

Study Skills Series



**CRITICALLY
EVALUATING THE
LITERATURE**



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A generic tool for Appraising research papers—developed by Caldwell et al (2005)

Does the title reflect the content?
Are the authors credible?

Does the abstract summarise the key components?

Is the rationale for undertaking the research clearly outlined?

Is the literature review comprehensive and up-to-date?

Is the aim of the research clearly stated?

Are all ethical issues identified and addressed?

Is the methodology identified and justified?

QUALITATIVE

Are the philosophical background and study design identified and the rationale for choice of design evident?

Are the major concepts identified?

Is the context of the study outlined?

Is the selection of the participants described and the sampling method identified?

Is the method of data collection auditable?

Is the method of data analysis credible and confirmable?

Are the results transferable?

QUANTITATIVE

Is the study design clearly identified, and is the rationale for choice of design evident?

Is there an experimental hypothesis clearly stated? Are the key variables clearly defined?

Is the population identified?

Is the sample adequately described and reflective of the population?

Is the method of data collection valid and reliable?

Is the method of data analysis valid and reliable?

Are the results generalisable?

Are the results generalisable?

Are the results presented in a way that is appropriate and clear?

Is the discussion comprehensive?

Is the conclusion comprehensive?

In addition you may wish to evaluate the paper as a whole

- Does the research paper as a whole make sense?
- Is it clearly written?
- Is there an overall consistency throughout the paper in relation to the terms and concepts which are used?
- Do the research findings and discussion relate to the identified research question?
- Is there enough information throughout the paper to enable the study to be replicated?
- What are the implications for practice?

What about non-research papers, how do I know they are of good quality?

- **Was the work presented clearly and unambiguously?**
- **What is the purpose of the work?**
- **How does the purpose influence the knowledge discussed in the work? Is there potential for bias?**
- **What is the scope and application of the paper?**
- **Who wrote it?**
- **Where and when was it published?**
- **Has it been subject to a review panel? (check front of journal)**
- **What support exists for the claims being made in the source? (look at the references)**
- **What debates, new ideas and trends are presented in the work?**
- **What are the strengths and weaknesses of the work?**
- **What research questions and queries emerge from the work?**

Introduction

The electronic age has increased the accessibility of information to everyone, whether they are professionals delivering the service or discerning consumers accessing those services. Unfortunately this accessibility often results in the individual being overwhelmed by the amount of information available to them. In addition the quality of some of this information can be questionable. The ability to search, select and then critically appraise the literature is a core skill for all individuals wishing to base their practice on best evidence. Critical evaluation, appraisal or critique is the ability to analyse the strengths and weaknesses of something. In this instance it is the appraisal of 'the literature or evidence'. Although much of the published material is peer reviewed prior to appearing in a journal, and therefore has met a certain standard, it is still good practice to complete your own evaluation. This will help you to identify the limitations of the paper as well as consider how the ideas presented apply to your practice.

There are many different types of literature available derived from different sources. Broadly the literature can be categorized into:

1. Clinical guidelines
2. Systematic reviews
3. Research studies
4. Internet articles
5. Non-research articles.

Critical appraisal—how to do it....

It can take 1-2 hours to critically appraise a paper and in some cases a little longer. The first thing you need to ask yourself is what type of paper are you reading. This will dictate the type of appraisal tool you will need to use to perform the critique. Below are the URLs of some websites where you can obtain critical appraisal tools free of charge

www.casp-uk.net

www.sign.ac.uk/methodology/checklists.html

<http://nettingtheevidence.pbworks.com/w/page/11403006/Critical%20Appraisal%20Checklists>

These sites provide information on how to appraise a paper

<http://www.vtstutorials.ac.uk/detective/who.html>

<http://resources.bmj.com/bmj/readers/how-to-read-a-paper/>

References:

Caldwell, K., Henshaw, L., and Taylor, G. (2005) Developing a framework for critiquing health research, *Journal of health, social and environmental issues*, 6(1), pp45-53.