by the literature.

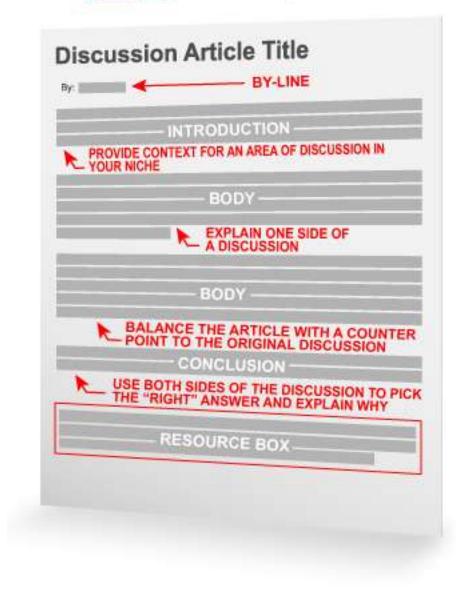
Topic sentence - outlining your main claim or key point for that paragraph

First statement of evidence from the literature

By its very nature, motivation requires a degree of individual satisfaction or narcissism. Robbins, Millet, Cacioppe, and Waters-Marsh (1998) suggest that motivation has as its very basis the need to focus on, and please the self. This is supported by Shaw, Shapard and Waugaman (2000) who contend that this narcissistic drive is based on the human effort to find personal significance in life. It can be argued that the desire to improve one's status is a highly motivational force, and is central to the idea of narcissistic motivation. The narcissistic motivational strategies put forward by Shaw et al. (2000) are concerned with motivation for life in general, but may also have applications in the context of work. These strategies, with their focus on personal needs, demonstrate that narcissism is an essential component of motivation.

Second statement of evidence from the literature Student analysis Concluding statement Source: https://www.dlsweb.rmit.edu.au/isu/content/2 Assessment Tasks/assess_tuts/lite_review_LL/integration.html

Discussion Article Template





Verbs for referencing

To incorporate quotations / references into a literature review, you can use a variety of verbs. These verbs are often used with prepositions, eg that, by, on. It is poor writing to use the same ones all the time, eg says that, states that. Verbs also allow the writer to indicate the degree to which they support the author of the research, eg claims that versus argues that. The following verbs (and prepositions) can be used to introduce references into your literature review. Please note that they can be used in different tenses.

Suggest (that)	Recent studies outlined by Leonard et al (1999) suggest that personality and disposition play an equally important role in motivation.
Argue (that)	Leonard et al (1999) argue that there are three elements of self perception.
Contend(s)	Mullens (1994) contends that motivation to work well is usually related to job satisfaction.
Outline	Recent studies outlined by Mullins (1994) suggest that personality and disposition play an equally important role in motivation.
Focus on	The early theories of Maslow and McGregor (Robbins et al, 1998) focused on personal needs and wants as the basis for motivation.
Define(s)	Eunson (1987, p. 67) defines motivation as 'what is important to you'.
Conclude(s) (that)	Reviewing the results of the case study, Taylor (1980) concludes that the theories of job enrichment and employee motivation do work.
State	He further states that there is an increasing importance on the role of autonomy and self regulation of tasks in increasing motivation.
Maintains (that)	Mullins (1994) maintains that job enrichment came from Herzber's two factor theory.
Found (that)	Mullins (1994) found that there is an increasing importance on the role of autonomy and self regulation of tasks in improving motivation.
Promote(s)	This promotes the idea that tension and stress are important external sources of motivation, which can be eliminated by completing certain tasks.
Establish(ed) (by)	As established by Csikszentmihalyi (Yair 2000, p. 2) 'the more students feel in command of their learning, the more they fulfil their learning potential'.
Asserts (that)	Locke's Goal Setting Theory asserts that setting specific goals tends to encourage work motivation (Robbins et al, 1998).
Show(s)	Various theories of motivation show employers that there are many factors that influence employees work performance.
Claim(s) (that)	Hackman and Oldham (1975) claim that people with enriched jobs, and high scores on the Job Diagnostic Survey, experienced more satisfaction and motivation.
Report(s)	Mullins (1994) reports on four content theories of motivation.
Mention(s)	Mullins (1994) mentions two common general criticisms of Herzberg's theory.
Address	Redesigning jobs so that responsibility moved from supervisors to the workers, was an attempt to address the issues of job satisfaction (Mullins, 1994).



Before submission, follow EASE Guidelines for Authors and Translators, freely available in many languages at <u>www.ease.org.uk/publicatio</u> <u>ns/author-guidelines</u>. Adherence should increase the chances of acceptance of submitted manuscripts.

Guidelines translations: Arabic Bangla Bosnian Chinese Croatian Czech Estonian French Hungarian Italian Japanese Korean Persian Polish Portuguese-Brazilian Romanian Russian Spanish Turkish

What is an alert service?

- Many journal databases and book publishers offer free alert services. These are an effective means of keeping track of the latest research.
- Alert services come in different forms. The most common include:
 - a search alert. This is a saved search which alerts you when a book or article that matches your search terms is published.
 - a TOC (Table of Contents) alert. Such an alert notifies you when a new issue of a journal is published, and provides you with the issue's table of contents.
 - a citation alert. This advises you when a new article cites a particular work.
 - Most alert services are email-based. An increasing number are now offered as an RSS feed. If you are just beginning, you might like to try email alerts first. These are generally easier to create.

Alert services are an effective means of keeping track of the latest research.

Create a Google Alert

- Enter the topic you wish to monitor.
- Search terms:
- Type:
- How often:
- Email length:
- Your email:









Thank you!

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