Research Methods for Graduate Business and Social Science Students

Literature Review and Critical Reading

Contributors: By: John Adams, Hafiz T.A. Khan, Robert Raeside & David White
Book Title: Research Methods for Graduate Business and Social Science Students
Chapter Title: "Literature Review and Critical Reading"
Pub. Date: 2007
Access Date: April 9, 2019
Publishing Company: SAGE Publications India Pvt Ltd
City: New Delhi
Print ISBN: 9780761935896
Online ISBN: 9788132108498
DOI: http://dx.doi.org/10.4135/9788132108498.n4
Print pages: 48-78

© 2007 SAGE Publications India Pvt Ltd All Rights Reserved.
This PDF has been generated from SAGE Knowledge. Please note that the pagination of the online version will vary from the pagination of the print book.

Literature Review and Critical Reading

Introduction

In this chapter we consider the importance of undertaking a literature review, what the review should do for you, how it links to your research questions, your research method(s), your theoretical framework and your findings. By the end of the chapter you will also appreciate why it is always the case that a literature review is never complete. This chapter provides detailed explanations of how to undertake a literature review and why it is a pivotal element of any research enquiry. You will be reminded of some of the discussions in Chapter 1 and given pointers to how the literature review relates to later chapters in the book. At the end of the chapter, you are presented with an example of a literature review section from a published paper which exemplifies the key elements required in a literature review. The present chapter is structured as follows:

- The Importance of Literature Review
- What Should the Literature Review Do?
- Types of Literature Review
- Some General Points in Literature Reviewing
- Obtaining Literature Sources
- Searching the Literature
- Assessing the Quality of Literature
- An Example of a Literature Review
- Critical Evaluation
- Critical Analysis
- Critical Reading
- Critical Thinking
- Critical Questions
- Critical Reviews
- Writing a Critical Review
- Exercises

The inclusion of a section especially on critical reading will improve the overall undertaking of the literature review. However, given the importance of the skills required for undertaking a literature review and for engaging in critical reading, it is necessary that they are given sufficient space on their own. They are, of course, complementary to each other.

The Importance of Literature Review

In any research project it is essential to understand what has already been done (if anything) in the specific topic you have chosen and what has been done in the wider subject area of that topic. This is essential for several reasons and the importance of a literature review can only be appreciated when we ask ourselves a number of specific questions. As a researcher, you need to know the answers to the following questions concerning the research topic you are *considering* for investigation:

- Has the work already been done?
- Who are the experts in the field?
- What are the main theoretical perspectives?
- What are the common research methods in the topic?
- What are the main problems in researching the topic?

- Are there any major controversies in this topic area?
- Is the topic open to hypothesis testing?
- Is the topic a trivial one?

The only way you can satisfactorily answer these questions is by reading as much as you can on research which is directly related to your research topic and research which is indirectly related to it and research which *may* be related to it. In the case of the latter, you can only know this by reading material which you think might be relevant. The easiest way to identify such material is through the article title and the abstract. Let us go through each of the questions posed above.

Has the Work Already Been Done?

Obviously, if this is the case then you need to consider changing your research topic or its focus. In most business-related research, it is very rare that a specific set of research questions or a specific hypothesis has already been addressed in your specific topic area. This is more common in science research. Nevertheless, it is still important to check that a piece of research already published is not so close to yours that undertaking your research would not be worthwhile. Clearly, this means that the literature review and dealing with the first question above is something that needs to start immediately after you have identified a possible research topic.

Who are the Experts in the Field?

There are many areas of business research where it is very difficult to identify any experts but there are areas where it is not. For example, in the field of 'Service Quality' in marketing research, it would be very difficult to avoid the work of A. Parasuraman (Parasuraman et al. 1991; Parasuraman and Zinkhan 2002) because this author has published widely on this topic and proposed an important theoretical model of Service Quality. In the field of 'Bureaucracy in Organisations', it is crucial that the work of Max Weber (1947, 1968) is consulted as well as the critiques of his work.

If your topic is strongly linked to Business Forecasting, you would need to consult the publications of S. Makridakis (Makridakis and Wheelright 1977; Makridakis et al. 1998) and published material which reports on his work. It should be clear to you now that in many areas of business research there are indeed experts on specific topics—so how do you identify them? In fact, this is relatively easy—you could consult the Social Science or Business citation index by topic area (on the web) and this will show up the names of authors in that area. Where a name appears several times then you can be reasonably certain that the author is very active in that research topic.

Alternatively, you could find a published article related to your topic in an academic journal and consult the reference list at the end of it—again it is often the case that the same name is referenced more than once. This is also a good way of establishing a 'road map' for your literature review—by following up references used in books or journals or academic working papers or even in electronic websites. This is because most of the references will be strongly related to the topic of the article.

What are the Main Theoretical Perspectives?

Whatever the research topic that you have identified, you need to construct a conceptual framework within which you will study the topic. This is critical to the successful implementation of the Research Cycle discussed in Chapter 3. Without theory, it is almost impossible to interpret data. For example, suppose we collected data on the number of washing machines purchased in a single city in a single year—this would be

relatively easy to do but once we had the data what would we do with it? We could graph it, we could apply all types of statistical analyses to it or we could write several paragraphs describing it. However, we could not even begin to try and explain it! This is because we have *no theory* available on the consumer decision ability on buying a washing machine. In fact, there is no relevance in graphing this data, analysing it or describing it unless we are pure inductivists (see Chapter 2) and have no idea whatsoever of the reasons behind washing machine purchase. Even worse, why would we collect such data in the first place if we have no understanding of why we are collecting it, if we have no *a priori* reasons to collect it and if we have no hypothesis we wish to test?

The key point here is that we need a theory in order to inform us what kind of data we require in order to answer the research questions we have already set ourselves—in other words, following the modern deductivist methodology of research. Where does one find this theory? The answer to this question is easy—you will find it in the literature related to your research topic. You will also find critiques of theory there and alternative theories of the same social behaviour. It is critical that you are aware of all theories pertaining to your research topic, their strengths and their weaknesses. In fact, it is often the case that the theoretical knowledge of a particular topic reveals gaps in our understanding of that topic—this often enables you to identify more important research questions.

What are the Common Research Methods in the Topic?

In reading the published academic literature on or closely related to your research topic, it is very important to try to identify the common characteristics of *how* the research was carried out. There are a number of aspects of this that need to be clearly understood:

(i) Is the published research in this topic mainly of a qualitative or a quantitative nature?
(ii) If qualitative, what is its most common basis?
(iii) If quantitative, what is its most common basis?
(iv) Is the published research usually a mix of qualitative and quantitative methods?

It is relatively easy to answer the first question. An initial review of a handful of published papers on the topic will quickly reveal the nature of the research approach taken to the topic—these will either contain a lot of mathematical analysis or statistical data or be dominated by textual analysis. The latter usually indicates a qualitative method being used. If this is the case, then we can move to the next question: are the qualitative methods mainly of the case study type, ethnographic, content analysis, grounded theory or some other generally recognised qualitative research method? It is your judgement as to what appears to be the most common basis for research in this topic. A detailed discussion of both quantitative and qualitative methods is provided in later chapters.

If you find that the handful of papers are dominated either by mathematical or statistical analysis, then you need to identify the nature of these. In business research, quantitative methods tend to be dominated by statistical analysis. You need to be clear on the most common approach taken here—is it simple descriptive statistics, non-parametric methods, parametric methods, multivariate methods or another generally accepted statistical approach? The answers to questions (i) and (ii) above will inform you as to *how you* should be formulating your own research questions as per the Research Cycle we considered in Chapter 3. If, as is often the case, the published research is a mix of qualitative and quantitative methods, then you need to decide where you will put the emphasis—and this will very much depend upon how you have formulated your specific research questions or how you hope to formulate them.

You also need to consider if the published research derives its data from secondary sources mainly or primary

sources—this will also inform you as to how and where you should be seeking your own data. Also consider what type of data is most commonly used in the topic: cross-sectional, time-series, or categorical, for example.

In addition, what is the typical (if any) source of this data—focus group, case study, survey or published sources base? It is also useful at this early stage of the literature review to determine if the data being used is tested against a theory or a theoretical model or if it is very much exploratory, that is, being applied within a predominantly inductivist framework.

What are the Main Problems in Researching the Topic?

Without a review of the literature, you cannot possibly know this. There may be many problems and several common problems in researching your research topic. One of the most common problems is data. Does it exist for example? If it does, can you get access to it? Is it in a format which is easily manipulated? Is it trustworthy? How old is it? Have the variables in the data been measured correctly and consistently? All these questions are important. Additionally, is the topic one for which primary data is essential? If so, can it be collected in a reasonable time and at low cost? Can it be collected at all if the topic is personally, socially or politically sensitive? Another problem which can arise is the absence of a clear theoretical framework in the published research. This may be a topic which has little or very weak theoretical underpinning and understanding—if so then how can you test a hypothesis or attempt to answer your research questions? All of the above need to be considered.

Finally, the topic may be one in which there is serious disagreement over how to research it at all—in other words, there is a real concern surrounding the value and appropriateness of any of the research methods used to investigate the topic. If this is the case, you should seriously consider if this is a topic suitable for a dissertation.

Are There Any Major Controversies in This Topic Area?

The controversies may be of a methodological, theoretical or empirical nature. They may arise due to mishandling theory, data methodology, or choosing improper methods for empirical investigation. It is one of the skills of literature reviewing to determine what the controversies actually are. This is also a very fruitful source for deriving your own research questions since the gaps in your understanding of the topic will be fairly clear from the debates and controversies you find in the literature.

Is the Topic Open to Hypothesis Testing?

Not all research questions can be put in the format of a hypothesis. A hypothesis needs to be clear, unambiguous, focused and testable using an accepted statistical method. If the research topic is mainly investigated using qualitative methods, then it may be very difficult to generate testable hypotheses. However, a good piece of research does not need to contain testable hypotheses—it could contain a set of focused research questions (but not too many) or a set of clear propositions (derived from theory). In either case you can still ‘test’ these using a logical and discursive analysis and/or statistical methods appropriate to the type of data being used.

Is the Topic a Trivial One?

If any one person or any one organisation has a ‘problem’, then it will never be trivial to them. However, research should be concerning itself with problems which are more significant and with the potential for the results to be generalisable to at least a group, an area, a sector of industry, or any other aggregation. A good indication of a research topic which is considered trivial is when you can find little or no trace of it in the literature. Of course, this could be because no one has ever thought about it, but it is usually because they have and immediately dismissed it as of no interest to anyone else, of no value to society and with no potential to be developed further. It is very much a matter of judgement.

What Should the Literature Review Do?

Apart from providing the answers to the earlier questions, the review should also achieve the following:

- It should enable you to sharpen and focus your initial research questions or even suggest new research questions.
- It should provide you with a wide and deep knowledge of the theoretical, empirical and methodological issues within your chosen research topic.
- It should provide a ‘bridge’ between your research questions and your research findings.
- It should enable you to speak with authority on your research topic and the wider subject area.
- It should enable you to compare your research methods, theoretical framework and findings with work already done.
- It should enable you to set the scope and range of your research topic.

Quite clearly, the literature review is the pivotal element of a research project. It connects your planned work to previous work, it connects your specific topic to the wider subject area, and it connects your specific findings to the findings of others. It is very much an inclusive activity in the sense that, if undertaken properly, you become a part of the academic community who can speak and write with confidence and authority on a specific research problem.

Linking to Your Research Questions

Most research projects begin with no more than initial ideas—these are very often unfocused and based mainly on personal interest. This is quite normal, however, and the literature review will enable you to do a number of things in relation to any initial research questions you may have.

- It will allow you to discard ideas which are considered trivial in the literature.
- It will enable you to discard any questions which the literature shows are extremely difficult to deal with.
- It will allow you to frame your research questions in the context of the main theories present in the literature.
- It will enable you to identify research questions which potentially can fill a gap in knowledge identified in the literature.

The literature review thus helps you to narrow the focus of your research and to be much more precise in framing the research questions or hypotheses which interest you.

Linking to Your Research Methods

As discussed earlier, it is very important to be aware of the main research methods employed in your chosen research topic. The literature review will help you identify *how* you should be designing your research project in order to answer the research questions you have posed. An understanding of what works well and what does not work well in terms of method is crucial to identifying an efficient and effective research method of your own. It may not seem like it but the literature review will actually save your time—because it enables you to avoid mistakes and to avoid reinventing the wheel! An understanding of the range of research methods employed in a particular research topic also enables you to identify the 'Limits of Validity' of any findings because you will have understood what a particular method can achieve and what it cannot achieve compared with alternative methods. This is very important because, as you know from earlier chapters, any research finding is itself dependent on how the research was carried out and can never be assumed to be the 'last word' on the subject. Thus, a good understanding of methods in a particular research area will enable you to identify areas for future research and to be realistically modest in your assessment of your own findings.

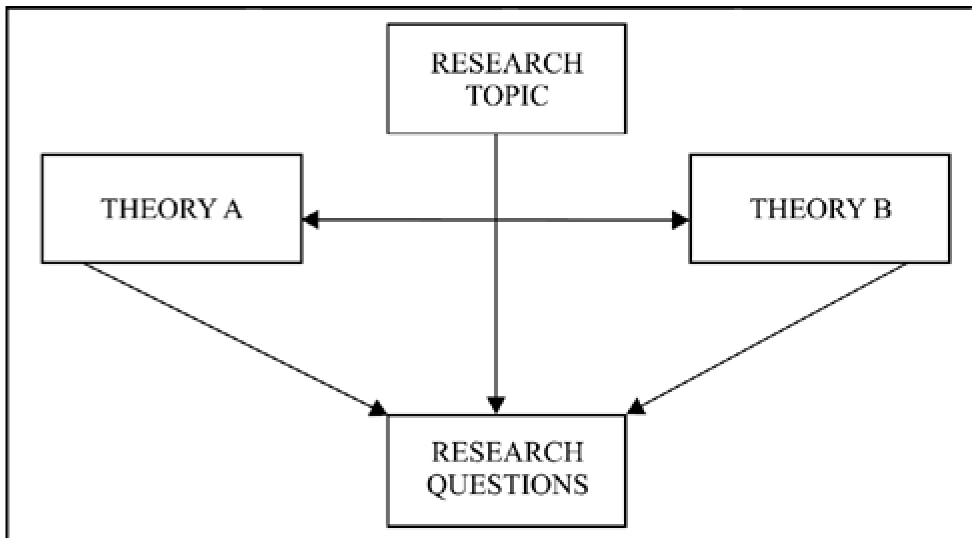
Linking to Your Theoretical Framework

This is arguably the most important part of any research project and the most important function of the literature review. As you know from earlier chapters, data comes and goes, the relationship between variables changes, society changes and therefore the primary function of academic research is to continually move theory forward—because in the end, it is all that we really have in terms of our 'knowledge' of the world. A research project which is heavily reliant on the description of data trends, constructs and behaviour is extremely limited in what it can contribute to knowledge. As has already been discussed in Chapter 2, the nature and purpose of the research project will largely determine how the work is undertaken, what research questions are feasible and which, if any, theoretical framework can be used.

Unless the data, the constructs and the behaviour are interpreted in terms of theory, the research work itself will be no more than a commentary on a specific topic. For example, most business students have encountered the concept of 'demand curve' in Economics and know that as prices fall demand rises and we can trace this by moving the price line along the demand curve. However, this is merely a description of what happens when prices fall—it is not the explanation. For the explanation we need to consult the utility theory. There is a clear difference between description and explanation and it is the latter which can only be provided by theory.

The literature review will also allow you to understand competing theories of social/business behaviour and to be aware of the weaknesses of these theories. It will also enable you to attempt to integrate different ideas from different theories in order to construct your own conceptual framework and to link this to the research questions you are asking as is shown in Figure 4.1.

FIGURE 4.1 Linking Questions to Conceptual Framework



To the above process you can add different data sets, related issues and sub-themes of the research topic. The key element here is that there must be a theoretical framework in order to allow you to interpret your results and to identify what has been achieved and what has not been achieved. This will also enable you to question whether the weaknesses in your own research are of a theoretical nature, methodological or related to the data you have used. Finally, you need to interpret the results of your research and the literature review plus the theory will help you do this.

Linking to Your Research Findings

You need to be in a position to be able to compare your findings with the findings in previous research. Obviously, you can only do this if you are aware of the findings in the literature. The theoretical framework allows you to interpret the findings while previous research allows you to compare these with the work of others. In addition, you should be evaluating your findings in the context of the research questions you have identified and subsequently sharpened in the light of your understanding of the literature. In order to link your findings to your literature review, you need to consider a set of questions, some of which you may be able to answer and some which may not be possible to answer—nevertheless they must still be explicitly considered and a discussion reported in your work. Specifically, you need to ask the following questions:

- Which research questions have been satisfactorily dealt with?
- Which have not been satisfactorily dealt with, and why?
- Which have not been answerable at all, and why?

You should also be identifying findings which you know to be consistent with the literature, as well as those which are inconsistent with the literature. In addition, you need to be able to explain why one or more of your findings are not what you expected (given you have *a priori* reasoning) and to identify the source of this—it may be data weakness, sampling problems, theoretical weakness, or it could well be that one of your specific research questions was not framed correctly or was, in fact, irrelevant. It is part of the research and evaluative process to work this out and to properly report it. Finally, you need to consider the Limits of Validity of your findings, the extent to which they can be generalised and the extent to which you can claim a degree of reliability of the findings. Again, all of this can be done with reference to your literature review.

Types of Literature Review

There are different types of literature review that can be undertaken, depending on the purpose of the research. The main types of literature review are:

- An Evaluative Review
- An Exploratory Review
- An Instrumental Review

These are not mutually exclusive and will often be mixed together. However, in the case of academic research, it is the second type of literature review which is the most common.

Evaluative Review

This type of literature review focuses on providing a discussion of the literature in terms of its coverage and contribution to knowledge in a particular area. An apt example of this type of review is meta-analysis which provides a comprehensive commentary on a very large number of research projects focused on a specific topic. It is often used to directly compare research findings from these projects when the findings are directly comparable—for example, in measuring reliability coefficients, regression coefficients, and also artificial constructs defined in the same way but applied in different projects. The field of Econometrics is often typified by literature reviews of this type.

Exploratory Review

This is a literature review which is seeking to find out what actually exists in the academic literature in terms of theory, empirical evidence and research methods as they pertain to a specific research topic and its related wider subject area. It is also used to sharpen, focus and identify research questions that remain unanswered in the specific topic. The key to conducting a review of this type is to remain focused on the field of study and not allow yourself to be taken into other directions just because they may be interesting. It is not as important here to provide a comprehensive review of the literature (as in meta-analysis) but it is much more important to focus on the specific area of the research topic.

The review should be seen as being informative to the researcher and providing him/her with clearer ideas on the common theories, methods and types of data analysis conducted on this topic. It is also critical in this type of review that the literature is properly cited and a proper bibliography is presented. This is to enable other researchers and readers to follow up aspects of the work they find especially interesting. In academic work, the most common referencing system is the Harvard system. This is very much the basis of an academic literature review designed to inform and to create a 'path' between previous and current research.

Instrumental Review

This is where the literature is used exclusively as a source of information on how to conduct some research on a highly specific research problem. It is not designed to identify the state of current knowledge in an area but to identify the best way to carry out a research project without reinventing the wheel and without incurring unnecessary and avoidable costs. This is the type of review which would be typically done in-house by company employees who are tasked to solve an urgent or unexpected business problem. This type of review will also be less concerned with properly citing the literature, unlike the two discussed earlier.

Some General Points in Literature Reviewing

Reviewing academic literature is not the same as just reading it! You need to think about the ideas, the research methods, how the data was collected, and how the findings have been interpreted. This is what we mean by Critical Reading and this is discussed in some detail later in this chapter. In the meantime, here are some questions which you should keep in mind when studying (not just reading) academic literature.

For any given piece of work:

- Is there a theoretical framework?
- If so, what is it and how does it fit into this topic?
- Does the work provide links to other work in the topic?
- Is there an empirical aspect to the work?
- If so, what is its basis?
- Does the work relate to a specific social group?
- Does it relate to a particular place?
- How applicable might it be outside the latter two?
- How old is the work?
- Is it still valid?

In addition to asking these questions, you also need to summarise the literature review. This should be done in the following terms:

- What does the previous research tell us about this topic?
- What does it not tell us?
- What are the key weaknesses in terms of theory, methods and data?

This is the ‘end’ of your literature review and you now have a platform from which to launch your own research, interpret the findings and evaluate what you have achieved in comparison with the literature. Of course, as explained at the beginning of this chapter, the literature review is never really complete simply because there is always on-going work which you will be unaware of; there is often too much literature to be covered in a specified period of time, and there will be literature on your topic which is already in the process of being published but is not yet published. This is entirely normal and nothing to be worried about.

A good review should demonstrate familiarity with the topic, show the path of prior research and how it is linked to the current project. To do this effectively the review should be written in a critical and reflective style. One should not simply accept something because it is written; one should judge it by showing where it is good or where it is poor. Being critical does not mean simply picking holes in an argument, and praise should be given to good ideas and well-developed arguments.

Obtaining Literature Sources

There are many sources of literature including journals, books, reports, abstracts, and electronic websites, among others. Searching for the appropriate literature can be very time consuming, and you need to be very specific when using library search engines, Internet search engines and other databases.

Once an appropriate article is obtained, there are various ways of reading it for research purposes. In doing the reading for the review, one must consider the credibility of the article. Articles published in referred journals tend to be the most reliable. Articles obtained from the World Wide Web (www) have to be treated with a great deal of caution, although there is good material on the Web. If you plan to use the Internet as a major source of research material, the most reliable sites are those of academic departments in universities. For ex-

ample, if you are researching a topic in the area of financial innovation or marketing communications, a good start point would be a Department of Finance in the first case and a Department of Marketing in the second. Most universities have academic departments where the departmental website will contain Staff Research Papers, Staff Working Papers, and sometimes staff publications—in most cases, these can be downloaded in full and at no charge.

Other sources of reliable material include government departments—they often put full reports and analyses of specific topics on their websites and, again, often at no charge. It is not a good idea just to enter the name of a topic into an Internet search engine because it will find material which you cannot be certain is free from bias or has been through a proper refereeing process. Material supplied by academic departments and government departments go through the process of refereeing and editing. These are far more reliable.

However, there is no real substitute for spending a considerable amount of time in libraries, playing detective, and tracing articles cited as references to articles you have read. You will not be able to read everything, so be selective. Reading abstracts helps in this. Remember that photocopying articles, although reassuring, is not a substitute for reading them. When you make photocopies always ensure that you copy the references at the end of the article.

On reading an article, it is useful to make notes and record accessing details on a card or computer file. Do this recording at the time, as failure to do so can add a considerable amount of time to your writing of the literature review and, later, in constructing the bibliography.

Searching the Literature

Literature searching involves a systematic and methodical search of published sources of information to identify items relevant to a particular requirement. The ‘literature’ involved may be in the form of books, journal articles, videos, cassette tapes, conference papers, reports, theses, patents, standards or other types of information sources.

Why Do a Search?

- To help in topic selection—to assess a topic's novelty, originality and feasibility.
- To discover information that you can use in your actual project—it is vital to show that you have located, understood and assimilated previous work in the field.
- To provide knowledge of the subject area in general, for background and contextual information—a search will give you awareness of the structure of information in a particular subject area.

Planning the Search

1. Plan your information search. Spend some time thinking about what you really want to find information on. This may involve breaking your topic down into several separate information searches.
2. Consider the following aspects of your search:
    - *Scope*—is the information you require—a core element of your topic, is it background (a paragraph in your introduction), or tangential to your central topic?
    - *Timescale*—how far back is the information of relevance? Must it be recent? Published in the last five years? Or historical? If looking to forecast, you may need to look back over a long period to assess statistical trends for example.
    - *Range*—do you need local information only? Regional? National or internation-

al? If a variety, assess the part each type will play in your project.
- Set yourself parameters or limits to the search if you can—but keep it flexible, as your strategy may change as the search develops.

3. Most importantly, select the *key concepts* your search will involve. From these concepts, generate a number of subjects or *keywords.* These are the words you will actually look up in various information tools.

   To help generate keywords, look through textbooks, encyclopaedias and handbooks, or scan some current issues of journals in the appropriate field. Brainstorming is an excellent way to identify keywords, especially in groups. Integrate new keywords discovered as your search progresses. When keywords are handy and appropriate that will give your search some element of strategy. Think in *broad* terms that encompass your topic, *narrower* terms that are more specific, *related* terms that will enable you to enrich your search, and *synonyms* or *alternative* terms to make your search comprehensive. When thinking of synonyms, be aware of global terms that may be used, and check out each in the indexes you select.

4. Think about the *type* of information you are seeking. This may help you identify the most likely tools to use. Is it general theory (textbooks), current analysis and comment (newspapers and journals), names of contacts (directories), statistical, governmental, legal, technical or bibliographical?

Doing the Search

1. Consult library catalogues, general subject guides and bibliographies to establish which indexing tools will be the most useful for your topic. Ask library staff for assistance in selecting the most appropriate tools.
2. Using the selected sources search through the subject indexes to trace relevant articles. If you find new or relevant keywords, add them to your search. Locate as many references as possible on your topic. If you cannot find many it may be because the keyword used is too narrow—broaden your search using more general terms. If you find too many articles try more specific keywords. Use synonyms and amend your search in the light of experience. If you cannot find much information, it may be that you are using an inappropriate index; or, as explained above, it may be because the topic itself is not considered important and, therefore, there is very little previous work on it. Another explanation could be that the topic you have chosen is so new that there has been no time for published research to appear yet. An example of this is the area of the 3G mobile-phone services—it has been launched in very few places only recently and economic, marketing and social research into this topic has yet to appear in significant amounts.
3. Be methodical and patient. Information searching can be frustrating, and there are times when you will either find too much or too little.
4. When you do find relevant articles or books, *note down the full bibliographic reference.* This will save you a great deal of frustration later on when you compile your bibliography. If you are doing an in-depth project or dissertation, you may wish to compile a database of your references with a list of keywords describing the contents of the work. This can be compiled manually or on a computer. You may also wish to add your own notes, detailing how useful the article was, where you obtained it, and what it has given to your literature review and to your research project in general.
5. Depending on the results, you may wish to extend your search by accessing information

sources outside the library. This may take the form of an online search accessing remote, or computerised stores of information. You may also wish to use other information sources external to the university such as specialist libraries or information centres, personal contacts etc. Before you do this, it is essential that you have a clear idea of what you are looking for, and that your planning has been as thorough as possible, otherwise you will waste much time and effort and the results will be variable.

Assessing the Quality of Literature

It is not easy to assess if a piece of published work is of high, medium or low quality until you actually read it and are able to compare it with other works you have read. However, there are a number of ‘tests’ you can use to give yourself a much clearer idea of what represents good and not-so-good research work. When reading a piece of published work from an academic journal, a newspaper, a textbook, a government report, a company report, a popular magazine or from the Internet, you can ask yourself the following questions:

- Is it clear which organisation is responsible for the contents of the work?
- Is there a way of verifying the legitimacy of this organisation? That is, is there a phone number or postal address to contact for more information?
- Is there a statement that the content has official approval of the organisation?
- Is there a statement giving the organisation's name as copyright holder?
- Do you know who wrote the article and his or her qualifications for writing on this topic?
- Is it clear who is ultimately responsible for the content of the material?
- Are the sources for any factual information clearly listed so that they can be verified in another source?
- Is the information free of grammatical, spelling and other typographical errors? (These kinds of errors not only indicate a lack of quality control, but can actually produce inaccuracies in information.)
- Are there editors monitoring the accuracy of the information being published?
- If there are charts and/or graphs containing statistical data, are the charts and/or graphs clearly labelled and easy to read?
- If material is presented in graphs and/or charts, is it clearly stated when the data was gathered?
- Is it clear when the work was published?
- If an academic journal article, when was it submitted to the journal?
- When was it accepted in revised form?

It should be clear to you by now that the safest sources of material for research are academic journals and the websites of academic departments. The first is where full and proper academic refereeing and editing process is guaranteed and the second is where a similar process is very likely to have occurred, and, if not, the authors' own academic credibility is usually sufficient to ensure that this material is of a very high standard.

An Example of a Literature Review

Below is an extract from an article published in an academic journal in 2002. The topic of the article is ‘Financial Globalisation’ and only its literature review section is reproduced here. You should read this followed by a different version of the same literature review. In reading the second (different) version, you should consider its difference from the first version. We provide a commentary on both which hopefully you will be able to compare with your own assessment of the two versions and the differences between them.

Of course, not all the aspects of a literature review (discussed earlier) can be covered in a single example, but the key elements of what needs to be present are contained in the example given below.

We also provide a second example of a literature review, again from a published paper and again in two versions. However, in this case we provide no commentary on the review and leave it to you to assess what the key differences are—this may also be used as an exercise at a tutorial or workshop or in discussion with your fellow students.

Example 1: Extract from 'Financial Globalisation: Is it a Threat to Key Central Bank Functions? The Case of Mauritius', by John Adams*

Abstract

There has been much discussion over recent years on the likely impact of financial globalisation on the financial services sector specifically and on the stability of national economies. This Paper examines how and to what extent the 'threats' from financial globalisation manifest themselves in relation to the functions of regulation and supervision carried out by central banks. A theoretical perspective on these issues is put forward followed by an analysis of the specific case of a small island economy which is embracing financial liberalisation and competition, Mauritius.

Published in *The International Journal of Financial Regulation and Compliance,* Vol. 10, No. 1, February 2002.

Received March 2001.

In revised form, September 2001.

Version 1

I. Introduction

The development of global financial transactions has been a key feature of international economic activity since WW II and particularly since the 1970s. In more recent years total international bank lending has been expanding by approximately 8 per cent per annum (BIS Annual Reports 1997b, 1999). However, the expansion in net international capital flows has not been without interruption. It has been clearly demonstrated that this process has followed a pronounced cyclical pattern (see Obstfeld and Taylor 1997). A rapid expansion in the 1880s was followed by rapid decline (1890s), expansion (1910s), slow decline to the 1930s, expansion (1940s) and slow decline to the early 1960s. Since then international capital flows have been subject to shorter cyclical fluctuations but the long-term trend has been one of steady expansion between 1970 and 1980 followed by rapid expansion since the early 1980s. A similar pattern can be observed in relation to total foreign exchange market turnover, as would be expected.

* School of Accounting and Economics, Napier University, Business School, Craiglockhart, Edinburgh EH14 1DJ. Tel: 0131-455-4308, E-mail: j.adams@napier.ac.uk.

Allied with these developments has been what can fairly be described as an explosion in financial innovation and the advent of a previously unheard of level of liberalisation in both domestic and international financial markets and services. The key features of these developments have been an extraordinary growth in the 'off-balance sheet' activities* of financial institutions and in 'over-the-counter' (OTC) transactions in options, swaps, and other financial derivatives. These are very important developments for the management of na-

tional economies, particularly in the area of monetary policy. This is because such innovations have effectively surpassed existing national and international regulatory and supervisory frameworks in many cases. It is therefore becoming increasingly difficult for central banks and other monetary authorities to undertake the primary functions of financial market stabilisation and price stability within their domestic economies to pursue past policy regimes typified by the Financial Repression Paradigm identified by McKinnon (1973).

It has recently been argued (Steinherr 2000) that these developments have in fact made the traditional regulatory and supervisory functions of central banks almost impossible. In other words, the risk of a financial ‘crisis’ both domestically and internationally has increased and the speed of transmission (contagion) of such crises has also increased. The challenge facing central banks and the international financial market system is how to deal with the increased risks which are now embedded within an increasingly interdependent but globalising financial market system.

This is clearly an issue for all central banks. However, this paper is confined to the particular case of Mauritius and how the central bank might respond to such a challenge.

The paper is structured as follows: in Section II, the concept of Financial Globalisation is discussed. This provides a useful theoretical framework within which the case of Mauritius can be analysed (Section III) and in Section IV of the paper, a number of key issues are identified with respect to ‘what can be done’. Section V concludes the paper.

II. Financial Market Globalisation—What is it?

Perhaps the clearest answer to this question is first to describe what financial globalisation is definitely not. It is not simply the expansion of net or gross international capital flows; it is not the expansion of individual economies' external financial transactions per se nor is it the increasing entry of large institutions into non-home based markets. These are all aspects of the *internationalisation* of capital and, as we already know, are subject to significant cyclical fluctuations. Were these the key elements of financial globalisation it would be irrefutably logical to talk of periods of ‘de-globalisation’ such as in the 1930s and 1950s. In addition, there remains a strong tendency for investors and their portfolios to retain a very strong ‘homebias’ and for wealth in all its forms to be predominantly held within investors' home countries. This home or domestic bias is likely to decline with time but it is an indication that the completely ‘globalised’ financial world is still some way off (Lewis 1995).

*These include investment advice, tax and financial planning, insurance broking, portfolio management and many other financial services. They also include securities underwriting and swap and hedging transactions. The key element in many of these activities is securitisation—a process of transforming previously non-tradable assets into marketable securities.

It seems clear, therefore, that cyclical fluctuations in cross-border capital transactions can neither conceptually nor empirically form the basis of what is effectively a relatively new and even ‘populist’ concept. Instead, we need a clear and unambiguous theoretical rationale which is capable of providing deeper insights into a process which we *believe* is underway but as yet do not fully understand. This will enable further analysis of the phenomenon and provide a better understanding of its implications for national economies and for the role of central banks in the future. As Shirakawa et al., argue ‘globalisation refers to [a situation] where each country's economy, including its financial markets, becomes increasingly integrated resulting in development towards *a single world market*’(Shirakawa et al. 1997: 23).

In other words, financial market globalisation will not and cannot proceed in the absence of the globalisation of all production relations, including labour itself. Using the definition given above, it is possible to delineate stages of the globalisation 'process' and to categorise what these stages mean in terms of both the 'real' economy and the financial markets.

Commentary

The first thing worth pointing out here is that the literature review above contains 845 words—this is for an article which is 4,200 words in length. In other words, the literature review is a significant part of the whole article, nearly 20 per cent. This is quite normal in research work and, as a general rule, you will find that for a Masters Dissertation of between 12,000 and 15,000 words, the literature review will typically be between 3,000 and 4,000 words. Let us consider the short literature review above. The first thing to note is that where a fact or a theory is being referred to, it has been referenced. Note too that the extract contains a quotation—not only is the quotation referenced but the exact page number of where the quotation is located is also provided. As explained earlier, it is important that this is done, hence the importance of always recording key elements of what you read as you read.

Second, the identity and affiliation of the author is clearly shown. Third, the date of publication is clearly shown and fourth, the date of the manuscript (first received by the journal and subsequently received in revised form) is also clearly shown. Some academic journals do not always give this information. However, where it is given, you should consider the gap between submission date and final publication date.

The next thing to notice is that this is an example of an exploratory literature review—it attempts to assess what we already know about financial globalisation from the literature and then goes on to set out how this knowledge is going to be applied to the topic of interest, the case of the Mauritian central bank. The review also attempts to give the reader a clear picture of what financial globalisation is not and explains this in terms of a very brief analysis of historical trends. This assessment of directly-relevant literature is then used to spell out the basis of the paper and what the rest of the paper will do. In other words, a clear path is constructed connecting the literature to the present study.

Notice too that the literature review is by no means comprehensive—it is highly selective and focused on centrally relevant material. A much more comprehensive review of the work in this topic could have been done but that would then make the purpose of the research and of the paper quite different. Hence, the importance of clearly setting out your research questions and of carefully constructing your research design.

Now let us consider a different version of the same extract and try to identify what is different and, more importantly, what might be wrong, if anything, with the second version.

Version 2

I. Introduction

The development of global financial transactions has been a key feature of international economic activity since WW II and particularly since the 1970s. In more recent years, total international bank lending has been expanding by approximately eight percent per annum (BIS Annual Reports). However, the expansion in net

international capital flows has not been without interruption. It has been clearly demonstrated (Obstfeld and Taylor 1997) that this process has followed a pronounced cyclical pattern. A rapid expansion in the 1880s was followed by rapid decline (1890s), expansion (1910s) slow decline to the 1930s, expansion (1940s) and slow decline to the early 1960s. Since then international capital flows have been subject to shorter cyclical fluctuations but the long term trend has been one of steady expansion between 1970 and 1980.

Allied with these developments has been what can fairly be described as an explosion in financial innovation and the advent of a previously unheard of level of liberalisation in both domestic and international financial markets and services. The key features of these developments have been an extraordinary growth in the 'off-balance sheet' activities* of financial institutions and in 'over-the-counter' (OTC) transactions in options, swaps, and other financial derivatives. These are very important developments for the management of national economies, particularly in the area of monetary policy. This is because such innovations have effectively surpassed existing national and international regulatory and supervisory frameworks in many cases. It is, therefore, becoming increasingly difficult for central banks and other monetary authorities to undertake the primary functions of financial market stabilisation and price stability within their domestic economies to pursue past policy regimes typified by the financial repression paradigm.

It has recently been argued (Steinherr 2000) that these developments have in fact made the traditional regulatory and supervisory functions of central banks almost impossible. In other words, the risk of a financial 'crisis' both domestically and internationally has increased and the speed of transmission (contagion) of such crises has also increased. The challenge facing central banks and the international financial market system is how to deal with the increased risks which are now embedded within an increasingly interdependent but globalising financial market system. This is clearly an issue for all central banks.

*These include investment advice, tax and financial planning, insurance broking, portfolio management and many other financial services. They also include securities underwriting and swap and hedging transactions. The key element in many of these activities is securitisation—a process of transforming previously non-tradable assets into marketable securities.

II. Financial Market Globalisation—What is it?

Perhaps the clearest answer to this question is first to describe what financial globalisation is definitely not. It is not simply the expansion of net or gross international capital flows; it is not the expansion of individual economies' external financial transactions per se and nor is it the increasing entry of large institutions into non-home based markets. These are all aspects of the *internationalisation* of capital and, as we already know, are subject to significant cyclical fluctuations. Were these the key elements of financial globalisation, it would be irrefutably logical to talk of periods of 'de-globalisation' such as in the 1930s and 1950s. In addition, there remains a strong tendency for investors and their portfolios to retain a very strong 'home-bias'. This home or domestic bias is likely to decline with time but it is an indication that the completely 'globalised' financial world is still some way off (Lewis 1995).

It seems clear, therefore, that cyclical fluctuations in cross-border capital transactions can neither conceptually or empirically form the basis of what is effectively a relatively new and even 'populist' concept. Instead, we need a clear and unambiguous theoretical rationale which is capable of providing deeper insights into a process which we *believe* is underway but as yet do not fully understand. This will enable further analysis of the phenomenon and provide a better understanding of its implications for national economies and for the role of central banks in the future. As Shirakawa et al. argue, '… globalisation refers to [a situation] where each

country's economy, including its financial markets, becomes increasingly integrated resulting in development towards *a single world market*' (Shirakawa et al. 1997).

In other words, financial market globalisation will not and cannot proceed in the absence of the globalisation of all production relations, including labour itself. Using the definition given above, it is possible to delineate stages of the globalisation 'process' and to categorise what these stages mean in terms of both the 'real' economy and the financial markets.

Commentary

So, what can we say about Version 2? Hopefully, you will have identified a number of discrepancies and errors and omissions of explanation. First, the referencing: in the first reference all that is supplied is 'BIS Annual Reports'—no information is given on which annual reports the discussion refers to. This, therefore, makes it very difficult for the reader or other researchers to check the facts for themselves. In the second reference, the initial of the first author is given but that of the second is not—this is inconsistent and should be avoided.

The end of the first paragraph stops the discussion of 'trends' at 1980, yet the Paper is published in 2002. Hence, the discussion of the 'trends' is clearly incomplete. In paragraph 2 there should be a numeral (superscript) indicating that the sentence is given more explanation in a footnote. The footnote is there and is numbered (i) but what part of the discussion it refers to is very difficult to identify. It is vitally important that if you are using footnotes to provide further explanation they must be clearly and correctly linked to the text.

At the end of paragraph 2, the term 'financial repression paradigm' is introduced. This is a body of theory and yet there is no reference to indicate the source of the theory to allow a reader to follow it up and learn more about 'financial repression'. It is extremely important that when using what is clearly a theoretical concept it should either be explained or given a clear reference to which the reader can be directed. In paragraph 3, something is identified as 'clearly an issue for all central banks'; but this paper is not about all central banks, it is focused on a particular country's central bank and this is not made clear. Thus, an opportunity to guide the reader towards the real focus of the research and the paper has been lost.

In paragraph 4, the term 'home-bias' is introduced but there is no attempt to provide an explanation of what this is. It is left to the reader to 'guess' what it might be. This is very poor practice in literature review and must be avoided—just because you know what something means do not assume that the readers will. In short, the introduction of concepts, 'jargon' or any other category of information should always be explained, ideally as briefly as possible. With a Masters Dissertation (or a journal article) you are not writing a textbook, therefore, you need to be precise, to the point and economical with language. The quotation given in the review is referenced but the page number of its source is not given. This is also a poor practice and should be avoided.

Finally, the review gives no indication of what is still to come in the rest of the paper. There is no identification of what the reader can expect because there is no structure given linking the review to the rest of the paper. It is essential that you provide forward linkages to what is still to come and, later in the paper or dissertation, backward linkages to what you have already discussed.

We hope that you were able to identify at least some of the differences between Version 1 and 2 and able to see what is wrong with Version 2. It is also useful at this point to note that the commentary for Version 2 is also an example of Critical Reading. In order to write this commentary, simply reading Version 2 was not enough—it had to be studied carefully in order that its 'critique' be fair, accurate and sensible.

Example 2: Extract from 'Air Passenger Growth Forecasts for the United Kingdom: The Potential Threat of the Policy Alternatives to Scottish Air Travel', by John Adams* and Robert Raeside

Published in *The Fraser of Allander Quarterly Economic Commentary*, December 2001.

Received August 2001.

In revised form, October 2001.

*Corresponding author: School of Accounting and Economics, Napier University Business School, Craiglockhart, Edinburgh EH14 1DJ, Tel: 0131-455-4308, E-mail: j.adams@napier.ac.uk.

Version 1

Introduction

The DETR has requested responses to its consultation document on the future of air transport services in the United Kingdom (DETR 2000). A number of alternative policy responses are set out which are rooted in the DETR's most recent forecasts for passenger growth. The forecasts of demand for air travel are and will continue to be at the core of these policies. However, it is argued in this paper that potential policy responses to the forecasts run the distinct risk of being contradictory, socially divisive and a threat to the continued expansion of air travel services in Scotland and also in all regions out in London.

In the case of Scotland, the 'demand constraint' option runs counter to the recent argument from the Secretary of State for Scotland that the country is still poorly served in terms of air transport. This article is concerned with setting out the context of the issues, the efficacy of the forecasts upon which the 'policy options' are being mooted and the implications for Scottish air travel if several of these options are taken up. First, it is useful to present some background information on UK air passenger growth.

Between 1974 and 1999 the number of air passengers travelling into and out of the United Kingdom (UK) has increased from 49 million to 171 million, an increase of almost 250 per cent (ibid.). The average annual increase in passenger numbers has been slowing down since the 1960s (Table 1).

TABLE 1 Annual Average Growth Rate in Passenger Numbers

Decade	*1960–69*	*1970–79*	*1980–89*	*1990–99*	*2000–2010*
Growth rate %	14	7.3	5.7	5.1	4.3

Source: DETR (2001).

The declining rate of growth reflects a consistent movement towards market maturity in passenger air travel for the UK. The decline is expected to continue in the present decade towards an annual average growth rate of 4.3 per cent and is expected to stabilise around this rate for the foreseeable future. This is consistent with forecasts suggesting a doubling in passenger air traffic over the next 10 years (ICAO 2000) and a near doubling in the last 10 years (Boeing 2000) on a *global* basis. Although the expected lower rate of growth for the UK in the next 10 years is considerably less than that recorded in the 1960s and 1970s, it has become a source of concern to the UK Government in terms of its likely impact on airport capacity requirements, land utilisation, social effects and particularly its environmental effects. It is with both the social and environmental issues implied by the UK Government forecasts and by the latter's potential response to these that this paper is primarily concerned.

There is no doubt, at least in the environmental sphere that the political context has been and continues to be an extremely strong determinant of the *raison d'être* of much Government sponsored research in the UK. It could be argued that since 1997 the new Government has fully embraced the dire warnings of global warming in relation to almost all forms of mechanised transport.

However, there is also an element of contradiction in the case of air transport where the UK has consistently been arguing for the adoption of an open skies policy in the EU to foster competition. This is hardly consistent with the threat of demand constraining policies!

It is within this potentially contradictory context that current policy on UK air travel is being formulated. Hence, it is very important to consider a number of aspects of the 'problem' as it has been perceived by the Government. This is because the forecasts for the next 20 years may be sufficiently in error such that any further costs imposed on the industry and or the passengers (as a result of the forecasts) may be significantly out of proportion to the 'problem'. Such an outcome will damage both the industry in the UK and the UK's competitiveness relative to other developed economies. In Scotland we have seen significant growth in both passenger numbers and freight traffic in the 1990s and there is no reason to expect this to wane in the absence of policy intervention. This is especially the case if the forecasts understate passenger growth since restrictive policies are likely to have an even larger impact on UK competitiveness than anticipated. In this paper, we examine a restricted set of questions in relation to the current forecasts of air passenger traffic to and from the UK. These are:

1. How accurate have past forecasts been?
2. How accurate are current forecasts likely to be?
3. Do alternative forecasting methods produce different results?
4. Should future demand be constrained?
5. What are the implications for social equity and regional competitiveness?

These questions are addressed separately in the following sections of the paper. First, it is useful to present some descriptive statistics of the trends in air passenger traffic in the UK.

Version 2

Introduction

The DETR has requested responses to its consultation document on the future of air transport services in the United Kingdom (DETR 2000). A number of alternative policy responses are set out which are rooted in the DETR's most recent forecasts for passenger growth. The forecasts of demand for air travel are and will continue to be at the core of these policies. However it is argued in this paper that potential policy responses to the forecasts run the distinct risk of being contradictory, socially divisive and a threat to the continued expansion of air travel services in Scotland and also in all regions out in London.

In the case of Scotland the 'demand constraint' option runs counter to the recent argument from the Secretary of State for Scotland that the country is still poorly served in terms of air transport. This article is concerned with setting out the context of the issues, the efficacy of the forecasts upon which the 'policy options' are being mooted and the implications for Scottish air travel if several of these options are taken up. First it is useful to present some background information on UK air passenger growth.

Between 1974 and 1999 the number of air passengers travelling into and out of the United Kingdom (UK) has increased from 49 million, an increase of almost 250 per cent. The average annual increase in passenger numbers has been slowing down since the 1960's (Table 1):

Decade	*1960–69*	*1970–79*	*1980–89*	*1990–99*	*2000–2010*
Growth rate %	14	7.3	5.7	5.1	4.3

The declining rate of growth reflects a consistent movement towards market maturity in passenger air travel for the UK. The decline is expected to continue in the present decade towards an annual average growth rate of 4.3 per cent and is expected to stabilise around this rate for the foreseeable future. This is consistent with forecasts suggesting a doubling in passenger air traffic over the next ten years (ICAO 2000) and a near doubling in the last ten years (Boeing 2000) on a *global* basis. Although the expected lower rate of growth for the UK in the next ten years is considerably less than that recorded in the 1960's and 1970's it has become a source of concern to the UK Government in terms of its likely impact on airport capacity requirements, land utilisation, social effects and particularly its environmental effects. It is with both the social and environmental issues implied by the UK Government forecasts and by the latter's potential response to these that this paper is primarily concerned.

There is no doubt, at least in the environmental sphere that the political context has been and continues to be an extremely strong determinant of the *raison d'etre* of much Government sponsored research in the UK. It could be argued that the new Government has fully embraced the dire warnings of global warming in relation to almost all forms of mechanised transport.

However, there is also an element of contradiction in the case of air transport where the UK has consistently been arguing for the adoption of an open skies policy in the EU to foster competition. This is hardly consistent with the threat of demand constraining policies!

It is within this potentially contradictory context that current policy on UK air travel is being formulated. Hence, it is very important to consider a number of aspects of the ‘problem’ as it has been perceived by the Government. This is because the forecasts for the next twenty years may be sufficiently in error such that any further costs imposed on the industry and or the passengers (as a result of the forecasts) may be significantly out of proportion to the ‘problem’. Such an outcome will damage both the industry in the UK and the UK's competitiveness relative to other developed economies. In Scotland we have seen significant growth in both passenger numbers and freight traffic in the 1990s and there is no reason to expect this to wane in the absence of policy intervention. This is especially the case if the forecasts understate passenger growth since restrictive policies are likely to have an even larger impact on UK competitiveness than anticipated. In this paper we examine a restricted set of questions in relation to the current forecasts of air passenger traffic to and from the UK.

These questions are addressed separately in the following sections of the Paper. First, it is useful to present some descriptive statistics of the trends in air passenger traffic in the UK.

Critical Evaluation

A critical review involves structuring and building a logical and coherent argument. It should flow smoothly

from one point to the next, drawing upon evidence, and where possible, present alternative viewpoints. It might also involve evaluating the quality of the evidence presented to support an argument, and not simply describing it. In other words, 'critical evaluation' helps one to assess the quality of other peoples work, their limitations and gives a positive indication for future research.

An unconnected list of 'who said what' is not a discussion, even where an extensive list of authors' names and dates is given. Students often make the mistake of assuming that by including references and quotations from books and articles they are engaging in a 'discussion'. Likewise, describing the criticisms made by other authors does not demonstrate a 'critical analysis'.

Critical Analysis

You need to show you have examined the material in a critical manner. You could:

- Look at the value of the evidence presented.
- Address inconsistent or incompatible evidence stemming from research and seek to explain it.
- Weigh up the pros and cons of different positions, coming down on the side of one argument if the quality of evidence favours it.
- Try to find original links between different sources or different strands of an argument.
- Show originality by presenting new ideas or interpretations based upon your own understanding of the material.

Critical Reading

To a critical reader, any single text provides but one view of the facts (or version of reality)—it is one individual's view of the subject matter. Critical readers, therefore, recognise not only what a text says but also how the text portrays the subject matter. They recognise the various ways in which each and every text is the unique creation of a unique author.

Having recognised what a text says, critical readers reflect on what the text does: Is it offering examples? Arguing? Appealing for sympathy? Making a contrast to clarify a point?

Critical readers also infer what the text, as a whole, means, based on their analyses. The goals of critical reading are therefore:

- To recognise an author's purpose.
- To understand tone and persuasive elements.
- To recognise bias by the author(s)—has the author not reported all the research or written the article so a particular view emerges as dominant which in actual fact may not be so dominant.

Critical Thinking

We think critically when we:

- Reply with reason rather than emotion.
- Require evidence, ignore no known evidence, and follow evidence where it leads.
- Are concerned more with finding the best explanation than being right.

- Analyse apparent confusion and ask questions.
- Weigh the influence of motives and biases.
- Recognise our own assumptions, prejudices, biases or points of view.
- Evaluate all reasonable inferences.
- Consider a variety of possible viewpoints/perspectives.
- Remain open to alternative interpretations.
- Accept a new explanation, model or paradigm because it explains the evidence better, is simpler or has fewer inconsistencies or covers more data.
- Accept new priorities in response to a re-evaluation of evidence.
- Do not reject unpopular views out of hand.
- Recognise the relevance and/or merit of alternative assumptions/perspectives.
- Recognise the extent and weight of evidence.

Critical Questions

In thinking critically about what you read, it is useful to answer a range of questions to help focus your thoughts. The variety of questions that might help you can be split into four categories.

Summary and Definition Questions

- What is (are)…?
- Who…?
- When…?
- How much…?
- How many…?
- What is an example of…?

Analysis Questions

- How…?
- Why…?
- What are the reasons for…?
- What are the functions of…?
- What is the process of…?
- What other examples of…?
- What are the causes/results of…?
- What is the relationship between… and…?
- How does…apply to…?
- What is (are) the problem(s) or conflict(s) or issue(s)…?
- What are possible solutions/resolutions to these problems or conflicts or issues…?
- What is the main argument or thesis of…?
- How is this argument developed…?
- What evidence or proof or support is offered?
- What are other theories or arguments from the authors?

Hypothesis Questions

- If… occurs, then what happens…?
- If… had happened, then what would be different…?
- What does theory X predict will happen…?

Evaluation Questions

- Is…good or bad…?
- Is…correct or incorrect…?
- Is…effective or ineffective…?
- Is…relevant or irrelevant…?
- Is…clear or unclear…?
- Is…logical or illogical…?
- Is…applicable or not applicable…?
- Is…proven or not proven…?
- Is…ethical or unethical…?
- What are the advantages or disadvantages of…?
- What are the pros and cons of…?
- What is the best solution to the problem/conflict/issue?
- What should or should not happen…?
- Do I agree or disagree…?
- What is my opinion of…?
- What is my support for my opinion?

Critical Reviews

To review material in a critical manner is an important skill that you have to develop when undertaking research. In this section we start by giving examples of two short reviews one poor and one good and then go on to present a checklist to help you to do a critical review.

Example of a Bad Review

The following paragraph is an example of a badly-written review of literature.

> Smith (1980) conducted an experiment on fear and self-esteem with 150 undergraduates. In the study, he tested subjects' self-esteem and then exposed subjects one at a time to a fear-inducing situation. He found that those with lower self-esteem felt greater fear. Jones and Jones (1982) surveyed elderly residents. The respondents who had the greatest independence, self-esteem, and physical health, had the lowest degree of fear of being a victim of crime. In a study of college women, Rosenberg (1979) found that the greater independence one felt, the less the fear of being left alone in a darkened room. DeSallo's study (1984) of 45 college males found that those who had the greatest self-esteem felt the least degree of fear and failure. Yu (1988) found the same for college females. Hong (1980) conducted a telephone survey of 200 welfare recipients and found no relationship between feelings of independence and fear of crime.

Example of a Better Review

The following paragraph is an example of a good literature review.

> People with greater self-esteem appear to be less afraid. Laboratory studies with college students (DeSallo 1984; Smith 1980; Yu 1988) find a strong negative relationship between self-esteem and fear. The same relationship was found in a survey of elderly people (Jones and Jones 1982). Only one study contradicted this finding (Johnson 1985). The contradictory finding may be due to the population used (prison inmates).
>
> In general, it appears that self-esteem is strongly related to feelings of independence (see Gomez 1977; Zarnoth 1985), and independence was found to decrease feelings of fear of crime (Jones and Jones 1982; Rosenberg 1979). Only Hong (1980) did not find a significant relation between independence and fear of crime. It was the only study that studied welfare recipients.

Let us now summarise *what* questions you should be asking yourself when you are undertaking a critical review of a piece of published research. You should use the following as a template for your own review:

- Has the author of the article clearly defined the *research problem?*
- Has the author clearly explained the *purpose* of the research?
- Is a review of *relevant literature* included in the article?
- Is this review *comprehensive* or too brief?
- Has the author presented and explained a *theoretical framework?*
- Is the *research method(s)* clearly described and explained?
- Are the *research questions* or *hypotheses* clearly spelled out?
- Is the *data analysis method* clearly explained?
- Is it consistent with the *type of data* (if any) being presented?
- Is the analysis of the data nearly *descriptive* or *analytical?*
- Are the *results* explained in terms of the original *research questions* or *hypotheses?*
- Are pointers to *further research* given?
- Do the *conclusions* make sense in terms of the *purpose* of the research?
- Does the author spell out the *limits* of the research?
- Is a comprehensive *reference list* given?

Think back to the section in Chapter 2 on Research Methodology—many of the philosophical and theoretical issues raised there lead directly to the questions above. In undertaking a critical review of a single piece of work or in undertaking a literature review for a dissertation the questions above, if approached in a logical and structured manner, will enable you to work your way through any published research in an efficient and disciplined context.

Writing a Critical Review

To write a good review you should produce a short, well-structured report. In this report it should be clear that you are knowledgeable about the area and it is common to refer to other work. Start with a paragraph or two on the importance of the work and who it is important to. Is the work dealing with an issue of major importance to society or is it a small part of a businesses operation and think who the work would help—is it only for researchers in the area or practitioners or a mixture of both. It is common to have maybe up to three pages summarising and critiquing the work and demonstrating that you have understood the work. Often the first page is a discussion on the methods used and their appropriateness to the aim of the work. Focus particularly on research design and the justification (if any) of the choice of research methods used. Then the

next page is a report on the efficiency of data collection and its analysis. Try to check for accuracy and the reliability and validity of the analysis. Is causality a problem, could other factors influence the results and how did the researchers control for external events? The final page in this section should be a discussion on the validity and appropriateness of the conclusions. Are the findings surprising, do they contradict other work, do you agree with the findings and ask yourself what alternative explanations could there be for the results and conclusions.

The review then concludes with a short paragraph on how the researchers could improve the work and finish with general comments on your overall impression about the soundness, quality, validity and importance of the work.

Exercises

Exercise 1

Discuss the merits of the following passage.

> In a study of alienation, Hang (1994) found that 500 males in his sample felt very alienated. Jones and Jeffery (1996) found alienation most severe amongst elderly people. The 1950 study by Clark supported the work of Jones and Jeffery. Zo and Qi (1998) have determined the factors which result in high alienation and argue that these have a socio-economic dimension. Abdullah gives a methodology for measuring the degree of social inclusion.

Exercise 2

Critically review the two versions of the journal article by Adams and Raeside (2001) on pages 67–70.

References

Adams, J.2002. ‘Financial Globalisation: Is It a Threat to Key Central Bank Functions? The Case of Mauritius’, Journal of Financial Regulation and Compliance, 10(1): 55–67.
Adams, J. and R.Raeside. 2001. ‘Future Scottish Air Travel: Potential Policy Constraints’, Fraser of Allander Quarterly Economic Commentary, 26(4): 40–45.
Makridakis, S. and S.C.Wheelwright. 1977. ‘Forecasting: Issues and Challenges for Marketing Management’, Journal of Marketing, 41(4): 24–38.
Makridakis, S., S.C.Wheelwright and R.Hyndman. 1998. Forecasting Methods and Applications (
Third Edition
). New York: John Wiley & Sons.
Parasuraman, A. and G.M.Zinkhan. 2002. ‘Marketing to and Serving Customers through the Internet: An Overview and Research Agenda’, Journal of the Academy of Marketing Science, 30(4): 286–95.
Parasuraman, A., L.Berry and V.Zeithaml. 1991. ‘Understanding Customer Expectations of Service’, Science and Quarterly, 32(3): 39–48.
Weber, M.1947. The Theory of Social and Economic Organization (translated by A.M.Henderson and T.Parsons). New York: Oxford University Press.
Weber, M.1968. Economy and Society: An Outline of Interpretive Sociology (edited and translated by G.Roth and C.Wittich). New York: Bedminster Press.
http://dx.doi.org/10.4135/9788132108498.n4